



Annual Electronic Weapons Use Analysis

A Summary of Electronic Weapons Use in Massachusetts: 2011 and 2012

Andrea J. Cabral, Secretary of Public Safety and Security

Report prepared by:
Brittany Peters, Research Analyst
Massachusetts Executive Office of Public Safety and Security
Office of Grants and Research
Research and Policy Analysis Division

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OVERVIEW AND BACKGROUND

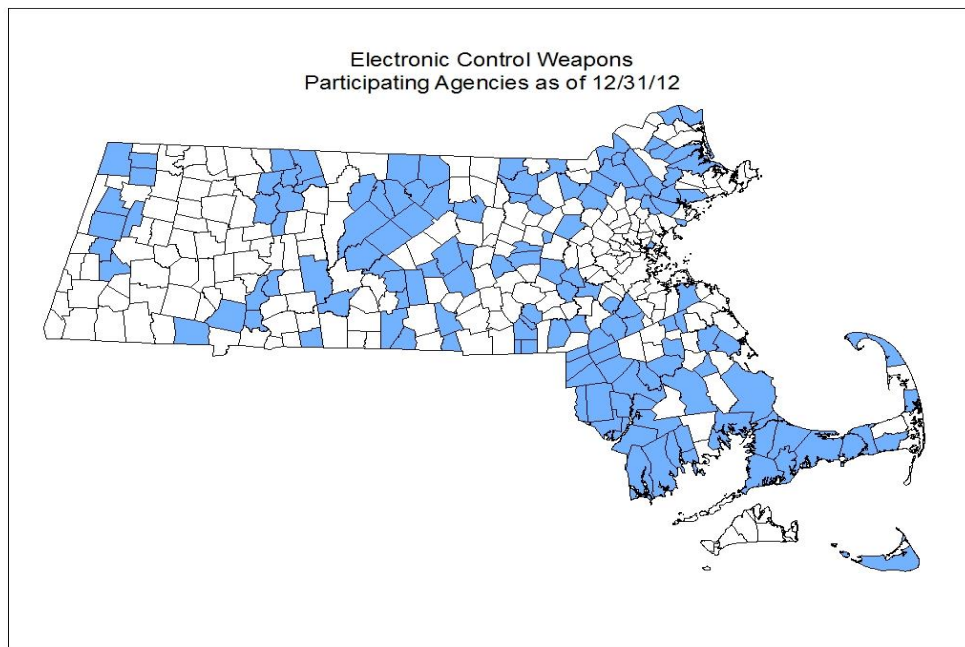
Massachusetts General Law chapter 140, section 131J permits the use of Electronic Control Weapons (ECW) by law enforcement personnel in the course of their official duties, provided that they have completed a training course individually approved by the Secretary of Public Safety and Security. Moreover, the statute requires that ECW devices contain a mechanism in order to track the number of times each weapon is fired.¹ 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 electronic weapons in the Commonwealth and the training of law enforcement personnel on the appropriate use of such weapons. In September 2005, the Secretary of Public Safety and Security began authorizing the purchase and use of ECWs by police departments within the Commonwealth. This report will examine the data captured by those departments and reported to EOPSS on a quarterly basis during calendar years 2011 and 2012, including the number of times each device was fired, and the gender and race/ethnicity of the targets (see Appendix A for reporting form).

Incomplete or inconsistent data were omitted from this analysis, although the cases were retained in order to issue a comprehensive report that was representative of the activities of all participating law enforcement agencies.

APPROVED AGENCIES

At the close of calendar year 2012, there were 141 municipal police departments and four regional law enforcement agencies approved to use ECWs (see Map 1). Combined, these 145 agencies serve populations of less than 1,000 persons to upwards of 150,000 persons, with the number of sworn officers ranging from one to 330.²

Map 1.



¹ As amended by St. 2004, c. 170, § 1.

² 2010 United States Census Bureau data retrieved from the Secretary of the Commonwealth's website, <http://www.sec.state.ma.us/census/>. Population data for the four regional agencies was excluded from this analysis. The number of sworn officers for the 141 municipal agencies was extracted from data provided in the Quarterly Reports. The number of sworn officers in the four regional agencies was excluded from this analysis.

