

Electronic Control Weapons in Massachusetts, 2021



Massachusetts Executive Office of Public Safety and Security
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About the Office of Grants and Research

The Office of Grants and Research (OGR) is a state agency that is part of the Executive Office of Public Safety and Security (EOPSS). The agency promotes public safety and security in Massachusetts communities through the management of grant funds and research programs focused on crime prevention and intervention, traffic safety, law enforcement and homeland security initiatives. OGR manages more than \$150 million in state and federal grants that are distributed to state, municipal, education, and nonprofit agencies across the Commonwealth. It is also home to the Massachusetts Statistical Analysis Center.

LEGISLATIVE LANGUAGE

Section 131J of Chapter 140 of Massachusetts General Laws (as amended by St. 2004, c. 170, §1 and St. 2018, c. 123, §13) requires the Secretary of Public Safety and Security to establish minimum safety and quality standards, safe storage requirements, education and safety training requirements, and law enforcement training on the appropriate use of electronic control weapons (ECWs), which shall require that any ECW purchased or used by a law enforcement or public safety official include a mechanism for tracking the number of times the ECW has been fired. In October 2004, in response to Chapter 170 of the Acts of 2004, the Executive Office of Public Safety and Security (EOPSS) promulgated 501 CMR 8.00 et seq., regulations governing the sale of ECWs in the Commonwealth and the training of law enforcement personnel on the appropriate use of such weapons. The regulation was updated on January 6, 2023, to reflect changes to Section 131J of Chapter 140 of the General Laws and Chapter 253 of the Acts of 2020,

An Act Relative to Criminal Justice, Equity, and Accountability in Law Enforcement in the Commonwealth, the “police reform” law.

Section 2 of Chapter 170 of the Acts of 2004, further requires the Secretary of Public Safety to develop a uniform protocol directing state and municipal law enforcement officers to collect data pursuant to the number of times the device or weapon has been fired and the identifying characteristics, including the race and gender, of the individuals who have been fired upon. The data are reported to EOPSS to be analyzed and included in an annual report.

2021 REPORT HIGHLIGHTS

- At the end of 2021, there were 284 municipal and 12 non-municipal law enforcement agencies in Massachusetts with ECWs, totaling 296 ECW agencies. Seven agencies acquired ECWs during the year, representing a 2.4% increase in the total number of ECW agencies from 2020.
- There were 1,090 ECW incidents, which is defined as any instance in which an officer or group of officers issued an ECW warning and/or deployed ECWs. In 2021, 194 agencies (65.5%) reported an ECW incident.
- 34.5% of agencies reported no ECW incidents (102 agencies); 56.1% (166 agencies) reported no ECW deployments.
- From 2020 to 2021, the number of ECW incidents decreased 13.1%. The number of ECW agencies, trained officers, and ECW devices increased by 2.4%, 1.8%, and 3.2%, respectively.
- The ratio of agency-owned ECWs to ECW-trained officers in 2021 was 0.09.

- Of 1,098 ECW contacts, 99.2% were people. The remainder (n = 9) were animals. Of the 1,089 human contacts, 90.3% were male, 51.9% were White, non-Hispanic, and the average age was 34.4 years. The term ECW contact refers to an individual officer's deployment, warning, or display of an ECW towards a single subject.
- Officer(s) issued at least one ECW warning in 90.4% of the 1,089 human contacts; of these contacts with warnings (984), 58.3% of contacts submitted to the warning and no deployment was made.
- An ECW was deployed in under half (40.8%) of the 1,089 human contacts; subjects submitted to deployments 74.8% of the time (332 submissions to 444 deployments).

INTRODUCTION

As required by the Legislature, this report summarizes data provided by Massachusetts law enforcement agencies with electronic control weapons (ECWs) for calendar year 2021. Agencies with ECWs are required to complete annual reports on information related to: 1) the number of sworn officers serving the agency; 2) the number of ECW-trained officers serving the agency; 3) the number of ECWs owned by the agency; 4) the number of officers carrying ECWs; 5) the number of total ECW-related incidents that occurred during the reporting period; 6) general details about each incident (e.g., warnings, deployments, submissions, etc.); and 7) demographic information of the subject involved in the incident. Terms and definitions referenced in this report are provided in the appendix on page A19.

ECW INCIDENTS AND LAW ENFORCEMENT AGENCIES

During 2021, seven new law enforcement agencies began reporting use of ECWs¹, raising the cumulative total to 296 ECW agencies in Massachusetts. Figure 1 (pg. 7) illustrates the growth in municipal ECW reporting agencies from 2005 to 2021. The greatest concentration of cities and towns that did not have ECWs in 2021 are in the western region of the state, particularly Berkshire and Franklin counties. Four of the seven new ECW agencies were located in Hampshire county.

In Massachusetts, there was a total of 1,090 ***ECW incidents***² reported in 2021.

¹ a device utilized to immobilize a subject without causing serious injury, typically by administering an electric shock. An ECW is commonly referred to as stun gun or TASER®.

² an event in which an officer (or group of officers) issues a warning and/or deploys an ECW towards a single subject.

194 agencies (65.5%) reported at least one ECW incident. The number of incidents reported by each department ranged from zero (102 agencies) to 55 incidents (one agency) (Appendix Tables 1-3, pgs. A1-A8). As shown in Figure 2, over three-quarters (79.1%) of agencies reported five or fewer incidents. 20.9% of agencies reported more than five incidents, including four agencies reporting 25 or more incidents. Those four agencies accounted for 16.9% (184) of all ECW incidents in 2021.

