

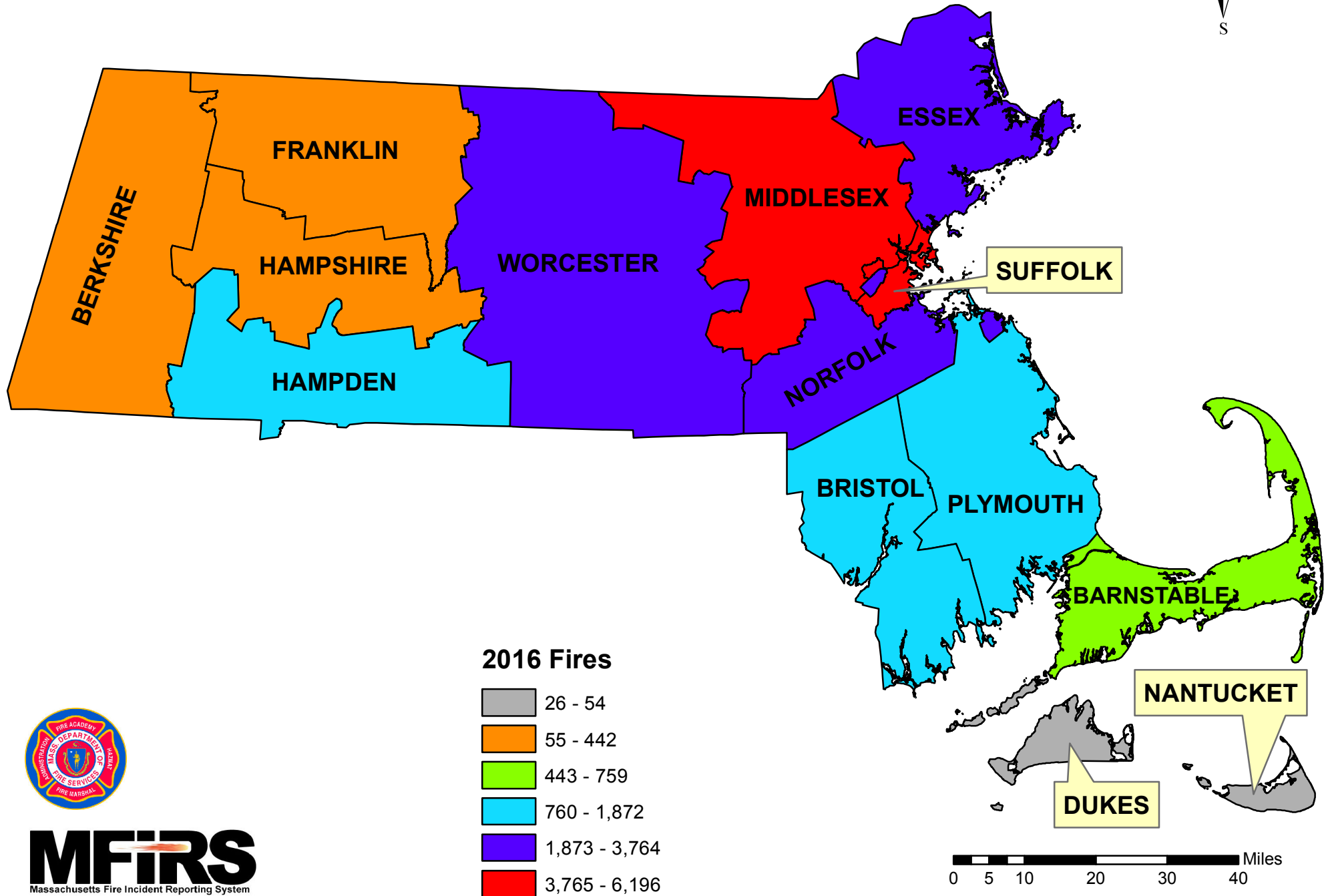


# County Profiles

## 2017 Fire Data Analysis

Statistics compiled by the Massachusetts  
Fire Incident Reporting System (MFIRS)

# 2017 Fires in Massachusetts Counties



**MFIRS**  
Massachusetts Fire Incident Reporting System

0 5 10 20 30 40 Miles  
Massachusetts Fire Incident Reporting System 2017

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**Hampshire County Profile**

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## 2017 Fires by County

County	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Civilian Deaths	Civilian Injuries	Fire Service Deaths	Fire Service Injuries	Dollar Loss
Barnstable	759	300	85	374	2	11	0	16	\$10,901,238
Berkshire	442	256	52	134	2	6	0	2	4,829,650
Bristol	1,872	847	278	747	6	27	0	12	13,307,487
Dukes	26	16	6	5	0	0	0	0	355,000
Essex	2,474	1,293	256	925	6	17	0	57	21,957,642
Franklin	253	118	22	113	5	5	0	2	1,641,127
Hampden	1,641	939	222	480	12	23	1	52	13,411,119
Hampshire	384	190	41	153	0	1	0	3	4,127,990
Middlesex	5,294	3,501	379	1,414	8	48	1	98	154,635,597
Nantucket	54	19	13	22	0	0	0	1	339,000
Norfolk	2,990	1,808	220	962	6	25	0	53	29,827,456
Plymouth	1,746	822	199	725	3	45	0	35	16,993,556
Suffolk	6,196	4,555	256	1,385	3	25	0	51	83,400,982
Worcester	3,764	2,435	338	991	5	36	0	55	34,754,417
<b>Total</b>	<b>27,895</b>	<b>17,098</b>	<b>2,367</b>	<b>8,430</b>	<b>58</b>	<b>269</b>	<b>2</b>	<b>434</b>	<b>\$390,482,261</b>

## 2017 Arsons by County

County	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons	Civilian Deaths	Civilian Injuries	Fire Service Deaths	Fire Service Injuries	Dollar Loss
Barnstable	35	6	2	27	0	0	0	0	\$38,201
Berkshire	11	1	0	10	0	0	0	0	12,400
Bristol	95	36	16	43	0	1	0	1	1,057,498
Dukes	0	0	0	0	0	0	0	0	0
Essex	68	15	6	47	1	0	0	0	70,575
Franklin	18	4	0	14	0	0	0	0	0
Hampden	59	17	11	31	0	0	0	1	94,510
Hampshire	26	6	1	19	0	0	0	0	82,120
Middlesex	43	11	4	28	1	0	0	4	110,035,685
Nantucket	4	2	1	1	0	0	0	0	155,000
Norfolk	68	16	1	51	0	0	0	0	172,738
Plymouth	35	9	4	22	0	3	0	0	76,925
Suffolk	129	33	12	84	0	1	0	0	1,415,752
Worcester	80	31	10	39	2	0	0	6	1,087,416
<b>Total</b>	<b>671</b>	<b>187</b>	<b>68</b>	<b>416</b>	<b>4</b>	<b>5</b>	<b>0</b>	<b>13</b>	<b>\$114,298,820</b>



## 2017 Fires, Arsons and Deaths by County and by Population\*

County	Population	Total Fires	Fires per 1,000 Pop.	Fire Deaths	Deaths per 1,000 Fires	Deaths per 10,000 Pop.	Total Arsons	Arsons per 1,000 Pop.
Barnstable	215,888	759	3.5	2	2.6	0.09	35	0.2
Berkshire	131,219	442	3.4	2	4.5	0.15	11	0.1
Bristol	548,285	1,872	3.4	6	3.2	0.11	95	0.2
Dukes	16,535	26	1.6	0	0.0	0.00	0	0.0
Essex	743,159	2,474	3.3	6	2.4	0.08	68	0.1
Franklin	71,372	253	3.5	5	19.8	0.70	18	0.3
Hampden	463,490	1,641	3.5	12	7.3	0.26	59	0.1
Hampshire	158,080	384	2.4	0	0.0	0.00	26	0.2
Middlesex	1,503,085	5,294	3.5	8	1.5	0.05	43	0.03
Nantucket	10,172	54	5.3	0	0.0	0.00	4	0.4
Norfolk	670,850	2,990	4.5	6	2.0	0.09	68	0.1
Plymouth	494,919	1,746	3.5	3	1.7	0.06	35	0.1
Suffolk	722,023	6,196	8.6	3	0.5	0.04	129	0.2
Worcester	798,552	3,764	4.7	5	1.3	0.06	80	0.1
<b>Massachusetts</b>	<b>6,547,629</b>	<b>27,895</b>	<b>4.3</b>	<b>58</b>	<b>2.1</b>	<b>0.09</b>	<b>671</b>	<b>0.1</b>

\*Population statistics based on 2010 U.S. Census Bureau data.

## 2017 Non-Fire Responses by County and by Incident Type

County	Total Non-Fire Responses	Overpressure Rupt. & Explos. (No-fire)	Rescue EMS Incidents	Hazardous Conditions (No-fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX <sup>1</sup> & Natural Disaster	Special Incident Type
Barnstable	54,054	54	38,032	2,302	3,994	2,542	6,792	163	175
Berkshire	12,518	15	6,994	690	1,738	685	2,321	16	59
Bristol	68,364	65	45,620	2,669	3,982	4,307	11,255	66	400
Dukes	1,223	6	79	96	52	281	697	0	12
Essex	109,055	102	62,289	4,572	15,232	7,767	18,184	168	741
Franklin	8,048	25	4,548	683	900	675	918	48	251
Hampden	46,501	87	28,144	1,810	3,773	5,276	7,265	25	121
Hampshire	15,535	25	10,234	693	882	864	2,752	10	74
Middlesex	194,934	118	116,913	10,091	20,204	11,289	30,559	197	5,563
Nantucket	2,817	3	1,521	95	65	40	1,086	1	6
Norfolk	96,028	102	61,320	5,158	8,933	5,666	13,251	74	1,524
Plymouth	88,630	83	60,799	4,461	7,160	5,933	9,817	186	191
Suffolk	106,082	68	56,077	4,674	14,412	10,064	18,738	43	2,006
Worcester	102,927	111	68,801	4,113	8,741	7,106	13,106	56	893
<b>Massachusetts</b>	<b>906,715</b>	<b>864</b>	<b>561,371</b>	<b>42,107</b>	<b>90,068</b>	<b>62,495</b>	<b>136,741</b>	<b>1,053</b>	<b>12,016</b>

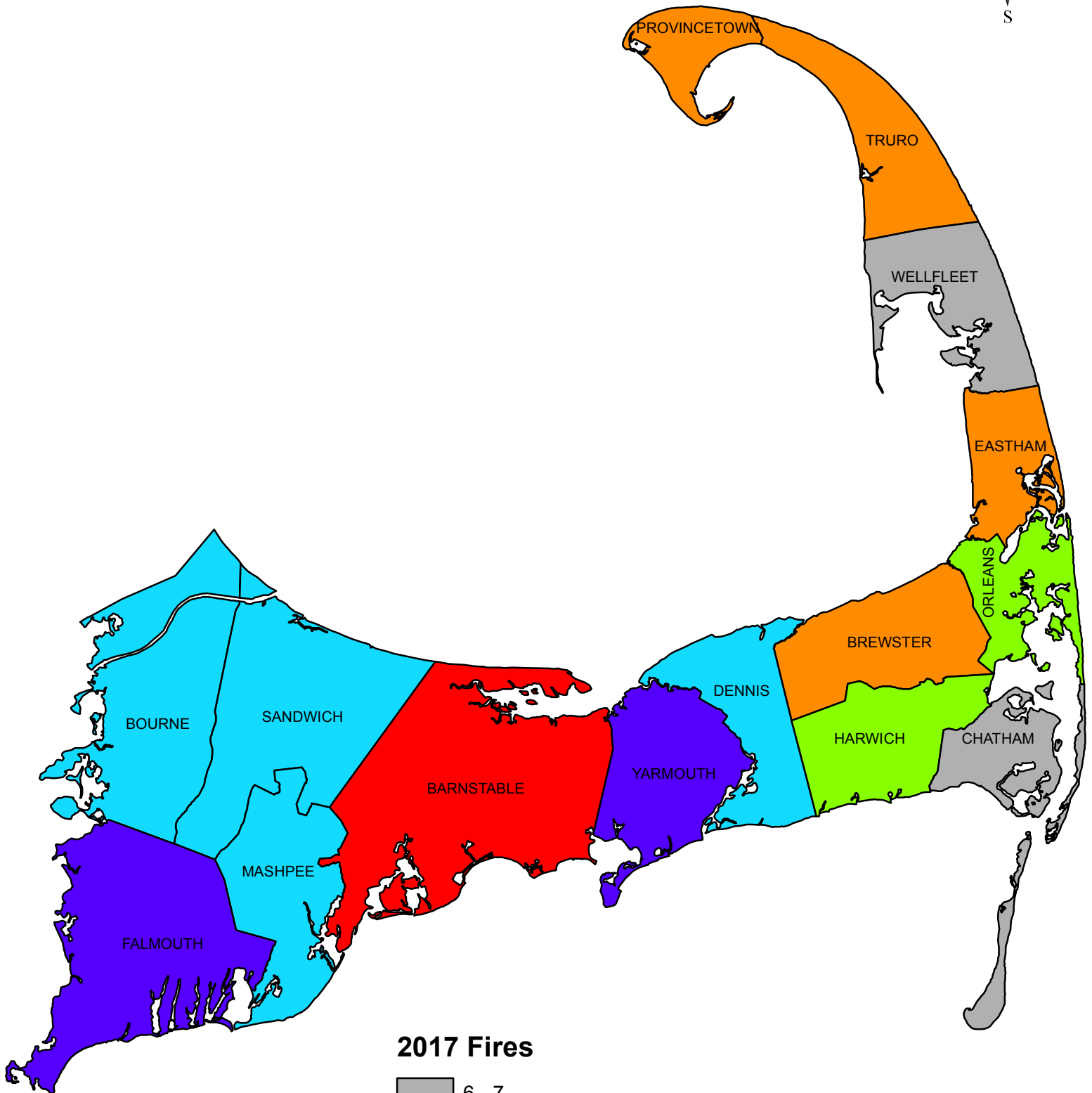
<sup>1</sup> WX is the abbreviation for Weather.



# Barnstable County

## 2017 Fire Data Analysis

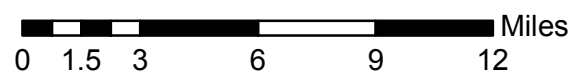
# Barnstable County Fires 2017



## 2017 Fires



**MFIRS**  
Massachusetts Fire Incident Reporting System



Massachusetts Fire Incident Reporting System 2017

# Barnstable County Fires in 2017

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## 759 Total Fires — 300 Structures, 85 Vehicles & 374 Other Fires

Barnstable County ranked ninth out of the 14 Massachusetts counties in total reported fires. Barnstable County fire departments reported 759 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 300 structure fires, 85 motor vehicle fires, 198 brush, tree, or lawn fires, 84 outside rubbish fires, 41 special outside fires, three cultivated crop or vegetation fires, and 48 unclassified fires caused two civilian deaths, 11 civilian injuries, 16 fire service injuries and an estimated dollar loss of \$11 million. Barnstable County's fires accounted for 3% of the 27,895 Massachusetts fires reported in 2017.

All 20 of Barnstable County's fire departments either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017.

## All Fires Down

The total number of reported fire incidents decreased by 75 from the 834 reported in 2016. Reported structure fires decreased by 50 from the 350 reported during the previous year. Motor vehicle fires increased by nine from the 76 reported during 2016. Outside and other fires decreased by 34 from the 408 reported the year before.<sup>1</sup>

## BARNSTABLE COUNTY FIRES FROM 2013 TO 2017

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2013	805	395	90	320	48	8	0	40
2014	902	413	82	407	55	7	4	44
2015	860	336	100	424	48	5	2	41
2016	834	350	76	408	28	8	0	20
2017	759	300	85	374	35	6	2	27

## Fire and Fire Death Rates

Barnstable County had 3.5 fires per 1,000 population. That figure ranks Barnstable County tied for fifth in the state and below the state rate of 4.3 fires per 1,000 population. Barnstable County also had 0.09 fire deaths per 10,000 population, ranking it tied for fifth and below the state rate of 0.09 fire deaths per 10,000 population.

## 2 Fatal Fires in Barnstable County

In 2017, Barnstable County had two fatal fires kill two people.

- On March 17, 2017, at 3:48 p.m., the Bourne Fire Department was called to a fatal smoking fire in a single-family home. The fire was started by undetermined smoking material on upholstered furniture in the living room. The victim was a 65-year old woman. One (1) firefighter was injured at this fire. It was undetermined if alarms

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<sup>1</sup> 2017 was a down year for brush fires statewide.

were present. There were no sprinklers. Damages from this fire were estimated to be \$941,041.

- On March 30, 2017, at 12:04 p.m., the Falmouth Fire Department was called to a fatal smoking fire in a single-family home. The fire was started by a cigarette igniting the bedding in the bedroom. The victim was a 43-year old woman who was possibly impaired by drugs. A second occupant tried to drag the victim out of the house but was overcome before he could move her very far. He suffered from smoke inhalation. Smoke alarms were present and operated. There were no sprinklers. Damages from this fire were estimated to be \$3,000.

### **Falmouth Had Barnstable County's Largest Loss Fire**

In 2017 Barnstable County had two large loss fires over \$1 million in estimated damages. These two fires combined to \$2.6 million in estimated damages, or 24% of Barnstable County's total reported dollar loss in 2017.

- On July 11, 2017, at 1:43 a.m., the Falmouth Fire Department responded to a fire on a sailing yacht that was docked at a marina. One civilian was injured at this fire. Damages were estimated to be \$1.4 million. The fire spread to two other boats nearby causing another \$20,000 in estimated damages.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 300 structure fires caused both civilian deaths, seven civilian injuries, 14 fire service injuries and an estimated dollar loss of \$8.4 million. These incidents represented 40% of Barnstable County's reported fires in 2017. The total number of reported structure fires decreased by 50, or 14%, from the 350 reported in 2016. The average estimated dollar loss per structure fire was \$28,084.

### **Arson Caused 2% of Structure Fires**

The six structure arsons caused an estimated dollar loss of \$38,201. Arson was indicated as the cause of 2% of the structure fires and less than 1% of Barnstable County's structure fire dollar loss. The six structure arsons accounted for 17% of the Barnstable County arson fires reported in 2017. The total number of reported structure arsons decreased by two from the eight reported in 2016.

### **2/3 of Structure Arsons Occurred in Residences**

Sixty-seven percent (67%) of Barnstable County's six structure arsons occurred in residential occupancies and the other 33% happened in educational facilities.

## **BUILDING FIRES**

There were 299 building fires of different types in Barnstable County in 2017. These 299 building fires accounted for 99.7% of all building fires in Barnstable County.

**83% of Barnstable County Building Fires Occurred in People's Homes**

Two hundred and forty-eight (248), or 83%, of Barnstable County's 299 building fires occurred in residential occupancies. Seventeen (17) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 14 fires. Six (6) fires took place in storage properties. Hospitals, prisons, and other institutional buildings experienced five fires. Three (3) fires occurred at industrial facilities; and another three happened at special properties. Two (2) fires took place in educational facilities. One (1) fire took place in a manufacturing or processing facilities.

**RESIDENTIAL FIRES****Residential Building Fires Are Down**

There were 248 reported residential building fires in Barnstable County in 2017. These 248 fires are a decrease of 39, or 14%, from the 287 residential building fires reported in 2016.

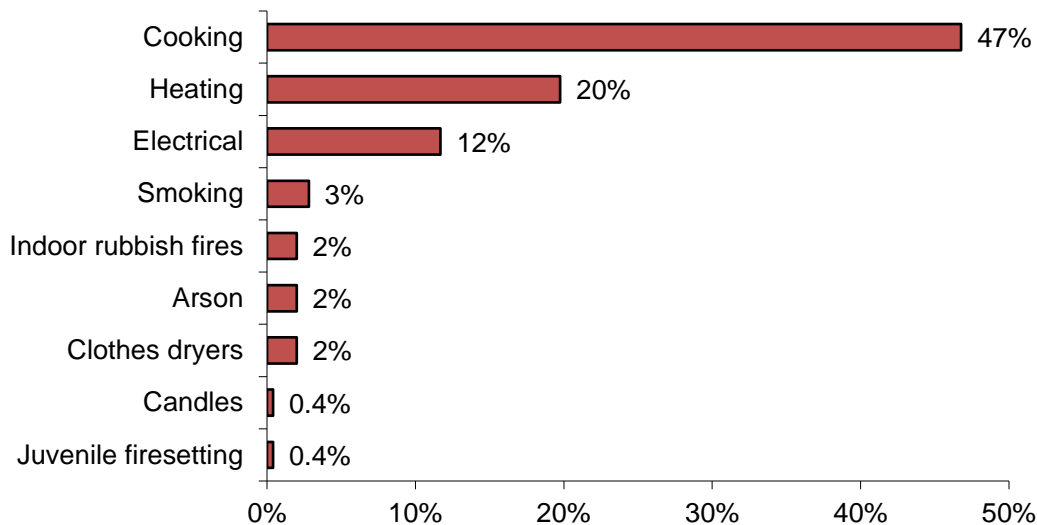
**1- & 2-Family Homes Accounted for 73% of Residential Building Fires**

The peak fixed property use for residential building fires were one- or two-family homes, accounting for 73% of the building fires in Barnstable County; 20% occurred in apartments; 3% happened in hotels or motels; 2% occurred in rooming houses; 1% happened in dormitories and less than 1% occurred in residential board and care facilities. Two (2), or 1%, of the building fires in Barnstable County occurred in unclassified residential buildings.

**Unattended Cooking Leading Cause of Residential Fires**

The leading cause of residential building fires in Barnstable County was unattended cooking and other unsafe cooking practices, accounting for 47% of the fires. Heating fires accounted for 20% of the fires in people's homes in 2017; 55% involved a chimney or flue and 47% involved a fuel burner or boiler. Electrical problems caused 12% of fires in residential buildings. Smoking caused 3% of these fires. Indoor rubbish fires, arsons and clothes dryers each caused 2% of these fires. Candles and juvenile set fires were each responsible for less than 1% of these fires.