INCIDENTS AND CONTACTS

For this report, an *incident* is defined as a call in which one or more officers responded and there was usage of an ECW. A *contact* is defined as an ECW deployment, warning, or display of an ECW towards a subject. Multiple contacts can occur within an incident.

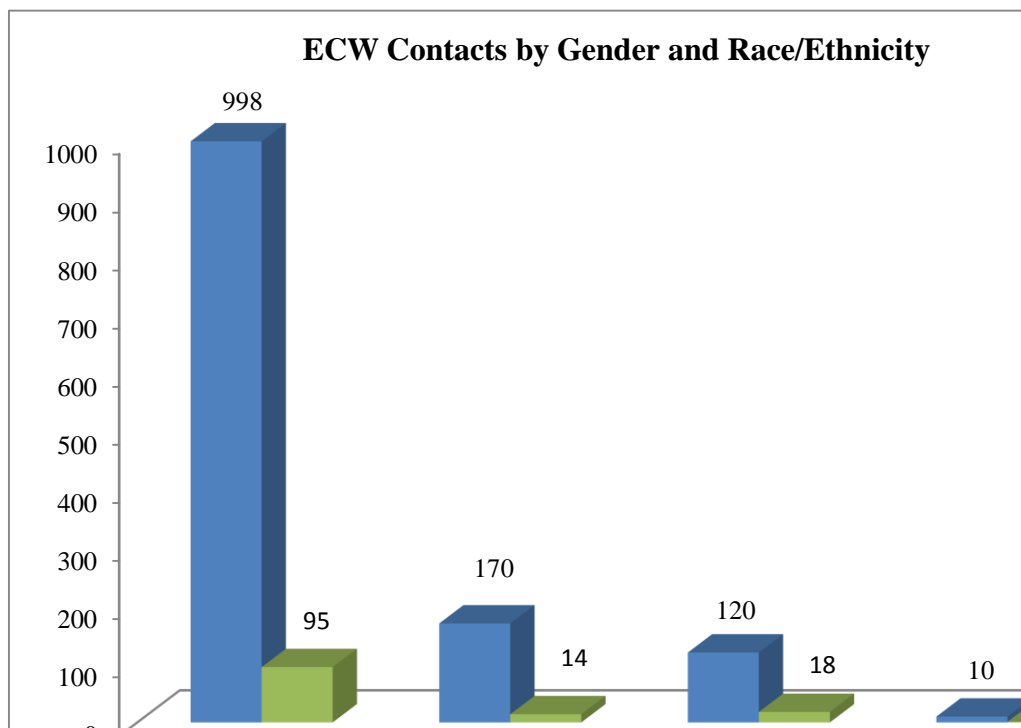
During 2011 there were a total of 522 incidents resulting in 557 contacts. In 2012 the number of incidents increased by 61.5% to 843 incidents with contacts increasing 58.9% to 885 contacts. Some of this increase may be accounted for by an increase in the number of police departments approved for ECW usage. From 2011 to 2012 this number increased by 52.6%.

A complete list of the approved agencies as of December 31, 2012, including a breakdown of usage by quarter during each of the two years covered in this analysis, is located in Appendix B.

CONTACT DEMOGRAPHICS

Of the 1,442 ECW contacts made during 2011 and 2012, the majority were male (90.0%). Approximately three-quarters of all contacts were white (76.6%), followed by black (12.9%), Hispanic (9.7%), and Other (0.8%).³ Contacts of Asian, Middle Eastern, and Native American descent were combined into the broader category of *Other*.

Chart 1.



³ Male $n = 1,304$ (90%); Female $n = 130$ (9%); and Missing $n = 8$. Race/ethnicity data are missing in 16 cases.

WARNINGS

Of the 1,442 interactions between law enforcement and civilians during the two years examined within this report, verbal warnings were issued in 1,161 instances (80.5% of the time).⁴ The issuance of warnings between males and females was distributed nearly evenly based on the total target population of each gender (81% and 79%, respectively),⁵ and consistently (80%) across the four racial/ethnic categories.⁶

When a warning was issued, the subject submitted 39% or 458 times, thus peacefully resolving the situation. Of the 702 cases where a warning was issued but the subject failed to comply, weapons were deployed 685 times (98%). Probe devices were fired 312 times, with subjects submitting in 74% of the cases. Stun devices were fired 286 times with subjects submitting 244 times (85%); in 87 instances both a probe and a stun were deployed with subjects submitting 8 times (9%). In the remaining 17 cases, a warning was issued, subjects failed to comply but neither a probe or stun device were deployed.

