

Biennial Survey of State Automated Traffic Enforcement Systems (Red Light and Speed Enforcement Cameras and Equipment) in Illinois during FY18

Bureau of Safety Programs and Engineering (BSPE)

The following is a summary of the state automated traffic enforcement systems survey, mainly Red Light Cameras (RLC) and Speed Cameras (SC) conducted by the Bureau of Safety Programs and Engineering (BSPE) at the Illinois Department of Transportation (IDOT). The survey questionnaire was designed to gather information and data from the local jurisdictions and political subdivisions responsible for the administration of RLC and SC systems in Illinois. The survey questions included background information of the agency responsible for administering these cameras (name, location, population, types of camera and equipment), general information on the Federal DOT guideline, transparency, accountability, and safety attributes. Specifically, the survey focused on locations, violation, crash statistics, availability of data, procedural information, audits, and process for dispute resolution, and post installation safety and operational performance throughout FY18 (See **Appendix A** for a copy of survey questionnaire).

In January 2018, BSPE identified 309 potential local jurisdictions and political subdivisions that were responsible for all automated traffic enforcement related equipment. On January 24, 2018, each identified local jurisdiction was sent an email and a copy of the RLC and SC survey questionnaire. After several reminders, 163 (53 percent) questionnaires were returned. Of the total 163 jurisdictions, 67 of them reported that they had RLCs in their communities. In order to check the accuracy, consistency, and completeness of the sample, we matched the sample list against the list of 69 Illinois communities and jurisdictions reported by the Insurance Institute for Highway Safety (IIHS) at:

http://www.iihs.org/iihs/topics/laws/automated_enforcement?topicName=red-light-running.

Out of the 69 IIHS communities with RLCs, only 59 jurisdictions reported to IDOT indicating that they had RLCs in their communities. A total of 10 of the 69 IIHS communities reported that they had no RLCs. Further, our sample includes eight additional jurisdictions, not identified in the IIHS database, with RLCs in their communities (**See Table 1**). It should be noted that the Illinois Compiled Statutes (**ILCS**) allows these systems only in eight counties: Cook, DuPage, Kane, Lake, Madison, McHenry, St. Clair and Will.

Overall, these **67** jurisdictions/political subdivisions reported **544** locations of RLC intersections. The City of Chicago is the only jurisdiction that has **151** locations of SC road segments.

Table 1: List of Jurisdictions and Communities with Red Light Cameras			
List of Jurisdictions in both IIHS and Sample Collected by BSPE		Agencies listed on IIHS website that have no Red Light or Speed Cameras	Additional agencies that have Red Light Cameras, but were not listed on the IIHS website
Addison	Melrose Park	Cook County	Burbank
Alsip	Morton Grove	Countryside	Calumet Part
Aurora	North Chicago	East St. Louis	Fox River Grove
Bedford Park	North Riverside	Forest Park	Hillside
Bellwood	Oak Forest	Lake in the Hills	Justice
Bensenville	Oak Lawn	Lyons	Rolling Meadows
Berwyn	Olympia Fields	Northfield	Rosemont
Blue Island	Orland Park	Northlake	West Chicago
Calumet City	Palatine	Warrenville	
Carol Stream	Palos Heights	Westmont Village	
Chicago	Palos Hills		
Country Club Hills	River Forest		
Des Plaines	Roselle		
East Dundee	Schiller Park		
Elk Grove Village	Skokie		
Fox Lake	South Chicago Heights		
Franklin Park	South Holland		
Granite City	Streamwood		
Gurnee	Tinley Park		
Highland Park	Villa Park		
Hoffman Estates	Wauconda		
Hometown	Waukegan		
Homewood	Westchester		
Kildeer	Western Springs		
Lake Zurich	Wheeling		
Libertyville	Wilowbrook		
Lincolnwood	Winfield		
Lisle	Worth		
Lynwood			
Markham			
Maywood			

Findings

The following survey findings are broken down into four categories: General, Transparency, Accountability, and Safety Attributes.