## 2017 Leading Causes of Fires in Barnstable County Homes



### 59% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

One hundred and forty-seven (147), or 59%, of all residential building fires were reported as confined to non-combustible containers in Barnstable County in 2017. Ninety-seven (97), or 39%, of all residential building fires reported in 2017 were cooking fires contained to a non-combustible container. Twenty-six (26) of the reported fires were confined to a chimney, accounting for 10% of residential building fires. Nineteen (19), or 8%, were fires confined to a fuel burner or boiler malfunction. Five (5), or 2%, of these fires were rubbish fires contained to a non-combustible container.

### Detectors Alerted Occupants in Only 43% of Fires

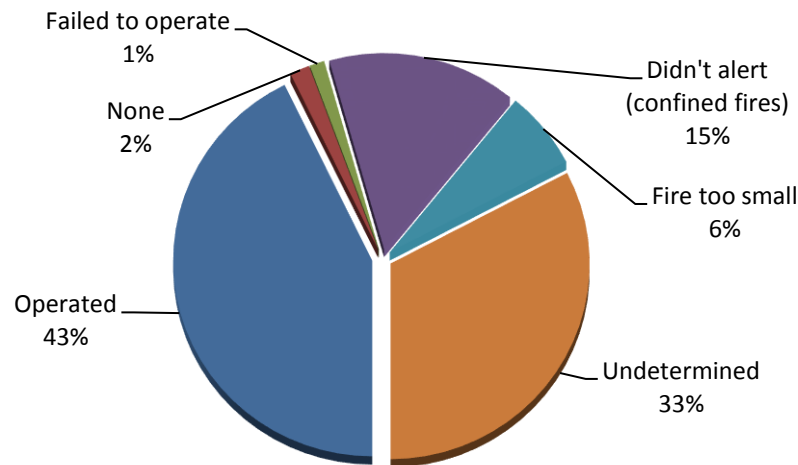
Smoke or heat detectors operated and alerted the occupants in 106, or 43%, of the residential building fires. In 15% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 1% of these incidents. In 2% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 6% of the residential fires. Smoke detector performance was undetermined in 81 incidents, or 33%, of Barnstable County's residential building fires.

<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup>These represent confined fires where it was reported that the detector did not alert the occupants.



## Detector Status in Barnstable County's Residential Structure Fires 2017



### 1 of 3 Detectors Failed from Power Failure, Shut Off or Disconnect

Of the three fires where smoke detectors were present but failed to operate, one (1), or 33%, failed from a power failure, shut off or disconnect. It was undetermined in the other two cases, or 67%, why the detector failed.

## VACANT BUILDINGS

### 2% of Building Fires Occurred in Vacant Buildings

Barnstable County reported seven fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the 299 building fires reported to MFIRS in 2017. Six (6) one- or two-family homes, and one military building were reported as vacant building fire incidents.

None of the vacant building fires in Barnstable County in 2017 were determined to be intentionally set.

## JUVENILE-SET FIRES

### 12 Juvenile-set Fires

There were 12 reported juvenile-set fires in Barnstable County in 2017. The seven brush fires, one structure fire, one outside rubbish fire, one special outside fire, and two unclassified fires caused \$5,000 in estimated damages.

## ARSONS

### **35 Total Arsons — 6 Structures, 2 Vehicle & 27 Other Arsons**

Thirty-five (35), or 5%, of Barnstable County's 759 fires were considered intentionally set, or, for purposes of this analysis, arson. The six structure arsons, two motor vehicle arsons and 27 outside and other arsons caused an estimated dollar loss of \$38,201.

### **Outside Arson Up in 2017**

The total number of reported arson fires increased by seven, or 25%, from the 28 reported in 2016. Reported structure arsons decreased by two from the eight reported in 2016. Motor vehicle arsons increased by two from none reported in 2016. Reported outside and other arsons increased by seven from the 20 reported in 2016.

## ALL INCIDENTS

### **Rescue & EMS Calls Are 69% of All Reported Incidents**

In 2017, Barnstable County fire departments reported 54,944 responses<sup>4</sup> to MFIRS. Of these 54,944 incidents, 54,054 non-fire calls were voluntarily reported.

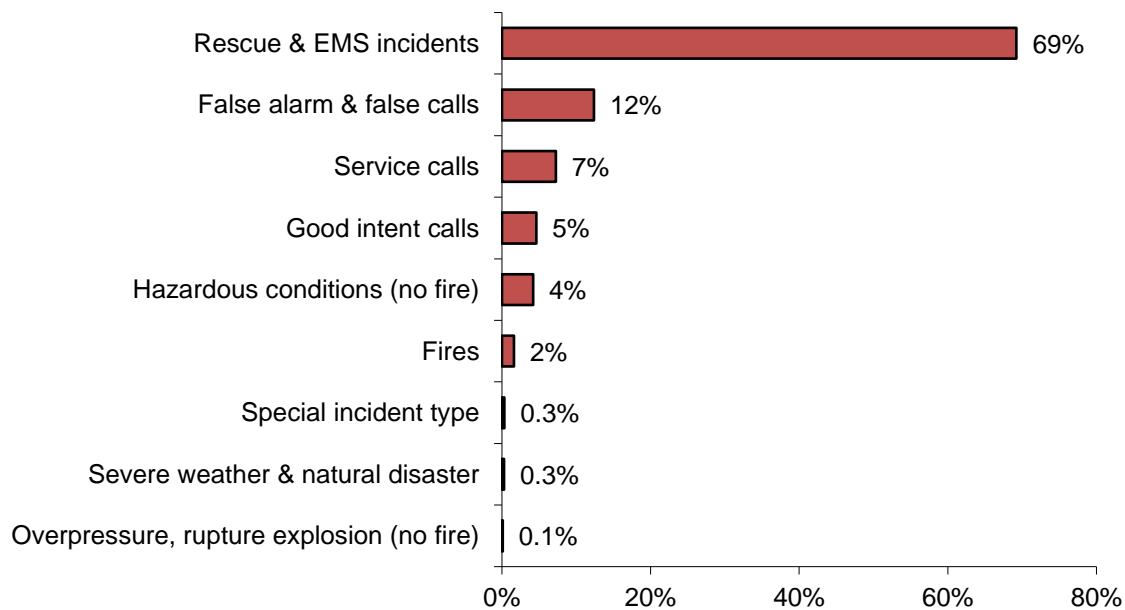
Of these 54,054 non-fire calls, 38,032, or 69%, of all of the responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 6,792, or 12%, were reported false alarm or false calls; 3,994, or 7%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 2,542, or 5%, reported good intent calls; 2,302, or 4%, were reported hazardous condition calls with no fire; 175, or 0.3%, were special incident type calls such as citizen complaints; 163, or 0.3%, were severe weather responses; and 54, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Eight hundred and ninety (890), or 2%, of the total responses submitted by Barnstable County fire departments were fires.

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<sup>4</sup> These figures include responses in which Barnstable County fire departments gave mutual aid to other fire departments.

## 2017 Responses by Incident Type



### Barnstable County Departments Gave Aid 1,563 Times

In 2017, Barnstable County fire departments reported coming to the aid of other fire departments 1,563 times. Of these 1,563 responses, 917, or 59%, were for rescue or EMS incidents; 236, or 15%, were for good intent calls; 234, or 15%, were for service calls such as cover assignments; 120, or 8%, were for fires; 24, or 2%, were for hazardous conditions calls with no fire; 22, or 1%, were for false alarms or false calls; seven, or 0.4%, were special incident types; two, or 0.1%, were for overpressure, rupture or explosion calls with no ensuing fire; and one, or 0.1%, was for a severe weather call.

### Barnstable County Received Mutual Aid in 942 Incidents

In 2017, Barnstable County fire departments received aid from surrounding departments in 942 incidents. Of these 942 incidents, 741, or 79%, were rescue and emergency medical services calls; 86, or 9%, were for fires; 31, or 3%, were good intent calls; 29, or 3%, were false alarms or false calls; 28, or 3%, were service calls; 23, or 2%, were hazardous conditions calls with no fire; three, or 0.3%, were overpressure, rupture, explosion or overheat calls with no fire; and one or 0.1%, was a severe weather call.

**Barnstable County****Population: 215,888****3.5 Fires/1,000 Population****Total Fires: 759 \$10,901,238**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	300	40%	\$8,425,069
Vehicle Fires	85	11%	2,431,717
Other Fires	374	49%	44,452

2 Fatal Fires 2.64 Civilian Deaths/1,000 Fires  
 2 Civilian Deaths 0.09 Civilian Deaths/10,000 Population  
 11 Civilian Injuries 16 Fire Service Injuries

**Building Fires: 299****Residential Structure Fires: 248****Residential Structure Fires Confined to Non-Combustible Containers: 147****Unconfined Residential Structure Fires: 101**

2 Civilian Deaths 6 Civilian Injuries 13 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	180	73%	Operated	106	43%
Apartments	49	16%	Didn't operate	3	1%
Hotels or motels	8	3%	None	4	2%
Rooming houses	5	2%	Fire too small	16	6%
Dormitories	3	1%	Didn't Alert (confined)	38	15%
Residential board & care	1	0.4%	Undetermined	81	33%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>% Unconfined<sup>6</sup></b>
Kitchen	48%	Arcing	8%	20%
Chimney or flue	10%	Heat from operating eq.	6%	16%
Heating room or area	8%	Radiated heat/oper. eq.	6%	14%
Bedroom	4%	Hot or smold. object, other	3%	8%
Wall surface, exterior	4%	Hot ember or ash	2%	6%

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Food, cooking materials	42%	Too close to combustibles	4%	10%
Film, residue (creosote)	10%	Misuse of mater. or prod.	4%	9%
Flammable or comb. liquid	8%	Electrical failure, malfunct.	3%	8%
Electrical wire, cable insulation	5%	Abandoned materials	2%	5%
Exterior sidewall covering	3%			
Structural member, framing	3%			

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	44%	Unintentional	19%	48%
None	25%	Failure of eq. or heat source	6%	14%
Chimney or flue	10%	Intentional	2%	4%
Boiler, furnace, cent. heat unit	8%	Act of nature	0.4%	1%
Clothes dryer	2%	Undetermined	6%	14%
		Cause Under Investigation	7%	18%

#### **Detector Alerted Occupants (Confined Fires in Non-Combustible Containers)**

Alerted Occupants	35%
Didn't Alert Occupants	26%
Undetermined	39%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	45	31	4	10
February	33	19	6	8
March	72	34	5	33
April	94	25	8	61
May	78	28	10	40
June	79	28	10	41
July	110	29	8	73
August	72	20	10	42
September	44	17	7	20
October	44	21	4	19
November	39	21	7	11
December	49	27	6	16

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	116	54	6	56
Monday	105	47	10	48
Tuesday	108	31	25	52
Wednesday	116	41	10	65
Thursday	95	36	9	50
Friday	101	40	13	48
Saturday	118	51	12	55

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	31	13	6	12
04:01 - 08:00	57	30	6	21
08:01 - 12:00	147	56	21	70
12:01 - 16:00	203	69	15	119
16:01 - 20:00	211	86	23	102
20:01 - 24:00	110	46	14	50

### **Motor Vehicle Fires**

Total: 85

Automobiles: 68 (80%)

1 (1%), of the automobile fires were considered intentionally set.

## Arson Fires

**Total Arsons: 35**

**Dollar loss: \$38,201**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	6	2%	17%	\$34,201
Vehicle Arsons	2	2%	6%	0
Other Arsons	27	7%	77%	1,000

0.03 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.13 Other arsons/1,000 population

No Injuries or Deaths

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 - 20:00	3	50%	20:01 – 00:00	2	100%
04:01 - 08:00	1	17%			
08:01 - 12:00	1	17%			
12:01 - 16:00	1	17%			

Other Arsons	#	%
08:01 - 12:00	7	26%
20:01 - 00:00	6	22%
16:01 - 20:00	5	19%

Peak Fixed Property Uses for Structure Arsons	#	%
1- & 2-Family homes	3	50%
Multifamily dwellings	1	17%
Adult education center, college classroom	1	17%
High/junior high/middle school	1	17%

**Town of Barnstable Fire Districts****Population: 45,193*****Barnstable******Est Pop. Protected: 3,164***

	<b>Total</b>	<b>Structure</b>	<b>Vehicle</b>	<b>Other</b>	<b>Total</b>	<b>Structure</b>	<b>Vehicle</b>	<b>Other</b>
2013	24	6	6	12	2	0	0	2
2014	24	9	6	9	0	0	0	0
2015	18	5	5	8	1	0	1	0
2016	30	7	2	21	2	0	0	2
2017	22	7	4	11	1	0	0	1

***Centerville - Osterville - Marston Mills******Est Pop. Protected: 23,048***

	<b>Total</b>	<b>Structure</b>	<b>Vehicle</b>	<b>Other</b>	<b>Total</b>	<b>Structure</b>	<b>Vehicle</b>	<b>Other</b>
	<b>Fires</b>	<b>Fires</b>	<b>Fires</b>	<b>Fires</b>	<b>Arsons</b>	<b>Arsons</b>	<b>Arsons</b>	<b>Arsons</b>
2013	68	29	14	25	7	1	0	6
2014	60	36	2	22	4	1	0	3
2015	75	33	4	38	6	2	0	4
2016	51	23	1	27	1	1	0	0
2017	49	16	6	27	2	0	0	2

***Cotuit******Est Pop. Protected: 3,164***

	<b>Total</b>	<b>Structure</b>	<b>Vehicle</b>	<b>Other</b>	<b>Total</b>	<b>Structure</b>	<b>Vehicle</b>	<b>Other</b>
	<b>Fires</b>	<b>Fires</b>	<b>Fires</b>	<b>Fires</b>	<b>Arsons</b>	<b>Arsons</b>	<b>Arsons</b>	<b>Arsons</b>
2013	1	0	1	0	0	0	0	0
2014 <sup>11</sup>	10	3	0	7	2	0	0	2
2015	5	0	0	5	1	0	0	1
2016	18	5	2	11	2	0	0	2
2017	5	2	0	3	0	0	0	0

***Hyannis******Est Pop. Protected: 12,654***

	<b>Total</b>	<b>Structure</b>	<b>Vehicle</b>	<b>Other</b>	<b>Total</b>	<b>Structure</b>	<b>Vehicle</b>	<b>Other</b>
	<b>Fires</b>	<b>Fires</b>	<b>Fires</b>	<b>Fires</b>	<b>Arsons</b>	<b>Arsons</b>	<b>Arsons</b>	<b>Arsons</b>
2013	115	53	11	51	2	2	0	0
2014	152	72	11	69	4	1	0	3
2015	151	45	16	90	3	0	0	3
2016	135	51	11	73	2	0	0	2
2017	108	39	8	61	5	2	0	3

<sup>11</sup> Cotuit reported 10 fires after this 2014 database was closed. None of these were included in the analysis.



**West Barnstable****Est Pop. Protected: 3,164**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	15	7	4	4	1	0	0	1
2014	10	4	1	5	0	0	0	0
2015	4	0	1	3	0	0	0	0
2016	16	4	3	9	2	1	0	1
2017	22	8	5	45	7	1	0	6

**Bourne****Population: 19,754**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	27	20	3	4	0	0	0	0
2014	79	33	11	35	8	0	0	8
2015	77	19	20	38	7	0	1	6
2016	16	14	0	2	1	0	0	1
2017	46	17	7	22	0	0	0	0

**Brewster****Population: 9,820**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	36	17	1	18	0	0	0	0
2014	31	9	3	19	3	0	1	2
2015	35	11	1	23	3	0	0	3
2016	26	11	3	12	1	1	0	0
2017	18	11	1	6	1	1	0	0

**Chatham****Population: 6,125**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	21	7	1	13	3	1	0	2
2014	39	20	1	18	1	0	0	1
2015	21	11	2	8	0	0	0	0
2016	17	8	1	8	1	0	0	1
2017	6	1	1	4	1	0	1	0

**Dennis** **Population: 14,207**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	60	30	5	25	6	1	0	5
2014	74	24	3	47	13	1	0	12
2015	88	35	7	46	3	0	0	3
2016	74	27	4	43	4	1	0	3
2017	54	25	7	22	1	0	0	1

**Eastham** **Population: 4,956**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	29	16	3	10	0	0	0	0
2014	16	11	0	5	0	0	0	0
2015	16	10	2	4	1	0	0	1
2016	23	9	1	13	0	0	0	0
2017	25	8	2	15	0	0	0	0

**Falmouth** **Population: 31,531**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	65	35	9	21	5	2	0	3
2014	51	21	8	22	3	2	0	1
2015	9	8	0	1	1	1	0	0
2016	96	33	1	52	0	0	0	0
2017	91	30	16	45	1	0	1	0

**Harwich** **Population: 12,243**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	46	18	5	23	3	0	0	3
2014	49	21	8	20	2	1	0	1
2015	45	21	5	19	1	0	0	1
2016	55	27	5	23	2	1	0	1
2017	40	15	8	17	1	0	0	1

**Joint Base Cape Cod (formerly: MA Military Reservation) Population: 0**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	11	1	0	10	4	0	0	4
2014	8	2	0	6	1	0	0	1
2015	6	1	2	3	1	0	0	1
2016	7	2	1	4	0	0	0	0
2017	6	1	0	5	0	0	0	0

**Mashpee Population: 14,006**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	40	17	5	18	4	0	0	4
2014	53	33	4	16	2	0	0	2
2015	41	13	5	23	2	0	0	2
2016	42	20	5	17	4	2	0	2
2017	48	17	5	26	8	0	0	8

**Orleans Population: 5,890**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	18	6	2	10	1	0	0	1
2014	25	8	5	12	1	0	1	0
2015	29	9	1	19	2	0	0	2
2016	36	14	6	16	2	0	0	2
2017	33	12	1	20	2	0	0	2

**Provincetown Population: 2,942**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	28	21	2	5	0	0	0	0
2014	21	12	2	7	1	0	0	1
2015	32	21	2	9	0	0	0	0
2016	23	16	0	7	0	0	0	0
2017	24	16	0	8	0	0	0	0

**Sandwich** **Population: 20,675**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	118	80	10	28	3	0	0	3
2014	94	56	9	29	4	0	1	3
2015	90	40	14	36	4	1	0	3
2016	76	34	7	35	1	1	0	0
2017	57	37	6	14	2	1	0	1

**Truro** **Population: 2,003**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	1	1	0	0	0	0	0
2014	2	1	0	1	0	0	0	0
2015	1	0	0	1	0	0	0	0
2016	10	4	0	6	0	0	0	0
2017	19	3	2	14	1	0	0	1

**Wellfleet** **Population: 2,750**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	18	7	3	8	1	0	0	1
2014	19	6	1	12	0	0	0	0
2015	23	13	1	9	2	0	0	2
2016	19	7	3	9	0	0	0	0
2017	19	10	3	6	0	0	0	0

**Yarmouth** **Population: 23,793**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	46	19	3	24	2	0	0	2
2014	74	25	7	42	5	1	1	3
2015	94	41	12	41	10	1	0	9
2016	59	30	9	20	3	0	0	3
2017	78	28	5	45	7	1	0	6

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
01919	Barnstable	1,183	28	2	692	45	127	54	213	19	3
01036	Bourne	3,007	53	4	2,366	100	116	80	268	3	17
01041	Brewster	2,916	26	1	2,283	60	118	73	319	28	8
01055	Chatham	1,346	6	0	863	53	144	69	201	8	2
01921	Cotuit	805	13	2	487	29	86	48	133	3	4
01920	C.O.M.M.	4,518	56	5	3,085	136	321	164	689	37	25
01075	Dennis	4,940	65	4	3,390	297	484	183	505	6	6
01086	Eastham	1,824	34	2	1,225	81	128	85	246	20	3
01096	Falmouth	7,810	91	7	6,075	233	234	386	773	5	6
01126	Harwich	4,205	52	5	3,184	192	226	154	389	1	2
01922	Hyannis	1,370	115	3	71	209	199	99	659	10	5
01936	Joint Base Cape Cod	868	6	0	80	128	325	3	326	0	0
01172	Mashpee	3,413	64	3	2,229	104	394	117	492	1	9
01224	Orleans	2,541	43	3	1,975	75	127	65	234	6	13
01242	Provincetown	161	25	1	16	17	10	16	75	0	1
01261	Sandwich	4,241	60	3	2,891	300	367	189	367	5	59
01300	Truro	811	24	0	222	26	108	316	111	0	4
01318	Wellfleet	1,153	22	2	736	32	147	77	132	5	0
01923	West Barnstable	621	26	0	382	32	80	29	70	2	0
01351	Yarmouth	7,211	81	7	5,780	153	253	335	590	4	8
<b>Total</b>	<b>Barnstable County</b>	<b>54,944</b>	<b>890</b>	<b>54</b>	<b>38,032</b>	<b>2,302</b>	<b>3,994</b>	<b>2,542</b>	<b>6,792</b>	<b>163</b>	<b>175</b>

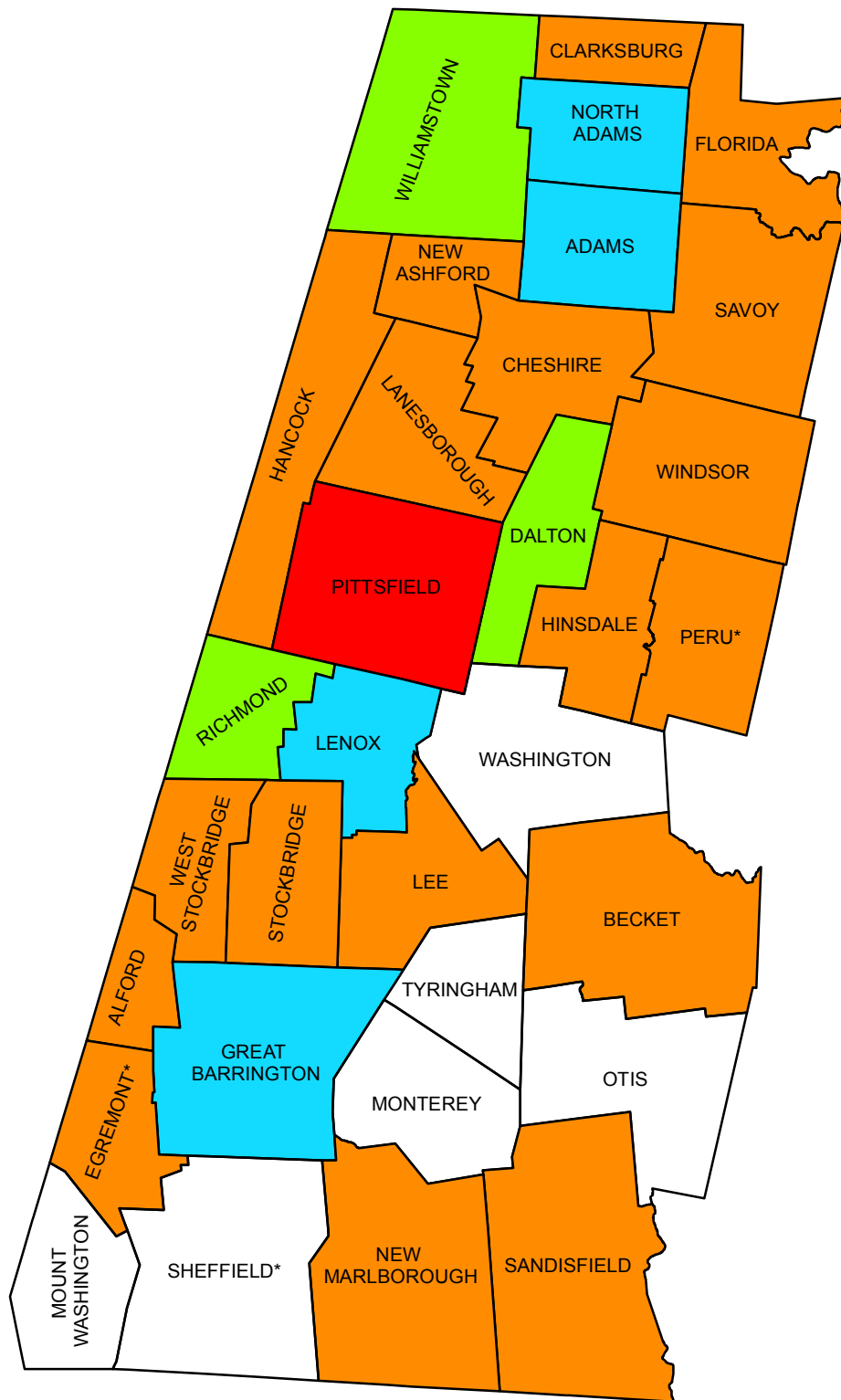
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



# Berkshire County

## 2017 Fire Data Analysis

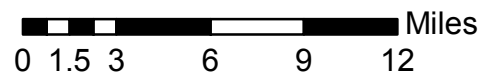
# Berkshire County Fires 2017



## 2017 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

# Berkshire County Fires in 2017

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## **445 Total Fires — 257 Structures, 52 Vehicles & 136 Outside and Other Fires**

Berkshire County ranked tenth out of the fourteen Massachusetts counties in total reported fires. Berkshire County fire departments reported 445 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 257 structure fires, 52 motor vehicle fires, 57 brush, tree or lawn fires, 34 outside rubbish fires, 18 special outside fires, three cultivated crop or orchard fires; and 24 other fires caused two civilian deaths, six civilian injuries, three fire service injuries and an estimated dollar loss of \$4.8 million. Berkshire County's fires accounted for 2% of the 27,895 Massachusetts fires reported in 2017.