NO WARNINGS

There were 275 cases in which a warning was not issued; of the 275 cases in which a warning was not issued, devices were utilized in 262 instances (95%) with submission resulting 76.7% of the time. There were 104 probe submissions, 96 stun submissions and one combined probe and stun submission.

⁴ Data related to the issuance of warnings are missing in six cases.

⁵ Male $n = 1,055$; Female $n = 103$; and Missing $n = 3$.

⁶ Mean = 80%; and Median = 81%. White $n = 889$ (81%); Black $n = 142$ (77%); Hispanic $n = 110$ (80%); and Other $n = 9$ (82%). Native American $n = 4$ (80%); Middle Eastern $n = 3$ (75%); and Asian $n = 2$ (100%). Race/ethnicity data are missing in 11 cases.

Appendix A: 2012 ECW Quarterly Reporting Form

Executive Office of Public Safety and Security
Electronic Control Weapons (ECWs) Use Quarterly Report

Agency Name:

Individual Completing Report:

Date Completed:

Phone Number:

Reporting Quarter	Reporting Period	Report Due Date
____ 1 st Quarter	January 1 st – March 31 st , 2012	April 15 th , 2012
____ 2 nd Quarter	April 1 st – June 30 th , 2012	July 15 th , 2012
____ 3 rd Quarter	July 1 st – September 30 th , 2012	October 15 th , 2012
____ 4 th Quarter	October 1 st – December 31 st , 2012	January 15 th , 2013

Please provide information that reflects use of electronic control weapons (ECWs) *during this quarter only*.

Police departments that have issued ECWs to their officers must submit a quarterly report **even if ECWs were not used or were not issued** during the quarter. In this case, indicate that the ECW were used in zero incidents.

If you have any questions about this report, please contact the Research and Policy Analysis Division at 617.725.3301.

Part I. Agency Level Information

1.	How many sworn officers were in your department at the end of this quarter?	<input type="text"/>
2.	How many officers have completed the approved training program for ECWs?	<input type="text"/>
3.	How many ECWs does your department own?	<input type="text"/>
4.	In how many <i>incidents</i> was an ECW involved during this quarter? (An incident is an event in which the officer issued a warning or displayed or deployed an ECW.)	<input type="text"/>

Electronic Control Weapons (ECWs) Use Quarterly Report

Part II. Incident Level Information

A: INSTRUCTIONS:

Please complete one row for each officer involved in an incident in which an ECW was involved and the officer issued a warning or displayed or deployed an ECW. If more than one officer is involved in the same incident, use the same incident number for all officers in that incident. The number of incidents containing information should equal the total incidents reported in question #4 on page 2. Additional rows can be added to the table if necessary.

Please provide information that reflects use of electronic control weapons (ECWs) *during this quarter only* (not including usage during trainings, testing, or usage on animals).

- Warning Type – More than one response may be entered. Please indicate all that apply:

N/A = not applicable (no warning given)

V = verbal warning used

L = laser function used

S = spark function used

- Deployment Type – Please indicate the number of each deployment type in ALL applicable columns:

STUN DEPLOYMENT = number of times drive stun function used

PROBE DEPLOYMENT = number of times probe function used and includes follow-up drive stun when a single probe is still attached

- Subject Submitted: Indicate whether each warning, probe, or stun resulted in the submission or cooperation of the subject. If subject did not submit (e.g., through flight or continued resistance), please answer “no”. If a subject submitted for reasons *other than* ECW use, such as hands-on techniques, pepper spray, or baton use, enter “no” in “Subject Submitted” columns.

- Race/Ethnicity – Please indicate the racial/ethnic composition of the targets of all ECW drive stuns or probes.

