A Review of Red Light Camera Programs in New York State

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Table of Contents

Overview and Executive Summary ........................................................................................................ 1
Research and Controversies .................................................................................................................. 2
Pending Legislation ............................................................................................................................... 3
Fulfillment of Reporting Requirements ............................................................................................... 4
Traffic Safety Statistics ........................................................................................................................ 4
Practical Concerns for Public Officials ................................................................................................ 5
  Lack of Transparency / Flouting of Responsibilities
  Right on Red Issues
  Video / Amber Duration
Recommendations ..................................................................................................................................... 6
  Extend the Pilot Program for Two Years
  Disclose Reports to the Public
  Penalize Municipalities for Incomplete Reports
  Clarify the Requirements for the Report
  Create a State Oversight Committee
  Educate the Public about Right on Red
  Require Video for Red Light Camera Programs
Conclusion ............................................................................................................................................... 8
Appendices
  Appendix A – Legislative History of Red Light Cameras in New York State ........................................ 9
  Appendix B – Red Light Camera Program Facts .................................................................................. 10
  Appendix C – Ambiguities in the Vehicle and Traffic Law ................................................................. 11
  Appendix D – Yonkers’ Misleading Graphs ....................................................................................... 15
  Appendix E – Sources .......................................................................................................................... 16
Overview and Executive Summary

In New York State, five municipalities currently operate red light cameras: New York City, Nassau County, Suffolk County, Yonkers, and Rochester. These programs will expire on December 1, 2014, if not reauthorized by the state legislature and the Governor. AAA New York State has conducted a review of these five red light camera programs to assist policymakers and the public in their debate over the future of red light cameras.

Automated enforcement can play a role in improving traffic safety. Red light running is dangerous behavior that merits a significant deterrent. Consequently, AAA supports properly administered red light camera programs. Unfortunately, the lack of transparency surrounding the programs in New York State fuels public suspicion that the programs are primarily for revenue generation.

Despite the legislative requirement that each municipality submit an annual report on the impact of red light cameras, the reports have, to varying degrees, failed to comply with such obligations. The information provided was insufficient to conduct a rigorous statewide analysis of the traffic safety benefits of red light camera programs. Accordingly, this review will focus on the quality of these reports and ways to improve them.

Since New York municipalities have circumvented the mandated assessment provisions, they should not be permitted to assume full control of red light cameras. AAA New York State strongly opposes any bill that would remove state oversight, and instead proposes an extension of the pilot programs, with the caveat that state requirements must be strictly enforced.

In particular, AAA New York State recommends:

- Extending the pilot program for two years
- Requiring disclosure of reports to the public
- Penalizing municipalities for late or low-quality reports
- Clarifying the requirements for the report
- Creating a photo enforcement oversight committee

The 2014 legislative session is a critical juncture for red light camera programs. Each year, nearly $100 million flows from motorists’ pockets to local budgets and camera vendor profit margins, so it is imperative that state officials hold municipalities accountable. Eliminating state oversight – or even maintaining the inadequate status quo – would effectively condone municipalities’ disregard for both the letter of the law and its intent, and would remove any incentive to perform a thorough evaluation. New York State must act decisively to fix these programs; otherwise, red light cameras will continue to erode trust between citizens and their government – perhaps irreparably.
Research and Controversies

Red light running is a major problem throughout New York State and the nation. In the United States, over 750 fatalities occurred from red light running in 2008 and 165,000 injuries result from red light running crashes each year. To combat this epidemic, federal guidelines recommend a combination of engineering, education, and enforcement. Over 500 municipalities now include red light camera programs in their enforcement toolbox.

Much of the evidence suggests that red light cameras increase safety. Studies from the IIHS, Arizona, Texas, Oxnard (CA), and USA/Singapore/Australia assert as much. A Federal Highway Administration review states that cameras “decreased right-angle crashes and increased rear end ones...There was indeed a modest aggregate crash cost benefit of [red light camera] systems.”

Studies from Seattle, Florida, and the National Cooperative Highway Research Program believe there are positive but not conclusive signs. A Virginia report states that “cameras are associated with an increase in rear-end crashes and a decrease in red light running crashes...there is significant variation by intersection and by jurisdiction...These results cannot be used to justify the widespread installation of cameras because they are not universally effective. These results also cannot be used to justify the abolition of cameras, as they have had a positive impact at some intersections and in some jurisdictions.”

Analyses from Winnipeg, Greensboro (NC), Florida, and Louisiana argue that red light cameras do not increase safety. The latter states that “despite reducing the number of cars entering this intersection during a red light, [red light cameras] do not seem to prevent traffic collisions at this monitored intersection. Alternative means of injury prevention must be investigated.”

