# New York State Automated Traffic Enforcement Systems Biennial Survey

# Introduction

The FAST Act prohibits states from using federal 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 biennial survey of automated traffic enforcement systems in New York State in FFY 2020. 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.

Table 1 Authorized Automated Traffic Enforcement Systems in New York State

			City of		City of			City of	
	City of	City of	Mount	Nassau	New	New York	Suffolk	White	City of
	Albany	Buffalo	Vernon	County	Rochelle	City	County	Plains	Yonkers
<b>Demonstration Systems</b>	for Speed Enf	orcement Ca	ameras						
Section of NYS Vehicle									
and Traffic Law		§ 1180-d				§ 1180-b			
Maximum number of school speed zones		20				750			
Repeal Date		9/6/2024				7/1/2022			
System operational as of 2/1/2020		Yes				Yes			
Demonstration Systems	for Red Light	Cameras							
Section of NYS Vehicle and Traffic Law	§ 1111-d		§ 1111-d	§ 1111-b	§ 1111-d	§ 1111-a	§ 1111-b	§ 1111-e	§ 1111-b
Maximum number of intersections	20		12	100	12	150	100	12	25
Repeal Date	12/1/2024		12/1/2024	12/1/2024	12/1/2024	12/1/2024	12/1/2024	12/1/2024	12/1/2024
System operational as of 2/1/2020	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Unknown
of 2/1/2020 Yes Yes Yes Yes Yes Yes Un  Note: Liability for each violation shall not exceed \$50; additional penalty for failure to respond shall not exceed \$25.						Unknov			

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 biennial surveys. Two versions of the questionnaire are 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 are designed to collect sufficient information to address each of the requirements under Section 1300.13(d)(2). Specifically, adequate information is 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 population for the FFY 2020 biennial survey included the nine jurisdictions authorized to install automated traffic enforcement systems identified in Table 1. The questionnaires were mailed with a cover letter to each of these jurisdictions. The jurisdictions were also given the option of downloading, completing and emailing PDF fillable form versions of the questionnaires. Follow-up by telephone and email was conducted when necessary. All jurisdictions, with the exception of the City of Yonkers, responded to the survey.

Since the FFY 2018 survey, new automated traffic enforcement systems have become operational in two jurisdictions; the City of Buffalo now has an Automated Speed Enforcement program and the City of White Plains has installed a Red Light Camera system.

# 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 are two ASE systems operational in the state. New York City, with a population of 8.5 million, has continued to operate an ASE program since 2014. The City of Buffalo started its ASE system in 2019 (*Table 2, Q3-4*). New York City stated in the survey that they referred to and followed the federal Guidelines when implementing their system, while the City of Buffalo replied that they don't know (*Q6*). New York City owns the equipment used in its ASE system, while Buffalo's equipment is leased (*Q7*).

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

		City of Buffalo	New York City
Ge	neral		
3	Population:	256,304	8.5 mil
4	In what year did the Automated Speed Enforcement (ASE) system first become	2019	2014
	operational?		
5	If no longer operational, what year was the system terminated?		
6	Did the jurisdiction refer to and follow federal DOT "Speed Enforcement	Don't Know	Yes
	Camera Systems Operational Guidelines" (DOT HS 810 916) when implementing		
	its automated enforcement system?		
7	Ownership of system (camera & equipment): [Jurisdiction-owned or	Contracted/	Owned
	Contracted/leased]	Leased	

#### 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, the City of Buffalo 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

		City of Buffalo	New York City
Tra	ansparency		
1	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?	Yes	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*).

The City of Buffalo responded that upon deployment at a specific site, there is a warning period before violations are issued, in keeping with the goal of program transparency (Q5). New York City, on the other hand, responded that there is no warning period. 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, three questions were asked to determine whether violations are reviewed and signed by a law enforcement officer, 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

		City of Buffalo	New York City			
Acc	Accountability					
1	Are violations reviewed and signed by a sworn law enforcement officer?	No	No			
2	Is there a system in place for dispute resolution?	Yes	Yes			
3	Is the automated speed enforcement program audited?	Yes	No			
3a	If yes, how often?	Annually				

According to the Speed Camera Guidelines, 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). The City of Buffalo and New York City both responded that violations are not reviewed and signed by a sworn law enforcement officer (Q1). However, New York City transportation officials comply with the Guidelines by overseeing the city's program, selecting camera sites and reviewing violations before fines are mailed. Both cities replied that they have a system in place for dispute resolution (Q2), 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).

NHTSA's *Speed Camera Guidelines* offer no recommendation for auditing an ASE program. The City of Buffalo reported that their program is audited annually, and New York City reported that their program is not audited (Q3, 3a).