Thirty (30), or 96.8%, of Berkshire County's 31 fire departments either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017.

## **All Fires Down**

The total number of reported fire incidents decreased by 102 from the 547 reported in 2016. Reported structure fires decreased by 43 from the 300 reported during the previous year. Motor vehicle fires decreased by three from the 55 reported in 2016. Outside and other fires decreased by 56 from the 192 reported in 2016.<sup>1</sup>

## **BERKSHIRE COUNTY FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	481	294	39	148	13	6	0	7
2014	478	296	45	137	19	3	3	13
2015	575	328	52	195	28	9	6	13
2016	547	300	55	192	26	11	2	13
2017	445	257	52	136	11	1	0	10

## **Fire and Fire Death Rates**

Berkshire County had 3.4 fires per 1,000 population. That figure ranks Berkshire County tied for tenth in the state and below the state rate of 4.3 fires per 1,000 population. Berkshire County also had 0.15 fire deaths per 10,000 populations ranking it third among Massachusetts counties and below the state rate of 0.09 fire deaths per 10,000 population.

## **2 People Killed in Berkshire County Fires**

In 2017 two people died in a two fires in Berkshire County.

- On October 2, 2017, at 5:44 p.m., the Lee Fire Department was called to a fatal motor vehicle crash with ensuing fire on Interstate 90 (Massachusetts Turnpike). A tractor trailer rear ended another truck and ignited. The driver of the tractor trailer, a 31-year

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<sup>1</sup> 2017 was a down year for brush fires statewide.



old man, was trapped inside and could not be freed by good Samaritans. Damages were not estimated.

- On November 30, 2017, at 11:59 a.m., the North Adams Fire Department responded to a fatal fire at a dentist office. The victim, a 56-year old man, was at the office to pick up his mother. He had recently filled his car with gasoline, spilling some on his clothes in the process. While he was in the office he tried to get rid of the gasoline smell by igniting the fumes with a lighter. He ignited his clothing. He was transported to a hospital where he succumbed to his injuries. No one else was injured at this fire. The fire was too small to activate the alarms. The building did not have any sprinklers. The only thing burned was the victim so monetary damages were not estimated.

### **Pittsfield Had Berkshire County's Largest Loss Fire**

Berkshire County did not have any fires that reported a dollar loss over \$1 million. Pittsfield reported the incident that had the greatest dollar loss in Berkshire County in 2017. This fire was responsible for 19% of the total county fire loss in 2017.

- On September 10, 2017, at 6:41 p.m., the Pittsfield Fire Department was called to a fire of undetermined cause in a 12-unit apartment building. No one was injured at this fire. Alarms were present and alerted the occupants of the building. The building was not sprinklered. Damages from this fire were estimated to be \$900,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 257 structure fires caused one civilian death, four civilian injuries, two fire service injuries and an estimated dollar loss of \$4.5 million. These incidents represented 58% of Berkshire County's reported fires in 2017. The average estimated dollar loss per structure fire was \$17,039. The total number of reported structure fires decreased by 43, or 14%, from the 300 reported in 2016.

### **Arson Caused 1 Structure Fire**

The one structure arson caused an estimated dollar loss of \$11,000. Arson was indicated as the cause of less than 1% of the structure fires and less than 1% of Berkshire County's structure fire dollar loss. The one structure arson accounted for 9% of the Berkshire County arson fires reported in 2017. The total number of reported structure arsons decreased by 10 from the nine reported in 2016.

### **100% of Structure Arsons Occurred in Residences**

The one Berkshire County structure arson occurred in residential occupancies, a single-family home, in 2017.

## **BUILDING FIRES**

There were 255 building fires of different types in Berkshire County in 2017. These 255 building fires accounted for 99.2% of structure fires in Berkshire County.

**85% of Berkshire Building Fires Occurred in People's Homes**

Two hundred and sixteen (216), or 85%, of Berkshire County's 255 building fires occurred in residential occupancies. Mercantile and business properties had 10 fires. Nine (9) fires took place in public assembly properties, including restaurants and churches. Six (6) fires occurred at educational facilities. Storage facilities had four fires. Industrial facilities had four fires. Hospitals, prisons, and other institutional buildings experienced three fires. Special properties, such as outbuildings or sheds had two fires. Manufacturing or processing facilities had one fire in Berkshire County in 2017.

**RESIDENTIAL FIRES****Residential Building Fires Down**

There were 216 reported residential building fires in Berkshire County in 2017. These 216 fires are a decrease of 32, or 13%, from the 248 residential building fires reported in 2016.

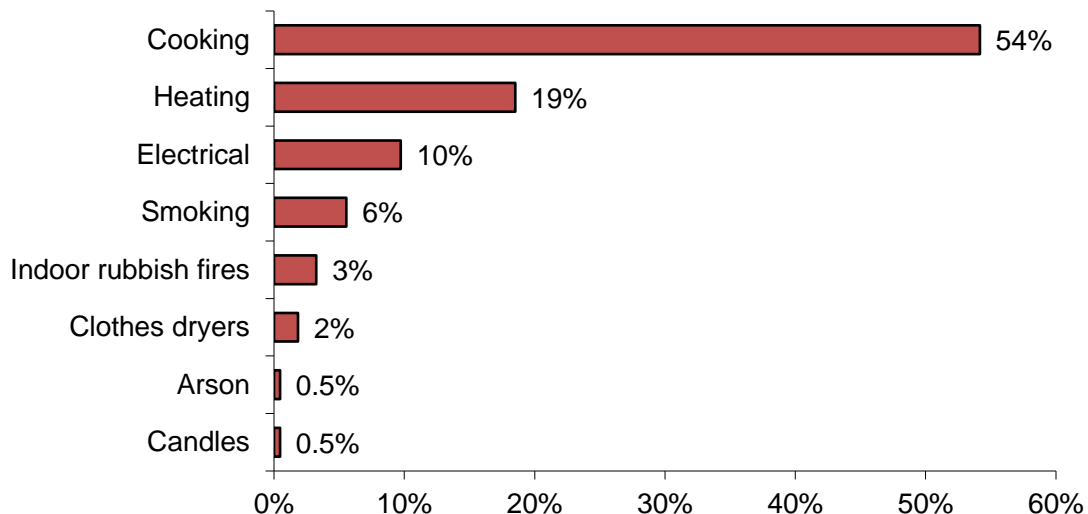
**1- & 2-Family Homes Accounted for 61% of Residential Building Fires**

The peak fixed property uses for residential building fires were one- or two-family homes, accounting for 61% of the building fires in Berkshire County; 32% occurred in apartments; 3% occurred in hotels or motels; 1% occurred in residential board and care facilities; 1% happened in dormitories; and 1% happened in rooming houses. Two (2), or 1%, of the building fires in Berkshire County occurred in unclassified residential buildings.

**Unattended Cooking Caused 54% of Residential Fires**

The leading cause of residential building fires in Berkshire County was unattended cooking and other unsafe cooking practices, accounting for 54% of the fires. Heating caused 19% of the residential building fires, of which 29, or 73%, were caused by chimney, fireplace or flue fires. Electrical fires caused 10% of these fires. Smoking caused 6% of the fires. Indoor rubbish fires caused 3% and clothes dryers caused 2% of these fires. Arson and candles each caused less than 1% of Berkshire County's residential building fires in 2017.

## 2017 Leading Causes of Fires in Berkshire County Homes



### 70% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

One hundred and fifty-two (152), or 70%, of these fires were confined to a non-combustible container. One hundred and nine (109), or 57.5% of all residential building fires reported in 2017 were cooking fires contained to a non-combustible container. Twenty-four (24) of the reported fires were confined to a chimney, accounting for 11% of residential building fires. Fires confined to a fuel burner or boiler malfunction accounted for 11, or 5% of these fires. Seven (7), or 5%, of these fires were confined indoor rubbish fires; and one, or less than 1% was a fire confined to a commercial compactor.

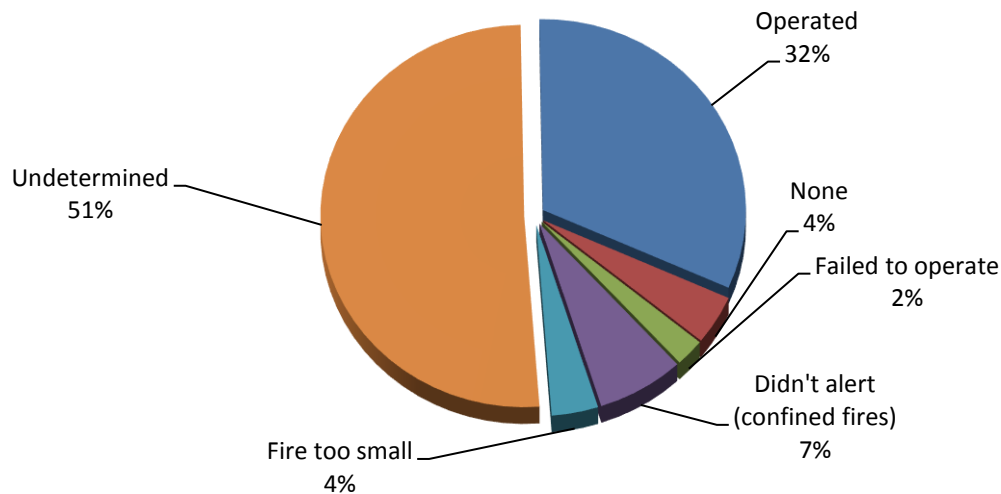
### Detectors Undetermined in Just Over 1/2 of Fires

Smoke or heat detectors operated and alerted the occupants in 69, or 32%, of the residential building fires. In 7% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 4% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 4% of the residential fires. Smoke detector performance was undetermined in 110 incidents, or 51%, of Berkshire County's residential building fires.

<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup>These represent confined fires where it was reported that the detector did not alert the occupants.

## Detector Status in Berkshire County's Residential Structure Fires 2017



### 2 Failed from Missing or Dead Batteries

Of the five fires where smoke detectors were present but failed to operate, one, or 20%, failed because the battery was either missing or disconnected; and another, or 20%, failed because of a dead battery. In three fires it was undetermined why the detectors failed.

### VACANT BUILDINGS

#### 2% of Building Fires Occurred in Vacant Buildings

Berkshire County reported six fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the total 255 building fires reported to MFIRS in 2017. Three (3) of these occurred in residential buildings. One (1) each occurred in an educational facility, and industrial facility and a storage facility.

None of the vacant building fires in Berkshire County in 2017 were determined to be intentionally set.

### JUVENILE-SET FIRES

#### 2 Juvenile-set Fires

There were two reported juvenile-set fires in Berkshire County in 2017, both were brush fires.

## ARSONS

### **11 Total Arsons — 1 Structure, 0 Vehicle & 10 Other Arsons**

Eleven (11), or 2%, of Berkshire County's 257 fires were intentionally set, or, for purposes of this analysis, arson. The one structure arson and 10 outside and other arsons caused an estimated dollar loss of \$12,400.

### **All Arsons Down**

The total number of reported arson fires decreased by 15 from the 26 reported in 2016. Reported structure arsons decreased by 10 from the 11 reported in 2016. Motor vehicle arsons decreased by two from two reported in 2016. Reported outside and other arsons decreased by three from the 13 reported in both 2016.

## ALL INCIDENTS

### **Rescue & EMS Calls Are 54% of All Reported Responses**

In 2017, Berkshire County fire departments reported 13,023 responses<sup>4</sup> to MFIRS. Of these 13,023 incidents, 12,518 non-fire incidents were voluntarily reported.

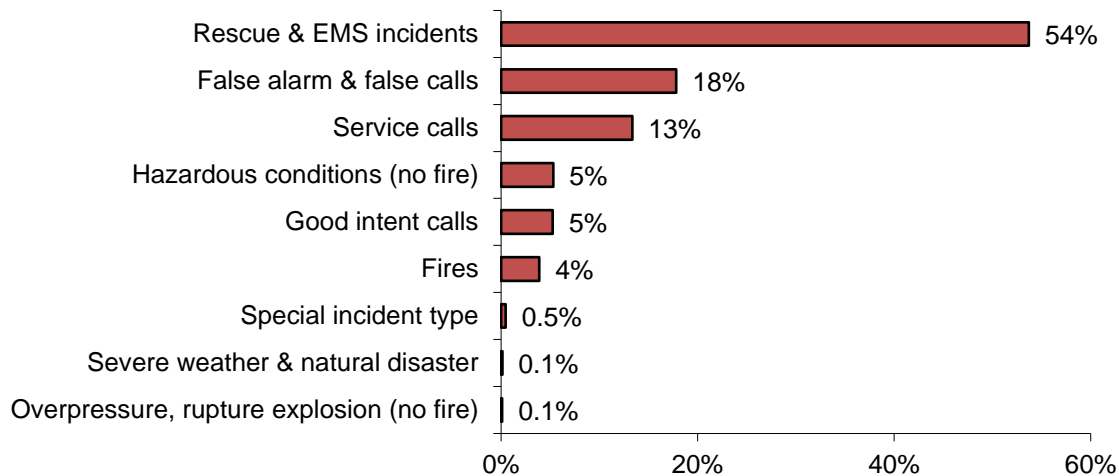
Of these 12,518 non-fire responses, 6,994, or 54%, of all the responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 2,321, or 18%, were reported false alarm or false calls; 1,738, or 13%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 690, or 5%, were reported hazardous condition calls with no fire; 685, or 5%, were reported good intent calls; 59, or 0.5%, were special incident type calls such as citizen complaints; 16, or 0.1%, were severe weather responses; and 15, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Five hundred and five (505), or 4%, of the total responses submitted by Berkshire County fire departments were fires.

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<sup>4</sup> These figures include responses in which Berkshire County fire departments gave mutual aid to other fire departments.

## 2017 Responses by Incident Type



### Berkshire County Departments Reported Giving Mutual Aid 259 Times

In 2017, Berkshire County fire departments reported coming to the aid of other fire departments 259 times. Of these 259 responses, 105, or 41%, were for rescue or EMS calls; 61, or 24%, were for fires; 44, or 17%, were good intent calls; 34 or 13%, were for service calls such as cover assignments; eight, or 3%, were for hazardous condition calls with no ensuing fire; six, or 2%, were for false alarms; and one, or 0.4%, was a severe weather or natural disaster call.

### Berkshire County Received Mutual Aid in 689 Incidents

In 2017, Berkshire County fire departments reported receiving aid from surrounding departments in 689 incidents. Of these 689 incidents, 626, or 91%, were rescue and emergency medical services calls; 36, or 5%, were for fires; 10, or 1%, were false alarms or false calls; seven, or 1%, were hazardous conditions calls with no fire; six, or 1%, were service calls; two, or 0.3%, were good intent calls; one, or 0.1%, was a severe weather or natural disaster call; and one, or 0.1%, was an overpressure, rupture explosion with no fire.

**Berkshire County****Population: 131,219****3.4 Fires/1,000 Population****Total Fires: 445 \$4,834,650**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	257	58%	\$4,379,149
Vehicle Fires	52	12%	255,341
Other Fires	136	31%	200,160

2 Fatal Fires 4.49 Civilian Deaths/1,000 Fires  
 2 Civilian Deaths 0.15 Civilian Deaths/10,000 Population  
 6 Civilian Injuries 3 Fire Service Injuries

**Building Fires: 255****Residential Structure Fires: 216****Residential Structure Fires Confined to Non-Combustible Containers: 152****Unconfined Residential Structure Fires: 64**

1 Civilian Death 4 Civilian Injuries 2 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	132	52%	Operated	69	32%
Apartments	69	27%	Didn't operate	5	2%
Hotels or motels	6	2%	None	9	4%
Rooming houses	3	1%	Fire too small	8	4%
Dormitories	2	1%	Didn't alert (confined)	15	7%
Residential board & care	2	1%	Undetermined	110	51%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	56%	Arcing	5%	17%
Chimney or flue	11%	Radiated heat from op. eq.	5%	16%
Heating equipment room	5%	Heat from operating equip.	3%	9%
Bedroom	3%	Cigarette	2%	8%
Function room, other	2%	Hot or smold. object, other	2%	8%
Laundry room	2%	Spark, ember, flame op. eq.	1%	6%

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Food, cooking materials	52%	Failure to clean	3%	11%
Film, residue (creosote)	11%	Abandoned materials	2%	6%
Flammable, combustible liquid	5%	Too close to combustibles	2%	6%
Rubbish, trash, waste	4%	Improper start up/shut down	2%	6%
Structural member, framing	3%	Unspecified short circuit arc	1%	5%
Electrical wire, cable insulation	2%			

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	55%	Unintentional	15%	52%
None	14%	Failure of eq. or heat source	6%	22%
Chimney or flue	13%	Intentional	2%	0.5%
Boiler, furnace, cent. heat unit	5%	Act of Nature	2%	0.5%
Clothes dryer	2%	Undetermined	5%	17%
Electrical wire, other	2%	Cause under investigation	2%	6%

**Detector Alerted Occupants  
(Confined Fires in Non-Combustible Containers)**

Alerted occupants	28%
Didn't alert occupants	10%
Undetermined	63%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.



<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	30	20	6	4
February	30	22	4	4
March	45	27	6	12
April	69	28	4	37
May	33	22	1	10
June	36	16	6	14
July	23	15	3	5
August	32	13	7	12
September	32	17	4	11
October	37	25	3	9
November	40	25	4	11
December	35	27	4	4

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	58	34	5	19
Monday	72	44	8	20
Tuesday	60	31	8	21
Wednesday	56	33	7	16
Thursday	51	27	3	21
Friday	73	44	13	16
Saturday	72	44	8	20

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	19	15	0	4
04:01 - 08:00	20	11	4	5
08:01 - 12:00	80	50	10	20
12:01 - 16:00	114	52	15	47
16:01 - 20:00	137	84	13	40
20:01 - 00:00	72	45	10	17

### **Motor Vehicle Fires**

Total: 52

Automobiles: 40 (77%)

0, or (0%), of the automobile fires were considered intentionally set.

