New York State Automated Traffic Enforcement Systems Biennial Survey

Introduction *

The FAST Act prohibits the use of Section 402 grant funds for automated traffic enforcement systems. Beginning with FFY 2018, states where automated red light or speed enforcement systems are used on public roads are required to conduct a biennial survey to collect specific information on all of the systems that are installed in the state.

In compliance with this requirement, the Governor's Traffic Safety Committee (GTSC), with the assistance of the Institute for Traffic Safety Management and Research (ITSMR), conducted a survey of automated traffic enforcement systems in New York State from November 2017 through January 2018. This report documents New York's compliance with the survey requirements detailed in 23 CFR Section 1300.13.

Background

The New York State Vehicle & Traffic Law Sections 1111 and 1180 authorize specific jurisdictions to establish demonstration programs that impose monetary liability on vehicle owners for failure to comply with posted speed limits or traffic-control indications. Under these programs the jurisdictions may install and operate photo speed violation-monitoring systems within a restricted number of school speed zones, or they may install and operate traffic-control signal photo violation-monitoring devices at a restricted number of intersections, for a limited period of time. Repeal dates are specified in the legislation. Owner liability per violation is not to exceed \$50, with an additional penalty of no more than \$25 for failure to respond.

The jurisdictions in New York State currently authorized to implement automated traffic enforcement systems and specific details about their programs are shown in Table 1 below.

Demonstration Systems for Speed Enforcement Cameras § 1180-b § 1180-c Section of NYS Vehicle and Traffic Law § 1180-c 1 per school district 1 per school district 140 Maximum number of school speed zones 7/25/2018 7/25/2018 8/30/2018 Repeal Date System operational as of 3/1/2018 No Yes No **Demonstration Systems for Red Light Cameras** § 1111-d § 1111-b § 1111-b § 1111-b § 1111-a § 1111-e Section of NYS Vehicle and Traffic Law § 1111-d § 1111-d § 1111-b 100 Maximum number of intersections 20 12 12 150 50 100 12 Repeal Date 8/21/2019 8/21/2019 12/1/2019 8/21/2019 12/1/2019 12/1/2019 12/1/2019 9/12/2020 12/1/2019 System operational as of 3/1/2018 Unknown Note: Liability for each violation shall not exceed \$50; additional penalty for failure to respond shall not exceed \$25.

Table 1 Authorized Automated Traffic Enforcement Systems in New York State

The FAST Act requires states to compare the automated traffic enforcement systems implemented on their public roadways with NHTSA's "Speed Enforcement Camera Systems Operational Guidelines" (2008), hereafter referred to as the *Speed Camera Guidelines*, and "Red Light Camera Systems Operational Guidelines" (2005), hereafter referred to as the *Red Light Camera Guidelines*. New York has complied with the federal *Speed Camera Guidelines* in several areas. The state has ensured legal authority for automated speed enforcement (ASE) and has made violations and penalties consistent among all jurisdictions using ASE (*Chapter 2, General Considerations and Planning, pp. 5 and 10*). By selecting school zones for ASE locations, New York has also complied with the federal guidelines which state that school zone enforcement has a "high level of support," making it "a good way to introduce ASE in a jurisdiction" (*Chapter 3, Program Startup, p. 18*).

Similarly, New York has followed the *Red Light Camera Guidelines* in that it has "enacted legislation at the State level that authorizes the use of red light camera systems" (*Chapter V, Red Light Camera Program Implementation, p. 14*). Additional comparisons of individual automated enforcement systems with the federal guidelines are provided in the discussion of the survey results.

Survey Administration

A questionnaire originally developed by the Maryland Highway Safety Office was adapted for New York's survey. Two versions of the questionnaire were used: one to collect information on red light camera systems and one for automated speed enforcement systems. Copies of the two questionnaires are included in the Appendix.

The questionnaires were designed to collect sufficient information to address each of the requirements under Section 1300.13(d)(2). Specifically, adequate information was collected to measure the transparency, accountability, and safety attributes of each automated traffic enforcement system and to compare each automated system with critical elements of the federal *Speed Camera Guidelines* and the *Red Light Camera Guidelines*.