Figure 1. MA Municipal Law Enforcement Agency ECW Growth, 2005 - 2021

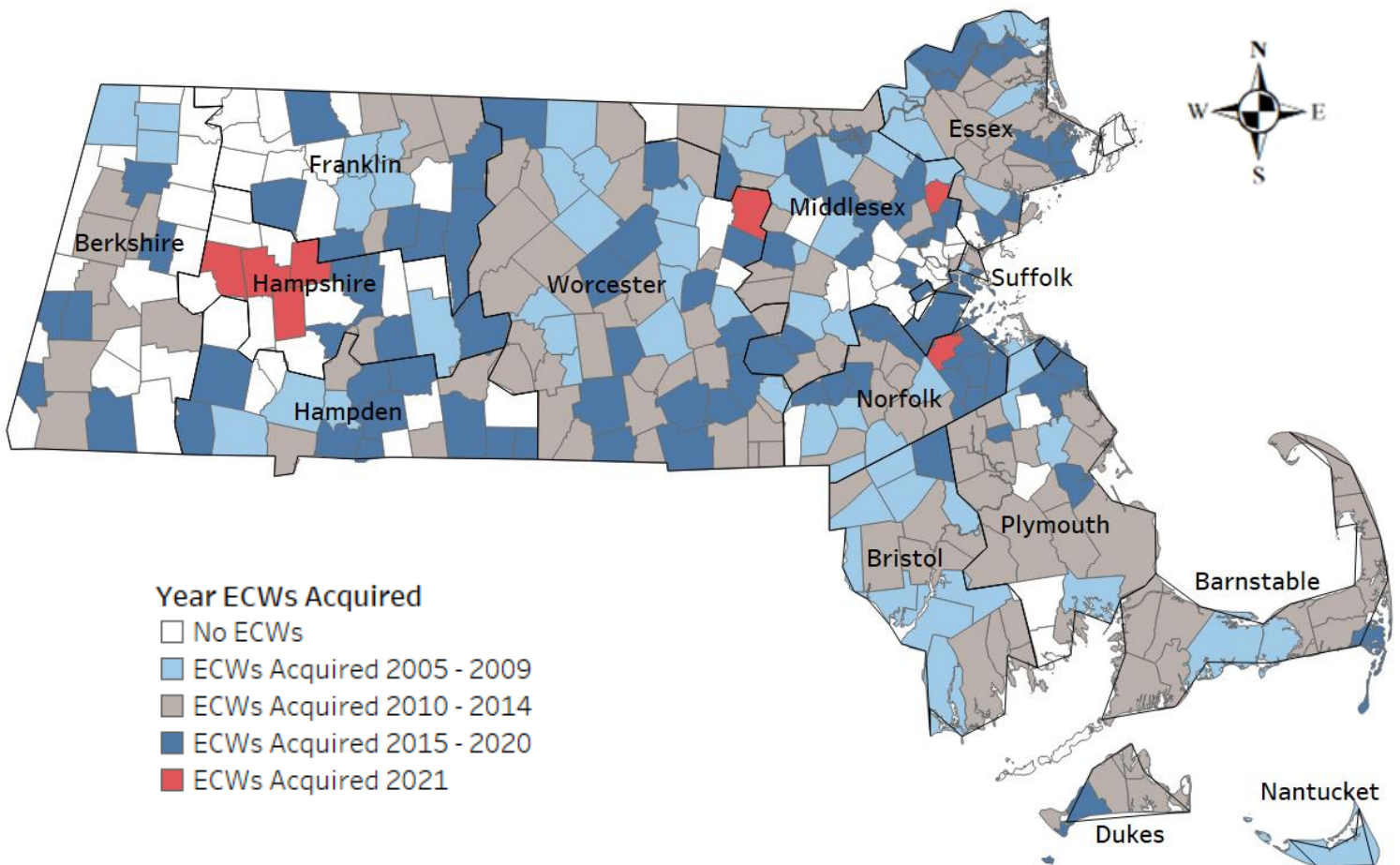


Figure 2. Number of ECW Incidents by Agency, 2021

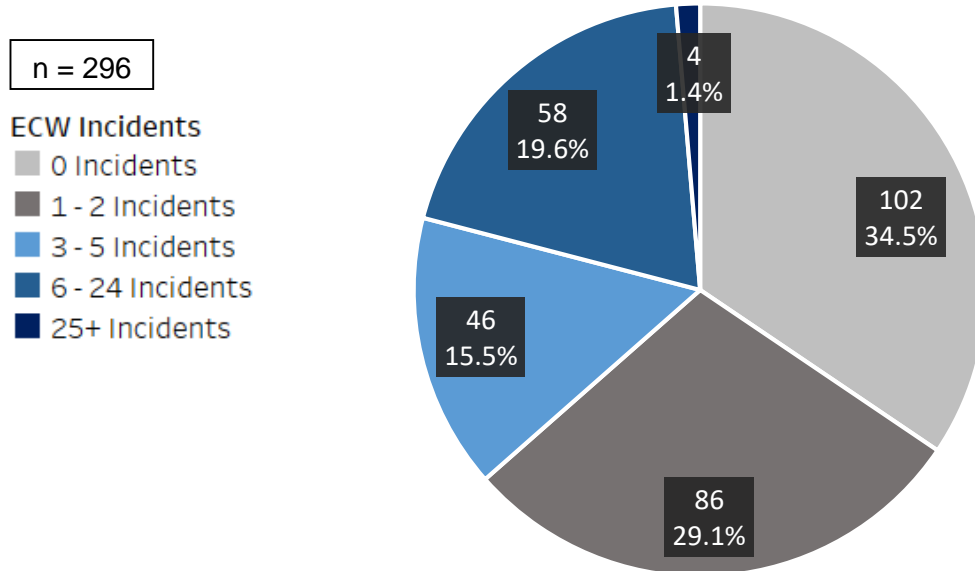
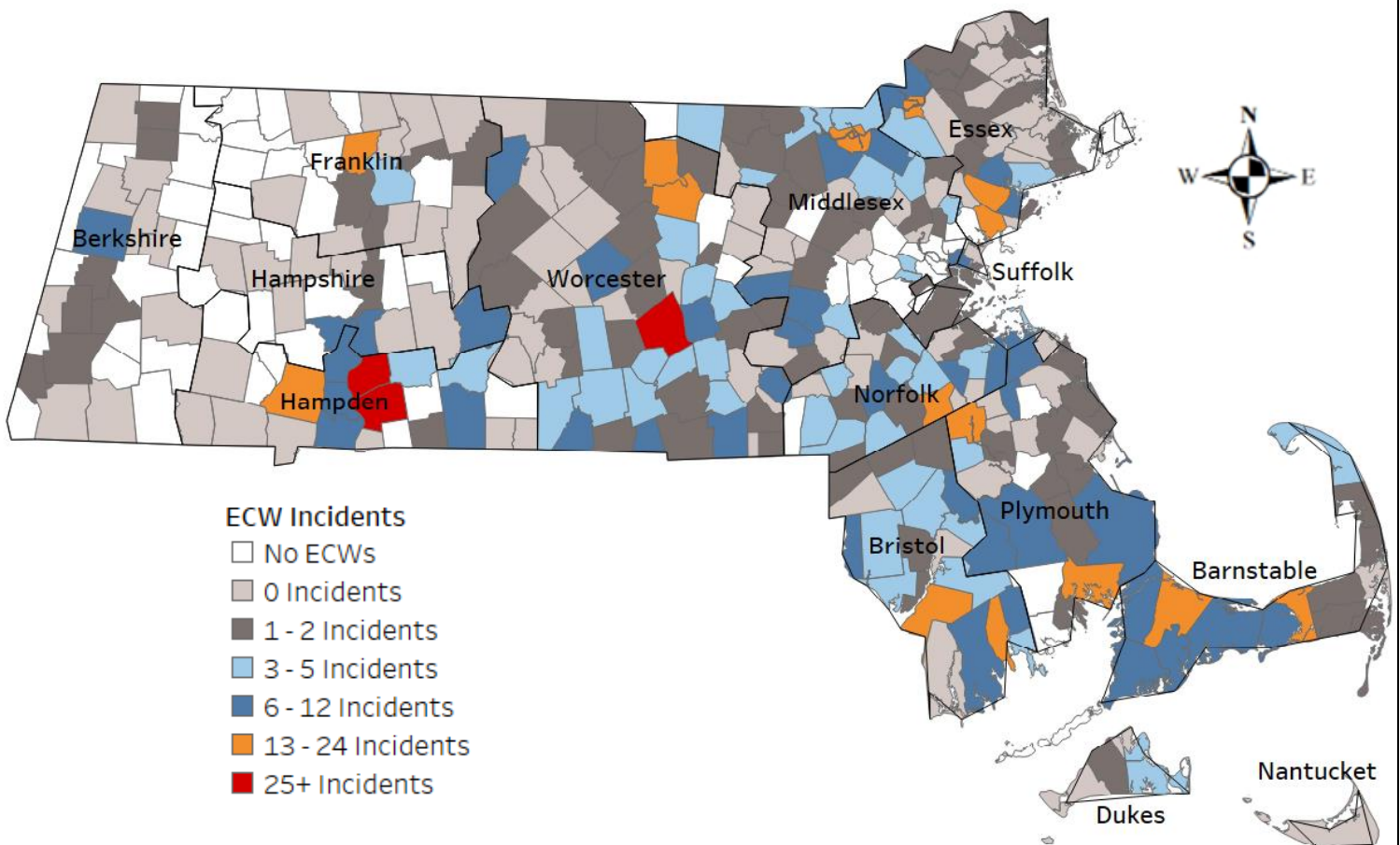


Figure 3. Massachusetts Municipal Law Enforcement ECW Incidents, 2021

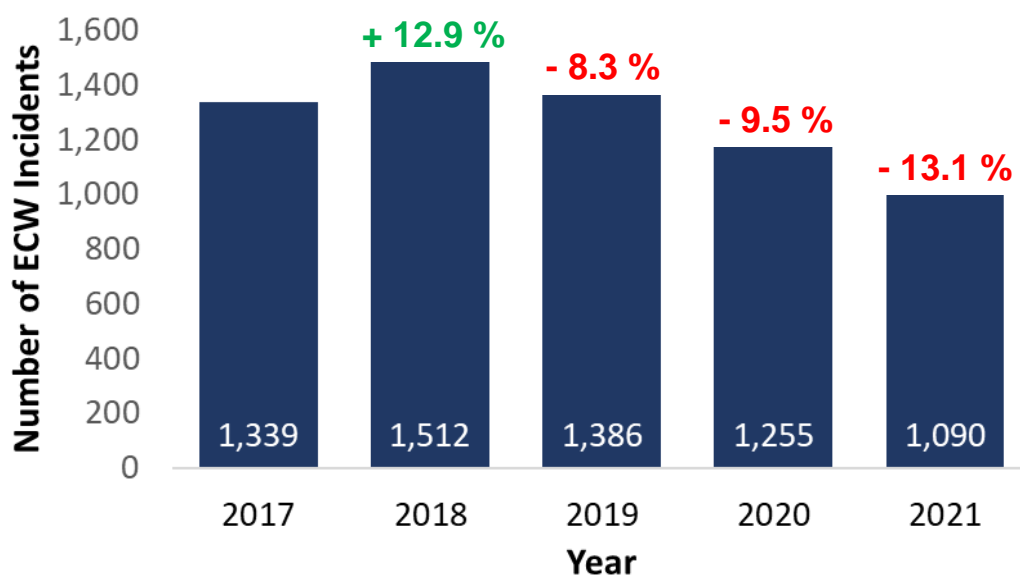


CURRENT TRENDS

Figure 4 and Table 1 illustrate the annual percentage change in reported ECW incidents from 2017 to 2021. Overall, the number of ECW incidents has decreased by 18.6% since 2017. There has been a decline in annual incidents for the third year in a row, a sharp contrast from the decade-long trend of increasing annual incidents from 2008 to 2018³.