## Arson Fires

**Total Arsons: 11**

**Dollar loss: \$12,400**

### 0.08 Arson Fires/1,000 Population

<b>Situation</b>	<b>Arsons</b>	<b>% Situation</b>	<b>% Arson</b>	<b>\$ Loss</b>
Structure Arsons	1	0.4%	9%	11,000
Vehicle Arsons	0	0%	0%	0
Other Arsons	10	7%	91%	1,400

0.01 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.08 Other arsons/1,000 population

No Injuries

### Peak Times of Day for:

<b>Structure Arsons</b>	<b>#</b>	<b>%</b>	<b>Vehicle Arsons</b>	<b>#</b>	<b>%</b>
20:01 - 00:00	1	100%			

<b>Other Arsons</b>	<b>#</b>	<b>%</b>
16:01 – 20:00	5	50%
12:01 - 16:00	3	30%
00:01 – 0:00	1	10%
20:01 - 00:00	1	10%

<b>Peak Fixed Property Uses for Structure Arsons</b>	<b>#</b>	<b>%</b>
1- and 2-Family homes	1	100%

**Adams** **Population: 8,405**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	31	21	1	9	1	1	0	0
2014	29	22	2	5	0	0	0	0
2015	20	11	7	2	1	0	0	1
2016	32	25	2	5	1	1	0	0
2017	40	27	6	7	2	0	0	2

**Alford** **Population: 494**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	2	0	0	0	0	0	0
2014	2	1	0	1	0	0	0	0
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	1	1	0	0	0	0	0	0
2017	1	0	1	0	0	0	0	0

**Becket** **Population: 1,779**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Non-Reporting Community							
2014	3	3	0	0	0	0	0	0
2015	2	1	1	0	0	0	0	0
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	2	1	0	1	0	0	0	0

**Cheshire** **Population: 3,235**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	9	6	2	1	0	0	0	0
2014	2	0	1	1	0	0	0	0
2015	14	9	2	3	1	1	0	0
2016	6	5	1	0	0	0	0	0
2017	10	6	1	3	1	0	0	1

**Clarksburg** **Population: 1,702**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013 <sup>11</sup>	1	0	1	0	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	1	0	0	1	0	0	0	0
2016	2	2	0	0	0	0	0	0
2017	1	1	0	0	0	0	0	0

**Dalton** **Population: 6,756**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	13	7	1	5	0	0	0	0
2014	21	14	0	7	2	0	0	2
2015	18	8	4	6	6	3	2	1
2016	25	17	3	5	0	0	0	0
2017	19	14	0	5	0	0	0	0

**Egremont** **Population: 1,225**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Non-Reporting Community							
2014	2	2	0	0	0	0	0	0
2015	15	7	2	6	0	0	0	0
2016	12	8	1	3	0	0	0	0
2017	4	3	0	1	0	0	0	0

**Florida** **Population: 752**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	4	3	0	1	0	0	0	0
2014	4	1	0	3	1	0	0	1
2015	2	1	1	0	0	0	0	0
2016	7	2	4	1	1	1	0	0
2017	4	1	3	0	0	0	0	0

<sup>11</sup> In 2014 Clarksburg reported 3 fire calls, all these were mutual aid calls to other fire departments.

**Great Barrington****Population: 7,104**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	79	63	3	13	0	0	0	0
2014	82	68	6	8	0	0	0	0
2015	90	73	2	15	1	0	0	1
2016	79	67	2	10	0	0	0	0
2017	26	15	7	4	0	0	0	0

**Hancock****Population: 717**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	1	0	1	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	2	2	0	0	0	0	0	0
2016	1	1	0	0	0	0	0	0
2017	1	1	0	0	0	0	0	0

**Hinsdale****Population: 2,032**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	3	3	0	0	0	0	0	0
2015	2	2	0	0	0	0	0	0
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	1	1	0	0	0	0	0	0

**Lanesborough****Population: 3,091**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	3	0	0	3	0	0	0	0
2014	1	1	0	0	0	0	0	0
2015	10	6	2	2	0	0	0	0
2016	11	4	1	6	0	0	0	0
2017	9	3	3	3	0	0	0	0

<b>Lee</b>					<b>Population: 5,943</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	3	3	0	0	0	0	0	0
2014	5	1	4	0	0	0	0	0
2015	4	3	0	1	0	0	0	0
2016	3	3	0	0	0	0	0	0
2017	1	0	1	0	0	0	0	0

<b>Lenox</b>					<b>Population: 5,025</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	28	22	0	6	2	1	0	1
2014	31	23	3	5	0	0	0	0
2015	46	27	5	14	0	0	0	0
2016	24	10	7	7	0	0	0	0
2017	34	25	0	9	1	0	0	1

<b>Monterey</b>					<b>Population: 961</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	2	0	0	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Non-Reporting Community							
2016	2	1	1	0	0	0	0	0
2017	Fire Department in Good Standing, Certified No Reportable Fires							

<b>New Ashford</b>					<b>Population: 228</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	1	1	0	0	0	0	0	0
2016	2	1	0	1	0	0	0	0
2017	1	0	0	1	0	0	0	0

**New Marlborough****Population: 1,509**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	9	5	0	4	0	0	0	0
2014	5	0	3	2	0	0	0	0
2015	14	4	2	8	0	0	0	0
2016	5	3	0	2	0	0	0	0
2017	5	2	1	2	0	0	0	0

**North Adams****Population: 13,708**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	35	17	5	13	0	0	0	0
2014	47	19	6	22	6	1	1	4
2015	44	21	4	19	2	1	0	1
2016	29	4	4	21	1	0	0	1
2017	36	20	7	9	1	1	0	0

**Otis****Population: 1,612**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	Non-Reporting Community							
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	1	1	0	0	0	0	0	0
2017	Fire Department in Good Standing, Certified No Reportable Fires							

**Peru****Population: 847**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	7	3	1	3	0	0	0	0
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	Non-Reporting Community							
2017	2	2	0	0	0	0	0	0

**Pittsfield** **Population: 44,737**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	213	118	17	78	9	5	0	4
2014	180	103	15	62	7	2	1	4
2015	239	127	16	96	14	4	4	6
2016	263	135	21	107	15	8	2	5
2017	193	107	16	70	5	1	0	4

**Richmond** **Population: 1,475**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	3	2	0	0	0	0	0
2014	10	4	2	4	0	0	0	0
2015	7	4	0	3	0	0	0	0
2016	9	1	1	7	1	0	0	1
2017	11	6	0	5	0	0	0	0

**Sandisfield** **Population: 915**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	5	0	5	1	0	0	1
2014	3	3	0	0	0	0	0	0
2015	4	2	0	2	0	0	0	0
2016	9	0	0	9	2	0	0	2
2017	7	1	2	4	1	0	0	1

**Savoy** **Population: 692**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	0	0	2	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	3	3	0	0	1	1	0	0
2017	4	4	0	0	0	0	0	0



**Sheffield** **Population: 3,257**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	3	2	0	1	0	0	0	0
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	Non-Reporting Community							
2017	Non-Reporting Community							

**Stockbridge** **Population: 1,947**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	2	0	0	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	2	2	0	0	0	0	0	0
2016	1	1	0	0	0	0	0	0
2017	10	5	2	3	0	0	0	0

**Tyringham** **Population: 327**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	Fire Department in Good Standing, Certified No Reportable Fires							

**Washington<sup>12</sup>** **Population: 7,754**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	1	0	0	0	0	0	0	0
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	Non-Reporting Community							
2017	Fire Department in Good Standing, Certified No Reportable Fires							

<sup>12</sup> The Town of Washington has no fire department only a fire chief. Neighboring towns have automatic aid agreements for fire suppression. They did have 1 structure fire in town in 2012 and 2014.

**West Stockbridge** **Population: 1,306**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	1	2	2	0	0	0	0
2014	11	5	1	5	0	0	0	0
2015	8	2	2	4	0	0	0	0
2016	7	2	4	1	1	0	0	1
2017	7	4	0	3	0	0	0	0

**Williamstown** **Population: 7,754**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	23	13	5	5	1	0	0	1
2014	18	11	1	6	3	0	1	2
2015	27	14	2	11	2	0	0	2
2016	7	2	2	3	0	0	0	0
2017	11	6	2	3	1	0	0	1

**Windsor** **Population: 899**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	6	4	0	2	0	0	0	0
2015	3	1	0	2	1	0	0	1
2016	6	1	1	4	3	0	0	3
2017	4	4	0	0	0	0	0	0

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
03004	Adams	309	47	4	110	31	21	24	71	1	0
03006	Alford	1	1	0	0	0	0	0	0	0	0
03022	Becket	2	2	0	0	0	0	0	0	0	0
03058	Cheshire	357	16	1	284	18	14	11	11	0	2
03063	Clarksburg	2	2	0	0	0	0	0	0	0	0
03070	Dalton	980	23	0	639	30	104	63	88	1	32
03090	Egremont	155	6	0	17	5	8	65	53	1	0
03098	Florida	79	6	0	53	4	8	8	0	0	0
03113	Great Barrington	574	29	1	121	49	40	41	292	1	0
03121	Hancock	1	1	0	0	0	0	0	0	0	0
03132	Hinsdale	2	1	0	0	1	0	0	0	0	0
03148	Lanesborough	386	12	1	293	7	12	9	52	0	0
03150	Lee	1	1	0	0	0	0	0	0	0	0
03152	Lenox	506	38	2	120	48	59	17	221	1	0
03193	Monterey*	0	0	0	0	0	0	0	0	0	0

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any departments that wants to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
03203	New Marlborough	160	9	0	87	7	1	14	41	1	0
03200	New Ashford	17	1	0	12		1	0	3	0	0
03209	North Adams	1,225	37	0	321	114	362	84	300	1	6
03225	Otis*	0	0	0	0	0	0	0	0	0	0
03233	Peru	42	3	0	29	5	0	0	3	1	1
03236	Pittsfield	7,131	193	6	4,419	279	1,067	311	843	4	9
03249	Richmond	124	22	0	31	22	10	7	30	2	0
03260	Sandisfield	148	10	0	98	18	2	5	15	0	0
03263	Savoy	4	4	0	0	0	0	0	0	0	0
03283	Stockbridge	367	11	0	196	12	5	0	139	2	2
03267	Sheffield**	0	0	0	0	0	0	0	0	0	0
03302	Tyringham*	0	0	0	0	0	0	0	0	0	0
03313	Washington*	0	0	0	0	0	0	0	0	0	0

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any departments that wants to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
03326	West Stockbridge	144	9	0	85	4	8	2	33	0	3
03341	Williamstown	213	13	0	12	32	13	24	119	0	0
03345	Windsor	93	8	0	67	4	3	0	7	0	4
<b>Total</b>	<b>Berkshire County</b>	<b>13,023</b>	<b>505</b>	<b>15</b>	<b>6,994</b>	<b>690</b>	<b>1,738</b>	<b>685</b>	<b>2,321</b>	<b>16</b>	<b>59</b>

\* Certified no reportable fires.

\*\*Non reporting department.

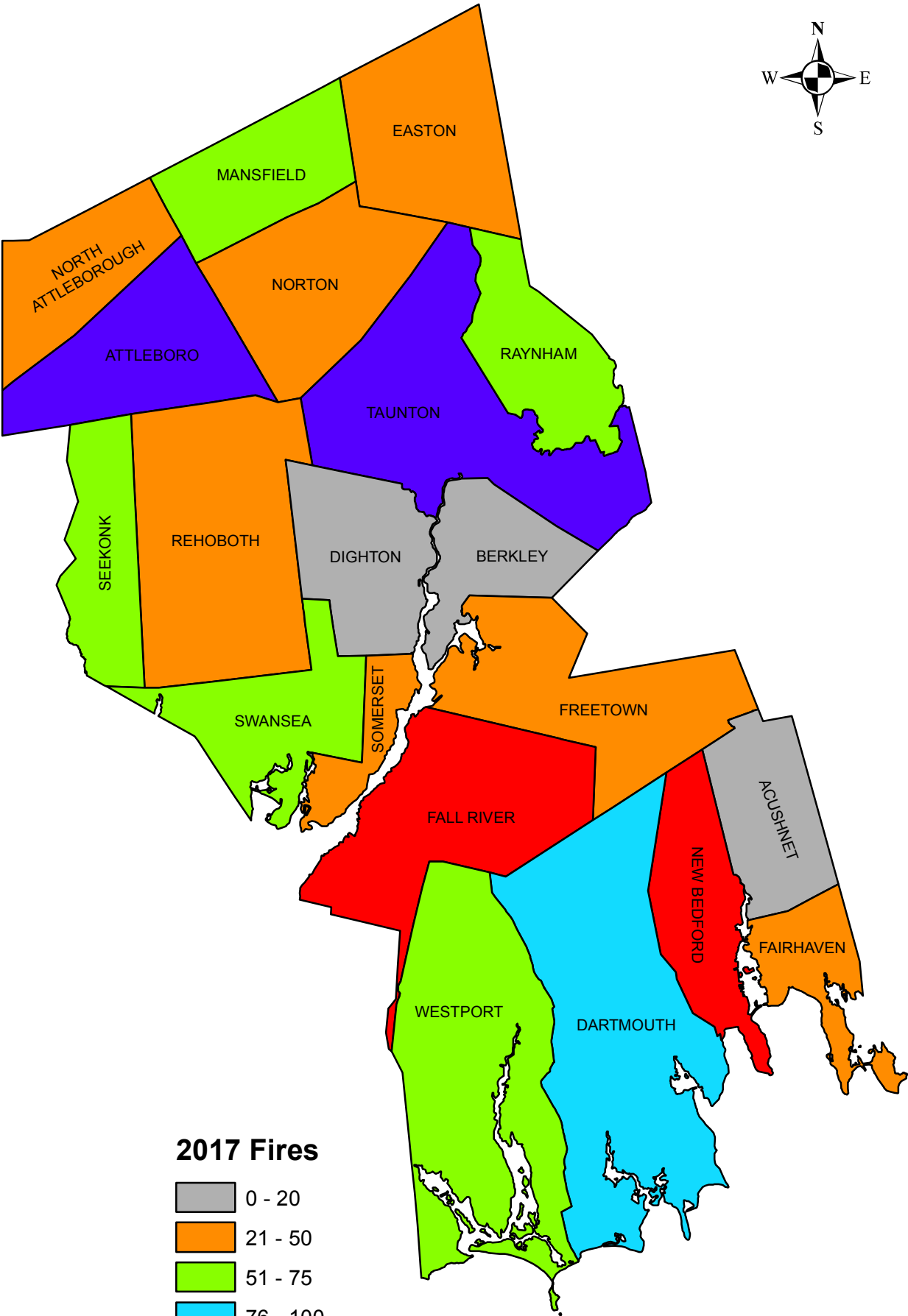
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any departments that wants to send all of their responses to do so.



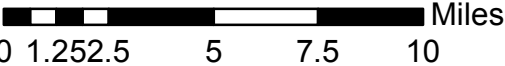
# Bristol County

## 2017 Fire Data Analysis

# Bristol County Fires 2017



## 2017 Fires



# Bristol County Fires in 2017

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## **1,872 Total Fires — 847 Structures, 278 Vehicles & 747 Other Fires**

Bristol County ranked sixth out of the fourteen Massachusetts counties in total reported fires. The county reported 1,872 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 847 structure fires, 278 motor vehicle fires, 375 brush, tree or lawn fires, 236 outside rubbish fires, 44 special outside fires, six cultivated vegetation or crop fires, and 86 other fires caused six civilian deaths, 27 civilian injuries, 12 fire service injuries and an estimated dollar loss of \$13.3 million. Bristol County's fires accounted for 7% of the 27,895 Massachusetts fires reported in 2017.

All 22, or 100%, of the fire departments in Bristol County reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS).

## **All Fires Down**

The total number of reported fire incidents decreased by 232 from the 2,104 reported in 2016. Reported structure fires decreased by 19 from the 866 reported during the previous year. The total number of reported motor vehicle fires decreased by 35 from the 313 incidents reported during 2016. Reported outside and other fires decreased by 178 from the 925 reported the year before<sup>1</sup>.

## **BRISTOL COUNTY FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2,006	899	270	837	90	31	4	55
2014	1,978	849	262	867	86	32	11	43
2015	2,120	939	281	900	87	29	17	41
2016	2,104	866	313	925	85	26	23	36
2017	1,872	847	278	747	95	36	16	43

## **Fire and Fire Death Rates**

Bristol County had 3.4 fires per 1,000 population. That figure ranks Bristol County tied for tenth in the state and below the state rate of 4.3 fires per 1,000 population. Bristol County also had 0.11 fire deaths per 10,000 populations ranking it fourth among Massachusetts counties and above the state rate of 0.09 fire deaths per 10,000 population.

## **6 Fires Kill 6 People in Bristol County**

In 2017, six fires in Bristol County killed six people.

- On January 15, 2017, at 2:19 a.m., the Mansfield Fire Department was called to a fatal motor vehicle crash with ensuing fire. The victim, a 32-year old woman, was trapped in the vehicle and died in the fire. No one else was injured at this fire. Damages from this fire were estimated to be \$11,000.

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<sup>1</sup> 2017 was a down year for brush fires.



- On February 10, 2017, at 4:33 a.m., the Fall River Fire Department was called to a fatal electrical fire in a single-family home. A space heater plugged into an extension cord arced and started the fire. The victim, a 50-year old woman, evacuated the building but re-entered the building with a fire extinguisher to try and extinguish the fire. She was overcome after she re-entered the building. No one else was injured at this fire. Alarms were present and alerted the occupants. There were no sprinklers in the home. Damages were estimated to be \$15,000.
- On March 8, 2017, at 4:02 p.m., the Mansfield Fire Department was called to a fatal smoking fire in a 12-unit apartment building. The fire was started by undetermined smoking materials in the bedroom. The victim, a 62-year old woman fell asleep while smoking. One (1) firefighter was injured at this fire. Alarms were present and alerted the occupants of the building. There were no sprinklers. Damages from this fire were estimated to be \$150,000.
- On March 18, 2017, at 2:01 p.m., the Attleboro Fire Department was dispatched to a motor vehicle fire in an open field near a cemetery. It is believed that the driver and only occupant of the vehicle got the car stuck in the field and then the hot components of the car ignited nearby combustibles. The car burst into flames and the victim, a 71-year old man was trapped inside the vehicle and could not be rescued. No one else was injured in this fire. Damages from this fire were not estimated.
- On April 9, 2017, at 3:48 p.m., the Mansfield Fire Department was called to a fatal motor vehicle fire on Interstate 95 of undetermined cause. The driver of the car, a 45-year old man, was not able to escape the car. Damages were estimated to be \$2,100.
- On July 23, 2017, at 3:21 a.m., the Fall River Fire Department was called to a fatal electrical fire in a three-unit apartment building. The fire was started by arcing in an extension cord in a second-floor living room. The victim, a 74-year old woman was overcome while she attempted to escape. One (1) firefighter was also injured at this fire. Alarms were present but did not operate. There were no sprinklers. Damages from this fire were estimated \$30,000.

### **Somerset Has Bristol County's Largest Loss Fire**

In 2017 Bristol County did not have any incidents with an estimated dollar loss over \$1 million. The largest loss fire that did occur in Bristol County was a fire in Somerset with \$530,000 in estimated damages.

- On April 9, 2017, at 5:25 p.m., the Somerset Fire Department responded to a fire of undetermined cause in an office. The fire began on the second floor. No one was injured at this fire. It was undetermined if any alarms were present. The building did not have sprinklers. Damages were estimated to be \$530,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 847 structure fires caused three civilian deaths, 19 civilian injuries, 12 fire service injuries and an estimated dollar loss of \$11.1 million. These incidents represented 45% of Bristol County's reported fires in 2017. The average estimated dollar loss per structure fire was \$13,051. The total number of reported structure fires decreased by 19, or 2%, from the 866 reported in 2016.

### **Structure Arsons Up**

The 36 structure arsons caused one fire service injury and an estimated dollar loss of \$913,246. Arson was indicated as the cause of 4% of the structure fires and 8% of Bristol County's structure fire dollar loss. The 36 structure arsons accounted for 38% of the Bristol County arson fires reported in 2017. The total number of reported structure arsons increased by 10 from the 26 reported in 2016.

### **3/4 of Structure Arsons Occurred in Residences**

Seventy-five percent (75%) of Bristol County's 36 structure arsons occurred in residential occupancies. Mercantile and business properties and storage facilities each had 8%. Special properties had 6% and educational facilities accounted for 3% of these fires.

## **BUILDING FIRES**

There were 840 building fires of different types in Bristol County in 2017. These 840 building fires accounted for 99.2% of all structure fires in Bristol County.

### **84% of Bristol Building Fires Occurred in People's Homes**

Seven hundred and eight (708), or 84%, of Bristol County's 840 building fires occurred in residential occupancies. Mercantile and business properties had 50 fires. Twenty-seven (27) fires took place in public assembly properties, including restaurants and churches. Twenty-three (23) fires took place in storage properties. Hospitals, prisons, and other institutional buildings had 12 fires. Manufacturing and processing facilities experienced seven fires. Educational facilities had six fires. Industrial facilities each experienced four fires. Special properties had three fires.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Down Slightly**

There were 708 reported residential building fires in Bristol County in 2017. These 708 fires are a decrease of five, or 1%, from the 713 residential building fires reported in 2016.

### **Apartments Accounted for Over 1/2 of Residential Building Fires**

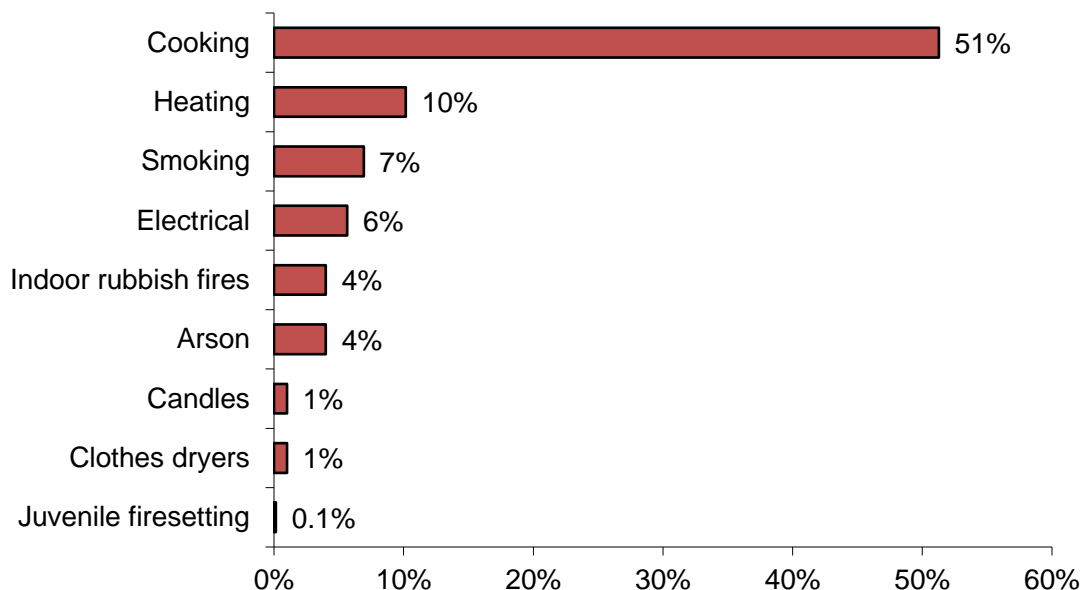
The peak fixed property uses for residential building fires were apartments, accounting for 52% of the building fires in Bristol County; 45% occurred in - & 2-family homes; 1%

occurred in residential board and care facilities; another 1% happened in rooming houses. Less than 1% occurred in dormitories. Two (2), or less than 1%, of the residential building fires in Bristol County occurred in unclassified residential buildings.