Red light camera skeptics can also point to numerous controversies. In Rochester, one intersection was proven to have insufficient amber signals that unjustly increased the number of violations; similar allegations have surfaced across the country. Camera vendor Redflex was dropped from its contract with Chicago after evidence of bribery came to light, and new allegations have tied the company to bribery in 13 other states. Additionally, 88% of Clermont’s (FL) violations were for right turns on red, not especially dangerous behavior.

The preponderance of the evidence leads to four primary conclusions:

- Red light cameras have the potential to reduce the deadliest crashes.
- The success of red light cameras varies significantly across jurisdictions and intersections.
- The most effective red light camera programs are accompanied by education (i.e. photo-enforced signs) and engineering (i.e. lengthening amber times or using an “all-red” phase).
- Red light cameras are susceptible to misuse and abuse.

These four conclusions form the basis of AAA New York State’s position on red light cameras:

AAA New York State supports red light camera programs that are supplemented with engineering measures, educational campaigns, and traditional law enforcement, provided that a thorough evaluation of such programs is regularly conducted and disclosed to the public.
Pending Legislation

In 1993, New York City became the first city in the United States to operate red light cameras. Nassau County (2009), Suffolk County, Yonkers, and Rochester (2010) later followed suit (see Appendix A for a more detailed legislative history). All current red light camera programs will expire on December 1, 2014, without passage of legislation. Numerous bills are pending in the Transportation Committees that would extend, expand, and/or modify the programs:

- Increase the number of cameras in New York City
  - 150 → 225
  - 150 → 250
  - No maximum
- Remove the requirement that New York City submit an annual report to Albany
- Make New York City’s program permanent
- Extend Rochester’s program for five years
- Expand the demonstration program to new municipalities
  - Albany
  - Mount Vernon
  - New Rochelle
  - Kingston
  - Hempstead
  - Freeport
  - Any county
- Modify existing programs
  - Provide additional privacy protections
  - Require all amber signals to have a uniform duration
  - Require countdown clocks for amber signals
  - Require signage notifying drivers of a photo enforcement intersection
  - Create a Nassau County red light camera audit committee

AAA New York State strongly opposes any bill that would remove state oversight or the requirement to complete reports, and also currently opposes any bills that would make the programs permanent, increase the maximum number of intersections, or allow red light cameras in other municipalities.
Fulfillment of Reporting Requirements

State law mandates what must be included in annual reports, but many municipalities have shirked these responsibilities. Since some municipalities have not released reports that were due in 2013, this analysis will focus on the reports that were due in 2012. In those reports, Nassau and Suffolk performed satisfactorily, though their 2013 reports have been nearly a year late. New York City omitted crash data and intersection-specific violation data. Rochester omitted violation, financial, and adjudication statistics. Yonkers’ report did not include crash data, financial statistics, or adjudication results, and incorporated misleading graphs (see Appendix D).

<table>
<thead>
<tr>
<th>Municipality</th>
<th>NYC</th>
<th>Nassau</th>
<th>Suffolk</th>
<th>Yonkers</th>
<th>Rochester</th>
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<tr>
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<td>✓</td>
<td>✓</td>
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<td>x</td>
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<td>✓</td>
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<td>x</td>
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<td>✓</td>
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<td>Weekly (aggregate)</td>
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<td>✓</td>
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<td>x</td>
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<td>✓</td>
<td>x</td>
<td>x</td>
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<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Traffic Safety Statistics

The reports have provided some good signs. At Nassau’s red light camera intersections, total crashes were reduced by over 40%. Suffolk reported a 28% reduction in side impact crashes and a 20% increase in rear-end crashes, echoing the findings of most studies. Rochester’s initial small sample found a 46% overall crash reduction (See Appendix B for more details).

These results are promising, but should be considered strictly preliminary, especially for municipalities like New York City and Yonkers that do not include intersection-specific crash data. In addition, no reports included a control group for comparison. This data justifies reauthorization of the programs, but not permanence and certainly not removal of oversight.
Practical Concerns for Public Officials

AAA New York State has identified the following concerns with red light camera programs. It is vital that state and local officials address these concerns if municipalities are to administer fair and effective programs.

Lack of Transparency / Flouting of Responsibilities

Municipalities’ reports have been either extremely late or have omitted important, state-mandated data. This behavior has made it nearly impossible for legislators, advocacy organizations, and the public to conduct a rigorous statewide assessment of red light programs. There has been no pattern of timely, thorough reporting. Allowing the programs to be expanded or made permanent would effectively condone the blatant disregard for the law and the wishes of the legislature.