General

- The population size of the **67** jurisdictions or political subdivisions where the RLCs are installed ranged from **580** in Bedford Park to **2.7 million** in the City of Chicago.
- All the RLC equipment are contracted or leased.
- **56** out of **67 (83.5 percent)** jurisdictions/political subdivisions reported that they referred to and followed FHWA “Red Light Camera Systems Operational Guidelines” when implementing their automated enforcement system. Additional information on **11** components of FHWA operational guidelines are shown in **Table 2**.

Transparency

- **95.5** percent of the jurisdictions/political subdivisions responded that the placement locations of automated enforcement are publically available on their website.
- **52.2** percent of the jurisdictions responded that information on automated enforcement revenue is publically available on their website.
- **23.9** percent of the jurisdictions/political subdivisions responded that disbursement of enforcement revenue is publically available on their website.
- **34.3 percent** of respondents indicated that the number of automated enforcement citations issued publically, are available on their website.
- **Over 85** percent of the respondents indicated that there was a warning period before citations were issued. The majority of the respondents (about **42** percent) indicated that the warning period was **30 days**.

Accountability

- **95.7**percent of jurisdictions responded that all citations were signed by sworn law enforcement officers.
- **95.5** percent of jurisdictions/political subdivisions reported that there was a process in place for dispute resolution.
- **79.1** percent of respondents indicated that their automated enforcement program was audited. Among those audited jurisdictions (**53** agencies), **45 (84.9 percent)** indicated that their automated enforcement program was audited annually.

Safety Attributes

- About **98.5** percent of the **67** jurisdictions reported that the traffic and safety data (engineering & crash) were utilized to determine placement of automated enforcement platforms.
- Over **97.0** percent of the **69** jurisdictions reported that they analyzed traffic safety data to determine their automated enforcement's impact on safety elements (i.e. crashes, speed, etc.).
- **61** out of **67** jurisdictions/political subdivisions (about **91.0** percent) reported they evaluate their post-installation safety and operational performance. About **64.2** percent of them reported they evaluate their post-installation safety and operational performance annually.

Table 2: Results of Biennial Survey of State Automated Traffic Enforcement Systems (Red Light Cameras) in Illinois				
Frequency and Percentage Distributions of Survey Questions				
Selected Questions	Frequenc y	Percent	Frequenc y	Percent
Location Type				
Village	29	42.65	29	42.65
City	39	57.35	68	100
Population Size of City/Village				
580	1	1.49	1	1.49
3,200	1	1.49	2	2.99
3,968	1	1.49	3	4.48
4,139	1	1.49	4	5.97
4,200	1	1.49	5	7.46
4,400	1	1.49	6	8.96
4,854	1	1.49	7	10.45
5,000	1	1.49	8	11.94
6,672	1	1.49	9	13.43
7,787	1	1.49	10	14.93
8,540	1	1.49	11	16.42
8,957	1	1.49	12	17.91
9,159	1	1.49	13	19.40
9,637	1	1.49	14	20.90
10,459	1	1.49	15	22.39
10,882	1	1.49	16	23.88
11,172	1	1.49	17	25.37
11,200	1	1.49	18	26.87
12,500	1	1.49	19	28.36
12,508	1	1.49	20	29.85
12,590	1	1.49	21	31.34
13,000	1	1.49	22	32.84
13,758	1	1.49	23	34.33
14,000	1	1.49	24	35.82
16,000	1	1.49	25	37.31
16,563	1	1.49	26	38.81
17,410	1	1.49	27	40.30
18,110	1	1.49	28	41.79
18,500	1	1.49	29	43.28