### Unsafe Cooking Leading Cause of Residential Fires

The leading cause of residential building fires in Bristol County was unattended cooking and other unsafe cooking practices, accounting for 51% of these fires. The second leading cause of residential building fires was heating equipment, accounting for 10%. Smoking caused 7% and electrical problems caused 6% of the fires in people's homes. Indoor rubbish fires and arsons were each responsible for 4% of these fires. Candles and clothes dryers each accounted for 1%. Juvenile-set fires accounted for less than 1% of Bristol County's residential building fires in 2017.

### 2017 Leading Causes to Fires in Bristol County Homes



### 58% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

Four hundred and fourteen (414), or 58%, of all residential building fires were reported as confined to non-combustible containers in 2017. Three hundred and thirty (330), or 47%, of all residential building fires reported in 2017 were cooking fires contained to a non-combustible container. Thirty-two (32), or 5%, were fires confined to a fuel burner or

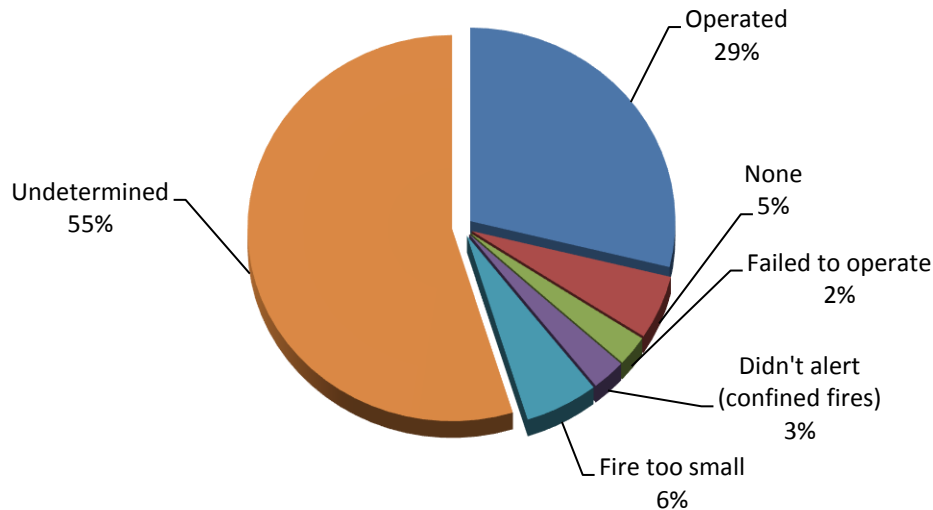
<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

boiler malfunction. Twenty-two (22) of the reported fires were confined to a chimney, accounting for 3% of residential building fires. Twenty-nine (29), or 4%, of these fires were rubbish fires; and one, or 0.1%, was a confined commercial compactor fire.

### **Detectors Alerted Occupants in Only 29% of Fires**

Smoke or heat detectors operated and alerted the occupants in 207, or 29%, of the residential building fires. In 3% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 5% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 6% of the residential fires. Smoke detector performance was undetermined in 388 incidents, or 55%, of Bristol County's residential building fires.

### **Detector Status in Bristol County's Residential Structure Fires 2017**



### **1/2 of Failed Detectors Had Missing or Dead Batteries**

Of the 18 fires where smoke detectors were present but failed to operate, seven, or 39%, failed because the batteries were either missing or disconnected and two, or 11%, failed because of dead batteries. Two (2), or 11%, failed from a power failure, shutoff or disconnect. An improper installation or placement caused one, or 7% of the detectors to fail to operate. It was undetermined or unclassified in six cases, or 33%, why the detectors failed to operate.

<sup>3</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

## VACANT BUILDINGS

### 3% of Building Fires Occurred in Vacant Buildings

Bristol County reported 27 fires that occurred in buildings that were vacant, under construction or demolition. This represented 3% of the 840 building fires reported to MFIRS in 2017. Twenty (20) fires occurred in vacant residential properties. Two (2) vacant building fires occurred in storage facilities. Two (2) happened in mercantile or business facilities. Two (2) vacant educational facilities had fires and a public assembly property had one of these fire incidents in Bristol County in 2017.

Three (3), or 11%, of the vacant building fires in Bristol County in 2017 were determined to be intentionally set. A high/junior high or middle school, a one- or two-family home, a warehouse each had a vacant arson in 2017.

## JUVENILE-SET FIRES

### 39 Juvenile-set Fires

There were 39 reported juvenile-set fires in Bristol County in 2017. The two structure fires, 36 brush fires and two motor vehicle fires caused \$20,850 in estimated damages.

## ARSONS

### 95 Total Arsons — 36 Structures, 16 Vehicles & 43 Other Arsons

Bristol County fire departments reported that 95, or 5%, of Bristol County's 1,872 fires were considered intentionally set, or, for purposes of this analysis, arson. The 36 structure arsons, 16 motor vehicle arsons and 43 outside and other arsons caused one civilian injury, one fire service injury and an estimated dollar loss of \$1.1 million.

### Structure Arsons Up

The total number of reported arson fires increased by 10 from the 85 reported in 2016. Structure arsons increased by 10 from 26 in 2016. Motor vehicle arsons decreased by seven from the 23 reported last year. Outside and other arsons rose by seven from the 36 reported in 2016.

## ALL INCIDENTS

### Rescue & EMS Calls Are 65% of All Reported Responses

In 2017, fire departments in Bristol County reported 70,301 responses<sup>4</sup> to MFIRS. Of these 70,301 incidents, 68,364 non-fire calls were voluntarily reported.

Of these 68,364 non-fire calls, 45,620, or 65%, of all the reported responses were reported rescue and emergency medical services (EMS) calls; 11,255, or 16%, were

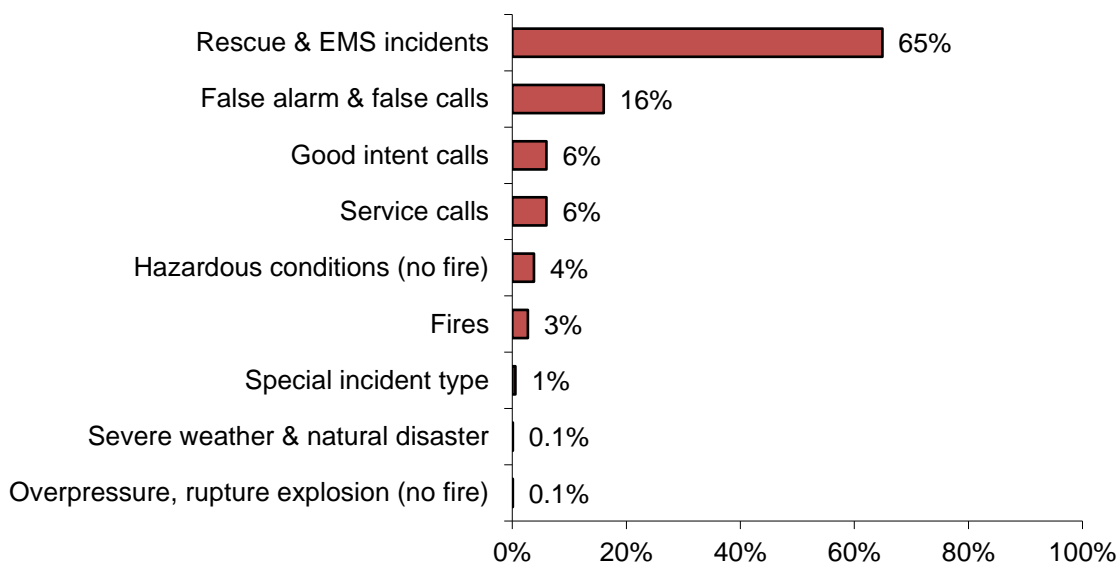
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<sup>4</sup> These figures include responses in which Bristol County fire departments gave mutual aid to other fire departments.

reported false alarm or false calls; 4,307, or 6%, were reported good intent calls; 3,982, or 6%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 2,669, or 4%, were reported hazardous condition calls with no fire; 400, or 1%, were special incident type calls such as citizen complaints; 66, or 0.1%, were severe weather responses; and 65, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

One thousand nine hundred and thirty-seven (1,937), or 3%, of the total responses submitted by Bristol County fire departments were fires.

### 2017 Responses by Incident Type



### Bristol County Fire Departments Gave Mutual Aid 1,520 Times

In 2017, Bristol County fire departments reported coming to the aid of other fire departments 1,520 times. Of these 1,520 responses, 1,018, or 67%, were for rescue or EMS calls; 291, or 19%, were for good intent calls; 133, or 9%, were for service calls such as cover assignments; 60, or 4%, were for fires; 10, or 1%, were for false alarms or false calls; four, or less than 1%, were special incident types; three, or less than 1%, were for hazardous conditions calls with no fire; and one, or less than 1%, was an overpressure, rupture explosion with no fire.

### Bristol County Received Mutual Aid in 950 Incidents

In 2017, Bristol County fire departments reported receiving aid from surrounding departments in 950 incidents. Of these 950 incidents, 801, or 84%, were rescue and emergency medical services calls; 75, or 8%, were for fires; 23, or 2%, were hazardous conditions calls with no fire; 21, or 2%, were good intent calls; 19, or 2%, were false alarms or false calls; nine, or 1%, of the mutual aid received calls, were service calls; one,

or less than 1%, was an overpressure, rupture, explosion or overheat call with no fire; and one, or less than 1%, was a special incident type.

**Bristol County****Population: 548,285****3.4 Fires/1,000 Population**

**Total Fires: 1,872 \$13,307,487**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	847	45%	\$11,254,232
Vehicle Fires	278	15%	1,596,769
Other Fires	747	40%	656,486

6 Fatal Fires 3.21 Civilian Deaths/1,000 Fires  
 6 Civilian Deaths 0.11 Civilian Deaths/10,000 Population  
 27 Civilian Injuries 12 Fire Service Injuries

**Building Fires: 840****Residential Structure Fires: 708****Residential Structure Fires Confined to Non-Combustible Containers: 414****Unconfined Residential Structure Fires: 294**

3 Civilian Deaths 19 Civilian Injuries 12 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	367	52%	Operated	204	29%
1- & 2-Family homes	321	45%	Didn't operate	18	2%
Rooming houses	9	1%	None	38	5%
Residential board & care	7	1%	Fire too small	41	6%
Dormitories	1	0.1%	Didn't alert (confined)	19	3%
			Undetermined	388	55%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	55%	Heat from operating eq.	5%	12%
Heating room or area	5%	Cigarettes	4%	10%
Chimney or flue	3%	Arcing	4%	10%
Living room	3%	Rad., cond. heat from op eq.	2%	5%
Bedroom	3%			

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.



<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Food, cooking materials	49%	Abandoned materials	3%	7%
Flammable or combust. Liquid	5%	Too close to combustibles	3%	6%
Rubbish, trash, waste	5%	Electrical failure, malfunc.	2%	4%
Film or residue (creosote)	3%	Misuse of mater. or product	1%	3%
Exterior sidewall covering	3%	Failure to clean	1%	2%
Electrical wire, cable insulation	3%	Equipment unattended	1%	2%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	50%	Unintentional	23%	54%
None	28%	Failure of eq. or heat source	4%	9%
Boiler, furnace, cent. Heat unit	5%	Intentional	3%	7%
Chimney or flue	3%	Cause under investigation	3%	7%
Electrical wiring, other	1%	Undetermined	8%	20%
Clothes dryer	1%	Act of Nature	0.1%	0.3%

#### **Detector Alerted Occupants (Confined Fires in Non-Combustible Containers)**

Alerted Occupants	20%
Didn't Alert Occupants	5%
Undetermined	75%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	131	77	20	34
February	131	84	25	22
March	162	83	17	62
April	209	68	26	115
May	151	62	26	63
June	187	64	30	93
July	189	66	31	92
August	192	70	21	101
September	136	50	23	63
October	130	65	19	46
November	143	79	22	42
December	111	79	18	14

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	286	145	38	103
Monday	253	122	35	96
Tuesday	272	122	40	110
Wednesday	257	111	43	103
Thursday	273	115	43	115
Friday	248	101	49	98
Saturday	283	131	30	122

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 – 04:00	140	67	30	43
04:01 – 08:00	128	60	24	44
08:01 – 12:00	287	134	46	107
12:01 – 16:00	521	193	86	242
16:01 – 20:00	543	264	61	218
20:01 – 24:00	253	129	31	93

### **Motor Vehicle Fires**

Total: 278

Automobiles: 212 (76%)

11, or 5%, of the automobile fires considered intentionally set.

## Arson Fires

**Total Arsons: 95**

**Dollar loss: \$1,057,498**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	36	4%	38%	\$913,246
Vehicle Arsons	16	6%	17%	137,250
Other Arsons	43	6%	45%	7,002

0.07 Structure arsons/1,000 population

0.03 Vehicle arsons/1,000 population

0.08 Other arsons/1,000 population

1 Civilian Injury

1 Fire Service Injury

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
00:01 – 04:00	12	33%	00:01 – 04:00	8	50%
16:01 – 20:00	9	25%	20:01 – 00:00	4	25%
08:01 – 12:00	6	17%	16:01 – 20:00	2	13%

Other Arsons	#	%
12:01 – 16:00	13	30%
16:01 – 20:00	13	30%
20:01 – 00:00	12	28%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	14	39%
1- and 2-Family homes	12	33%
Warehouse	2	6%
Service station, gas station	2	6%

**Acushnet** **Population: 10,303**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	23	13	4	6	1	0	0	1
2014	11	7	1	3	1	1	0	0
2015	19	12	2	5	1	0	0	1
2016	28	18	5	5	1	0	0	1
2017	12	8	1	3	0	0	0	0

**Attleboro** **Population: 43,593**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	135	51	23	61	3	2	1	0
2014	114	45	19	50	1	1	0	0
2015	145	46	22	77	0	0	0	0
2016	130	50	17	63	2	1	1	0
2017	122	41	24	57	0	0	0	0

**Berkley** **Population: 6,411**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	18	9	2	7	0	0	0	0
2014	10	5	4	1	0	0	0	0
2015	13	7	1	5	0	0	0	0
2016	15	4	3	8	0	0	0	0
2017	16	5	6	5	0	0	0	0

**Dartmouth Fire Districts<sup>11</sup>** **Population: 34,032****Dartmouth District # 1***Est. Pop. Protected: 13,272*

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	27	12	1	14	0	0	0	0
2014	31	17	5	9	0	0	0	0
2015	23	12	2	9	1	1	0	0
2016	18	8	3	7	0	0	0	0
2017	21	14	2	5	0	0	0	0

<sup>11</sup> The estimated population protected statistics were determined by multiplying the 2010 census figure by the percentage of the 2000 census figure determined by the then Town Clerk.

**Dartmouth District #2***Est. Pop. Protected: 2,723*

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	0	1	6	0	0	0	0
2014 <sup>12</sup>	Fire Department in Good Standing							
2015	1	0	1	0	0	0	0	0
2016 <sup>13</sup>	Fire Department in Good Standing							
2017	7	3	0	4	0	0	0	0

**Dartmouth District #3***Est. Pop. Protected: 18,037*

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	102	35	16	51	2	2	0	0
2014	77	19	17	41	2	0	1	1
2015	87	19	17	51	6	0	0	6
2016	73	23	10	40	4	2	0	2
2017	67	16	14	37	2	0	0	2

**Dighton****Population: 7,086**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	18	11	0	7	3	0	0	3
2014	15	8	3	4	0	0	0	0
2015	8	1	3	4	1	0	1	0
2016	18	6	5	7	0	0	0	0
2017	16	6	5	5	0	0	0	0

**Easton****Population: 23,112**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	5	4	1	0	0	0	0
2014	21	16	2	3	0	0	0	0
2015	78	31	1	46	4	1	0	3
2016	54	19	7	28	2	0	0	2
2017	45	18	5	22	3	0	0	3

<sup>12</sup> In 2014, Dartmouth District #2 reported 8 calls.<sup>13</sup> In 2014, Dartmouth District #2 reported 9 calls.

**Fairhaven****Population: 15,873**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	16	7	11	0	0	0	0
2014	55	22	8	25	4	0	0	4
2015	54	23	8	23	1	0	0	1
2016	56	19	7	30	1	0	0	1
2017	30	11	7	12	0	0	0	0

**Fall River****Population: 88,857**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	453	255	48	150	22	15	1	6
2014	414	232	45	137	19	12	1	6
2015	472	301	42	129	8	6	2	0
2016	437	254	58	125	22	13	9	0
2017	431	263	41	127	25	10	8	7

**Freetown****Population: 8,870**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	55	21	12	22	1	0	0	1
2014	44	20	11	13	2	2	0	0
2015	44	15	10	19	0	0	0	0
2016	48	16	13	19	2	0	2	0
2017	44	14	16	14	0	0	0	0

**Mansfield****Population: 23,184**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	62	14	14	34	1	0	0	1
2014	51	11	11	29	2	0	0	2
2015	44	13	4	27	2	1	0	1
2016	61	14	15	32	1	0	0	1
2017	59	13	17	29	1	0	0	1

<b>New Bedford</b>					<b>Population: 95,072</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	393	216	50	127	12	6	2	4
2014	456	227	50	179	19	8	7	4
2015	478	213	63	202	24	9	11	4
2016	445	213	49	183	13	6	6	1
2017	453	229	53	171	30	18	9	3

<b>North Attleboro</b>					<b>Population: 28,712</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	49	21	10	18	0	0	0	0
2014	42	16	6	20	1	1	0	0
2015	46	19	6	21	0	0	0	0
2016	67	21	14	32	1	0	1	0
2017	40	13	6	21	2	0	0	2

<b>Norton</b>					<b>Population: 19,031</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	9	6	19	1	0	0	1
2014	49	40	6	33	3	0	1	2
2015	37	18	1	18	0	0	0	0
2016	48	10	11	27	6	0	1	5
2017	25	6	4	15	3	2	0	1

<b>Raynham</b>					<b>Population: 13,383</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	58	22	10	26	0	0	0	0
2014	61	13	15	33	0	0	0	0
2015	63	19	17	27	2	0	1	1
2016	76	14	16	46	0	0	0	0
2017	64	18	11	35	0	0	0	0

**Rehoboth****Population: 11,608**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	31	17	6	8	0	0	0	0
2014	28	16	6	6	0	0	0	0
2015	61	21	11	29	20	4	0	16
2016	43	18	7	18	3	1	0	2
2017	45	15	8	22	9	1	0	8

**Seekonk****Population: 13,722**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	59	27	9	23	0	0	0	0
2014	59	10	5	44	0	0	0	0
2015	61	11	11	39	1	1	0	0
2016	86	23	13	50	2	1	0	1
2017	53	18	7	28	2	1	0	1

**Somerset****Population: 18,165**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	43	22	5	16	0	0	0	0
2014	41	14	3	24	0	0	0	0
2015	35	16	8	11	0	0	0	0
2016	43	18	10	15	0	0	0	0
2017	39	16	8	15	0	0	0	0

**Swansea****Population: 15,865**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	89	42	9	38	4	1	0	3
2014	86	38	15	33	0	0	0	0
2015	78	37	18	23	0	0	0	0
2016	78	33	16	29	1	0	0	1
2017	60	30	15	15	1	0	0	1



**Taunton** **Population: 55,874**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	240	63	24	153	36	5	0	31
2014	240	77	26	137	24	7	1	16
2015	213	90	20	103	16	6	2	8
2016	218	76	21	121	20	1	2	17
2017	156	70	15	71	13	3	0	10

**Westport** **Population: 15,532**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	66	18	9	39	4	0	0	4
2014	71	25	4	42	8	0	0	8
2015	60	15	13	32	0	0	0	0
2016	62	9	13	40	3	0	1	2
2017	72	19	15	38	6	1	0	5

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
05003	Acushnet	542	15	0	245	79	113	16	73	0	1
05016	Attleboro	7,403	128	1	5,384	125	350	502	902	8	3
05027	Berkley	472	19	0	346	15	16	37	39	0	0
05972	Dartmouth Distr.#1	391	23	0	24	58	32	36	205	12	1
05973	Dartmouth Distr.#2	143	8	1	34	34	27	7	24	2	6
05974	Dartmouth Distr.#3	795	69	3	179	58	127	105	253	1	0
05076	Dighton	203	16	0	43	26	18	21	77	1	1
05088	Easton	3,387	45	2	2,415	148	293	101	362	9	12
05094	Fairhaven	3,382	35	3	2,645	152	123	115	303	0	6
05095	Fall River	7,447	433	6	2,886	477	281	472	2,867	2	23
05102	Freetown	1,403	46	13	886	57	131	158	100	2	10
05167	Mansfield	3,377	59	3	2,212	164	229	223	472	2	13
05201	New Bedford	15,106	453	7	10,330	374	420	1,227	2,256	11	28
05211	North Attleboro	2,572	45	5	1,758	98	234	86	338	0	8
05218	Norton	3,283	28	0	2,178	143	353	22	421	0	138
05245	Raynham	2,862	72	1	2,077	82	121	84	406	3	16

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
05247	Rehoboth	634	50	1	280	64	59	31	140	5	4
05265	Seekonk	3,222	55	0	2,173	83	148	326	431	2	4
05273	Somerset	2,872	40	0	2,313	55	144	153	160	1	6
05292	Swansea	497	67	4	30	83	55	71	184	1	2
05293	Taunton	9,542	156	9	6,983	217	575	440	1,062	1	99
05334	Westport	766	75	6	199	77	133	74	180	3	19
	<b>Bristol County</b>	<b>70,301</b>	<b>1,937</b>	<b>65</b>	<b>45,620</b>	<b>2,669</b>	<b>3,982</b>	<b>4,307</b>	<b>11,255</b>	<b>66</b>	<b>400</b>