Additionally, most municipalities have made it difficult to obtain information, and some have outright ignored correspondence. Nassau County is a notable exception: its program’s administrators have been exceedingly willing to discuss the program and provide information, even granting the authors access to tour the facility where violations are screened and adjudicated. For other locations, AAA New York State has been forced to submit FOIL requests and endure bureaucratic runarounds just to see reports that were already completed. Moreover, for no compelling reason, reports are not disclosed to the public. This lack of transparency justifiably feeds public distrust of the programs, whereas timely release of information could provide persuasive evidence of their effectiveness.

Right on Red Issues

A substantial number of violations in non-NYC municipalities are for turning right on red without coming to a complete stop. Some of these violations are egregious – drivers do not slow down at all, endangering pedestrians, bicyclists, and other motorists. Such behavior clearly merits a notice of liability. Other violations are for “California stops,” where drivers slow down significantly but not completely as they scan the road to see if a right turn is safe. While such behavior is technically unlawful, it is not the dangerous red light running behavior that the programs aim to eliminate. Because many drivers are not aware of the rule, they are surprised to receive a notice of liability for what is, in many cases, not risky behavior.

Video / Amber Duration

New York City does not use video. Video captures the context of any violation, which can help bolster an innocent defendant’s argument or convince a guilty defendant of the veracity of the violation. AAA New York State has confirmed cases of human error where unwarranted violations have slipped through the screening process; video is the best way to dismiss such notices of liability and is vital in any modern red light camera program.

Some motorists have concerns that mistimed amber signals lead to unjust violations. Except in Rochester, such evidence is anecdotal – but all municipalities should include the amber duration in the notice of liability. Video would likewise assuage concerns.
Recommendations

Extend the Pilot Program for Two Years

AAA New York State believes that the lack of transparency and the failure to produce a pattern of timely and high-quality reports indicate a need for caution in allowing municipalities to operate their red light camera programs without state oversight. However, there are some encouraging signs. Nassau and Suffolk demonstrated a reduction in crashes, and other reports have shown a reduction in violations. Timely disclosure of complete violation and crash data by intersection is required to conclusively prove that the programs are effective. Accordingly, the state legislature and the Governor should grant municipalities two extra years to organize data and complete the required reports.

Disclose Reports to the Public

Currently, the statute only mandates that the reports be submitted to the Governor, the Speaker of the Assembly, and the Temporary President of the Senate, hindering the public and watchdog groups such as AAA New York State from accessing the data or evaluating the programs. If the reports are already completed, there is no reason to conceal them from the public eye. In the interest of transparency and full disclosure, the state legislature and the Governor should mandate that reports be publicly available and displayed on the website of each municipality.

Penalize Municipalities for Incomplete Reports

Municipalities have not taken the state law’s reporting provisions seriously because they have not been held accountable. Without consequences for submitting late or incomplete reports, municipalities will continue to flout these responsibilities. The state legislature and the Governor should institute a penalty system for failing to submit complete reports in a timely fashion. Such penalty system could include (but not be limited to):

- A provision that the municipality may not issue any notices of liability when the report is late or incomplete, and that it shall be an affirmative defense to any such notice of liability that it was unlawfully issued and therefore invalid.
- A monetary penalty for lateness or incompleteness imposed by the state that would be dedicated to the expenses of the oversight committee (see below), traffic safety education, and transportation infrastructure.
- Either or both of the above penalties, or more severe ones, if a municipality is determined to have submitted an incomplete report more than once.

Create a State Oversight Committee

Because the municipalities have not submitted complete reports, state oversight is needed in the forms of stricter reporting requirements and penalties. However, without any particular official(s) dedicated to enforcing these requirements, they are unlikely to be followed. The state legislature and the Governor should explore the formation of a committee to monitor each red light camera program in New York State and enforce penalties if necessary.
Clarify the Requirements for the Report

Municipalities have clearly not followed the reporting regulations, but the ambiguous text of the statute has compounded this problem. State legislators wisely aimed to standardize the report, but certain requirements have been interpreted in different and occasionally insufficient ways, showing a need for clarification. The state legislature and the Governor should amend the text of the statute to resolve ambiguities and require additional information as described in Appendix C.