As shown in Table 1 (pg. 10), the growth in the number of ECW agencies, ECW trained officers, and agency-owned devices has slowed over the five-year period. The number of sworn officers from ECW agencies declined for the second year in a row. For 2021, growth in the number of ECW agencies, ECW trained officers, and agency-owned devices was 2.4%, 1.8%, and 3.2%, respectively. The number of sworn officers decreased by 0.8%.

Figure 4. ECW Incidents and Percent Change, Calendar Years 2017 – 2021



³ Earlier Electronic Control Weapon Reports are archived on <https://archives.lib.state.ma.us/handle/2452/47826>.

During the five-year period between 2017 and 2021, the growth of agency-owned ECW devices (27.6%) far surpassed that seen in ECW incidents (-18.6%), ECW agencies (7.6%), sworn officers (5.3%), and ECW trained officers (18.9%). The ratio of ECW incidents to ECW trained officers decreased over the last five years, from 0.14 in 2017 to 0.09 in 2021.

Table 1. Characteristics of ECW Reporting Agencies, 2017 - 2021

Year	Number					Annual Percent Change			
	2017	2018	2019	2020	2021	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
ECW Incidents	1,339	1,512	1,386	1,255	1,090	12.9%	-8.3%	-9.5%	-13.1%
ECW Agencies	275	281	286	289	296	2.2%	1.8%	1.0%	2.4%
Sworn Officers ^a	15,106	15,574	16,126	16,034	15,909	3.1%	3.5%	-0.6%	-0.8%
ECW Trained Officers	9,691	10,425	11,313	11,319	11,525	7.6%	8.5%	0.1%	1.8%
ECW Agency-Owned Devices	7,481	8,219	8,766	9,247	9,543	9.9%	6.7%	5.5%	3.2%

^a Sworn officers include all part-time, full-time, reserve and other officers serving in ECW agencies. ECW agencies report the number of officers as of the end of the calendar year.

ECW CONTACTS

From January 1 through December 31, 2021, ECW reporting agencies recorded 1,098 ECW contacts.⁴ Nine contacts involved animals or fowl, such as dogs or turkeys. The remaining 1,089 ECW contacts involved people. The vast majority (90.3%) of the 1,089 human contacts involved male subjects (Appendix Table 4, pg. A9). Over three-quarters of contacts were with White subjects: Non-Hispanic (51.9%), Hispanic Ethnicity (14%), Unknown Ethnicity (9.1%). Black subjects accounted for 19.6% of total human

⁴ 'ECW Contact' refers to an individual officer's deployment, warning, or display of an ECW towards a single subject. Multiple ECW contacts can occur during a single ECW incident, (e.g., an incident in which two officers each issue a warning and/or deploy an ECW at a subject is considered two contacts and one incident). This section details ECW contacts between officers and subjects.

contacts: Non-Hispanic (16.2%), Hispanic Ethnicity (0.7%), Unknown Ethnicity (2.7%). Subjects with unknown race and ethnicity accounted for 1.7% of contacts and subjects of Other Races⁵ made up 2.8% of contacts. Of all human contacts, 16.7% involved subjects of Hispanic Ethnicity.

The average age of contacts was 34.4 years, with over three-quarters of contacts involving subjects between 20 and 44 years of age (75.5%). Subjects in the two oldest age groups (60 - 64 years and 65+ years) represented the smallest proportion of ECW contacts (1.7% and 1.6%, respectively).

ECW WARNINGS AND SUBMISSIONS

Of the 1,089 ECW contacts with human subjects, 984 or 90.4% involved the officer(s) issuing at least one ***ECW warning (verbal warning, laser warning, and/or spark warning)***⁶ in an attempt to gain the subject's compliance. In contacts that involved an ECW warning, officers issued a single type of warning in 41.9% of contacts, with a verbal warning being the most common (388 of 412, 94.2%) (Table 2, pg. 13). The rate of compliance for contacts with one warning, however, was the lowest for

⁵ 'Other' comprises the race categories of American Indian/Alaska Native, Asian, Native Hawaiian or other Pacific Islander, Two or More Races, and Other (specified).

⁶ ECW Warnings:

Laser Warning: A visual warning whereby an officer employs the laser function of the ECW device to indicate that an ECW will be deployed.

Spark Warning: A visual warning whereby an officer employs a spark on a handheld stun device in order to demonstrate its effectiveness.

Verbal Warning: Any spoken words or display of the ECW that would indicate to a subject that an ECW may be used. This warning can include: 1) Any direct wording to a subject indicating or implying that an ECW will be used. *Example: Displaying ECW and shouting, "Stop!"* 2) Any indirect wording that a subject may overhear indicating or implying that an ECW is about to be deployed. *Example: A warning to other officers that an ECW is about to be deployed by saying "Taser, Taser, Taser!"*

verbal warnings (37.1%). Excluding spark warnings (n = 1), laser warnings had the highest rate of compliance (52.2%), though the use of laser warnings only was rare (n = 23).

Over half of ECW contacts involved multiple warnings (58.1%). Of these, the verbal and laser warning comprised the vast majority (510 of 572, 89.2%) and resulted in a compliance rate of 51.4%. A combination of verbal and spark warnings had a compliance rate of 47.4%, followed by a combination of all three ECW warnings with a 26.2% compliance rate.

A smaller number of contacts (105 or 9.6%) received no warning prior to ECW deployment. Agencies indicated that sudden actions by the subject (i.e., subjects becoming combative during handcuffing) required immediate ECW deployment (probe deployment, 5-second cycle, and/or stun deployment)⁷ and precluded an opportunity for the officer to issue a warning. Additionally, incidents involving two or more officers may result in one warning but more than one deployment. Thus, both contacts would indicate a deployment, but only one would show a warning was given.

⁷ ECW Deployments:

Probe deployment: the act of firing two small dart-like probes from the ECW, which attach to the subject. The device then delivers a 5-second electrical cycle, which can be repeated as needed in order to incapacitate the subject to the point of submission.

5-second cycle: a five second electrical charge resulting from a probe deployment, which can be repeated as needed.

Stun deployment: the act of bringing the ECW device into direct contact with the subject's skin or clothing in order to induce pain to the point of submission. Stuns can be repeated as needed if the subject does not initially submit.

Table 2. ECW Warning Types by Submissions, 2021

Characteristic	Warnings		Submissions		Percent that Submit
	Number	Percent	Number	Percent	
One Warning	412	41.9%	157	35.8%	38.1%
Verbal	388	39.4%	144	32.8%	37.1%
Laser	23	2.3%	12	2.7%	52.2%
Spark	1	--	--	--	--
Multiple Warnings	572	58.1%	282	64.2%	49.3%
Verbal/Laser	510	51.8%	262	59.7%	51.4%
Verbal/Spark	19	1.9%	9	2.1%	47.4%
Laser/Spark	1	--	--	--	--
Verbal/Laser/Spark	42	4.3%	11	2.5%	26.2%
Total	984	100%	439	100%	44.6%

-- Percentages with such a small denominator are not statistically reliable.

CONTACT CHARACTERISTICS

Table 3 (pg. 14) presents some demographic data on the contacts for which subject characteristics are known. The data show officers' use of warnings and/or ECW deployments by subject gender, race, ethnicity, and age. A consistent pattern is revealed across all of the subject groups: a) in more than half of contacts, the officer(s) issues an ECW warning with no subsequent ECW deployment; b) in about 40% of contacts, the officer(s) issued an ECW warning and an ECW deployment; and c) in less than one in 10 contacts, the officer(s) deploys an ECW with no prior ECW warning.