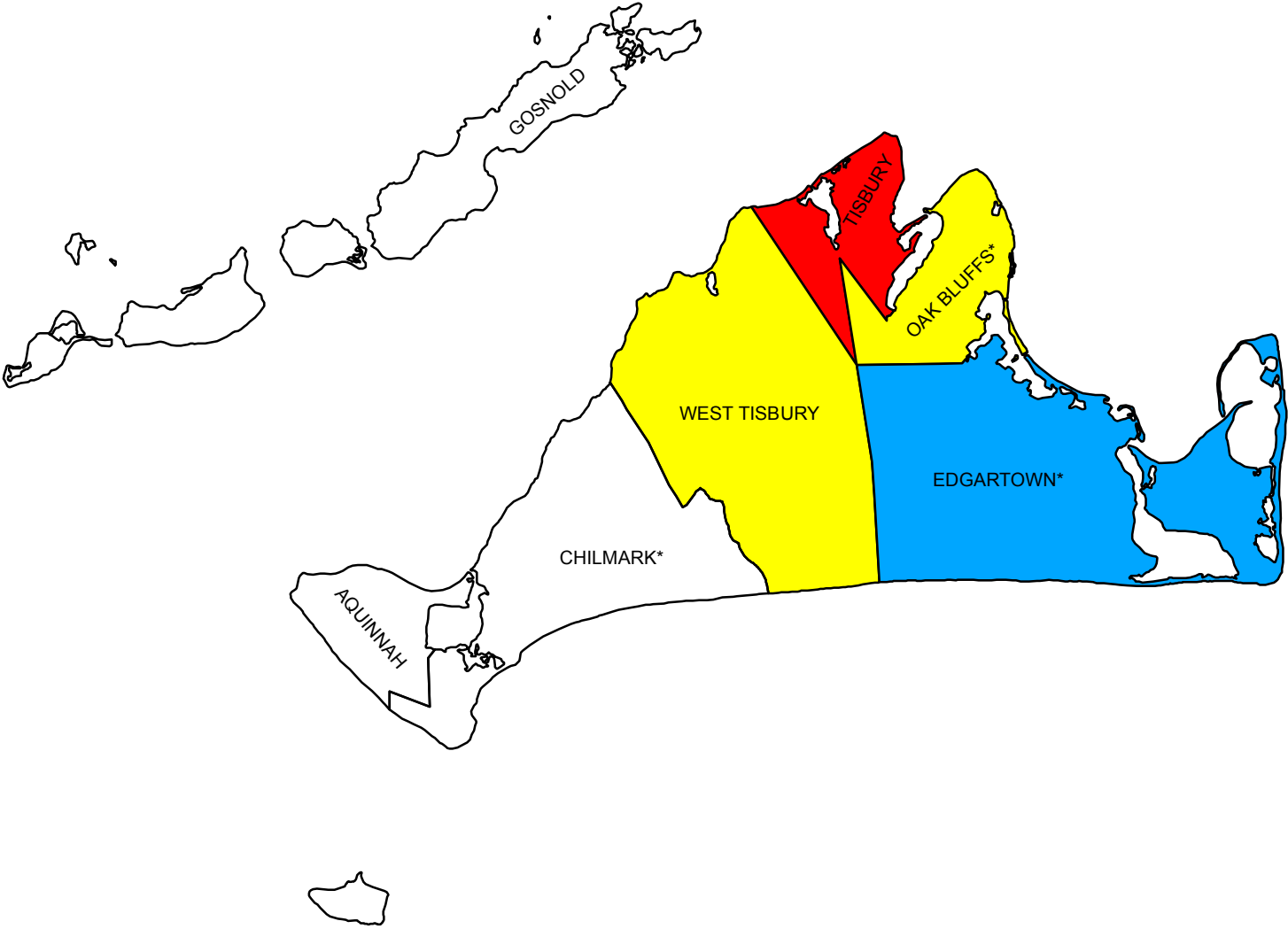
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



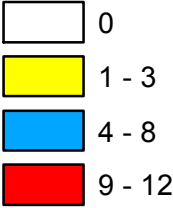
# Dukes County

## 2017 Fire Data Analysis

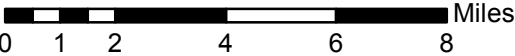
# Dukes County Fires 2017



## 2017 Fires



\*Non-reporting department



# Dukes County Fires in 2017

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## **26 Total Fires — 15 Structures, 6 Vehicles Fires & 5 Outside & Other Fires**

Dukes County ranked last out of the fourteen Massachusetts counties in total fires. Dukes County fire departments reported 26 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2016. The reported 15 structure fires, 6 motor vehicle fire, one brush fire, one outside rubbish fire, two special outside fires, and one unclassified fires caused an estimated dollar loss of \$355,000. Dukes County's fires accounted for 0.1% of the 27,895 Massachusetts fires reported in 2017.

Six (6) of the seven of the fire departments, or 86%, in Dukes County reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS). One (1) department certified that they had no reportable fires in 2017.

## **All Fires Down**

The total number of reported fire incidents decreased by 24 from the 50 reported in 2016. Reported structure fires increased by three from the 12 reported in 2016. Motor vehicle fires decreased by four from the 10 reported the previous year. Outside and other fires decreased by 23 from the 28 reported in 2016<sup>1</sup>.

## **DUKES COUNTY FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	42	15	7	20	1	0	0	1
2014	22	10	1	11	1	0	0	1
2015	37	10	5	22	1	0	0	1
2016	50	12	10	28	2	0	1	1
2017	26	15	6	5	0	0	0	0

## **Fire and Fire Death Rates**

Dukes County had 1.6 fires per 1,000 population. That figure ranks Dukes County last in the state and below the state rate of 4.3 fires per 1,000 population. Dukes County also had 0 fire deaths per 10,000 population ranking it tied for last among Massachusetts counties and well below the state rate of 0.09 fire deaths per 10,000 population.

## **No Fire Deaths in Dukes County in 2017**

In 2017 there were no fatal fires in Dukes County.

## **Edgartown Had Dukes County Largest Loss Fire**

Dukes County did not have any large loss fires over \$1 million in 2017. Edgartown had the largest loss fire in the County.

- The largest loss fire in Dukes County in 2017 was a fire of undetermined cause in a single-family home in Edgartown. This fire occurred on March 9, 2017, at 3:18

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<sup>1</sup> 2017 was a down year statewide for brush fires.

p.m. No one was injured at this fire. It was undetermined if alarms were present and the building did not have any sprinklers. Damages were estimated at \$225,000. This one fire accounted for 63% of Dukes County total estimated damages.

## **STRUCTURE FIRES**

### **Reported Structure Fires 58% of All Reported Fires**

There were 15 reported structure fires in Dukes County in 2017. These incidents represented 58% of Dukes County's reported fires in 2017 and 68% of the county's reported dollar loss. The total number of reported structure fires increased by three from the 12 reported in 2016.

### **0 Reported Structure Arson in 2017**

There was no reported structure arson in Dukes County in 2017

## **BUILDING FIRES**

There were 14 building fires of different types in Dukes County in 2017. These 14 building fires accounted for 93.3% of the structure fires in Dukes County.

### **93% of Dukes Building Fires Occurred in People's Homes**

Thirteen (13), or 93%, of Dukes County's 14 building fires occurred in residential occupancies. The other fire occurred in a storage facility.

## **RESIDENTIAL FIRES**

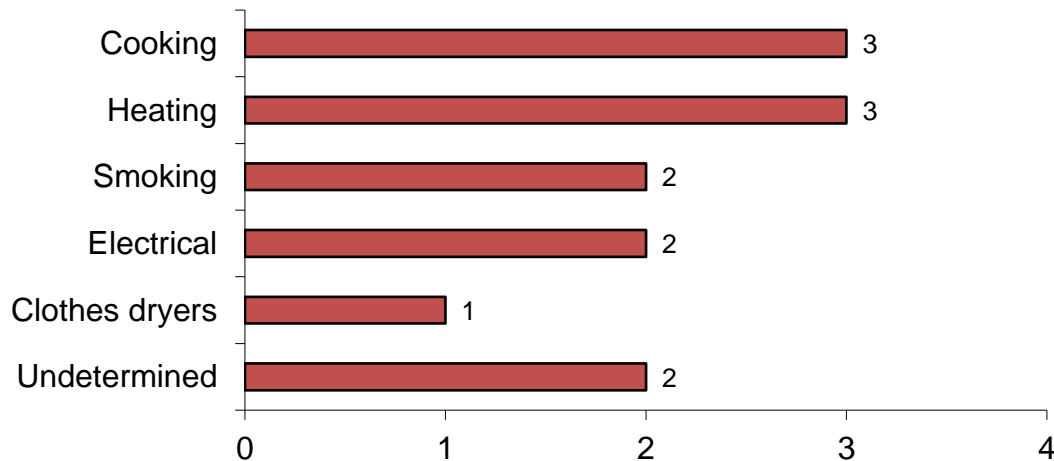
### **13 Residential Building Fires**

There were 13 reported residential building fires in Dukes County in 2017. These 13 fires are an increase of four, or 44%, from the nine reported in 2016. They caused \$242,000 in estimated damages.

### **Cooking & Heating Were the Leading Cause of Residential Fires**

Heating equipment and unattended cooking were tied as the leading causes of residential fires in Dukes County in 2017. Both of these caused three, or 23%, of residential building fires in Dukes County in 2017. Smoking and electrical fires each caused two, or 15%, of these fires, all three heating fires were chimney fires. There was one clothes dryer fire and the cause of the other two fires were undetermined.

### 2017 Leading Causes of Fires in Dukes County Homes



#### 5 Residential Building Fires Were Confined to Non-Combustible Containers<sup>2</sup>

Five (5), or 38%, of the reported fires in Dukes County were confined to a non-combustible container. Two (2), or 40%, of these fires were confined cooking fires and three, or 60%, were confined to a chimney or flue.

#### Detector Operation Undetermined in 8 of 9 of Fires

Smoke or heat detectors operated and alerted the occupants in two, or 15%, of the residential building fires. In 23% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 8% of these incidents. In 15% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 8% of the residential fires. Smoke detector performance was undetermined in the four incidents, or 31%, of Dukes County's residential building fires.

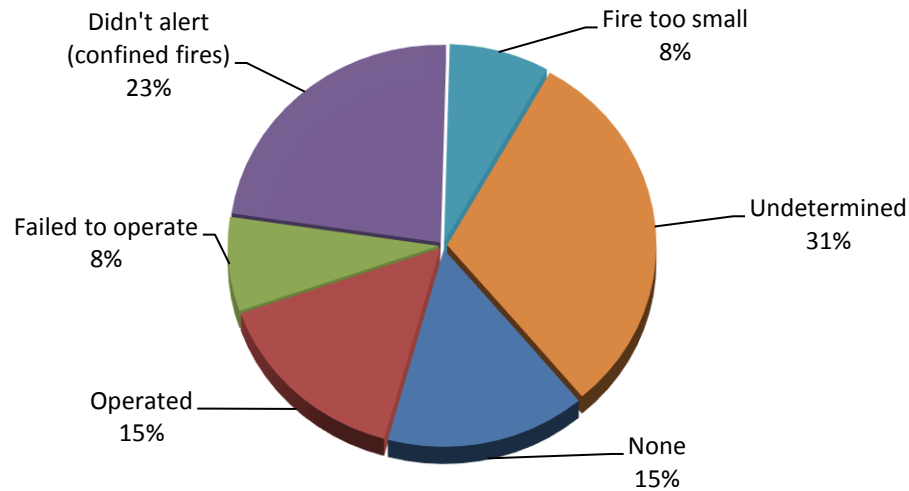
The reason the one detector failed to operate was because of a missing battery.

<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup>These represent confined fires where it was reported that the detector did not alert the occupants.



## Detector Status in Dukes County's Residential Fires 2017



### VACANT BUILDINGS

#### 0 Vacant Building Fires

There was no reported fires in a vacant building in Dukes County in 2017.

### JUVENILE-SET FIRES

#### No Juvenile-set Fires

There were no reported juvenile-set fires in Dukes County in 2017.

### ARSONS

#### 0 Arsons

There were no reported arsons in Dukes County in 2017. This was a decrease of two over the two arsons in Dukes County in 2016.

## ALL INCIDENTS

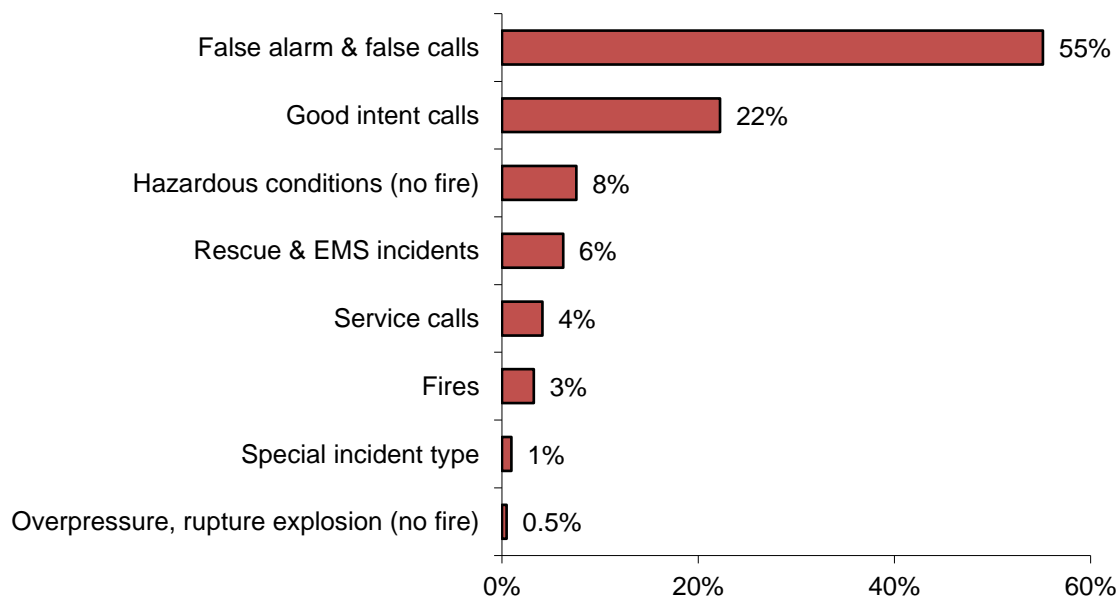
### False Alarms Are Over 1/2 of All Reported Responses

In 2017, Dukes County fire departments reported 1,264 responses<sup>4</sup> to MFIRS. Of these 1,264 incidents, 1,223 non-fire calls were voluntarily reported. The vast majority of these calls came from five departments: Aquinnah, Edgartown, Oak Bluffs, Tisbury and West Tisbury.

Of these 1,223 non-fire calls, 697, or 55%, were reported false alarm or false calls; 281, or 22%, were reported good intent calls; 96, or 8%, were reported hazardous condition calls with no fire; 79, or 6%, of all of the responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 52, or 4%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 12, or 1%, were special incident types; and six, or less than 1%, were overpressure, rupture explosions with no ensuing fire calls.

Forty-one (41), or 3%, of the total incidents submitted by Dukes County fire departments were fires.

### 2017 Incidents by Incident Type



<sup>4</sup> These figures include responses in which Dukes County fire departments gave mutual aid to other fire departments.

**Dukes County Fire Departments Gave Mutual Aid 31 Times**

In 2017, Dukes County fire departments reported coming to the aid of other fire departments 31 times. Of these responses, 15, or 48%, were for fires; 11, or 35%, were for good intent calls; one, or 3%, was a service call; one, or 3%, was for a false alarm or false call; one, or 3%, was for a hazardous condition call with no fire; one, or 3%, was a rescue or EMS call; and one, or 3% was for a special incident type call.

**Dukes County Fire Departments Received Mutual Aid in 16 Incidents**

In 2017, Dukes County fire departments reported receiving aid from surrounding departments in 16 incidents. Nine (9), or 56%, were for fires; two, or 13%, of these incidents were for false alarms or false calls; two, or 13%, were good intent calls; two, or 13%, were hazardous condition call with no fire; and one, or 6%, was for a rescue or EMS call.

**Dukes County****Population: 16,535****1.6 Fires/1,000 Population****Total Fires: 26 \$355,000**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	15	58%	\$242,000
Vehicle Fires	6	23%	112,000
Other Fires	5	19%	1,000

0 Fatal Fires 0.0 Civilian Deaths/1,000 Fires  
 0 Civilian Deaths 0.0 Civilian Deaths/10,000 Population  
 0 Civilian Injuries 0 Fire Service Injuries

**Building Fires: 14****Residential Structure Fires: 13****Residential Structure Fires Confined to Non-Combustible Containers: 5****Unconfined Residential Structure Fires: 8**

No Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	10	77%	Operated	2	15%
Hotels or motels	2	14%	Didn't operate	1	8%
Apartments	1	7%	None	2	15%
			Fire too small	1	8%
			Didn't alert (confined)	3	23%
			Undetermined	4	31%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	23%	Hot ember or ash	23%	38%
Chimney or flue	23%	Rad., cond. heat fr. op. eq.	15%	25%
		Heat from op. equip., other	8%	13%

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Film, residue (creosote)	23%	Abandoned materials	15%	25%
Cooking materials	15%	Too close to combustibles	15%	25%
Box, carton, bag	15%	Improper container/storage	8%	13%
		Mechanical failure, malf.	8%	13%
		Unspecified short circuit arc	8%	13%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
None	31%	Unintentional	38%	63%
Chimney or flue	23%	Failure of eq. or heat source	0%	0%
Kitchen & cooking equipment	23%	Undetermined	0%	0%
Clothes dryer	8%	Cause under investigation	15%	25%
Battery charger	8%			

**Detector Alerted Occupants  
(Confined Fires in Non-Combustible Containers)**

Alerted occupants	20%
Didn't alert occupants	60%
Undetermined	20%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined Fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	4	4	0	0
February	1	1	0	0
March	5	3	0	2
April	1	0	1	0
May	1	1	0	0
June	3	0	3	0
July	0	0	0	0
August	1	0	0	1
September	3	2	0	1
October	0	0	0	0
November	2	0	2	0
December	2	2	0	0

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	3	1	1	1
Monday	4	4	0	0
Tuesday	5	3	2	0
Wednesday	4	2	0	2
Thursday	4	2	0	2
Friday	4	2	2	0
Saturday	2	1	1	0

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	0	0	0	0
04:01 - 08:00	2	2	0	0
08:01 - 12:00	7	3	3	1
12:01 - 16:00	11	7	2	2
16:01 - 20:00	3	3	0	0
20:01 - 00:00	3	0	1	2

### **Motor Vehicle Fires**

Total: 6

Automobiles: 2 (33%)

0 (0%) of the automobile fires were incendiary in 2017.

**Arson Fires****Total Arsons:           0****Dollar loss: \$0****0.00 Arson Fires/1,000 Population**

<b>Situation</b>	<b>Arsons</b>	<b>% Situation</b>	<b>% Arson</b>	<b>Loss</b>
Structure Arsons	0	0%	0%	\$0
Vehicle Arsons	0	0%	0%	0
Other Arsons	0	0%	0%	0

0.00 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.00 Other arsons/1,000 population

No Injuries

**Peak Times of Day for:**

<b>Structure Arsons</b>	<b>#</b>	<b>%</b>	<b>Vehicle Arsons</b>	<b>#</b>	<b>%</b>
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<b>Other Arsons</b>	<b>#</b>	<b>%</b>
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<b>Peak Fixed Property Uses for Structure Arsons</b>	<b>#</b>	<b>%</b>
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**Aquinnah****Population: 311**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	1	0	1	0	0	0	0
2014	1	0	0	1	0	0	0	0
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	3	2	1	0	0	0	0	0
2017	Fire Department in Good Standing, Certified No Reportable Fires <sup>11</sup>							

**Chilmark****Population: 866**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	8	2	2	4	0	0	0	0
2014	1	0	0	1	0	0	0	0
2015	1	0	1	0	0	0	0	0
2016	4	0	0	4	0	0	0	0
2017	Non-Reporting Community							

**Edgartown****Population: 4,067**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	1	1	0	0	0	0	0
2014	2	1	0	1	0	0	0	0
2015	1	1	0	0	0	0	0	0
2016	2	0	0	2	0	0	0	0
2017	8	7	1	0	0	0	0	0

**Gosnold (Cuttyhunk)****Population: 75**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	Fire Department in Good Standing, Certified No Reportable Fires							

<sup>11</sup> Aquinnah did report 59 total runs to MFIRS in 2017.



**Oak Bluffs****Population: 4,067**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	3	0	3	0	0	0	0
2014	3	2	0	1	0	0	0	0
2015	Non-Reporting Community							
2016	22	3	5	14	2	0	1	1
2017	3	2	1	0	0	0	0	0

**Tisbury****Population: 3,959**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	15	7	4	4	0	0	0	0
2014	10	7	0	3	0	0	0	0
2015	21	9	3	9	0	0	0	0
2016	16	6	4	6	0	0	0	0
2017	12	5	4	3	0	0	0	0

**West Tisbury****Population: 2,740**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	1	0	5	1	0	0	1
2014	5	0	1	4	1	0	0	1
2015	14	0	1	13	1	0	0	1
2016	3	1	0	2	0	0	0	0
2017	3	1	0	2	0	0	0	0

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
07104	Aquinnah	59	2	0	1	2	1	24	29	0	0
07062	Chilmark**	0	0	0	0	0	0	0	0	0	0
07089	Edgartown	312	12	0	8	44	22	58	168	0	0
07109	Gosnold*	0	0	0	0	0	0	0	0	0	0
07221	Oak Bluffs	230	4	0	32	11	16	15	152	0	0
07296	Tisbury	362	17	4	29	22	12	56	221	0	1
07327	West Tisbury	301	6	2	9	17	1	128	127	0	11
<b>Total</b>	<b>Dukes County</b>	<b>1,264</b>	<b>41</b>	<b>6</b>	<b>79</b>	<b>96</b>	<b>52</b>	<b>281</b>	<b>697</b>	<b>0</b>	<b>12</b>

\* Certified no reportable fires.