Educate the Public about Right on Red

Perhaps the most common reason that some motorists distrust red light camera programs is the frequency of violations involving failure to come to a complete stop before turning right on red. Violations for drivers who do not slow down at all are clearly warranted. However, some notices of liability are given to drivers who slow down significantly but not completely before proceeding to make an appropriate right turn. Many argue that, though such behavior is technically unlawful, it is generally not risky and thus may not be ticketed by a police officer. To avoid this discrepancy between cameras and traditional law enforcement, and to raise awareness of the rule, the state legislature and the Governor should require that all municipalities, except New York City, conduct a public relations campaign educating the public about the need to come to a full stop before making a right turn at a red signal. This education could take many forms, including mailers, public service announcements, or signs at each intersection saying “right on red after full stop.”

Require Video

New York City does not allow right on red, and therefore argues that video is not necessary to record red light violations because video is typically used to determine whether a car came to a complete stop before turning right. However, video can confirm amber signal lengths and provide the context of a violation. Motorists and prosecutors alike would benefit from the opportunity to review video footage, and motorists skeptical of the validity of their violation would be convinced of its truth, helping to restore trust in the programs. Therefore, the state legislature and the Governor should require that New York City and other municipalities with red light camera programs include video evidence in any notices of liability.
Conclusion

AAA supports properly managed red light camera programs, which have the potential to enhance traffic safety. Unfortunately, the lack of transparency pervading the programs in New York State has reinforced the public suspicion that the programs are solely for fiscal purposes. Many municipalities have paid mere lip service to safety and instead emphasized the budgetary benefits of the cameras, thereby missing an opportunity to remind the public of the importance of safe driving and trivializing their legitimate traffic safety goals. Moreover, the traffic safety benefits of the cameras vary by intersection. Without the collection and reporting of crash data, it is impossible to determine red light cameras’ effectiveness at a given intersection or whether additional measures are needed.

The 2014 legislative session is a critical juncture for red light camera programs. The state legislature and the Governor have a chance to reaffirm the traffic safety rationale for red light cameras by extending the pilot program for two years, strictly enforcing reporting requirements, and ensuring that reports are publicly available. This may be New York’s one shot at promoting safety and accountability in red light camera programs. Let’s get it right.
Appendix A – Legislative History of Red Light Cameras in New York State

Red light camera programs in New York State have undergone many extensions and expansions, as seen in the following table (bold = legislative change or activation of program):

<table>
<thead>
<tr>
<th>Year</th>
<th>Report due date (all sites)</th>
<th>Sunset date (all sites)</th>
<th>Max # intersections (shaded: cameras not activated)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NYC</td>
</tr>
<tr>
<td>1988</td>
<td><strong>Mar. 1, 1991</strong>&lt;sup&gt;51&lt;/sup&gt;</td>
<td><strong>Dec. 26, 1991</strong>&lt;sup&gt;52&lt;/sup&gt;</td>
<td>25&lt;sup&gt;53&lt;/sup&gt;</td>
</tr>
<tr>
<td>1991</td>
<td><strong>Mar. 1, 1993</strong>&lt;sup&gt;54&lt;/sup&gt;</td>
<td><strong>Dec. 26, 1993</strong>&lt;sup&gt;55&lt;/sup&gt;</td>
<td>25</td>
</tr>
<tr>
<td>1993</td>
<td>Mar. 1, 1993</td>
<td><strong>Dec. 1, 1996</strong>&lt;sup&gt;56&lt;/sup&gt;</td>
<td>25&lt;sup&gt;57&lt;/sup&gt;</td>
</tr>
<tr>
<td>1995</td>
<td>Mar. 1, 1993</td>
<td><strong>Dec. 1, 1999</strong>&lt;sup&gt;58&lt;/sup&gt;</td>
<td>50&lt;sup&gt;59&lt;/sup&gt;</td>
</tr>
<tr>
<td>1999</td>
<td><strong>Mar. 1, 2004</strong>&lt;sup&gt;60&lt;/sup&gt;</td>
<td><strong>Dec. 1, 2004</strong>&lt;sup&gt;61&lt;/sup&gt;</td>
<td>50</td>
</tr>
<tr>
<td>2004</td>
<td><strong>Mar. 1, 2009</strong>&lt;sup&gt;62&lt;/sup&gt;</td>
<td><strong>Dec. 1, 2009</strong>&lt;sup&gt;63&lt;/sup&gt;</td>
<td>50</td>
</tr>
<tr>
<td>2006</td>
<td><strong>Jun. 1, annually</strong>&lt;sup&gt;64&lt;/sup&gt;</td>
<td>Dec. 1, 2009</td>
<td>100&lt;sup&gt;65&lt;/sup&gt;</td>
</tr>
<tr>
<td>2007</td>
<td>Jun. 1, annually</td>
<td>Dec. 1, 2009</td>
<td>100</td>
</tr>
<tr>
<td>2008</td>
<td>Jun. 1, annually</td>
<td>Dec. 1, 2009</td>
<td>100</td>
</tr>
<tr>
<td>2009</td>
<td><strong>Jun. 1, annually</strong>&lt;sup&gt;66&lt;/sup&gt;</td>
<td><strong>Dec. 1, 2014</strong>&lt;sup&gt;67&lt;/sup&gt;</td>
<td>150&lt;sup&gt;68&lt;/sup&gt;</td>
</tr>
<tr>
<td>2012</td>
<td>Jun. 1, annually</td>
<td>Dec. 1, 2014</td>
<td>150</td>
</tr>
<tr>
<td>2013</td>
<td>Jun. 1, annually</td>
<td>Dec. 1, 2014</td>
<td>150</td>
</tr>
<tr>
<td>2014</td>
<td>Jun. 1, annually</td>
<td>Dec. 1, 2014</td>
<td>150</td>
</tr>
</tbody>
</table>