The original survey population included the nine jurisdictions authorized to install automated traffic enforcement systems identified in Table 1. The questionnaires were originally mailed with a cover letter to each of these jurisdictions; follow-up by telephone and email was conducted, when necessary. All jurisdictions but one, the City of Yonkers, responded to the survey. Those who answered that they currently operate or formerly operated automated traffic enforcement systems completed the survey. Details about those who responded that they do not currently operate these systems are listed below.

- Nassau County installed an ASE system but terminated the program in 2014.
- Suffolk County never installed an ASE system.
- The City of Rochester operated a Red Light Camera system from 2010 to 2016.
- The City of White Plains decided against moving forward with a Red Light Camera program.

Survey Results – Speed Enforcement Camera Systems

General

A number of general questions were asked to collect descriptive information about the jurisdiction and the automated speed enforcement (ASE) system that was installed. Currently, there is only one ASE

system operational in the state. New York City, with a population of 8.5 million, has continued to operate an ASE program since 2014. Nassau County's ASE system was only operational in 2014. (*Table 2, Q3-5*). Both New York City and Nassau County stated in the survey that they referred to and followed the federal Guidelines when implementing their systems (*Q6*).

Table 2 Survey Results - Speed Enforcement Camera Systems in New York State: General

	Wasauco	Hen Joh City
General		
3 Population:	1.3 mil	8.5 mil
4 In what year did the Automated Speed Enforcement (ASE) system first become operational?	e 2014	2014
5 If no longer operational, what year was the system terminated?	2014	
6 Did the jurisdiction refer to and follow federal DOT "Speed Enforcement Came Systems Operational Guidelines" (DOT HS 810 916) when implementing its autoenforcement system?		Yes
7 Ownership of system (camera & equipment): [Jurisdiction-owned or Contracted/leased]	Contr.	Juris.

New York City owns the equipment used in its ASE system, while Nassau County's equipment was leased (Q7).

Transparency

The survey included four questions related to the transparency of the automated speed enforcement program. These questions collected data on whether information on the locations of the cameras, revenue generation, revenue distribution, and the number of violations issued is publicly available. An additional question asked whether, upon deployment at a specific location, there is a warning period before violations are issued.

New York's ASE programs follow the general NHTSA recommendation that "to achieve speeding deterrence, the public must be aware of the ASE program and how it works" (*Speed Camera Guidelines, Chapter 3, Program Startup, p. 21*). As shown in Table 3, Nassau County and New York City both answered that they make the following information about their ASE systems publicly available: the placement locations of cameras, information regarding revenue and the distribution of revenue, and the number of violations issued (*Q1-4*).

Table 3 Survey Results – Speed Enforcement Camera Systems in New York State: Transparency

Tran	sparency	WasauCon	rick RentolyCity
		V	V
	Are placement locations of speed enforcement cameras publicly available?	Yes	Yes
2	Is information regarding automated speed enforcement revenue publicly available?	Yes	Yes
3	Is information regarding the distribution of this revenue publicly available?	Yes	Yes
4	Is the number of automated speed enforcement violations issued publicly available?	Yes	Yes
5	Upon deployment at a specific location, is there a warning period before violations are issued?	No	No

The NHTSA Guidelines state that "revealing enforcement locations contributes to the goal of program transparency ... though public awareness of enforceable sites may reduce the general deterrent effect of ASE." (Chapter 3, Program Startup, p. 22).

Nassau County and New York City responded that after the deployment at a specific site, there is no warning period before violations are issued (*Q5*). This practice is consistent with the *Speed Camera Guidelines*, which point out that although a warning period has some advantages, "a disadvantage is that a warning period may encourage some drivers to speed intentionally because they know there will be no penalties" (*Chapter 3, Program Startup, p. 26*).

Accountability

In the area of program accountability, two questions were asked to determine whether there is a system in place for dispute resolution, and whether the program is audited (*Table 4*).

Table 4 Survey Results - Speed Enforcement Camera Systems in New York State: Accountability

	Hossau	New York City
Accountability		
1 Is there a system in place for dispute resolution?	Yes	Yes
2 Is the automated speed enforcement program audited?	No	No
2a If yes, how often?		