#### 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*, the City of Buffalo 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

		City of Buffalo	New York City
Saf	fety Attributes		
1	Is traffic data (engineering & crash) utilized to determine placement of enforcement sites?	Yes	Yes
2	Does the jurisdiction analyze traffic data to determine the impact of automated speed enforcement on safety elements (i.e., crashes, speed, etc.)?	Yes	Yes

The City of Buffalo 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, New York City and White Plains, as well as two counties – Nassau and Suffolk – currently operate Red Light Camera systems (*Table 6, Q4-5*). 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					City of
		City - f	,	NI	C'to a f Name	Nimo	C CC - II.	•
		City of	Mount	Nassau	City of New	New	Suffolk	White
		Albany	Vernon	County	Rochelle	York City	County	Plains
Ge	neral							
3	Population:	97,856	70,000	1.3 mil	80,000	8.5 mil	1.5 mil	57,925
4	In what year did the Red Light Camera	2015	2015	2009	2016	1994	2010	2018
	system first become operational?							
5	If no longer operational, what year							
	was the system terminated?							
6	Did the jurisdiction refer to and follow	Don't Know	Yes	Yes	Yes	Yes	Don't Know	Yes
	FHWA "Red Light Camera Systems							
	Operational Guidelines" (FHWA-SA-							
	05-002) when implementing its							
	automated enforcement system?							
7	Ownership of system (camera &	Contracted/	Contracted/	Contracted/	Contracted/	Owned	Contracted/	Contacted/
	equipment): [Jurisdiction-owned or	Leased	Leased	Leased	Leased		Leased	Leased
	Contracted/leased]							

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

Just as it owns 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, Nassau County, New Rochelle, New York City and White Plains responded that they make information regarding the distribution of the revenue publicly available (*Q3*).

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 White Plains reported that they have used this option (*Q5*).

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

	,	City of	City of Mount	Nassau	City of New	New York	Suffolk	City of White
		Albany	Vernon	County	Rochelle	City	County	Plains
Tra	ansparency							
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	Yes	Yes	Yes	No	Yes
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	No	Yes

## Accountability

Regarding program accountability, four 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		City of	New		City of
		City of	Mount	Nassau	New	York	Suffolk	White
		Albany	Vernon	County	Rochelle	City	County	Plains
Acc	ountability							
1	Are violations reviewed and signed by a sworn law enforcement	Yes	Yes	No	Yes	No	No	Yes
	officer?							
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	Yes	No	No	No	Yes	Yes
3a	If yes, how often?						Annually	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).

In keeping with the *Red Light Camera Guidelines*, which recommend "quality assurance audits, to be conducted by trained traffic officers for a randomly selected sample of recorded violations on a periodic basis," Mount Vernon, Suffolk County and White Plains 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

		City of Albany	City of Mount Vernon	Nassau County	City of New Rochelle	New York City	Suffolk County	City of White Plains
	Safety Attributes							
1	Is traffic data (engineering & crash) utilized to determine placement of enforcement sites?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	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 were contacted and asked to complete a survey for one or both types of systems. Two respondents were surveyed regarding ASE systems: the City of Buffalo and New York City. Seven jurisdictions with Red Light Camera systems participated in the survey.

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



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

General	
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) whe
	implementing its automated enforcement system?
	Yes No Don't Know
7.	Ownership of system (camera & equipment):
	Jurisdiction-owned Contracted/leased
Transpa	
1.	Are placement locations of speed enforcement cameras publicly available?
	Yes No No
2.	Is information regarding automated speed enforcement revenue publicly available?
	Yes No 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
5.	Upon deployment at a specific location, is there a warning period before violations are issued?
	Yes No No
Account	ability
	Are violations reviewed and signed by a sworn law enforcement officer?
	Yes No No
2.	Is the <u>re</u> a system in place for dispute resolution?
	Yes No No
3.	Is the <u>automated</u> speed 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 speed enforcement on safety elements (i.e., crashes,
	speed, etc.)?
	Yes No No
Data rec	orded by:
	Name Date
	Phone 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 No
2.	Is information regarding automated red light enforcement revenue publicly available?
	Yes No No
3.	Is information regarding the distribution of this revenue publicly available?
	Yes No No
4.	Is the <u>number of automated red light enforcement violations issued publicly available?</u>
	Yes No No
5.	Upon deployment at a specific location, is there a warning period before violations are issued?
	Yes No No
Account	,
4.	Are violations reviewed and signed by a sworn law enforcement officer?
	Yes No No
5.	Is there a system in place for dispute resolution?
	Yes No No
6.	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 No
Data reco	orded by:
	Name Date
	Phone number Email address