Red light camera programs have undergone additional amendments:

- In 1994, the maximum fine was set at $50, and the maximum late penalty was set at $25.<sup>78</sup>
- In 2006, crash data and expense figures were added to the mandatory reports and photo enforcement systems were required to attempt to conceal the driver’s identity.<sup>79</sup>
- In 2009, Syracuse<sup>80</sup> and Buffalo<sup>81</sup> were authorized to install red light cameras. Both cities opted to forgo the programs.<sup>82</sup> <sup>83</sup>
Appendix B – Red Light Camera Program Facts

The following table includes traffic safety statistics and other facts from the 2012 reports (except Suffolk, which first included a year of data in its 2013 report). Some of these figures provide evidence that the programs may be working as intended. These are good signs, particularly in Nassau and Suffolk; however, all results should be considered strictly preliminary, especially for municipalities that have not provided intersection-specific crash data. AAA New York State wants these programs to succeed, but at present the facts provide evidence for neither a wholehearted endorsement nor a conclusive rejection but rather cautious optimism.

<table>
<thead>
<tr>
<th>Year Implemented</th>
<th>NYC</th>
<th>Nassau</th>
<th>Suffolk</th>
<th>Yonkers</th>
<th>Rochester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993$^{84}$</td>
<td>2009$^{85}$</td>
<td>2010$^{86}$</td>
<td>2010$^{87}$</td>
<td>2010$^{88}$</td>
<td></td>
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<tr>
<td>Number of Intersections Authorized</td>
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<td>100$^{90}$</td>
<td>100$^{91}$</td>
<td>25$^{92}$</td>
<td>50$^{93}$</td>
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<td>Yes$^{96}$</td>
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<td>Fine</td>
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<td>$50$(^{103})</td>
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<td>Administrative Fee</td>
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<td>$30$(^{104})</td>
<td>$30$(^{105})</td>
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<td>$0$</td>
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<td>Vendor</td>
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<td>American Traffic Solutions(^{107})</td>
<td>Affiliated Computer Services(^{108})</td>
<td>American Traffic Solutions(^{109})</td>
<td>Redflex(^{110})</td>
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<td>Notices of Liability issued</td>
<td>821,483 (2011)(^{111})</td>
<td>459,769 (2011)(^{112})</td>
<td>278,332 (2011)(^{113})</td>
<td>73,348 (11/10-8/11)(^{114})</td>
<td>91,250 (estimate)(^{115})</td>
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<tr>
<td>Events Captured</td>
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<td>712,626 (2011)(^{117})</td>
<td>335,198 (2011)(^{118})</td>
<td>Unknown</td>
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<td>$3.6 million (estimate)(^{123})</td>
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<td>% going to Vendor</td>
<td>39%(^{124})</td>
<td>36%(^{125})</td>
<td>54%(^{126})</td>
<td>38%(^{127})</td>
<td>40%(^{128})</td>
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<tr>
<td>Overall Crashes</td>
<td>Not in 2012 report</td>
<td>-41%(^{129})</td>
<td>-2%(^{130})</td>
<td>Not in 2012 report</td>
<td>-46%(^{131})</td>
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<tr>
<td>Side Impact Crashes</td>
<td>Not in 2012 report</td>
<td>-54%(^{132})</td>
<td>-28%(^{133})</td>
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<td>Not in 2012 report</td>
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<td>Head-on Crashes</td>
<td>Not in 2012 report</td>
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<td>Unknown</td>
<td>Not in 2012 report</td>
<td>Not in 2012 report</td>
</tr>
<tr>
<td>Rear-end Crashes</td>
<td>Not in 2012 report</td>
<td>-32%(^{135})</td>
<td>+20%(^{136})</td>
<td>Not in 2012 report</td>
<td>Not in 2012 report</td>
</tr>
<tr>
<td>Injuries</td>
<td>-16%(^{137})</td>
<td>Not in 2012 report</td>
<td>-11%(^{138})</td>
<td>Not in 2012 report</td>
<td>-50%(^{139})</td>
</tr>
</tbody>
</table>
Appendix C – Ambiguities in the Vehicle and Traffic Law