Nassau County and New York City replied that they have a system in place for dispute resolution (Q1), consistent with NHTSA's directive that "violation notice recipients must be provided the opportunity to contest violations at a hearing" (Chapter 6, Violation Notice Receipt and Adjudication, p. 41). An appropriate procedure is one where "a human reviewer must review each ASE citation to determine whether a violation took place. A human also serves as the accuser at a hearing" (Chapter 3, Program Startup, p. 23).

NHTSA's *Speed Camera Guidelines* offer no recommendation for auditing an ASE program. Nassau County and New York City reported that their programs are not audited.

Safety Attributes

Jurisdictions were asked whether traffic data (engineering & crash) is used to determine site placement and whether they analyze traffic data to determine the impact of automated enforcement on safety elements such as crashes and speed. In keeping with the *Speed Camera Guidelines*, Nassau County and New York City reported that they use traffic data (engineering & crash) to determine placement of enforcement sites (*Table 5, Q1*). As indicated in Table 1, New York's Vehicle and Traffic Law allows ASE systems only in school speed zones.

Table 5 Survey Results – Speed Enforcement Camera Systems in New York State: Safety Attributes

		MassauCon	Hen York City
Safe	ty Attributes		
1	Is traffic data (engineering & crash) utilized to determine placement of enforcement sites?	Yes	Yes
2	Does the jurisdisction analyze traffic data to determine the impact of automated speed enforcement on safety elements (i.e., crashes, speed, etc.)?	Yes	Yes

Nassau County and New York City both responded in the survey that they analyze traffic data to determine the impact of ASE on safety elements, i.e., crashes and speed (Q2), following NHTSA's guideline that "the most important measures of ASE effectiveness are its effects on crashes and vehicle speeds" (Chapter 7, Program Evaluation, p. 44).

Survey Results – Red Light Camera Systems

General

Jurisdictions with Red Light Camera Systems were also asked to respond to a set of general questions regarding their programs. The cities of Albany, Mount Vernon, New Rochelle and New York City, as well as two counties – Nassau and Suffolk – currently operate Red Light Camera systems (*Table 6, Q4-5*). The City of Rochester terminated its program on December 31, 2016. The City of Yonkers did not respond to the survey.

Table 6 Survey Results – Red Light Camera Systems in New York State: General

		City of Alth	City of Nic	Wasau Ci	lintid City of Net	n Rollelle Nen York	jiri Citri of Rock	Suffalk County
Gen	eral							
3	Population:	97,856	70,000	1.3 mil	80,000	8.5 mil	210,000	1.5 mil
4	In what year did the Red Light Camera system first become operational?	2015	2015	2009	2016	1994	2010	2010
5	If no longer operational, what year was the system terminated?						2016	
6	Did the jurisdiction refer to and follow FHWA "Red Light Camera Systems Operational Guidelines" (FHWA-SA-05-002) when implementing its automated enforcement system?	Don't Know	Yes	Yes	Yes	Yes	Don't Know	Don't Know
7	Ownership of system (camera & equipment): [Jurisdiction-owned or Contracted/leased]	Contr.	Contr.	Contr.	Contr.	Juris.	Contr.	Contr.

Of those who responded to the survey, four jurisdictions reported that they followed the federal Guidelines when implementing their system and three replied that they did not know, most likely due to personnel changes in those responsible for the program (Q6).

As with its ASE system, New York City owns its own red light cameras & equipment, while the other jurisdictions use contractor-owned equipment (Q7). The federal Guidelines indicate that leasing the equipment is an acceptable alternative and recommend that where a private contractor installs and operates the equipment, the local agency should have complete oversight and supervision of the program (Red Light Camera Guidelines, Chapter V, Red Light Camera Program Implementation, p. 15).

Transparency

In the area of program transparency, the federal Guidelines recommend a public awareness and information campaign that clearly describes the operation of the red light camera equipment, the program objectives, and the use of the program revenues (*Chapter V, Red Light Camera Program Implementation, p. 18*). All seven jurisdictions follow this recommendation by making information available to the public on the placement locations of red light cameras, information regarding revenue, and the number of violations issued (*Table 7, Q1-2, 4*). In addition, Albany, Mount Vernon, New Rochelle and New York City responded that they make information regarding the distribution of the revenue publicly available (*Q3*).