Appendix Tables 4 and 5 (pg. A9) break down the data slightly differently, looking at contacts with a warning or contacts with an ECW deployment by subject gender, race/ethnicity, and age. The percentages are similar by gender, and differ slightly by race/ethnicity and age. Those in the Other Race, Hispanic Ethnicity category had the

highest proportion of contacts with warnings (100%) and the highest percentage of contacts with an ECW deployment (57.1%), though the number of contacts was low (n = 14). The next highest proportion of contacts with warnings was the White, Hispanic category (92.2%), followed by White, non-Hispanic (92%). Appendix Table 5 shows that subjects in the age categories of 18 - 19 years and 50 - 54 years received the highest percent of contacts with a warning (97% and 93.3%, respectively). Subjects 18 - 19 years had the smallest percentage of contacts with an ECW deployment (27.3%).

Table 3. Percent of Contacts with a Warning and/or ECW Deployment by Subject Characteristics, 2021

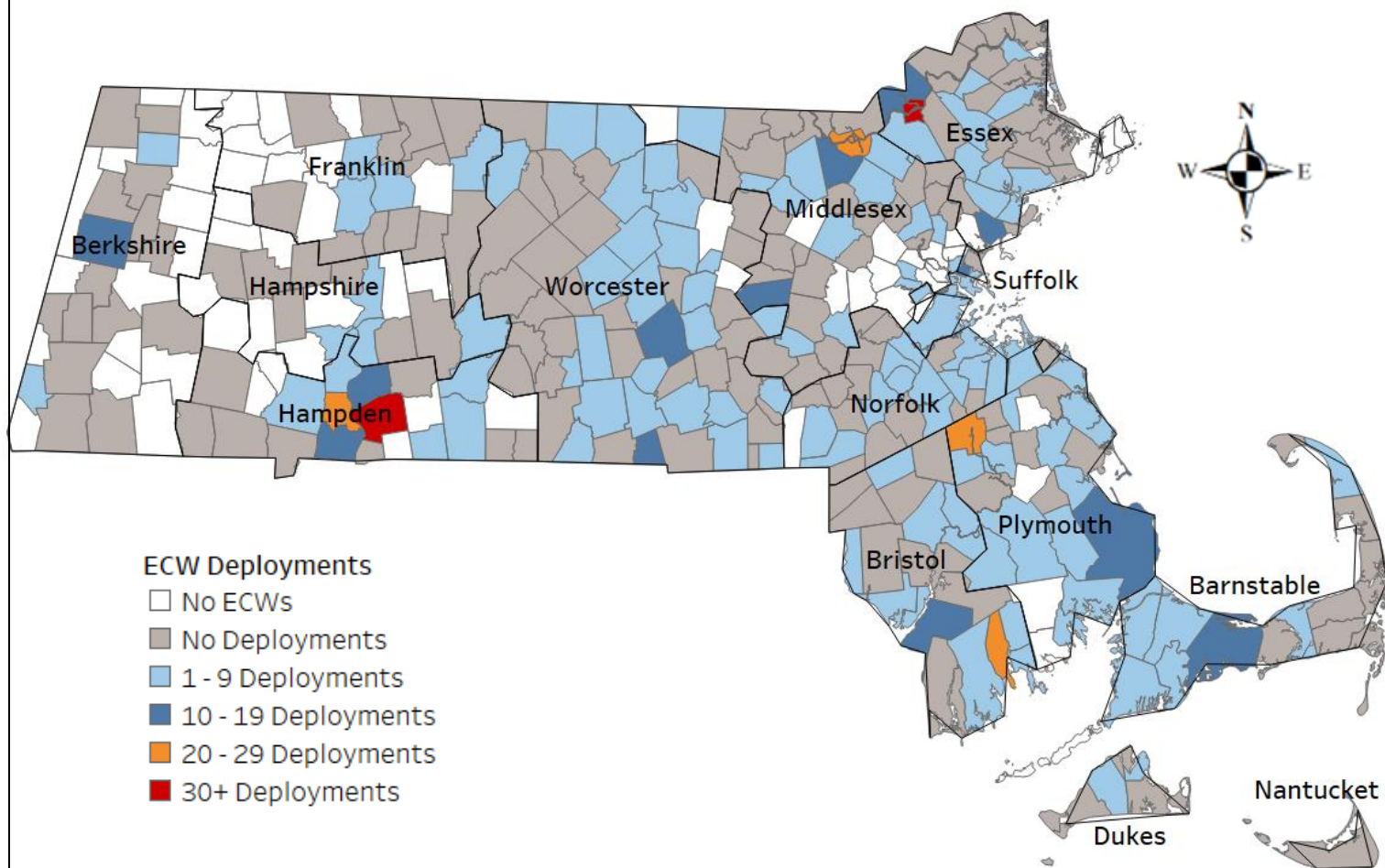
Characteristic		Contacts with Warning(s), No ECW Deployment		Contacts with Warning(s) and ECW Deployment(s)		Contacts with ECW Deployment(s), No Warning		Total
		Number	Percent	Number	Percent	Number	Percent	Number
Gender	Male	562	58.4%	327	34.0%	74	7.7%	963
	Female	59	57.8%	35	34.3%	8	7.8%	102
	Non-Binary	1	--	0	--	0	--	1
	Total	622	58.3%	362	34.0%	82	7.7%	1066
Race	White	473	59.1%	272	34.0%	56	7.0%	801
	Black	121	57.9%	69	33.0%	19	9.1%	209
	Other	16	55.2%	10	34.5%	3	--	29
	Unknown	12	44.4%	11	40.7%	4	--	27
	Total	622	58.3%	362	34.0%	82	7.7%	1066
Ethnicity	Non-Hispanic	444	60.0%	246	33.0%	55	7.4%	745
	Hispanic	102	57.0%	67	37.4%	10	5.6%	179
	Unknown	76	53.5%	49	34.5%	17	12.0%	142
	Total	622	58.3%	362	34.0%	82	7.7%	1066
Age	Less than 20 Years	46	69.7%	19	28.8%	1	--	66
	20 - 24 Years	91	59.9%	50	32.9%	11	7.2%	152
	25 - 29 Years	97	52.4%	70	37.8%	18	9.7%	185
	30 - 34 Years	115	57.5%	70	35.0%	15	7.5%	200
	35 - 44 Years	164	61.2%	85	31.7%	19	7.1%	268
	45 - 54 Years	62	53.4%	44	37.9%	10	8.6%	116
	55 Years or Older	47	59.5%	24	30.4%	8	10.1%	79
	Total	622	58.3%	362	34.0%	82	7.7%	1066

-- Percentages with such a small denominator are not statistically reliable.

ECW DEPLOYMENTS

Of the 296 Massachusetts agencies with ECWs in 2021, 56.1% (166 agencies) reported zero ECW deployments. The remaining 43.9% (130 agencies) reported between one and 39 deployments, totaling 721 weapon (probe and/or stun) deployments. Of the agencies with a deployment, over half (69 agencies, 53.1%) reported between one and three ECW deployments. Figure 5 displays the number of ECW deployments by agency, excluding non-municipal agencies.