A = Asian or Pacific Islander

B = Black

H = Hispanic

I = Native American, American Indian, or Alaskan Native

M = Middle Eastern or East Indian

W = White

**Executive Office of Public Safety and Security
Electronic Control Weapons (ECWs) Use Quarterly Report**

B: EXAMPLES OF INCIDENT LEVEL INFORMATION:

Incident Number	Weapon Serial Number	Date of Incident	Warning Type	Did Subject Submit? Y/N	# of Probe Deployments	Subject Submitted? Y/N	# of Stun Deployments	Did Subject Submit? Y/N	Target's Gender	Target's Race / Ethnicity
1	A12345	1/1/12	S	No	0	N/A	2	Yes	M	W
1	C23456	1/1/12	N/A	N/A	1	Yes	0	N/A	M	W
2	11234DE	2/1/12	V	No	0	N/A	1	No	F	B
3	B23456	3/1/12	V, L, S	No	1	No	3	No	M	A
4	W78514	3/15/12	V	Yes	0	N/A	0	N/A	M	H
5	X225844	3/31/12	N/A	N/A	1	Yes	1	No	M	I

C: CURRENT INCIDENT LEVEL INFORMATION*

Incident Number	Weapon Serial Number	Date of Incident	Warning Type	Did Subject Submit? Y/N	# of Probe Deployments	Subject Submitted? Y/N	# of Stun Deployments	Did Subject Submit? Y/N	Target's Gender	Target's Race / Ethnicity

**If necessary, please add rows by cutting and pasting additional cells*

Part III. Additional Information

If there is any other information you would like to report, including details regarding a specific incident or incidents, please use this space to do so.

Appendix B: Quarterly ECW Usage by Agency

Note: The gray boxes within the table indicate that a department was not yet approved for ECW usage.

	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012
<i>Police Department</i>	<i>Q1 Incidents</i>	<i>Q2 Incidents</i>	<i>Q3 Incidents</i>	<i>Q4 Incidents</i>	<i>Total Incidents</i>	<i>Q1 Incidents</i>	<i>Q2 Incidents</i>	<i>Q3 Incidents</i>	<i>Q4 Incidents</i>	<i>Total Incidents</i>
Abington PD		0	0	0	0	4	1	3	1	9
Acushnet PD								0	0	0
Adams PD	1	0	0	0	1	0	1	0	0	1
Amesbury PD	0	1	2	2	5	0	2	2	2	6
Andover PD	2	0	0	0	2	0	1	1	0	2
Ashburnham PD		0	4	2	6	0	0	0	0	0
Athol PD						0	0	4	7	11
Attleboro PD	1	5	3	5	14	4	7	2	4	17
Ayer PD							0	2	3	5
Barnstable PD	10	12	7	4	33	11	7	11	7	36
Barre PD							0	1	2	3
Belchertown PD	0	0	1	1	2	1	0	0	1	2
Berkley PD	0	0	0	0	0	0	0	0	0	0
Bernardston PD	0	0	0	0	0	0	0	1	0	1
Beverly PD				0	0	0	0	0	0	0
Billerica PD	0	0	2	0	2	2	2	1	0	5
Blackstone PD			0	2	2	0	0	1	1	2
Bourne PD						0	0	5	5	10
Bridgewater PD	0	0	0	2	2	0	0	0	0	0
Canton PD	0	1	0	0	1	2	0	0	1	3
Cape Cod Regional Law Enforcement Council	0	0	0	0	0	0	0	0	0	0
Chelmsford PD	0	0	1	2	3	0	0	1	2	3
Chelsea PD	4	6	2	5	17	1	2	2	1	6
Concord PD	0	0	0	0	0	0	0	0	0	0
Dalton PD	1	2	0	0	3	0	0	0	1	1
Danvers PD								0	0	0
Dartmouth PD		0	0	0	0	1	2	1	4	8
Deerfield PD	1	0	4	2	7	3	1	1	0	5
Dennis PD		0	0	0	0	0	1	1	0	2
Dighton PD	0	0	0	0	0	0	0	0	0	0
Dover PD									0	0
Duxbury PD	0	0	2	0	2	0	0	0	2	2
East Bridgewater PD								1	2	3
East Brookfield PD	0	1	1	0	2	0	0	2	0	2