Table 7 Survey Results - Red Light Camera Systems in New York State: Transparency

		City of Al	City of N	ount Vernon	City of A	en Rochelle Rent of	City of Pa	ochester Sukolik County
Tran	sparency							
1	Are placement locations of red light cameras publicly available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	Is information regarding automated red light enforcement revenue publicly available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	Is information regarding the distribution of this revenue publicly available?	Yes	Yes	No	Yes	Yes	No	No
4	Is the number of automated red light enforcement violations issued publicly available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	Upon deployment at a specific location, is there a warning period before violations are issued?	Yes	Yes	No	Yes	No	Yes	No

The *Red Light Camera Guidelines* state that the option of a warning period may be used in the implementation of Red Light Camera programs and often the initial educational program includes issuance of warning citations to likely violators for a limited period, and clear public communication of the date on which warning violations will be halted and actual enforcement violations will begin (*Chapter V, Red Light Camera Program Implementation, p. 15*). Albany, Mount Vernon, New Rochelle and Rochester reported that they have used this option (*Q5*).

Accountability

Regarding program accountability, five of the seven jurisdictions that responded to the survey said that violations are reviewed and signed by a sworn law enforcement officer (*Table 8, Q1*). This procedure follows the *Red Light Camera Guidelines* which state that "only a qualified law enforcement officer should be authorized to issue a citation. Citations should not be created prior to review of appropriate evidentiary material by the officer" (*Chapter V, Red Light Camera Program Implementation, p. 27*).

Table 8 Survey Results – Red Light Camera Systems in New York State: Accountability

		City of Albah	City of MOV	Wasan Con	city of New	Rochertork	id City of Roch	Suffalk Country
Acco	ountability							
1	Are violations reviewed and signed by a sworn law enforcement officer?	Yes	Yes	Yes	Yes	No	Yes	No
2	Is there a system in place for dispute resolution?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	Is the automated red light enforcement program audited?	No	No	No	No	No	Yes	No
3a	If yes, how often?						Annually	

All seven of the jurisdictions reported that there is a system in place for dispute resolution (*Q2*). Again, this practice is in keeping with federal Guidelines which recommend that programs should "answer telephone inquiries, schedule violator appointments ... provide court-requested information and support court hearings" (*Chapter V, Red Light Camera Program Implementation, p. 27*).

Although the *Red Light Camera Guidelines* recommend "quality assurance audits, to be conducted by trained traffic officers for a randomly selected sample of recorded violations on a periodic basis," only the City of Rochester which terminated its program in 2016 indicated that an annual audit was performed (*Chapter V, Red Light Camera Program Implementation, p. 27; Q3-3a*).

Safety Attributes

The Red Light Camera Guidelines state that "crash data is the most comprehensive basis for the identification and analysis of red light running at signalized intersections," and recommend that the jurisdiction considering the use of a red light camera system "should conduct an engineering study to determine the factors contributing to red light running" (Chapter III, Problem Identification, pp. 6, 7). Site selection should be based on accurate crash data, and installation at a signalized intersection should be done "when an engineering study of the intersection determines photo enforcement is an appropriate countermeasure to reduce the incidence of red light running" (Chapter V, Red Light Camera Program Implementation, pp. 20-21). Consistent with these guidelines, all seven jurisdictions reported that they utilize traffic data (engineering & crash) to determine placement of enforcement sites (Table 9, Q1).

Table 9 Survey Results - Red Light Camera Systems in New York State: Safety Attributes

	rable 5 Saivey Results Rea Light Camera s	ystein	J		ruic. J	arcty / tt		<u>, </u>	
		City of Pi	CHAOLA	Nassau	City of R	new Rochelle	City of P	odhestet Sulfalk Cavi	nty
Safe	ety Attributes								Т
-	Is traffic data (engineering & crash) utilized to determine placement of enforcement sites?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	I
2	Does the jurisdisction analyze traffic data to determine the impact of automated red light enforcement on safety elements (i.e., crashes, speed, etc.)?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

All seven jurisdictions also responded in the survey that they analyze traffic data to determine the impact of automated red light enforcement on safety elements, i.e., crashes and speed (Q2). Again, this practice is in keeping with the federal Guidelines which state that "continual analysis of violation and crash data, with community input, is an important element of a successful red light camera program" (Chapter V, Red Light Camera Program Implementation, p. 28).