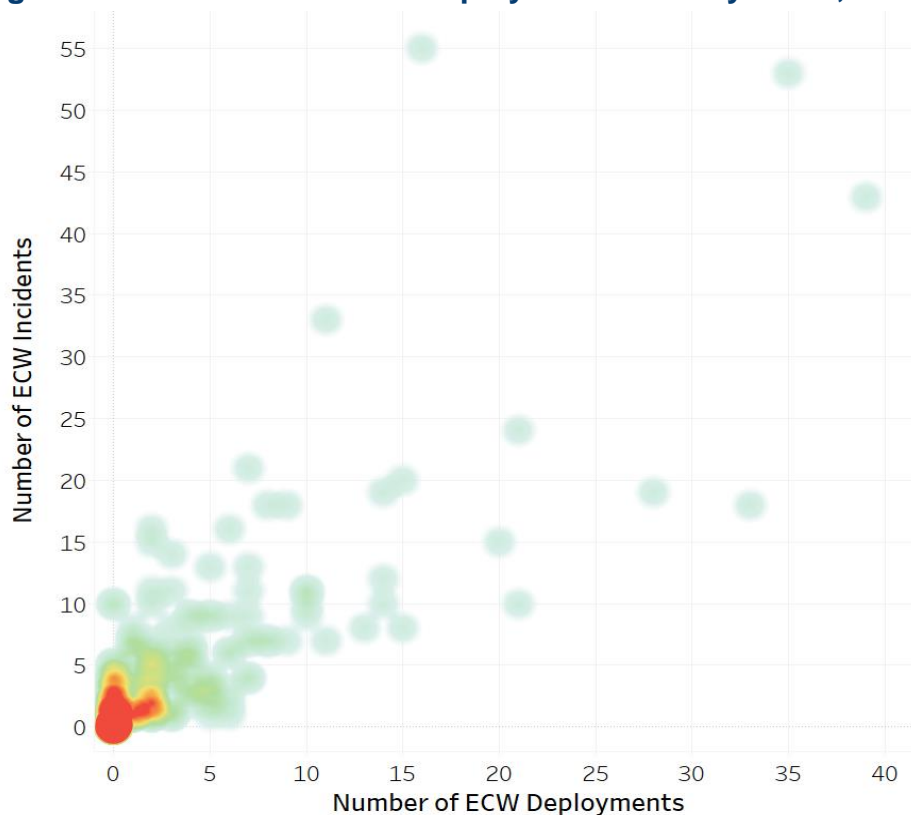
Figure 5. MA Municipal Law Enforcement ECW Deployments, 2021



Appendix Tables 6 – 8 (pgs. A10 - A18) provide information on the type of deployment by department, revealing a slightly higher overall usage of probe deployments (383, 53.1%) compared to stun deployments, also known as a ‘drive stun’ (338, 46.9%). Additionally, the range of stun deployments per department was more widely dispersed (1 to 27) than probe deployments (1 to 25). The percentage of probe deployments for non-municipal departments was higher than for municipal departments, 62.2% and 52.5%, respectively.

Figure 6 is a density chart illustrating the number of reported ECW incidents and deployments by agency. The majority of agencies are concentrated around low numbers of ECW incidents and deployments (shown in red). In fact, 34.5% of agencies reported no ECW incidents (102 agencies) and 56.1% (166 agencies) reported no ECW deployments.

Figure 6. ECW Incidents and Deployments Density Chart, 2021



Officers deployed ECWs in under half (40.8%) of the 1,089 human contacts. Table 4 shows that of the 444 incidents where an ECW was deployed, 51.4% involved the use of only probe deployments (the firing of two small dart-like probes from the ECW, which attach to the subject and can emit an electrical charge), 37.2% involved the use of only stun deployments (bringing the ECW device into direct contact with the subject's skin or clothing), and 11.5% of the incidents involved a combination of probe and stun deployments. Overall, subjects submitted to the deployments of an ECW 74.8% of the time. Subjects submitted to individual stun deployments more often than individual probe deployments (77.6% and 76.3%, respectively). Combined probe and stun deployments had the lowest submission rate with 58.8%.

Table 4. Distribution of ECW Submissions by Deployment Type, 2021^a

Characteristic	ECW Deployments		ECW Submissions		Percent that Submit
	Number	Percent	Number	Percent	
Probe	228	51.4%	174	52.4%	76.3%
Stun	165	37.2%	128	38.6%	77.6%
Combined Probe and Stun	51	11.5%	30	9.0%	58.8%
Total	444	100%	332	100%	74.8%

^a excludes cases where subject was not a person.

Appendix Table 1. Municipal and Non-municipal ECW Incidents, 2017 - 2021

Agency Type	2017	2018	2019	2020	2021
Non-municipal	85	117	100	90	56
Municipal	1,254	1,395	1,286	1,165	1,034
Total	1,339	1,512	1,386	1,255	1,090

Appendix Table 2. Non-municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
Amtrak Police	--	0	0	0	0
Bridgewater State University	2	2	1	0	0
Cape Cod Regional Law Enforcement Council	1	0	0	0	0
Central Massachusetts Law Enforcement Council	0	0	1	1	1
Clark University	0	1	0	0	1
Holyoke Community College	--	--	--	0	0
Massachusetts State Police	81	94	77	82	43
Massasoit Community College	1	2	0	0	0
Martha's Vineyard Police Tactical Response Team	0	0	0	0	0
University of Massachusetts, Lowell	--	0	2	0	0
University of Massachusetts, Memorial Medical Center	0	4	3	1	9
University of Massachusetts, Worcester	0	14	16	6	2
Total	85	117	100	90	56

Appendix Table 3. Municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
Abington	1	1	2	0	0
Acushnet	7	4	3	5	6
Adams	0	1	3	4	2
Agawam	0	11	6	6	7
Amesbury	4	1	1	0	0
Andover	2	0	2	2	3
Aquinnah	0	0	0	0	0
Ashburnham	0	4	0	2	2
Ashfield	0	0	0	0	0
Ashland	6	2	5	9	6
Athol	0	0	0	0	6
Attleborough	5	8	12	5	0
Auburn	3	2	3	4	5
Avon	0	0	1	0	0
Ayer	3	3	0	0	5
Barnstable	24	15	15	15	10

Note: Agencies can acquire Electronic Control Weapons throughout the year, so an agency's first reporting year may not span a full 12 months.

-- cells denoted by a "--" indicate the agency had not yet implemented use of ECWs.

Appendix Table 3. (continued) Municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
Barre	5	4	2	0	0
Becket	0	0	0	0	0
Bedford	2	3	3	4	2
Belchertown	2	1	3	0	0
Belmont	--	--	--	2	4
Berkley	0	2	0	0	0
Bernardston	0	0	0	0	0
Beverly	7	4	4	6	4
Billerica	0	4	2	1	4
Blackstone	5	1	3	4	1
Blandford	0	0	0	0	0
Bolton	0	0	0	1	0
Boston	4	1	0	3	1
Bourne	1	3	5	7	6
Boxborough	0	0	2	1	1
Boxford	1	0	0	0	1
Boylston	2	5	6	1	4
Braintree	--	--	--	1	3
Brewster	2	3	0	0	1
Bridgewater	0	2	2	2	0
Brockton	26	22	28	23	19
Brookfield	1	0	0	0	0
Burlington	0	0	0	1	0
Canton	4	7	7	8	3
Carlisle	0	0	0	2	0
Carver	0	1	1	2	2
Charlton	2	2	5	1	5
Chatham	0	1	1	1	1
Chelmsford	6	5	5	8	11
Chelsea	2	5	3	9	8
Cheshire	--	--	1	0	0
Chesterfield ^a	--	--	--	--	0
Chicopee	25	44	43	44	33
Chilmark	0	0	0	0	0
Clinton	4	9	6	4	2
Cohasset	0	1	0	0	0
Colrain	0	1	0	0	0
Concord	2	1	0	1	1

Note: Agencies can acquire Electronic Control Weapons throughout the year, so an agency's first reporting year may not span a full 12 months.

-- cells denoted by a "--" indicate the agency had not yet implemented use of ECWs.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 3. (continued) Municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
Dalton	1	0	1	1	0
Danvers	4	8	9	11	8
Dartmouth	3	4	1	4	9
Dedham	--	2	5	4	4
Deerfield	0	1	0	0	2
Dennis	4	7	9	10	16
Dighton	0	0	0	2	2
Douglas	3	1	1	4	1
Dover	0	0	0	0	0
Dracut	4	3	8	3	3
Dudley	3	2	3	0	2
Dunstable	0	0	0	0	1
Duxbury	0	1	3	2	0
East Bridgewater	1	5	9	2	1
East Brookfield	1	0	0	2	2
Eastham	1	0	3	4	2
Easthampton	2	4	2	0	6
Easton	4	3	5	2	1
Edgartown	2	0	0	0	3
Egremont	0	1	0	0	1
Erving	0	0	0	0	1
Essex	2	3	0	1	1
Everett	14	8	4	12	7
Fairhaven	3	4	1	1	3
Fall River	36	32	26	16	19
Falmouth	11	8	7	8	9
Fitchburg	27	19	24	16	21
Foxborough	6	7	7	4	5
Framingham	10	13	20	14	10
Franklin	8	4	4	0	4
Freetown	4	1	3	7	4
Gardner	11	5	2	1	2
Georgetown	0	0	0	0	0
Gill	0	0	0	0	0
Grafton	4	6	4	3	3
Granby	0	0	0	0	0
Granville	0	0	0	0	0
Great Barrington	2	5	1	1	1
Greenfield	10	6	5	5	14

Note: Agencies can acquire Electronic Control Weapons throughout the year, so an agency's first reporting year may not span a full 12 months.