State legislators wisely required that municipalities with automated enforcement programs submit reports to Albany. However, the subdivision describing the data that must be included contains ambiguities that may have contributed to the differences in what are designed to be standardized reports. This appendix will list such inconsistencies and offer suggestions to improve clarity.

Subdivision (m): In any city which adopts a demonstration program pursuant to subdivision (a) of this section, such city shall submit an annual report on the results of the use of a traffic-control signal photo violation-monitoring system to the governor, the temporary president of the senate and the speaker of the assembly on or before June first, two thousand seven and on the same date in each succeeding year in which the demonstration program is operable. Such report shall include, but not be limited to:

- The text requires submission to legislative and executive leaders, but not public disclosure. This is not an ambiguity, but should be changed.
- Additionally, the “annual” quality of the report is confusing. Ostensibly, it would seem to mean that the report due on June 1, 2014 must contain data from the 2013 calendar year. However, later subsections measure data based on the date of installation of each camera, not from January 1-December 31. This inconsistency should be clarified in each particular subsection.
- Proposed text:
  o (m): In any city which adopts a demonstration program pursuant to subdivision (a) of this section, such city shall submit an annual report on the results of the use of a traffic-control signal photo violation-monitoring system to the governor, the temporary president of the senate and the speaker of the assembly, and make such report publicly available on the website of such city, on or before June first, two thousand seven and on the same date in each succeeding year in which the demonstration program is operable. Such report shall include, but not be limited to:

1. a description of the locations where traffic-control signal photo violation-monitoring systems were used;

- The word “description” either means “list” or something else. If it means “list,” then the text should say so. If it means something else, then it would seem to be a useless clause.
  o New York City exploited this ambiguity and did not include a list of locations, perhaps because over 200 locations are instrumented for cameras but only 150 are operational at one time. The only section of New York City’s report that could be construed to satisfy this clause included a typical breakdown of the number of operational cameras by borough. A list of all the locations where cameras are installed should be explicitly mandated.
- Proposed text:
  o 1. a description list of the locations intersection and approaches to such intersections where traffic-control signal photo violation-monitoring systems were used;

2. (within each borough of such city,) the aggregate number, type and severity of accidents reported at intersections where a traffic-control signal photo violation-monitoring system is used for the year preceding the installation of such system, to the extent the information is maintained by the department of motor vehicles of this state. (In parentheses = only NYC)
3. (within each borough of such city,) the aggregate number, type, and severity of accidents reported at intersections where a traffic-control signal photo violation-monitoring system is used, to the extent the information is maintained by the department of motor vehicles of this state. (In parentheses = only NYC)

- The meaning of “type” and “severity” is unclear, as evidenced by the variety in definitions used by reports. “Type” should, at a minimum, refer to rear-end, side, head-on, pedestrian, and bicycle crashes, and “severity” should, at a minimum, refer to whether a collision produced injury.
  - Suffolk separated crashes into “right angle,” “rear end,” “left turn,” “right turn,” “head on,” “fixed object,” “ped/bicycle,” “over-taking,” “backing,” and “other/unknown” categories. Additionally, it separated crashes into those where injury occurred and where only property damage occurred. Though the report’s format was not especially conducive to before-and-after comparison of crash data, the report was the only one that satisfies state requirements.
  - Nassau separated crashes into “rear end,” “side,” and “head on” categories.
  - New York City did not include crash data in 2012 – a clear violation of the requirement – but did include injury data separated by pedestrian/bicyclist/motorist and severity of injury.
  - Rochester separated crashes into those where injury occurred and where only property damage occurred – which could reasonably be interpreted to satisfy either “type” or “severity,” but not both.
  - Yonkers did not include crash data.

- The current text does not require a control sample, which is a prerequisite for any serious academic analysis. Nassau and Suffolk, the two municipalities who have best satisfied requirements, do not include control data, which is no fault of their own – it was not mandated by the state. This oversight should be remedied.