Table 2: Results of Biennial Survey of State Automated Traffic Enforcement Systems (Red Light Cameras) in Illinois				
Frequency and Percentage Distributions of Survey Questions				
Selected Questions	Frequenc y	Percent	Frequenc y	Percent
19,107	1	1.49	30	44.78
Frequency and Percentage Distributions of Survey Questions				
Selected Questions	Frequenc y	Percent	Frequenc y	Percent
19,600	1	1.49	31	46.27
Population Size of City/Village				
19,631	1	1.49	32	47.76
19,800	1	1.49	33	49.25
20,405	1	1.49	34	50.75
21,882	1	1.49	35	52.24
22,000	2	2.99	37	55.22
23,000	1	1.49	38	56.72
23,227	1	1.49	39	58.21
24,000	1	1.49	40	59.70
24,021	1	1.49	41	61.19
25,229	1	1.49	42	62.69
26,530	1	1.49	43	64.18
27,086	1	1.49	44	65.67
27,792	1	1.49	45	67.16
28,908	1	1.49	46	68.66
30,000	1	1.49	47	70.15
31,056	1	1.49	48	71.64
32,000	1	1.49	49	73.13
32,200	1	1.49	50	74.63
34,000	1	1.49	51	76.12
36,732	1	1.49	52	77.61
37,000	1	1.49	53	79.10
38,315	1	1.49	54	80.60
40,000	1	1.49	55	82.09
42,000	1	1.49	56	83.58
52,271	1	1.49	57	85.07
56,257	1	1.49	58	86.57
56,831	1	1.49	59	88.06
57,000	1	1.49	60	89.55
58,141	1	1.49	61	91.04
59,000	1	1.49	62	92.54

64,784	1	1.49	63	94.03
68,766	1	1.49	64	95.52
89,800	1	1.49	65	97.01
200,000	1	1.49	66	98.51
2,700,000	1	1.49	67	100.00
GENERAL				
Q2: Did the jurisdictional/political subdivision refer to and follow FHWA “Red Light Camera Systems Operational Guidelines” when implementing its automated enforcement system? If Yes, please check applicable boxes below.				
Frequency and Percentage Distributions of Survey Questions				
Selected Questions	Frequenc y	Percent	Frequenc y	Percent
Yes	56	83.58	56	83.58
Don't Know/NA	11	16.42	67	100
Q2A: Investigating Intersection Safety (Chapter III)				
Yes	51	76.12	51	76.12
No	16	23.88	67	100
Q2B: Engineering Study (Chapter III)				
Yes	51	76.12	51	76.12
No	16	23.88	67	100
Q2C: Engineering Countermeasures (Chapter IV)				
Yes	47	70.15	47	70.15
No	20	29.85	67	100
Q2D: Education (Chapter IV)				
Yes	49	73.13	49	73.13
No	18	26.87	67	100
Q2E: Enforcement (Chapter IV)				
Yes	52	77.61	52	77.61
No	15	22.39	67	100
Q2F: Early Planning and Startup (Chapter V)				
Yes	50	74.63	50	74.63
No	17	25.37	67	100

Q2G: System Planning (Chapter V)				
Yes	50	74.63	50	74.63
No	17	25.37	67	100
Q2H: Engineering Design of Red Light Camera Systems (Chapter V)				
Yes	51	76.12	51	76.12
No	16	23.88	67	100
Frequency and Percentage Distributions of Survey Questions				
Selected Questions	Frequenc y	Percent	Frequenc y	Percent
Q2I: Red Light Camera System Installation Chapter (Chapter V)				
Yes	52	77.61	52	77.61
No	15	22.39	67	100
Q2J: Operation and Maintenance (Chapter V)				
Yes	52	77.61	52	77.61
No	15	22.39	67	100
Q2K: On-Going Public Information and Education (Chapter V)				
Yes	46	68.66	46	68.66
No	21	31.34	67	100
TRANSPARENCY				
Q3: Are placement locations of automated enforcement publicly available on a website?				
Yes	64	95.52	64	95.52
No	3	4.48	67	100
Q4: Is information regarding automated enforcement revenue publicly available on a website?				
Yes	35	52.24	35	52.24
No	32	47.76	67	100
Q5: Is information regarding the disbursement of this revenue publicly available on a website?				
Yes	16	23.88	16	23.88
No	51	76.12	67	100
Q6: Is the number of automated enforcement citations issued publicly available on a website?				
Yes	23	34.33	23	34.33