-- cells denoted by a "--" indicate the agency had not yet implemented use of ECWs.

Appendix Table 3. (continued) Municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
Groton	0	0	0	2	1
Groveland	0	0	0	0	2
Hadley	--	--	3	2	2
Hamilton	--	1	0	0	0
Hampden	0	0	0	0	1
Hanson	3	0	0	0	0
Hardwick	2	1	2	0	2
Harvard ^a	--	--	--	--	0
Harwich	4	3	1	6	2
Hatfield	0	0	0	0	0
Haverhill	0	0	2	2	1
Hingham	1	6	3	5	6
Hinsdale	0	0	0	0	0
Holbrook	0	0	1	0	0
Holden	5	12	7	3	2
Holland	0	1	0	0	0
Holliston	2	0	4	1	2
Holyoke	34	27	20	11	7
Hopedale	0	0	0	0	0
Hopkinton	6	6	6	2	0
Hubbardston	1	3	0	0	0
Hudson	6	5	4	3	0
Hull	1	8	1	0	3
Ipswich	0	0	4	0	0
Kingston	6	5	3	2	2
Lakeville	5	1	8	4	7
Lanesborough	1	0	0	1	0
Lawrence	22	23	31	21	18
Lee	1	0	0	0	1
Leicester	3	0	2	2	2
Lenox	0	1	0	1	1
Leominster	12	34	36	25	16
Leverett	0	0	0	0	0
Lincoln	1	2	0	0	0
Littleton	4	3	4	0	1
Longmeadow	0	1	4	2	0
Lowell	61	63	34	29	24
Ludlow	0	13	10	2	3

Note: Agencies can acquire Electronic Control Weapons throughout the year, so an agency's first reporting year may not span a full 12 months.

-- cells denoted by a "--" indicate the agency had not yet implemented use of ECWs.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 3. (continued) Municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
Lunenburg	0	4	0	0	1
Lynn	--	--	12	27	20
Lynnfield	2	0	0	1	0
Manchester-by-the-Sea	0	1	1	0	1
Mansfield	3	13	10	12	1
Marblehead	4	4	2	2	1
Marion	1	1	0	2	1
Marlborough	11	7	5	15	9
Marshfield	3	5	0	4	1
Mashpee	11	8	9	1	6
Maynard	5	0	1	0	0
Medfield	1	2	1	0	0
Medway	0	2	1	1	0
Mendon	0	1	0	0	1
Merrimac	1	1	2	0	0
Methuen	18	6	16	17	11
Middleborough	12	11	13	5	10
Middleton	4	3	2	1	1
Milford	2	7	8	6	7
Millbury	3	6	5	6	3
Millis	3	1	0	0	3
Millville	0	0	0	0	0
Milton ^a	--	--	--	--	0
Monson	2	7	5	9	6
Montague	1	4	2	2	4
Nantucket	1	0	2	0	0
Natick	7	14	9	6	3
Needham	5	2	4	0	2
New Bedford	69	89	32	12	15
New Braintree	1	0	0	0	0
New Marlborough	0	0	0	0	0
New Salem	0	0	0	0	0
Newbury	2	2	0	0	0
Newburyport	6	3	5	6	2
Norfolk	0	0	0	0	2
North Adams	5	1	1	3	1
North Andover	1	2	2	1	0
North Attleborough	3	7	3	0	2

Note: Agencies can acquire Electronic Control Weapons throughout the year, so an agency's first reporting year may not span a full 12 months.

-- cells denoted by a "--" indicate the agency had not yet implemented use of ECWs.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 3. (continued) Municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
North Brookfield	3	0	0	0	1
North Reading	3	1	1	0	1
Northborough	1	2	3	1	4
Northbridge	1	4	1	2	3
Northfield	0	0	0	0	0
Norton	11	10	6	9	5
Norwell	0	1	0	0	0
Norwood	3	3	4	4	5
Oak Bluffs	2	10	5	5	4
Oakham	0	0	0	0	0
Orange	2	2	0	1	1
Orleans	2	0	1	3	0
Oxford	15	12	10	5	5
Palmer	9	11	8	12	5
Paxton	0	3	0	5	0
Peabody	9	21	12	12	13
Pembroke	5	2	5	4	2
Pepperell	4	3	4	6	1
Petersham	0	0	0	0	1
Phillipston	0	1	0	0	0
Pittsfield	14	8	3	7	8
Plainville	1	0	0	1	2
Plymouth	16	9	22	14	12
Plympton	1	1	1	1	2
Princeton	0	0	1	0	2
Provincetown	4	6	4	2	5
Quincy	--	4	9	2	1
Randolph	16	16	18	12	11
Raynham	10	5	6	7	11
Reading ^a	--	--	--	--	0
Rehoboth	1	1	2	1	4
Revere	5	5	3	4	0
Rockland	9	7	6	3	7
Rowley	1	2	0	0	1
Royalston	--	--	0	0	0
Rutland	1	4	4	2	9
Salem	4	6	9	10	7
Salisbury	0	1	0	1	1

Note: Agencies can acquire Electronic Control Weapons throughout the year, so an agency's first reporting year may not span a full 12 months.

-- cells denoted by a "--" indicate the agency had not yet implemented use of ECWs.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 3. (continued) Municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
Sandwich	2	2	3	12	13
Scituate	--	10	4	3	1
Seekonk	8	4	3	3	6
Sharon	3	3	2	1	1
Sheffield	1	1	0	7	0
Sherborn	0	0	2	0	0
Shirley	4	0	1	3	0
Shrewsbury	0	18	16	6	8
Shutesbury	3	0	0	0	0
Somerset	2	0	1	1	2
South Hadley	2	4	1	3	6
Southborough	1	4	0	1	1
Southbridge	28	15	26	7	11
Southwick	2	0	2	0	0
Spencer	2	8	7	7	3
Springfield	81	94	89	81	53
Sterling	2	1	0	0	4
Stockbridge	0	0	1	0	1
Stoneham	0	3	8	3	2
Stoughton	14	18	12	19	15
Stow	0	0	0	1	0
Sturbridge	6	2	1	1	4
Sudbury	1	2	0	3	1
Sunderland	0	0	0	2	1
Sutton	0	1	1	0	1
Swampscott	0	0	1	1	0
Swansea	5	2	3	2	5
Taunton	7	13	7	10	4
Templeton	3	3	0	0	0
Tewksbury	8	17	17	9	7
Tisbury	0	0	3	4	0
Tolland	--	--	--	0	0
Topsfield	0	1	1	0	0
Townsend	2	3	0	0	3
Truro	0	1	1	0	3
Tyngsborough	2	9	8	3	4
Upton	0	0	0	0	0
Uxbridge	6	6	3	5	7
Wakefield	3	8	2	2	3
Wales	0	0	0	1	0

Note: Agencies can acquire Electronic Control Weapons throughout the year, so an agency's first reporting year may not span a full 12 months.

-- cells denoted by a "--" indicate the agency had not yet implemented use of ECWs.

Appendix Table 3. (continued) Municipal ECW Incidents by Agency, 2017 – 2021

Agency Name	Number of Incidents per Year				
	2017	2018	2019	2020	2021
Walpole	10	5	3	6	7
Ware	5	13	21	22	9
Wareham	14	24	33	26	18
Warren	0	0	3	1	0
Warwick	0	0	0	0	0
Watertown	--	--	3	5	4
Webster	12	8	4	13	10
Wellesley	--	--	1	2	1
Wellfleet	1	0	0	2	1
Wenham	0	1	0	0	0
West Boylston	3	1	0	0	0
West Bridgewater	3	4	1	5	3
West Brookfield	2	1	0	0	0
West Newbury	0	0	1	0	0
West Springfield	10	12	21	15	10
West Stockbridge	0	0	0	0	0
West Tisbury	0	0	1	0	2
Westborough	2	8	4	10	2
Westfield	12	17	5	13	18
Westford	0	2	2	4	1
Westhampton ^a	--	--	--	--	0
Westminster	1	0	0	1	0
Westport	0	2	2	3	2
Westwood	0	2	3	3	0
Weymouth	27	16	14	27	1
Whately	0	0	0	0	9
Whitman	6	4	4	0	0
Williamsburg ^a	--	--	--	--	0
Williamstown	2	2	2	0	0
Wilmington	0	2	9	3	4
Winchendon	8	4	2	2	1
Winchester	0	1	0	1	0
Woburn	1	4	0	3	1
Worcester	63	59	70	54	55
Worthington ^a	--	--	--	--	0
Wrentham	7	4	1	4	4
Yarmouth	7	5	7	9	10
Total	1,254	1,395	1,286	1,165	1,034

Note: Agencies can acquire Electronic Control Weapons throughout the year, so an agency's first reporting year may not span a full 12 months.