- The timeframe for the data in subsection 3 is not specified as in subsection 2. It may refer to the most recent calendar year, the most recent non-calendar year (year measured from date of installation), or something else. It should refer to the three most recent calendar years, to allow for an easier comparison with the control data and with previous years.

- The June 1 deadline may present problems with retrieval of state data, which may lead to late reports. For this reason, the inability to obtain a particular year of data should not classify the report as “incomplete.” However, available years of data should still be included.

- Lastly, due to their largely preventable nature, “accidents” are now usually referred to as “crashes” or “collisions” in traffic safety literature. The text of the statute should reflect this change.

- Proposed text
  - 2. (within each borough of such city) the aggregate number, type, and severity of accidents reported at each intersections where a traffic-control signal photo violation-monitoring system is used and in the aggregate (within each borough of such city) for all such intersections for the year preceding the installation of such system, to the extent the information is maintained by the department of motor vehicles of this state;
  - 2-a. for subsections 2, 3, and 4 of this subdivision, “type” shall refer to the geometric relationship between parties in the collision, including but not limited to rear-end, side, head-on, pedestrian, and bicyclist. “Severity” shall refer to the extent of injury and/or property damage in each accident;
3. for each of the three calendar years preceding the due date of such report as specified in the heading of subdivision (m), (within each borough of such city) the aggregate number, type, and severity of accidents/collisions reported at intersections where a traffic-control signal photo violation-monitoring system is used, and the number, type, and severity of collisions reported at each such intersection, to the extent the information is maintained by the department of motor vehicles of this state, provided that if an intersection has not used such system for such three calendar years only the calendar years after such system was installed shall be required, and further provided that the inability to obtain one calendar year of data shall not be cause for exemption from the requirements for other calendar years;

4. for each of the three calendar years preceding the due date of such report as specified in the heading of subdivision (m), the aggregate number, type, and severity of collisions reported at twenty of the most dangerous intersections where a traffic-control signal photo violation-monitoring system is not used, to the extent the information is maintained by the department of motor vehicles of this state;

4. the number of violations recorded at each intersection where a traffic-control signal photo violation-monitoring system is used and in the aggregate on a daily, weekly and monthly basis;

- It is unclear whether the text refers to a calendar year or a year measured from the date of installation. It should refer to every calendar year since the program’s inception (for aggregate numbers) and the three most recent calendar years (for each intersection) to facilitate comparison.
- It is also unclear whether the “daily, weekly, and monthly basis” refers to the number of violations in each specific day, week, and month or the average number of violations per day, week, and month. It would be helpful to give specific numbers for each month to see if certain months produce more violations. Providing specific numbers for each day and week seems unnecessary and unwieldy. The average number of violations per day and the average number of violations per intersection per day are more effective statistics.
  - New York City provided two effective measures: specific numbers for each month since the program’s inception and the average number of violations per camera per day for each year.
  - Nassau included the number of violations for each intersection in the calendar year.
  - Suffolk included the number of violations for each intersection in the calendar year, and included the average number of violations per day, week, and month.
  - Yonkers visually displayed the number of violations for each intersection in each month.
  - Rochester did not include violation data.

- Proposed text
  - 45. for each of the three calendar years preceding the due date of such report as specified in the heading of subdivision (m), the number of violations recorded at each intersection where a traffic-control signal photo violation-monitoring system is used and the average number of violations per day at each such intersection, and in the aggregate on a daily, weekly, and monthly basis;
  - 56. for every calendar year preceding the due date of such report as specified in the heading of subdivision (m), the number of violations recorded in that calendar year, the
number of violations recorded in each month of such calendar year, the average number of violations per day, and the average number of violations per intersection per day;

5. the total number of notices of liability issued for violations recorded by such systems;
6. the number of fines and total amount of fines paid after first notice of liability issued for violations recorded by such systems;
7. the number of violations adjudicated and results of such adjudications including breakdowns of dispositions made for violations recorded by such systems;
8. the total amount of revenue realized by such city from such adjudications;
9. expenses incurred by such city in connection with the program; and

- These sections are fairly straightforward, but do not specify a timeframe.
- Additionally, the expense report should include the amount paid to the vendor associated with the program.
- Proposed text:
  - 5. for every calendar year preceding the due date of such report as specified in the heading of subdivision (m), the total number of notices of liability issued for violations recorded by such systems;
  - 6. for every calendar year preceding the due date of such report as specified in the heading of subdivision (m), the number of fines and total amount of fines paid after first notice of liability issued for violations recorded by such systems;
  - 7. for every calendar year preceding the due date of such report as specified in the heading of subdivision (m), the number of violations adjudicated and results of such adjudications including breakdowns of dispositions made for violations recorded by such systems;
  - 8. for every calendar year preceding the due date of such report as specified in the heading of subdivision (m), the total amount of revenue realized by such city from such adjudications.
  - 9. for every calendar year preceding the due date of such report as specified in the heading of subdivision (m), expenses incurred by such city in connection with the program, including the amount paid to the vendor associated with the program; and

10. quality of the adjudication process and its results.