No	44	65.67	67	100
Q7: Upon deployment at a specific location, is there a warning period before citations are issued?				
Yes	57	85.07	57	85.07
No	10	14.93	67	100
Frequency and Percentage Distributions of Survey Questions				
Selected Questions	Frequenc y	Percent	Frequenc y	Percent
Q7A: If yes to Q7, Number of Warning Periods				
0	13	19.4	13	19.4
1	28	41.79	41	61.19
2	9	13.43	50	74.63
3	1	1.49	51	76.12
4	2	2.99	53	79.1
7	1	1.49	54	80.6
14	6	8.96	60	89.55
15	2	2.99	62	92.54
20	5	7.46	67	100
Q7B: If yes to Q7, How Often?				
None	13	19.4	13	19.4
Day	14	20.9	27	40.3
Week	10	14.93	37	55.22
Month	30	44.78	67	100
Q7AB: If yes to Q7, How Many Days?				
0	13	19.4	13	19.4
7	1	1.49	14	20.9
14	13	19.4	27	40.3
15	2	2.99	29	43.28
20	5	7.46	34	50.75
21	1	1.49	35	52.24
28	2	2.99	37	55.22
30	28	41.79	65	97.01
60	2	2.99	67	100
ACCOUNTABILITY				
Q8: Are citations reviewed and signed by a sworn law enforcement officer?				
Yes	66	95.65	66	95.65

No	3	4.35	69	100
Q9: Is there a process in place for dispute resolution?				
Yes	64	95.52	64	95.52
	3	4.48	67	100
Frequency and Percentage Distributions of Survey Questions				
Selected Questions	Frequenc y	Percent	Frequenc y	Percent
Q10: Is the automated enforcement program audited?				
Yes	53	79.1	53	79.1
No	12	17.91	65	97.01
Don't Know/NA	2	2.99	67	100
Q10A: If yes, How Often				
Six Months	3	4.48	3	4.48
Annually	45	67.16	48	71.64
Biennially	3	4.48	51	76.12
Don't Know	16	23.88	67	100
SAFETY ATTRIBUTES				
Q11: Is traffic and safety data (engineering & crash) utilized to determine placement of automated enforcement platforms?				
Yes	66	98.51	66	98.51
No	1	1.49	67	100
Q12: Does the jurisdictional/political subdivision analyze traffic safety data to determine its automated enforcement's impact on safety elements (i.e. crashes, speed, etc.)?				
	Frequency	Percent	Frequency	Percent
Yes	65	97.01	65	97.01
No	2	2.99	67	100
Q13: Does the jurisdictional/political subdivision evaluate the post-installation safety and operational performance?				
Yes	61	91.04	61	91.04
No	6	8.96	67	100
Q13A: If Yes to Q13, how often				
Weekly	3	4.48	3	4.48
Monthly	1	1.49	4	5.97

Annually	43	64.18	47	70.15
Six Month/Biannually	8	11.94	55	82.09
Don't Know	12	17.91	67	100

Table 1: Results of Biennial Survey of State Automated traffic Enforcement Systems (Red Light Cameras) in Illinois		
Frequency and Percentage Distributions of Survey Questions		
Selected Questions		Frequency
Location Type		
Village		29
City		39
Population Size of City/Village		
	580	1
	3200	1
	3968	1
	4139	1
	4200	1
	4400	1
	4854	1
	5000	1
	6672	1
	7787	1
	8540	1
	8957	1
	9159	1
	9637	1
	10459	1
	10882	1
	11172	1
	11200	1
	12500	1
	12508	1
	12590	1
	13000	1
	13758	1
	14000	1
	16000	1