-- cells denoted by a "--" indicate the agency had not yet implemented use of ECWs.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 4. Distribution of ECW Contacts, Warnings, and Deployments by Subject Gender and Race/Ethnicity, 2021

Characteristic	Contacts		Warnings		Deployments		Percent of Contacts with a Warning	Percent of Contacts with a Weapon Deployment
	Number	Percent	Number	Percent	Number	Percent		
<u>Gender</u>								
Male	983	90.3%	889	90.3%	401	90.3%	90.4%	40.8%
Female	105	9.6%	94	9.6%	43	9.7%	89.5%	41.0%
Non-Binary	1	--	1	--	0	--	--	--
<u>Race/Ethnicity</u>								
White, non-Hispanic	565	51.9%	520	52.8%	219	49.3%	92.0%	38.8%
White, Hispanic	153	14.0%	141	14.3%	64	14.4%	92.2%	41.8%
White, Unknown Ethnicity	99	9.1%	84	8.5%	45	10.1%	84.8%	45.5%
Black, non-Hispanic	176	16.2%	156	15.9%	75	16.9%	88.6%	42.6%
Black, Hispanic	8	0.7%	8	0.8%	2	--	100%	--
Black, Unknown Ethnicity	29	2.7%	26	2.6%	11	2.5%	89.7%	37.9%
Other ^a , non-Hispanic	16	1.5%	12	1.2%	5	1.1%	75.0%	31.3%
Other ^a , Hispanic	14	1.3%	14	1.4%	8	1.8%	100%	57.1%
Unknown Race, Non-Hispanic	3	--	2	--	2	--	--	--
Unknown Race, Hispanic	7	0.6%	6	0.6%	3	--	85.7%	--
Unknown Race, Hispanic Ethnicity Unknown	19	1.7%	15	1.5%	10	2.3%	78.9%	52.6%
Total	1,089	100%	984	100%	444	100%	90.4%	40.8%

^a The race/ethnicity categories of American Indian/Alaska Native, Asian, Native Hawaiian or other Pacific Islander, Two or More Races, and Other (specified) comprise Other.

Appendix Table 5. Distribution of ECW Contacts, Warnings, and Deployments by Subject Age, 2021

Subject Age (in Years)	Contacts		Warnings		Deployments		Percent of Contacts with a Warning	Percent of Contacts with a Weapon Deployment
	Number	Percent	Number	Percent	Number	Percent		
17 or younger	36	3.3%	33	3.4%	11	2.5%	91.7%	30.6%
18-19	33	3.0%	32	3.3%	9	2.0%	97.0%	27.3%
20-24	158	14.5%	141	14.3%	61	13.7	89.2%	38.6%
25-29	187	17.2%	167	17.0%	88	19.8	89.3%	47.1%
30-34	204	18.7%	185	18.8%	85	19.1	90.7%	41.7%
35-39	165	15.2%	149	15.1%	69	15.5	90.3%	41.8%
40-44	108	9.9%	100	10.2%	35	7.9%	92.6%	32.4%
45-49	72	6.6%	64	6.5%	32	7.2%	88.9%	44.4%
50-54	45	4.1%	42	4.3%	22	5.0%	93.3%	48.9%
55-59	46	4.2%	41	4.2%	17	3.8%	89.1%	37.0%
60-64	18	1.7%	16	1.6%	6	1.4%	88.9%	33.3%
65 or older	17	1.6%	14	1.4%	9	2.0%	82.4%	52.9%
Total	1,089	100%	984	100%	444	100%	90.4%	40.8%

-- Percentages with such a small denominator are not statistically reliable.

Appendix Table 6. Number of Municipal and Non-municipal ECW Deployments, 2021

Agency Type	Probe Cycles	Stuns	Total
Non-municipal	28	17	45
Municipal	355	321	676
Total	383	338	721

Appendix Table 7. Non-municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Amtrak Police	0	0	0
Bridgewater State University	0	0	0
Cape Cod Regional Law Enforcement Council	0	0	0
Central Massachusetts Law Enforcement Council	1	1	2
Clark University	0	0	0
Holyoke Community College	0	0	0
Massachusetts State Police	25	14	39
Massasoit Community College	0	0	0
Martha's Vineyard Police Tactical Response Team	0	0	0
University of Massachusetts, Lowell	0	0	0
University of Massachusetts, Memorial Medical Center	0	0	0
University of Massachusetts, Worcester	2	2	4
Total	28	17	45

Appendix Table 8. Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Abington	0	0	0
Acushnet	0	4	4
Adams	3	2	5
Agawam	9	2	11
Amesbury	0	0	0
Andover	0	1	1
Aquinnah	0	0	0
Ashburnham	1	0	1
Ashfield	0	0	0
Ashland	2	2	4
Athol	4	2	6
Attleborough	0	0	0
Auburn	3	1	4
Avon	0	0	0

Appendix Table 8. (continued) Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Ayer	0	2	2
Barnstable	8	2	10
Barre	0	0	0
Becket	0	0	0
Bedford	0	0	0
Belchertown	0	0	0
Belmont	1	0	1
Berkley	0	0	0
Bernardston	0	0	0
Beverly	2	3	5
Billerica	6	1	7
Blackstone	0	1	1
Blandford	0	0	0
Bolton	0	0	0
Boston	1	0	1
Bourne	1	1	2
Boxborough	0	0	0
Boxford	3	3	6
Boylston	0	2	2
Braintree	5	0	5
Brewster	0	0	0
Bridgewater	0	0	0
Brockton	10	18	28
Brookfield	0	0	0
Burlington	0	0	0
Canton	1	1	2
Carlisle	0	0	0
Carver	2	0	2
Charlton	1	3	4
Chatham	0	0	0
Chelmsford	7	3	10
Chelsea	7	6	13
Cheshire	0	0	0
Chesterfield ^a	0	0	0

Note: Agencies can acquire ECWs throughout the year, so an agency's first reporting year may not span a full 12 months.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 8. (continued) Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Chicopee	3	8	11
Chilmark	0	0	0
Clinton	0	2	2
Cohasset	0	0	0
Colrain	0	0	0
Concord	2	0	2
Dalton	0	0	0
Danvers	3	0	3
Dartmouth	4	1	5
Dedham	3	0	3
Deerfield	5	1	6
Dennis	6	0	6
Dighton	0	0	0
Douglas	0	0	0
Dover	0	0	0
Dracut	0	0	0
Dudley	0	0	0
Dunstable	0	0	0
Duxbury	0	0	0
East Bridgewater	1	0	1
East Brookfield	2	0	2
Eastham	0	0	0
Easthampton	1	2	3
Easton	0	0	0
Edgartown	0	0	0
Egremont	5	0	5
Erving	0	0	0
Essex	0	0	0
Everett	0	4	4
Fairhaven	1	3	4
Fall River	12	2	14
Falmouth	1	5	6
Fitchburg	3	4	7
Foxborough	0	0	0
Framingham	0	0	0
Franklin	1	2	3

Appendix Table 8. (continued) Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Freetown	0	0	0
Gardner	0	0	0
Georgetown	0	0	0
Gill	0	0	0
Grafton	0	0	0
Granby	0	0	0
Granville	0	0	0
Great Barrington	0	0	0
Greenfield	2	1	3
Groton	0	0	0
Groveland	0	2	2
Hadley	1	4	5
Hamilton	0	0	0
Hampden	1	0	1
Hanson	0	0	0
Hardwick	0	0	0
Harvard ^a	0	0	0
Harwich	0	0	0
Hatfield	0	0	0
Haverhill	0	0	0
Hingham	1	0	1
Hinsdale	0	0	0
Holbrook	0	0	0
Holden	4	0	4
Holland	0	0	0
Holliston	0	0	0
Holyoke	3	6	9
Hopedale	0	0	0
Hopkinton	0	0	0
Hubbardston	0	0	0
Hudson	0	0	0
Hull	0	5	5
Ipswich	0	0	0
Kingston	2	0	2
Lakeville	6	2	8