Summary

The necessity for jurisdictions in New York State to obtain legal authority before implementing automated traffic enforcement systems facilitated the identification of the cities and counties where Automated Speed Enforcement (ASE) or Red Light Camera systems have been installed. Jurisdictions with current operational systems, as well as jurisdictions that implemented systems that were subsequently terminated, were contacted and asked to complete a survey for one or both types of systems. Two respondents were surveyed regarding ASE systems: New York City which is the only jurisdiction currently operating an ASE program and Nassau Country which terminated its program in 2014. Seven jurisdictions with Red Light Camera systems participated in the survey; only the City of Rochester's system is no longer operational.

Appendix: Questionnaires * Biennial Survey of State Automated Traffic Enforcement Systems *



Conoral

FIXING AMERICA'S SURFACE TRANSPORTATION (FAST)
US CODE Title 23; Public Law 114-94, Title IV – Highway Safety
§ 4002 – Special Funding Conditions for Section 402 Grants

Biennial Survey of State Automated Traffic Enforcement Systems Speed Enforcement Camera Systems

Genera	
1.	Name of Jurisdiction:
2.	Type of Government Entity (state, county, city, etc.):
3.	Population:
4.	In what year did the Automated Speed Enforcement (ASE) system first become operational?
5.	If no longer operational, what year was the system terminated?
6.	Did the jurisdiction refer to and follow federal DOT "Speed Enforcement Camera Systems Operational Guidelines"
	(DOT HS 810 916) when implementing its automated enforcement system? Yes No Don't Know
7.	Ownership of system (camera & equipment):
	Jurisdiction-owned Contracted/leased
Transpa	rency
1.	Are placement locations of speed enforcement cameras publicly available? Yes No
2.	Is information regarding automated speed enforcement revenue publicly available? Yes No
3.	Is information regarding the distribution of this revenue publicly available? Yes No
4.	Is the number of automated speed enforcement violations issued publicly available?
	Yes No No
5.	Upon deployment at a specific location, is there a warning period before violations are issued? Yes No
Accoun	ability
1.	Is there a system in place for dispute resolution?
2	Yes No
2.	Is the automated speed enforcement program audited? Yes No If yes, how often?
-	Attributes
1.	Is traffic data (engineering & crash) utilized to determine placement of enforcement sites? Yes No
2.	Does the jurisdiction analyze traffic data to determine the impact of automated speed enforcement on safety
	elements (i.e., crashes, speed, etc.)?
	Yes No No
Data rec	orded by:
	Name Date
	Dhono number Email address



Biennial Survey of State Automated Traffic Enforcement Systems *Red Light Camera Systems**

General	
1.	Name of Jurisdiction:
2.	Type of Government Entity (state, county, city, etc.):
3.	Population:
4.	In what year did the Red Light Camera system first become operational?
5.	If no longer operational, what year was the system terminated?
6.	Did the jurisdiction refer to and follow FHWA "Red Light Camera Systems Operational Guidelines" (FHWA-SA-05-002)
	when implementing its automated enforcement system?
	Yes No Don't Know
7.	Ownership of system (camera & equipment):
	Jurisdiction-owned Contracted/leased
Transpa	rency
1.	Are placement locations of red light cameras publicly available?
	Yes No
2.	Is information regarding automated red light enforcement revenue publicly available?
	Yes No
3.	Is information regarding the distribution of this revenue publicly available?
	Yes No No
4.	Is the number of automated red light enforcement violations issued publicly available?
	Yes No No
5.	Upon deployment at a specific location, is there a warning period before violations are issued?
	Yes No No
Account	•
1.	Are violations reviewed and signed by a sworn law enforcement officer?
	Yes No No
2.	Is there a system in place for dispute resolution?
	Yes No No
3.	Is the automated red light enforcement program audited?
	Yes No If yes, how often?
Safety A	ttributes
1.	Is traffic data (engineering & crash) utilized to determine placement of enforcement sites?
	Yes No No
2.	Does the jurisdiction analyze traffic data to determine the impact of automated red light enforcement on safety
	elements (i.e., crashes, speed, etc.)?
	Yes No
Data rec	orded by:
	Name Date
	Phone number Email address