	16563	1
	17410	1
	18110	1
	18500	1
	19107	1
	19600	1
	19631	1
	19800	1
	20405	1
	21882	1
	22000	2
	23000	1
	23227	1
	24000	1
	24021	1
	25229	1
	26530	1
	27086	1
	27792	1
	28908	1
	30000	1
	31056	1
	32000	1
	32200	1
	34000	1
	36732	1
	37000	1
	38315	1
	40000	1
	42000	1
	52271	1
	56257	1
	56831	1
	57000	1
	58141	1
	59000	1
	64784	1
	68766	1
	89800	1
	200000	1
	2700000	1

GENERAL		
Q2: Did the jurisdictional/political subdivision refer to and follow FHWA “Red Light Camera Systems Operational Guidelines” when implementing its automated enforcement system? If Yes, please check applicable boxes below.		
Yes		56
Don't Know/NA		11
Q2A: Investigating Intersection Safety (Chapter III)		
Yes		51
No		16
Q2B: Engineering Study (Chapter III)		
Yes		51
No		16
Q2C: Engineering Countermeasures (Chapter IV)		
Yes		47
No		20
Q2D: Education (Chapter IV)		
Yes		49
No		18
Q2E: Enforcement (Chapter IV)		
Yes		52
No		15
Q2F: Early Planning and Startup (Chapter V)		
Yes		50
No		17
Q2G: System Planning (Chapter V)		
Yes		50
No		17
Q2H: Engineering Design of Red-Light Camera Systems (Chapter V)		

Yes		51
No		16
Q2I: Red Light Camera System Installation Chapter (Chapter V)		
Yes		52
No		15
Q2J: Operation and Maintenance (Chapter V)		
Yes		52
No		15
Q2K: On-Going Public Information and Education (Chapter V)		
Yes		46
No		21
TRANSPARENCY		
Q3: Are placement locations of automated enforcement publicly available on a website?		
Yes		64
No		3
Q4: Is information regarding automated enforcement revenue publicly available on a website?		
Yes		35
No		32
Q5: Is information regarding the disbursement of this revenue publicly available on a website?		
Yes		16
No		51
Q6: Is the number of automated enforcement citations issued publicly available on a website?		
Yes		23
No		44
Q7: Upon deployment at a specific location, is there a warning period before citations are issued?		
Yes		57
No		10
Q7A: If yes to Q7, Number of Warning Periods		
	0	13
	1	28

	2	9
	3	1
	4	2
	7	1
	14	6
	15	2
	20	5
Q7B: If yes to Q7, How Often?		
Q7B	Frequency	P
None	13	
Day	14	
Week	10	
Month	30	
Q7AB: If yes to Q7, How Many Days?		
Q7AB	Frequency	P
	0	13
	7	1
	14	13
	15	2
	20	5
	21	1
	28	2
	30	28
	60	2
ACCOUNTABILITY		
Q8: Are citations reviewed and signed by a sworn law enforcement officer?		
Yes		66
No		3
Q9: Is there a process in place for dispute resolution?		
Yes		64
		3
Q10: Is the automated enforcement program audited?		
Yes		53
No		12
Don't Know/NA		2
Q10A: If yes, How Often		

Six Months	3	
Annually	45	
Biennially	3	
Don't Know	16	
SAFETY ATTRIBUTES		
Q11: Is traffic and safety data (engineering & crash) utilized to determine placement of automated enforcement platforms?		
Yes	66	
No	1	
Q12: Does the jurisdictional/political subdivision analyze traffic safety data to determine its automated enforcement's impact on safety elements (i.e. crashes, speed, etc.)?		
	Frequency	P
Yes	65	
No	2	
Q13: Does the jurisdictional/political subdivision evaluate the post-installation safety and operational performance?		
Yes	61	
No	6	
Q13A: If Yes to Q13, how often		
Weekly	3	
Monthly	1	
Annually	43	
Six Month/Biannually	8	
Don't Know	12	

Appendix A: A copy of Survey Questionnaire