<i>Police Department</i>	<i>2011 Q1 Incidents</i>	<i>2011 Q2 Incidents</i>	<i>2011 Q3 Incidents</i>	<i>2011 Q4 Incidents</i>	<i>2011 Total Incidents</i>	<i>2012 Q1 Incidents</i>	<i>2012 Q2 Incidents</i>	<i>2012 Q3 Incidents</i>	<i>2012 Q4 Incidents</i>	<i>2012 Total Incidents</i>
Eastham PD			0	1	1	0	0	0	1	1
Erving PD								0	0	0
Fairhaven PD	0	0	4	5	9	0	1	4	2	7
Fall River PD	3	5	10	10	28	5	13	14	12	44
Falmouth PD							6	7	2	15
Foxborough PD	1	0	0	0	1	0	0	3	3	6
Framingham PD	1	1	1	0	3	0	0	2	2	4
Franklin PD	1	0	0	0	1	1	2	0	0	3
Freetown PD	1	1	1	0	3	0	0	0	0	0
Gardner PD	0	1	2	2	5	3	2	4	3	12
Georgetown PD	0	0	1	0	1	0	0	0	0	0
Gill PD	0	0	0	0	0	0	0	0	0	0
Granville PD	0	0	0	0	0	0	0	0	0	0
Greenfield PD	5	6	5	2	18	0	5	4	3	12
Groton PD	0	0	0	0	0	0	0	0	0	0
Groveland PD		0	0	0	0	0	0	1	0	1
Hampden PD							1	0	1	2
Hardwick PD	0	3	0	1	4	1	0	2	0	3
Harwich PD			4	2	6	0	0	0	0	0
Hingham PD	0	1	0	1	2	2	8	1	0	11
Holden PD		0	0	0	0	0	0	0	0	0
Holyoke PD							0	1	5	6
Hopedale PD	1	2	1	1	5	0	0	0	0	0
Hubbardston PD	0	2	1	0	3	1	1	2	0	4
Hudson PD				0	0	2	0	0	2	4
Ipswich PD				0	0	0	0	0	0	0
Lanesborough PD								0	0	0
Lawrence PD	5	6	5	3	19	6	5	9	6	26
Lee PD						1	1	0	0	2
Lenox PD									0	0
Leominster PD	9	5	6	3	23	5	5	4	6	20
Littleton PD	0	1	1	1	3	1	0	0	0	1
Lynnfield PD	0	0	0	0	0	0	0	0	0	0
Massachusetts State Police	0	0	0	3	3	0	2	0	0	2
Mansfield PD	0	4	0	1	5	1	1	0	2	4
Marion PD								0	0	0
Marlborough PD									0	0
Mashpee PD		0	3	3	6	1	2	2	2	7

<i>Police Department</i>	<i>2011 Q1 Incidents</i>	<i>2011 Q2 Incidents</i>	<i>2011 Q3 Incidents</i>	<i>2011 Q4 Incidents</i>	<i>2011 Total Incidents</i>	<i>2012 Q1 Incidents</i>	<i>2012 Q2 Incidents</i>	<i>2012 Q3 Incidents</i>	<i>2012 Q4 Incidents</i>	<i>2012 Total Incidents</i>
Maynard PD	0	0	0	0	0	0	0	0	0	0
Mendon PD	0	0	1	0	1	0	0	0	2	2
Methuen PD	1	3	0	2	6	1	0	0	0	1
Middleborough PD	0	6	4	3	13	2	2	0	6	10
Middleton PD		0	0	0	0	0	2	1	0	3
Milford PD	0	0	1	1	2	1	0	2	0	3
Millville PD	3	1	0	0	4	0	0	0	1	1
Montague PD	0	2	0	0	2	0	0	0	0	0
Martha's Vineyard Tactical Response Team	0	0	0	0	0	0	0	0	0	0
Nantucket PD	0	1	1	0	2	1	1	2	1	5
Natick PD	5	1	1	3	10	1	1	1	0	3
New Bedford PD			7	7	14	16	33	46	50	145
New Braintree PD	0	0	0	0	0	0	0	0	0	0
Norfolk PD	0	0	0	0	0	0	0	0	0	0
North Adams PD	1	1	2	1	5	0	2	0	2	4
North Andover PD									0	0
North Attleboro PD	0	0	0	0	0	0	0	0	0	0
North Brookfield PD	0	0	0	1	1	0	0	1	1	2
North Reading PD	0	0	0	0	0	0	0	0	0	0
Northborough PD	0	0	0	0	0	0	0	0	0	0
North Eastern Massachusetts Law Enforcement Council	0	0	0	1	1	0	0	0	0	0
Northfield PD			0	0	0	0	0	0	0	0
Norton PD	1	1	4	2	8	1	1	2	1	5
Norwood PD			0	1	1	2	4	5	5	16
Oxford PD				0	0	1	1	9	3	14
Palmer PD							0	1	6	7
Paxton PD	0	0	0	0	0	0	0	0	0	0
Peabody PD	0	0	0	3	3	0	1	2	2	5
Pembroke PD	1	1	0	0	2	4	1	2	1	8
Pepperell PD	0	1	2	1	4	1	1	0	1	3
Petersham PD			0	0	0	0	0	0	0	0