- Nobody seems to know what this means, since the results of adjudications were already mentioned. Legislators should clarify what information they are seeking from this clause.
- Proposed text:
  - 10. quality a description of the adjudication and appeals process and its results.
Appendix D – Yonkers’ Misleading Graphs

Yonkers’ 2012 report stands out as particularly lacking by omitting crash data, financial figures, and adjudication results. The report claims that 12 out of 16 intersections have seen a reduction in violations, erroneously counting the intersections shown below, which are neither clearly reductions nor increases. (The first month given is the first full month of operation):

Intersection #2 is deemed a 1% reduction in crashes due to the arbitrary selection of endpoints. March-August is a reduction, but May-August would be an increase. It is self-evident that no clear pattern has emerged at this intersection. “No clear pattern” would be a far more appropriate classification than “reduction.”

Intersections #6 and #12 produced a large increase in violations from April to May, followed by a steady decrease until August. Had Yonkers measured from April to May, June, or July, it would have found an increase in violations.

Perhaps the increase from April to May was a result of drivers adjusting to the cameras, or driving more in summer – but that increase does not happen at all intersections. Again, the best classification is “no clear pattern”, not “reduction.” These intersections provide persuasive reasons to postpone a conclusion until multiple years of data have been thoroughly analyzed.

The classification of these three intersections as “reductions” is unwarranted, and misleads readers into believing that 75% of intersections reduced violations, when the true proportion is just over half.
Appendix E – Sources

2 Ibid.
14 Brodbeck, Tom, “Red light cam disgrace: crashes increase 18% at intersections where devices installed,” *Winnipeg Sun* (September 22, 2010).
18 Ibid.
24 A.1037 (Heastie).
25 S.459-A (Avella).
26 A.8386/S.6115 (Rosa/Espaillat).
27 Ibid.
28 S.459-A (Avella) and A.8386/S.6115 (Rosa/Espaillat).
A.9498 (Gantt).

A.9583/S.7295 (Fahy/Breslin).

A.8368/S.7236 (Pretlow/Hassell-Thompson) and A.7319/S.5010 (Pretlow/Hassell-Thompson).

A.8250/S.6389 (Paulin/Stewart-Cousins).

S.6652 (Tkaczyk).

A.1902 (Hooper).

Ibid.

A.1432 (Gantt).

A.290/S.211 (Kavanagh/Squadron).

A.3862 (Pretlow).

A.8738 (Lupinacci).

A.4102-A (Weisenberg).

A.1897 (Hooper).


Suffolk County Department of Public Works, “Suffolk County Red Light Safety Program 2011 Calendar Year Annual Report.”

City of Yonkers, “Yonkers Intersection Safety Program.”

Delaney, Chris, “Red Light Cameras.”


Ibid.


McKinney’s 1988 Session Laws of New York, Chapter 746, Pages 2141-2142

Ibid.

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McKinney’s 1993 Session Laws of New York, Chapter 582.


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McKinney’s 1999 Session Laws of New York, Chapter 503, pages 1115-1116.

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McKinney’s 2004 Session Laws of New York, Chapter 667, pages 1380-1381.

Ibid.


Ibid.


Ibid., Chapter 18, pages 21-22.

Ibid., Chapter 19, pages 22-28.


McKinney’s 2009 Session Laws of New York, Chapter 23, pages 64-69.

Ibid., Chapter 20, pages 28-40.

Ibid., Chapter 22, pages 52-64.


Ibid.


Ibid., Chapter 383, pages 1095-1107.

Ibid., Chapter 21, pages 41-52.


Ibid., Chapter 22, pages 52-64.


Ibid.


Ibid.


Ibid.


Ibid.


The text of the statute, with a couple technical differences, is the same for all municipalities. The sections of the Vehicle and Traffic Law that authorize red light camera programs are:

- New York: 1111-a
- Nassau: 1111-b
- Yonkers: 1111-b*2
- Rochester: 1111-b*4
- Suffolk: 1111-b*5