Note: Agencies can acquire ECWs throughout the year, so an agency's first reporting year may not span a full 12 months.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 8. (continued) Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Lanesborough	0	0	0
Lawrence	6	27	33
Lee	0	0	0
Leicester	0	0	0
Lenox	0	0	0
Leominster	0	2	2
Leverett	0	0	0
Lincoln	0	0	0
Littleton	1	0	1
Longmeadow	0	0	0
Lowell	17	4	21
Ludlow	0	0	0
Lunenburg	0	0	0
Lynn	8	7	15
Lynnfield	0	0	0
Manchester-by-the-Sea	0	0	0
Mansfield	2	1	3
Marblehead	0	0	0
Marion	1	0	1
Marlborough	6	4	10
Marshfield	0	1	1
Mashpee	6	0	6
Maynard	0	0	0
Medfield	0	0	0
Medway	0	0	0
Mendon	0	0	0
Merrimac	0	0	0
Methuen	5	5	10
Middleborough	2	0	2
Middleton	1	2	3
Milford	5	3	8
Millbury	0	0	0
Millis	0	0	0
Millville	0	0	0
Milton ^a	0	0	0

Note: Agencies can acquire ECWs throughout the year, so an agency's first reporting year may not span a full 12 months.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 8. (continued) Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Monson	3	0	3
Montague	1	1	2
Nantucket	0	0	0
Natick	2	0	2
Needham	0	0	0
New Bedford	13	7	20
New Braintree	0	0	0
New Marlborough	0	0	0
New Salem	0	0	0
Newbury	0	0	0
Newburyport	1	1	2
Norfolk	0	0	0
North Adams	0	0	0
North Andover	0	0	0
North Attleborough	0	0	0
North Brookfield	0	0	0
North Reading	0	0	0
Northborough	0	0	0
Northbridge	0	4	4
Northfield	0	0	0
Norton	0	0	0
Norwell	0	0	0
Norwood	0	2	2
Oak Bluffs	1	0	1
Oakham	0	0	0
Orange	2	0	2
Orleans	0	0	0
Oxford	2	1	3
Palmer	2	0	2
Paxton	0	0	0
Peabody	4	1	5
Pembroke	0	2	2
Pepperell	0	0	0
Petersham	0	0	0
Phillipston	0	0	0
Pittsfield	14	1	15

Appendix Table 8. (continued) Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Plainville	0	0	0
Plymouth	9	5	14
Plympton	0	0	0
Princeton	2	1	3
Provincetown	0	0	0
Quincy	0	1	1
Randolph	3	0	3
Raynham	0	2	2
Reading ^a	0	0	0
Rehoboth	0	0	0
Revere	0	0	0
Rockland	2	0	2
Rowley	0	1	1
Royalston	0	0	0
Rutland	4	0	4
Salem	3	4	7
Salisbury	0	0	0
Sandwich	5	2	7
Scituate	1	0	1
Seekonk	1	0	1
Sharon	0	0	0
Sheffield	0	0	0
Sherborn	0	0	0
Shirley	0	0	0
Shrewsbury	0	1	1
Shutesbury	0	0	0
Somerset	1	1	2
South Hadley	0	2	2
Southborough	1	0	1
Southbridge	1	6	7
Southwick	0	0	0
Spencer	1	1	2
Springfield	8	27	35
Sterling	2	3	5
Stockbridge	0	0	0

Note: Agencies can acquire ECWs throughout the year, so an agency's first reporting year may not span a full 12 months.

^a Agency began using Electronic Control Weapons during 2021.

Appendix Table 8. (continued) Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
Stoneham	0	2	2
Stoughton	1	1	2
Stow	0	0	0
Sturbridge	0	0	0
Sudbury	0	0	0
Sunderland	0	0	0
Sutton	1	1	2
Swampscott	0	0	0
Swansea	1	1	2
Taunton	6	1	7
Templeton	0	0	0
Tewksbury	2	5	7
Tisbury	0	0	0
Tolland	0	0	0
Topsfield	0	0	0
Townsend	1	1	2
Truro	4	0	4
Tyngsborough	0	0	0
Upton	0	0	0
Uxbridge	0	1	1
Wakefield	0	0	0
Wales	0	0	0
Walpole	1	0	1
Ware	1	4	5
Wareham	4	5	9
Warren	0	0	0
Warwick	0	0	0
Watertown	1	0	1
Webster	6	8	14
Wellesley	0	0	0
Wellfleet	0	0	0
Wenham	0	0	0
West Boylston	0	0	0
West Bridgewater	4	2	6
West Brookfield	0	0	0
West Newbury	0	0	0

Appendix Table 8. (continued) Municipal ECW Deployments by Agency, 2021

Agency Name	Number of ECW Deployments		
	Probe Cycles	Stuns	Total
West Springfield	5	16	21
West Stockbridge	0	0	0
West Tisbury	1	0	1
Westborough	0	0	0
Westfield	3	5	8
Westford	0	3	3
Westhampton ^a	0	0	0
Westminster	0	1	1
Westport	0	0	0
Westwood	0	2	2
Weymouth	4	3	7
Whately	0	0	0
Whitman	0	0	0
Williamsburg ^a	0	0	0
Williamstown	0	0	0
Wilmington	0	0	0
Winchendon	2	0	2
Winchester	0	0	0
Woburn	1	0	1
Worcester	7	9	16
Worthington ^a	0	0	0
Wrentham	0	3	3
Yarmouth	0	0	0
Total	355	321	676

Note: Agencies can acquire ECWs throughout the year, so an agency's first reporting year may not span a full 12 months.

^a Agency began using Electronic Control Weapons during 2021.

TERMS AND DEFINITIONS

These terms and definitions are provided to law enforcement agencies on the ECW reporting application where the report is submitted.

Electronic Control Weapon (ECW): A device utilized to immobilize a subject without causing serious injury, typically by administering an electric shock. An ECW is commonly referred to as a stun gun or Taser®.

ECW Agency: A law enforcement agency in Massachusetts with electronic control weapons.

ECW Contact: Each individual officer's deployment, warning, or display of an ECW towards a single subject. *(Example: Four officers respond to one call and only one officer issues a warning and a second officer deploys a weapon on a single subject. This would be reported as one incident and two contacts.)*

ECW Deployment:

Probe Deployment: The act of firing two small, dart-like probes from the ECW that attach to the subject. The device then delivers a 5-second electrical cycle, which can be repeated in order to incapacitate the subject to the point of submission.

5-Second Cycle: A 5-second electrical charge resulting from a probe deployment, which can be repeated.

Stun Deployment: The act of bringing the ECW device into direct contact with the subject's skin or clothing in order to induce pain to the point of submission. Stuns can be repeated if the subject does not initially submit.

ECW Incident: An event in which an officer (or group of officers) issue a warning and/or deploy an ECW towards a single subject.

ECW Warning:

Laser Warning: A visual warning whereby an officer employs the laser function of the ECW device to indicate that an ECW will be deployed.

Spark Warning: A visual warning whereby an officer employs a spark on a handheld stun device in order to demonstrate its effectiveness.

Verbal/Visual Warning: Any spoken words or display of the ECW that would indicate to a subject that an ECW may be used. This warning can include: 1) Any direct wording to a subject indicating or implying that an ECW will be used. *(Example: Displaying an ECW and shouting "Stop!")*, 2) Any indirect wording that a subject may overhear indicating or implying that an ECW is about to be deployed. *(Example: A warning to other officers that an ECW is about to be deployed by saying "Taser, Taser, Taser.")*

ABOUT THE RESEARCH AND POLICY ANALYSIS DIVISION

The Research and Policy Analysis Division (RPAD) is a division within the of the Office of Grants and Research (OGR), a state agency that is part of the Massachusetts Executive Office of Public Safety and Security (EOPSS). The RPAD and its Statistical Analysis Center use research and evaluation to promote public safety. RPAD works on a number of projects including electronic control weapons reporting, provider sexual crime report analysis, the collection of statewide county release data for recidivism, and the development of criminal justice data standards.

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