	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012
<i>Police Department</i>	<i>Q1 Incidents</i>	<i>Q2 Incidents</i>	<i>Q3 Incidents</i>	<i>Q4 Incidents</i>	<i>Total Incidents</i>	<i>Q1 Incidents</i>	<i>Q2 Incidents</i>	<i>Q3 Incidents</i>	<i>Q4 Incidents</i>	<i>Total Incidents</i>
Phillipston PD			0	0	0	0	0	0	0	0
Pittsfield PD	6	8	6	4	24	3	4	2	5	14
Plainville PD	0	0	0	0	0	0	0	0	0	0
Plymouth PD			0	4	4	5	12	11	7	35
Plympton PD	0	0	1	0	1	0	0	0	0	0
Provincetown PD	0	0	2	0	2	0	1	1	0	2
Raynham PD	0	0	1	0	1	0	0	0	0	0
Rehoboth PD				0	0	0	2	7	1	10
Rockland PD	1	1	1	1	4	1	2	4	0	7
Rowley PD	0	0	0	0	0	0	0	0	0	0
Salisbury PD	0	1	1	2	4	2	3	1	1	7
Sandwich PD				0	0	0	0	1	1	2
Seekonk PD	0	1	2	3	6	0	0	2	1	3
Sharon PD	0	0	0	0	0	0	0	0	0	0
Sherborn PD		2	0	1	3	0	2	0	1	3
Somerset PD	0	0	1	1	2	0	0	1	0	1
South Hadley PD		0	0	1	1	3	0	2	0	5
Southbridge PD			0	10	10	14	10	8	4	36
Spencer PD		0	1	2	3	1	1	1	0	3
Sterling PD	0	0	0	0	0	0	1	1	0	2
Stoughton PD							0	2	4	6
Sturbridge PD				0	0	0	0	1	0	1
Sunderland PD								0	0	0
Swampscott PD									0	0
Swansea PD	0	1	0	1	2	0	0	2	1	3
Taunton PD	4	2	3	4	13	5	11	4	2	22
Templeton PD	2	3	1	1	7	0	0	0	0	0
Tewksbury PD	0	3	2	0	5	1	3	5	3	12
Topsfield PD	0	1	0	1	2	1	0	1	1	3
Truro PD	0	0	1	0	1	1	0	1	0	2
Tyngsborough PD	0	0	0	0	0	0	0	0	0	0
Wareham PD	5	1	4	4	14	7	7	9	8	31
Webster PD	8	3	8	6	25	5	0	1	3	9
West Boylston PD	2	0	0	0	2	0	0	0	0	0
West Springfield PD	0	0	0	0	0	0	0	0	0	0
Westfield PD	5	8	7	6	26	4	4	5	5	18
Westminster PD	0	2	0	0	2	2	3	0	0	5

<i>Police Department</i>	<i>2011 Q1 Incidents</i>	<i>2011 Q2 Incidents</i>	<i>2011 Q3 Incidents</i>	<i>2011 Q4 Incidents</i>	<i>2011 Total Incidents</i>	<i>2012 Q1 Incidents</i>	<i>2012 Q2 Incidents</i>	<i>2012 Q3 Incidents</i>	<i>2012 Q4 Incidents</i>	<i>2012 Total Incidents</i>
Westport PD	0	0	0	0	0	1	0	0	1	2
Williamstown PD	0	0	2	0	2	1	0	0	0	1
Winchendon PD	0	2	1	0	3	2	1	0	0	3
Worcester PD	2	4	3	0	9	2	1	1	3	7
Yarmouth PD	1	4	4	3	12	2	2	2	3	9