\*\*Non reporting department.

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.

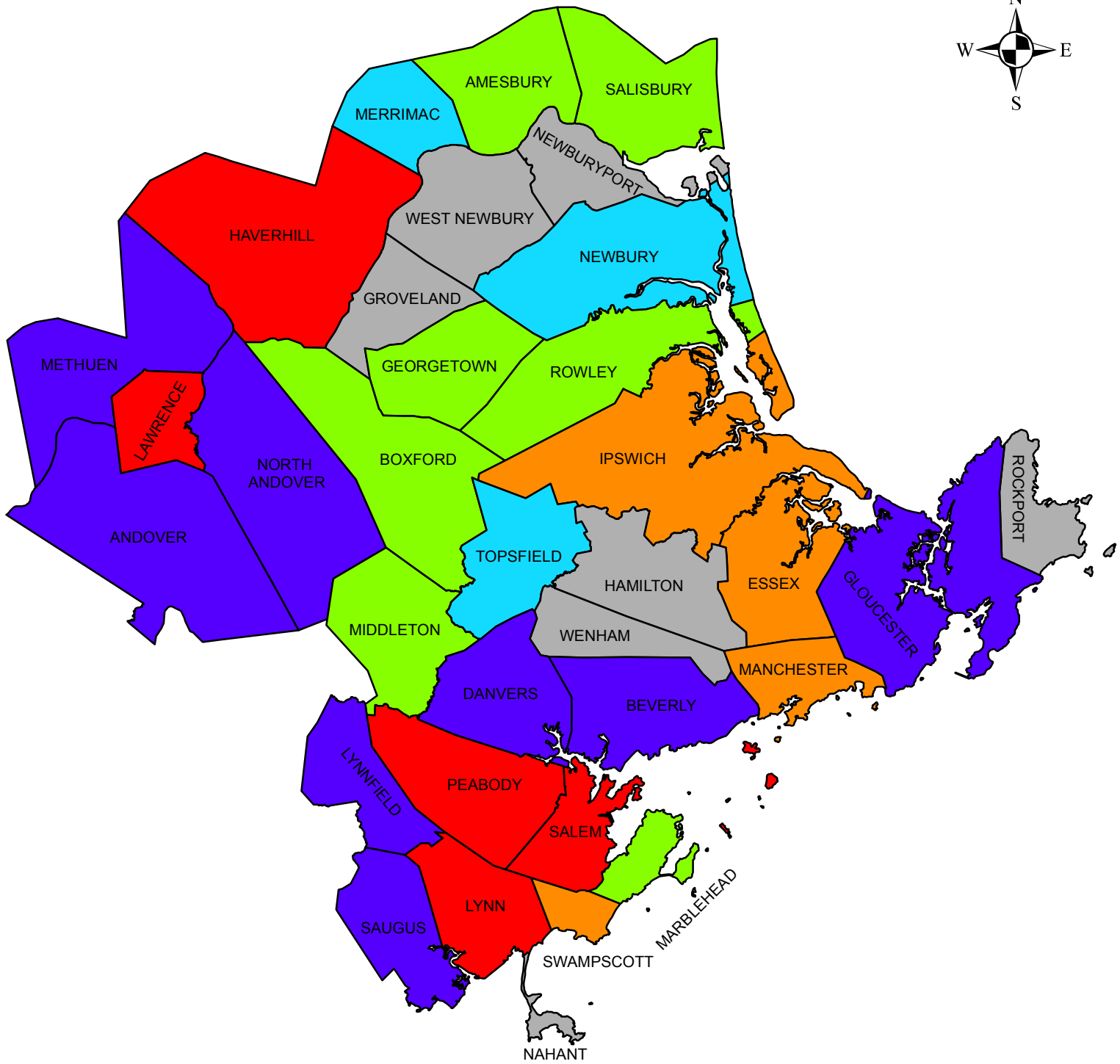


# Essex County

## 2017 Fire Data Analysis

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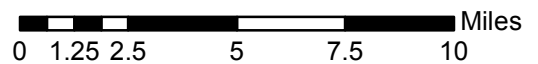
# Essex County Fires 2017



## 2017 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2017

# Essex County Fires in 2017

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## **2,474 Total Fires — 1,293 Structures, 256 Vehicles & 925 Other Fires**

Essex County ranked fifth out of the fourteen Massachusetts counties in total reported fires. The county reported 2,474 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 1,293 structure fires, 256 motor vehicle fires, 466 brush, tree or lawn fires, 224 outside rubbish fires, 98 special outside fires, six cultivated crop or vegetation fires, and 131 other fires caused six civilian deaths, 17 civilian injuries, 57 fire service injuries and an estimated dollar loss of \$22 million. Essex County's fires accounted for 9% of the 27,895 Massachusetts fires reported in 2017.

All 34 fire departments in Essex County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017.

## **All Fires Down**

The total number of reported fire incidents decreased by 505 incidents from the 2,979 that were reported in 2016. Reported structure fires decreased by 58 from the 1,351 reported during the previous year. The total number of motor vehicle fires increased by 38 from the 218 incidents reported during 2016. Reported outside and other fires decreased by 485 from the 1,410 reported the year before.

## **ESSEX COUNTY FIRES FROM 2013 TO 2017**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2013	2,952	1,512	268	1,172	111	21	10	80
2014	2,858	1,639	244	975	80	13	7	60
2015	2,897	1,414	274	1,209	86	19	15	52
2016	2,979	1,351	218	1,410	103	19	11	73
2017	2,474	1,293	256	925	68	15	6	47

## **Fire and Fire Death Rates**

Essex County had 3.3 fires per 1,000 population. That figure ranks Essex County twelfth in the state and below the state rate of 4.3 fires per 1,000 population. Essex County had 0.08 fire deaths per 10,000 population making it seventh among Massachusetts counties and below the state rate of 0.09 deaths per 10,000 population.

## **6 People Died in 6 Essex County Fires**

In 2017 there were six fatal fires in Essex County that killed six people.

- On January 29, 2017, at 4:40 a.m., the Lynn Fire Department was called to a fatal self-immolation fire in a 19-unit apartment building. The victim, a 41-year old man, set fire to the living room sectional and forced his estranged wife out of the apartment. No one else was injured at this fire. Alarms were present but it was undetermined if they operated. The victim was intimately involved with the ignition

of the fire. The building was not sprinklered. Damages from this fire were estimated to be \$500,000.

- On February 2, 2017, at 6:14 a.m., the Lawrence Fire Department was called to a fatal motor vehicle fire of undetermined cause. Firefighters found a pickup truck on fire behind an auto body shop with a person inside it. It is believed that the victim, a 56-year old man, had been living in the truck and died in the fire. No one else was injured at this fire. Damages from this fire were estimated to be \$1,000.
- On February 4, 2017, at 4:26 a.m., the Haverhill Fire Department was called to a fatal smoking fire in a two-unit home. The fire was started by the victim smoking while using home oxygen. The victim, a 68-year-old man, was possibly impaired by alcohol. Three (3) firefighters were injured at this fire. It was undetermined if alarms were present. It was also undetermined if the home had sprinklers. Damages from this fire were estimated to be \$2,000.
- On September 25, 2017, at 10:25 a.m., the Beverly Fire Department was called to a fatal cooking fire in a single-family home. The fire was started by a burner on the stove being left on with combustibles too close to the stove. There was much debris throughout the home leading to a hoarding situation. The victim was an 85-year old woman. She was overcome by the smoke. No one else was injured at this fire. Alarms were present but it was undetermined if they operated. The building was not sprinklered. Damages from this fire were estimated to be \$350,000.
- On February 28, 2017, at 1:06 p.m., the Methuen Fire Department was dispatched to an airplane crash into a seven-unit apartment building. The victim, a 73-year old man was working flying his single-engine 'experimental' plane when it crashed into the building starting the fire. The pilot was trapped and killed inside the plane. No one else was injured at this fire. Alarms were present and alerted the occupants of the building. The building's sprinklers did work to suppress the fire until firefighters arrived and totally extinguished it. Damages from this fire were estimated to be \$250,000.
- On September 4, 2017, at 1:24 a.m., the Lawrence Fire Department was called to a fatal fire in a three-unit apartment building of undetermined cause. The victim, a 37-year old man, was in the general area of origin of the fire and was overcome by the smoke as he tried to escape. He was transported to a local hospital and died months later from his injuries. Two (2) firefighters were also injured at this fire. It was undetermined if alarms were present. The building was not sprinklered. Damages from the blaze were estimated to be \$150,000. The fire spread to a neighboring building and caused another \$10,000 in damages.

### **Lawrence Had Largest Loss Fire in 2017**

In 2017, Essex County had one fire that was considered large loss, or greater than \$1 million in estimated damages. The largest loss fire was in Lawrence.

- On December 23, 2017, at 5:16 p.m., the Lawrence Fire Department was dispatched to an electrical fire in a preschool at the Rollins Early Childhood Center. There were three fire service injuries at this fire. Alarms were present but did not operate. The building did have sprinklers but it was not reported if they operated. Damages from this fire were estimated to be \$2 million.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 1,293 structure fires caused five civilian deaths, nine civilian injuries, 48 fire service injuries and an estimated dollar loss of \$18.8 million. These incidents represented 52% of Essex County's reported fires in 2017. The average estimated dollar loss per structure fire was \$14,565. The total number of reported structure fires decreased by 58, or 4%, from the 1,351 reported in 2016.

### **Arson Caused 1% of Structure Fires**

The 15 structure arsons caused one civilian fire death and an estimated dollar loss of \$60,610. Arson was indicated as the cause of 1% of the structure fires and 0.3% of Essex County's structure fire dollar loss. The 15 structure arsons accounted for 22% of the Essex County arson fires reported in 2017. The number of reported structure arsons decreased by four from the 19 reported in 2016.

### **1/3% of Structure Arsons Occurred in Residences**

Thirty-three percent (33%) of Essex County's 15 structure arsons occurred in residential occupancies. Twenty-seven percent (27%) took place in public assembly properties, and 20% occurred in special properties. Educational facilities, institutional facilities and storage facilities each accounted for 7% of structure arsons.

## **BUILDING FIRES**

There were 1,286 building fires of different types in Essex County in 2017. These 1,286 building fires accounted for 99.5% of all structure fires in Essex County.

### **84% of Essex Building Fires Occurred in People's Homes**

One thousand seventy-six (1,076), or 84%, of Essex County's 1,286 building fires occurred in residential occupancies. Fifty-seven (57) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 53 fires. Hospitals, prisons, and other institutional buildings experienced 30 fires. Seventeen (17) fires took place in storage properties. Fourteen (14) fires happened in industrial facilities. Thirteen (13) building fires took place in educational properties. Eleven (11) building fires in Essex County occurred in special properties such as outbuildings, bus stop shelters and toll booths. Ten (10) fires took place in manufacturing and processing facilities, and five fires occurred in unclassified properties in Essex County in 2017.

## RESIDENTIAL FIRES

### Residential Building Fires Down in 2017

There were 1,076 reported residential building fires in Essex County in 2017. These 1,076 fires are a decrease of 65, or 6%, from the 1,141 residential building fires reported in 2016.

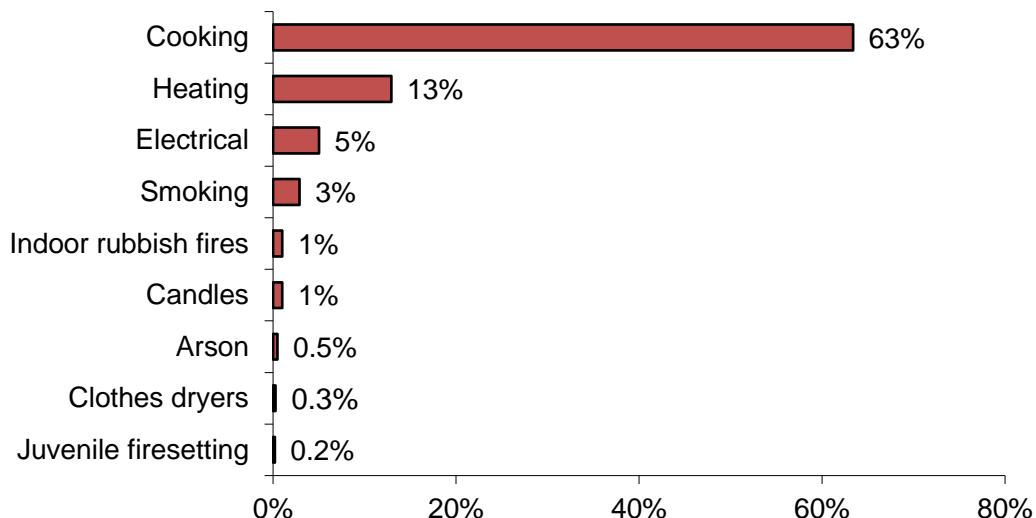
### Apartments Accounted for 476% of Residential Building Fires

The peak fixed property uses for residential building fires were apartments accounting for almost half, or 46%, of the building fires in Essex County; 45% occurred in 1- and 2-family homes; 3% occurred in dormitories; 2% happened in rooming houses; 1% happened in hotels or motels; and less than 1% took place in residential board and care facilities. Thirty-four (34), or 3% of the residential building fires in Essex County occurred in unclassified residential buildings.

### Cooking Leading Cause of Residential Fires

The leading cause of residential building fires in Essex County was unattended cooking and other unsafe cooking practices, accounting for 63% of these fires. Heating was the second leading cause, accounting for 13% of these fires. Electrical problems caused 5%. Smoking caused 3%. Indoor rubbish fires and candles each caused 1% of these fires. Arsons, clothes dryers and juvenile-set fires each caused less than 1% of the fires in people's homes in Essex County in 2017.

### 2017 Leading Causes of Fires in Essex County Homes





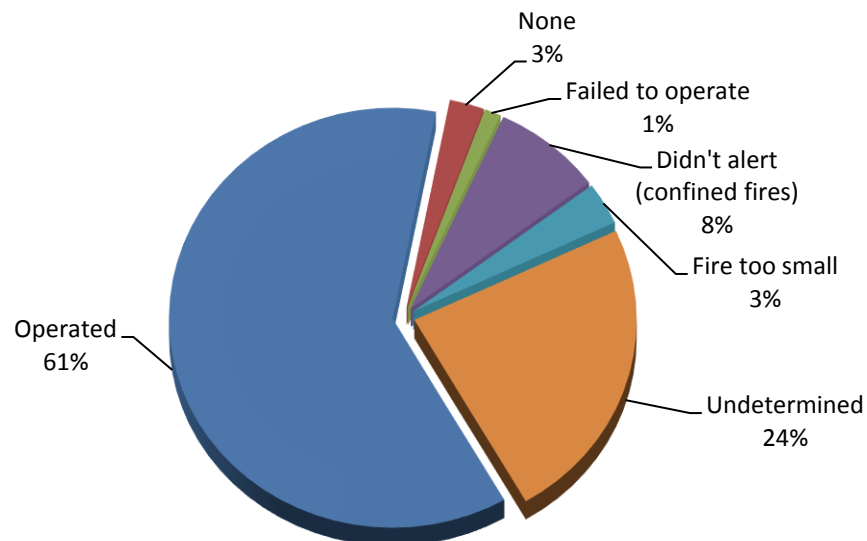
### 3/4 of Residential Building Fires Are Confined to Non-Combustible Containers<sup>1</sup>

Eight hundred and three (803), or 75%, of all residential building fires were reported as confined to non-combustible containers in 2017. Six hundred and fifty-one (651), or 61%, of all residential building fires reported in 2017 were cooking fires contained to a non-combustible container. Eighty-eight (88), or 11%, were fires confined to a fuel burner or boiler malfunction. Forty-seven (47) of the reported fires were confined to a chimney, accounting for 6% of residential building fires. Fourteen (14), or 2%, of these fires were rubbish fires contained to a non-combustible container. There were three reported confined commercial compactor fires, accounting for less than 1% of Essex County's residential fires in 2017.

### Detectors Operated in 61% of Fires

Smoke or heat detectors operated and alerted the occupants in 661, or 61%, of the residential building fires. In 8% of these fires<sup>2</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 1% of these incidents. In 3% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 3% of the residential fires. Smoke detector performance was undetermined in 254 incidents, or 24%, of Essex County's residential building fires.

### Detector Status in Essex County's Residential Structure Fires 2017



<sup>1</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>2</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

**2 Failed Detectors Had Missing or Dead Batteries**

Of the 13 fires where smoke detectors were present but failed to operate, two, or 15%, failed because the batteries were either missing or disconnected. Two (2) detectors, or 15%, failed from a lack of maintenance. It was undetermined or unclassified in nine cases, or 69%, why the detectors failed to operate.

**VACANT BUILDINGS****2% of Building Fires Occurred in Vacant Buildings**

Essex County reported 20 fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the total 1,286 building fires reported to MFIRS in 2017. Eight (8) fires occurred in vacant residential properties. Storage facilities accounted for four vacant building fire incidents. Mercantile and business properties, public assembly properties and special properties each had two of these fires. Educational facilities and an unclassified property each had one vacant building fire incident in Essex County in 2017.

One (1) of the vacant building fires in Essex County in 2017 were determined to be intentionally set. This fire was to a memorial structure.

**JUVENILE-SET FIRES****10 Juvenile-set Fires**

There were 10 reported juvenile-set fires in Essex County in 2017. The three structure fires, one brush fire, three special outside fires and three unclassified fires caused one fire service injury and \$875,011 in estimated damages.

**ARSONS****68 Total Arsons — 15 Structures, 6 Vehicles & 47 Other Arsons**

Sixty-eight (68), or 3%, of Essex County's 2,474 fires were considered intentionally set, or, for purposes of this analysis, arson. The 15 structure arsons, six motor vehicle arsons and 47 outside and other arsons caused one civilian death and an estimated dollar loss of \$70,575.

**All Arsons Down**

The total number of reported arson fires decreased by 35 from the 103 reported in 2016. Reported structure arsons decreased by four from the 19 reported in 2016. Motor vehicle arsons decreased by five from the 11 reported in 2016. Outside and other arsons decreased by 26 from 73 reported the year before.

## ALL INCIDENTS

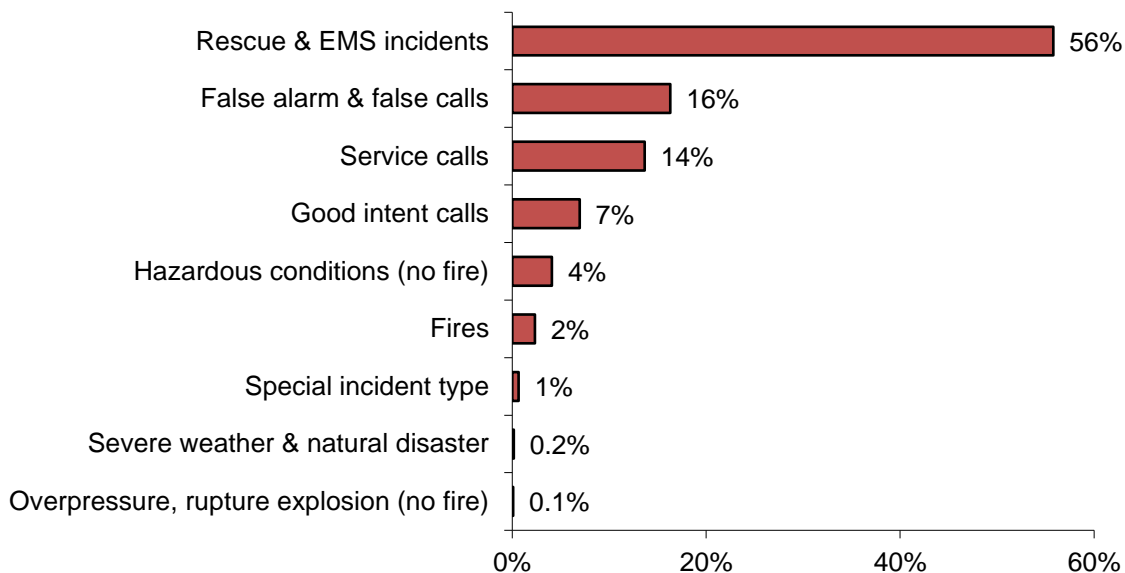
### Rescue & EMS Calls Are 56% of All Reported Responses

In 2017, fire departments in Essex County reported 111,666 responses<sup>3</sup> to MFIRS. Of these 111,666 incidents, 109,055 non-fire calls were voluntarily reported.

Of these 109,055 non-fire calls, 62,289, or 56%, of all the reported responses in 2017 were reported rescue and emergency medical services (EMS) calls; 18,184, or 16%, were reported false alarm or false calls; 15,232, or 14%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 7,767, or 7%, were reported good intent calls; 4,572, or 4%, were reported hazardous condition calls with no fire; 741, or 1%, were special incident type calls such as citizen complaints; 168, or 0.2%, were severe weather responses; and 102, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Two thousand six hundred and eleven (2,611), or 2%, of the total incidents submitted by Essex County fire departments were fires.

### 2017 Responses by Incident Type



### Essex County Fire Departments Reported Giving Mutual Aid 1,382 Times

In 2017, Essex County fire departments reported coming to the aid of other fire departments 1,382 times. Of these 1,382 responses, 566, or 41%, were for service calls such as cover assignments; 377, or 27%, were for rescue or EMS calls; 195, or 14%, were for good intent calls; 109, or 8%, were for fires; 108, or 8%, was for a false alarm or false

<sup>3</sup> These figures include responses in which Essex County fire departments gave mutual aid to other fire departments.

call; 23, or 2%, were for hazardous conditions calls with no fire; two, or 0.1%, were special incident types; and one, or 0.1%, was a severe weather or natural disaster call.

**Essex County Received Mutual Aid in 756 Incidents**

In 2017, Essex County fire departments reported receiving aid from surrounding departments in 756 incidents. Of these 756 incidents, 431, or 57%, were rescue and emergency medical services calls; 128, or 17%, were for fires; 100, or 13%, were false alarms or false calls; 40, or 5%, were good intent calls; 31, or 4%, were hazardous conditions calls with no fire; 23, or 3%, were service calls.; two, or 0.3%, were overpressure, rupture explosions with no fire; and one, or 0.1%, was a special incident type.

**Essex County****Population: 743,159****3.3 Fires/1,000 Population****Total Fires: 2,474 \$21,957,642**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	1,293	52%	\$18,832,346
Vehicle Fires	256	10%	2,408,050
Other Fires	925	37%	717,246

6 Fatal Fires 2.43 Civilian Deaths/1,000 Fires  
 6 Civilian Deaths 0.08 Civilian Deaths/10,000 Population  
 17 Civilian Injuries 57 Fire Service Injuries

**Building Fires: 1,286****Residential Structure Fires: 1,076****Residential Structure Fires Confined to Non-Combustible Containers: 803****Unconfined Residential Structure Fires: 273**

5 Civilian Deaths 7 Civilian Injuries 37 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	491	46%	Operated	661	61%
1- & 2-Family homes	483	45%	Didn't operate	13	1%
Dormitories	32	3%	None	27	3%
Rooming houses	20	2%	Fire too small	35	3%
Residential board & care	13	1%	Didn't alert (confined)	86	8%
Hotels/motels	3	0.3%	Undetermined	254	24%

<b>Area of Origin<sup>4</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>5</sup></b>
Kitchen	65%	Arcing	3%	13%
Heating equipment room	9%	Heat from operating equip.	3%	10%
Chimney or flue	4%	Hot or smoldering obj., other	2%	8%
Bedroom	2%	Cigarette	1%	6%
Exterior balcony/unencl. porch	2%	Hot ember or ash	1%	5%

<sup>4</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>5</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>6</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>7</sup></b>
Food, cooking materials	62%	Electrical failure, malfunc.	2%	8%
Flammable/comb. liquid	8%	Too close to combustibles	2%	7%
Film, residue (creosote)	4%	Misuse of materials or prod.	1%	5%
Rubbish, trash, waste	3%	Abandoned materials	1%	5%
Structural member, framing	2%	Mechanical failure, malf.	1%	3%
Electrical wire, cable insulation	2%	Unspecified short circuit arc	1%	2%
		Failure to clean	1%	2%

<b>Equipment<sup>8</sup></b>		<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>9</sup></b>
Kitchen & cooking equipment	63%	Unintentional	14%	56%
None	20%	Failure of eq. or heat source	3%	11%
Boiler, furnace, cent. heat. unit	8%	Intentional	0.5%	2%
Chimney, flue	4%	Undetermined	2%	8%
Electrical wiring, other	0.5%	Cause under investigation	5%	21%
Clothes dryer	0.5%	Act of Nature	0.3%	1%
Outlet, receptacle	0.5%			

**Detector Alerted Occupants  
(Confined Fires in Non-Combustible Containers)**

Alerted occupants	66%
Didn't alert occupants	11%
Undetermined	24%

<sup>6</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>7</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>8</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>9</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	147	101	21	25
February	170	117	23	30
March	209	131	19	59
April	292	133	19	140
May	242	103	31	108
June	216	89	17	110
July	210	77	23	110
August	226	102	22	102
September	174	83	20	71
October	216	112	22	82
November	206	129	19	58
December	166	116	20	30

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	408	221	26	161
Monday	332	167	30	135
Tuesday	332	189	45	98
Wednesday	355	196	39	123
Thursday	359	188	40	131
Friday	316	138	39	139
Saturday	372	197	37	138

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	128	70	24	34
04:01 - 08:00	166	93	30	43
08:01 - 12:00	443	231	62	150
12:01 - 16:00	669	312	53	304
16:01 - 20:00	709	388	55	266
20:01 - 00:00	359	199	32	128

### **Motor Vehicle Fires**

Total: 256

Automobiles: 210 (82%)

5, or (2%), of the automobile fires considered intentionally set.

## Arson Fires

**Total Arsons: 68**

**Dollar loss: \$70,575**

### 0.09 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	15	1%	22%	\$60,610
Vehicle Arsons	6	2%	9%	9,000
Other Arsons	47	5%	69%	965

0.02 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.06 Other arsons/1,000 population

1 Civilian Death

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	5	33%	04:01 - 08:00	3	50%
16:01 - 20:00	4	27%	00:01 - 04:00	1	17%
04:01 - 08:00	3	20%	12:00 - 16:00	1	17%
20:01 - 00:00	3	20%	20:00 - 00:00	1	17%

Other Arsons	#	%
16:01 - 20:00	17	36%
12:01 - 16:00	10	21%
20:01 - 00:00	10	21%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	3	20%
Apartment buildings	2	13%



**Amesbury** **Population: 16,283**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	41	24	2	15	1	0	0	1
2014	74	43	8	23	1	0	0	1
2015	15	12	1	2	0	0	0	0
2016	45	19	3	23	0	0	0	0
2017	38	15	4	19	0	0	0	0

**Andover** **Population: 33,201**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	65	35	13	17	1	0	0	1
2014	51	17	12	22	1	0	0	1
2015	74	25	18	31	2	0	0	2
2016	80	29	7	44	1	0	0	1
2017	98	51	16	31	1	0	0	1

**Beverly** **Population: 39,502**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	105	35	8	62	3	1	0	2
2014	93	35	3	55	6	2	0	4
2015	127	57	8	62	2	0	0	2
2016	142	43	12	87	9	0	0	9
2017	81	41	6	34	2	1	0	1

**Boxford** **Population: 7,965**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	10	6	18	0	0	0	0
2014	21	9	8	4	0	0	0	0
2015	30	7	2	21	3	0	0	3
2016	19	4	3	12	1	0	0	1
2017	29	10	7	12	0	0	0	0

**Danvers****Population: 26,493**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	103	15	8	80	5	0	0	5
2014	69	18	11	40	5	1	1	3
2015	122	33	11	78	1	1	0	0
2016	142	20	12	110	2	0	0	2
2017	82	17	11	54	2	0	0	2

**Essex****Population: 3,504**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	1	3	6	0	0	0	0
2014	15	9	1	5	0	0	0	0
2015	17	7	2	8	1	0	0	1
2016	17	8	2	7	2	0	0	2
2017	17	8	1	8	1	0	1	0

**Georgetown****Population: 8,183**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	43	35	1	7	0	0	0	0
2014	48	42	3	3	0	0	0	0
2015	53	42	3	8	1	1	0	0
2016	63	49	0	14	2	0	0	2
2017	29	17	5	7	1	0	0	1

**Gloucester****Population: 28,789**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	123	62	6	55	6	1	0	5
2014	113	64	4	45	5	1	0	4
2015	117	58	11	48	2	1	0	1
2016	115	65	4	46	1	1	0	0
2017	87	42	10	35	1	0	1	0

**Groveland****Population: 6,459**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	0	1	1	0	0	0	0
2014	15	6	0	9	2	0	0	2
2015	22	8	1	13	2	0	0	2
2016	25	5	1	19	3	0	0	3
2017	14	3	0	11	3	0	0	3

**Hamilton****Population: 7,764**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	24	15	0	9	3	0	0	3
2014	27	21	0	6	3	1	0	2
2015	19	9	1	9	0	0	0	0
2016	16	9	0	7	0	0	0	0
2017	12	6	0	6	3	1	0	2

**Haverhill****Population: 60,879**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	265	93	25	147	19	3	0	16
2014	245	140	28	77	2	1	0	1
2015	249	97	16	136	8	2	0	6
2016	270	112	25	133	4	2	1	1
2017	169	94	23	52	4	3	0	1

**Ipswich****Population: 13,175**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	15	3	16	3	1	1	1
2014	23	8	5	10	0	0	0	0
2015	29	9	8	12	3	0	2	1
2016	35	12	2	21	1	0	0	1
2017	21	8	2	11	1	1	0	0

**Lawrence****Population: 76,377**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	273	98	44	131	21	8	5	8
2014	300	171	30	99	10	3	4	3
2015	294	131	41	122	33	10	11	12
2016	253	72	31	150	27	7	7	13
2017	215	74	43	98	16	2	6	8

**Lynn****Population: 90,329**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	483	366	25	92	0	0	0	0
2014	487	374	28	85	1	1	0	0
2015	524	379	30	115	0	0	0	0
2016	459	323	23	113	13	5	2	6
2017	442	309	29	104	8	1	1	6

**Lynnfield****Population: 11,596**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	95	78	3	14	3	0	0	3
2014	76	55	4	17	3	0	0	3
2015	62	33	4	25	0	0	0	0
2016	112	61	7	44	6	1	0	5
2017	100	72	4	24	6	0	0	6

**Manchester-By-The-Sea****Population: 5,136**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	14	11	2	1	1	0	0	1
2014	18	10	2	6	1	0	0	1
2015	20	12	0	8	0	0	0	0
2016	21	11	3	7	0	0	0	0
2017	16	5	2	9	1	0	0	1

**Marblehead****Population: 19,808**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	45	18	3	24	1	0	0	1
2014	34	18	2	14	2	0	0	2
2015	22	10	1	11	2	0	0	2
2016	31	14	2	15	0	0	0	0
2017	39	20	0	19	0	0	0	0

**Merrimac****Population: 6,338**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	48	17	6	25	9	0	0	9
2014	39	20	4	15	6	0	0	6
2015	39	16	6	17	8	0	0	8
2016	38	15	4	19	5	0	0	5
2017	54	34	4	16	4	0	0	4

**Methuen****Population: 47,255**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	123	47	23	53	11	3	2	6
2014	114	38	15	61	6	0	0	6
2015	135	41	21	73	8	2	2	4
2016	163	44	19	100	8	0	1	7
2017	112	38	17	57	6	1	0	5

**Middleton****Population: 8,987**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	92	82	1	9	1	0	0	1
2014	119	97	5	17	1	0	0	1
2015	54	22	6	26	1	0	0	1
2016	36	7	2	27	0	0	0	0
2017	29	14	3	12	0	0	0	0

**Nahant****Population: 3,410**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	12	7	1	4	2	0	0	2
2014	15	2	0	13	1	0	0	1
2015	14	8	2	4	0	0	0	0
2016	16	9	1	6	1	0	0	1
2017	10	7	0	3	1	1	0	0

**Newbury****Population: 6,666**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	63	39	8	16	1	0	0	1
2014	25	10	1	14	6	0	0	6
2015	18	6	3	9	3	0	0	3
2016	9	1	1	7	1	0	0	1
2017	57	43	4	10	0	0	0	0

**Newburyport****Population: 17,416**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	12	7	0	5	0	0	0	0
2014	14	7	4	3	0	0	0	0
2015	26	16	8	2	0	0	0	0
2016	13	10	0	3	0	0	0	0
2017	13	9	2	2	0	0	0	0

**North Andover****Population: 28,352**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	98	67	11	20	1	0	0	1
2014	97	65	12	20	4	0	0	4
2015	125	81	11	33	3	1	0	2
2016	127	67	5	55	7	3	0	4
2017	82	53	9	20	3	0	0	3

<b>Peabody</b>					<b>Population: 51,251</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	153	65	18	70	1	0	0	1
2014	179	67	12	20	4	0	0	4
2015	150	60	17	73	0	0	0	0
2016	49	35	2	12	0	0	0	0
2017	153	73	16	64	2	2	0	0

<b>Rockport</b>					<b>Population: 6,952</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	4	2	0	2	0	0	0	0
2014	18	10	1	7	0	0	0	0
2015	Non-Reporting Community							
2016 <sup>10</sup>	23	17	3	3	0	0	0	0
2017	20	11	1	8	1	1	0	0

<b>Rowley</b>					<b>Population: 5,856</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	30	22	1	7	0	0	0	0
2014	23	16	2	5	0	0	0	0
2015	41	27	5	9	0	0	0	0
2016	56	33	3	20	0	0	0	0
2017	37	31	4	2	0	0	0	0

<b>Salem</b>					<b>Population: 41,340</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	185	67	12	106	5	2	2	1
2014	161	70	11	80	0	0	0	0
2015	198	60	12	123	1	0	0	1
2016	174	59	10	105	3	0	0	3
2017	165	61	15	89	1	1	0	0

<sup>10</sup> Rockport submitted their 2016 incidents after the annual database was closed for analysis. These 23 fires were not included in the analysis.

**Salisbury** **Population: 8,283**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	50	11	6	33	6	0	0	6
2014	32	4	5	23	2	0	0	2
2015	42	8	6	28	0	0	0	0
2016	55	14	3	38	2	0	0	2
2017	39	9	5	25	1	0	0	1

**Saugus** **Population: 26,628**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	154	51	18	85	3	2	0	1
2014	145	61	10	74	2	1	1	0
2015	116	47	10	59	1	1	0	0
2016	164	58	18	88	0	0	0	0
2017	118	45	12	61	0	0	0	0

**Swampscott** **Population: 13,787**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	45	23	5	17	0	0	0	0
2014	32	20	2	10	0	0	0	0
2015	28	15	1	12	1	0	0	1
2016	38	16	0	22	1	0	0	1
2017	27	10	1	16	1	0	0	1

**Topsfield** **Population: 6,085**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	94	77	1	16	4	0	0	4
2014	106	90	1	15	3	0	0	3
2015	93	68	5	20	0	0	0	0
2016	104	80	5	19	0	0	0	0
2017	70	64	0	6	0	0	0	0



**Wenham** **Population: 4,875**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	14	8	2	4	0	0	0	0
2014	13	9	0	4	1	0	0	1
2015	11	4	2	5	0	0	0	0
2016	6	2	0	4	0	0	0	0
2017	7	3	0	4	1	0	0	1

**West Newbury** **Population: 4,235**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	16	9	2	5	0	0	0	0
2014	13	9	1	3	3	0	1	2
2015	11	6	1	4	0	0	0	0
2016	17	10	2	5	0	0	0	0
2017	10	8	1	1	0	0	0	0

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
09007	Amesbury	4,216	49	4	2,366	177	755	430	435	0	0
09009	Andover	3,130	98	9	1,110	218	369	93	864	6	363
09030	Beverly	5,135	81	8	2,861	254	320	362	1,230	7	12
09038	Boxford	929	30	0	482	56	65	68	214	0	14
09071	Danvers	7,668	82	4	3,060	160	2,935	292	1,052	1	82
09092	Essex	372	24	0	95	41	104	21	84	3	0
09105	Georgetown	1,998	29	2	678	55	960	103	168	3	0
09107	Gloucester	5,319	87	4	3,426	141	565	463	605	0	28
09116	Groveland	744	31	0	420	60	78	51	98	4	2
09119	Hamilton	467	12	0	67	61	93	18	207	7	2
09128	Haverhill	6,991	174	5	3,838	305	826	626	1,204	5	8
09144	Ipswich	2,120	21	4	957	80	230	486	337	2	3
09149	Lawrence	6,679	220	12	3,651	291	426	287	1,775	8	9
09163	Lynn	13,732	456	11	8,459	319	1,274	1,121	2,081	6	5
09164	Lynnfield	1,815	104	6	1,089	86	201	72	254	3	0

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
09166	Manchester	1,375	17	0	560	75	460	63	198	0	2
09168	Marblehead	2,548	39	0	1,287	127	410	279	403	0	3
09180	Merrimac	1,081	58	1	663	38	92	92	122	14	1
09181	Methuen	7,922	114	1	5,851	265	533	244	886	5	23
09184	Middleton	2,044	37	2	990	90	294	158	471	2	0
09196	Nahant	626	12	1	351	43	122	35	57	2	3
09205	Newbury	1,292	58	0	714	72	108	124	201	11	4
09206	Newburyport	13	13	0	0	0	0	0	0	0	0
09210	North Andover	4,413	82	4	2,894	167	405	165	673	4	19
09229	Peabody	8,090	153	7	5,167	328	367	707	1,345	6	10
09252	Rockport	215	20	0	12	30	23	10	120	0	0
09254	Rowley	719	46	1	362	18	47	127	111	6	1
09258	Salem	7,371	165	6	4,157	425	652	377	1,543	40	6
09259	Salisbury	2,148	44	0	1,413	112	206	168	198	6	1
09262	Saugus	4,708	121	0	2,847	178	408	496	583	4	71

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## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
09291	Swampscott	2,172	34	10	1,186	132	315	106	318	2	69
09298	Topsfield	2,387	70	0	655	74	1,370	60	158	0	0
09320	Wenham	739	7	0	378	70	138	27	118	1	0
09324	West Newbury	488	23	0	243	24	81	36	71	10	0
	<b>Essex County</b>	<b>11,666</b>	<b>2,611</b>	<b>102</b>	<b>62,289</b>	<b>4,572</b>	<b>15,232</b>	<b>7,767</b>	<b>18,184</b>	<b>168</b>	<b>741</b>

\* Certified no reportable fires.

\*\*Non reporting department.

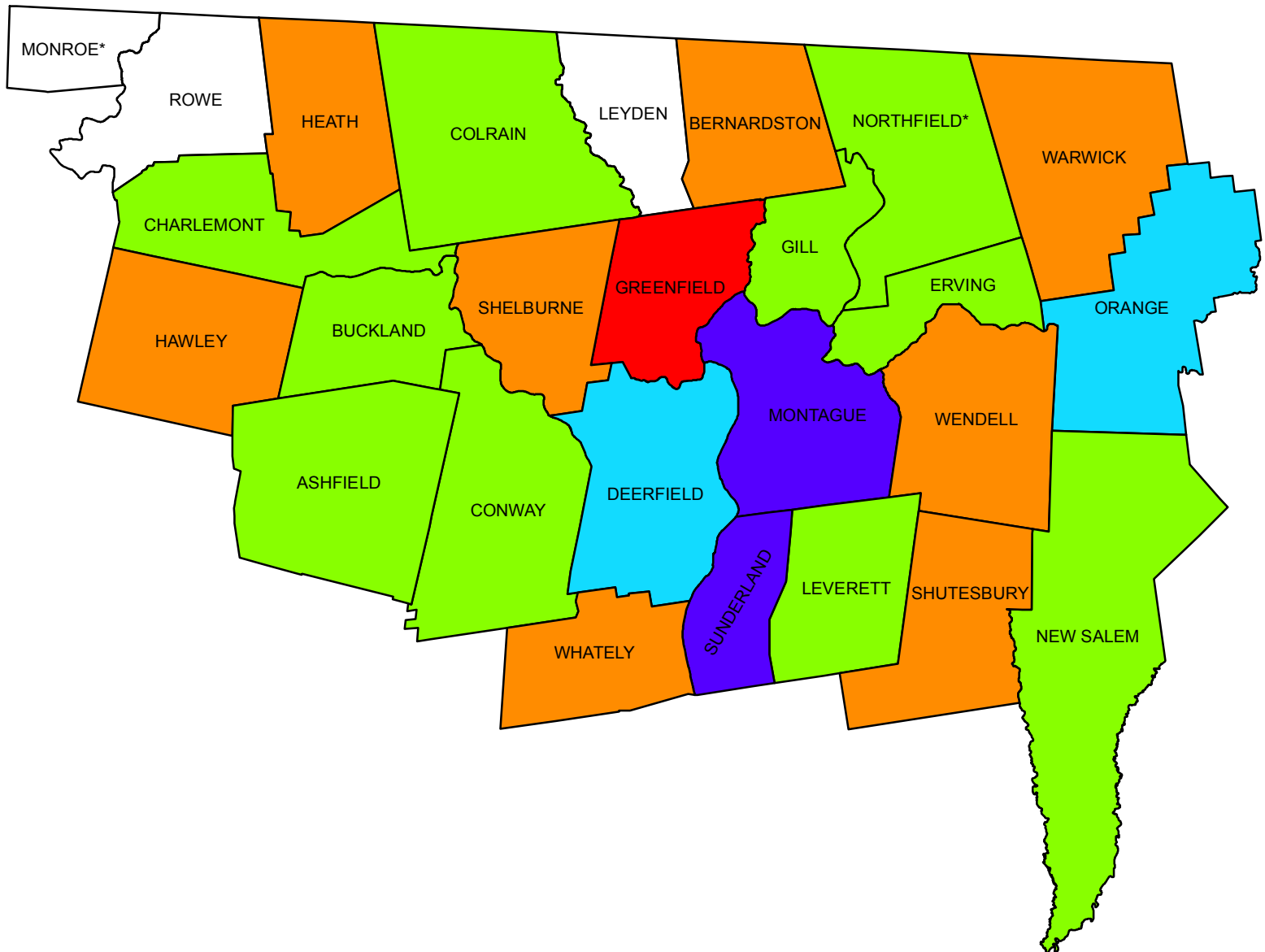
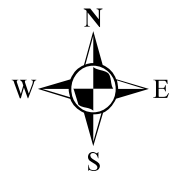
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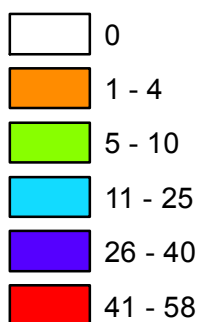
# Franklin County

## 2017 Fire Data Analysis

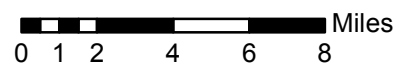
# Franklin County Fires 2017



## 2017 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2017

# Franklin County Fires in 2017

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## **253 Total Fires — 118 Structures, 22 Motor Vehicles & 113 Outside or Other Fires**

Franklin County ranked twelfth out of the fourteen Massachusetts counties in total fires. Franklin County fire departments reported 253 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 118 structure fires, 22 motor vehicle fires, 59 brush, tree or lawn fires, 25 outside rubbish fires, 13 special outside fires, and 16 unclassified fires caused five civilian deaths, five civilian injuries, two fire service injuries and an estimated dollar loss of \$1.6 million. Franklin County's fires accounted for 1% of the 27,895 Massachusetts fires reported in 2014.

Twenty-eight (28) of the 29, or 96.6%, fire departments in Franklin County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2016.

## **All Fires Down**

The total number of reported fire incidents decreased by 89, or 26%, from the 342 reported in 2016. Reported structure fires decreased by 40 from the 158 reported during the previous year. Motor vehicle fires decreased by four from the 26 reported in 2016. Outside and other fires decreased by 45 from the 158 reported the year before.<sup>1</sup>

## **FRANKLIN COUNTY FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	328	160	34	134	20	1	0	19
2014	262	114	24	124	18	3	0	15
2015	314	159	35	120	15	3	1	11
2016	342	158	26	158	16	3	0	13
2017	253	118	22	113	18	4	0	14

## **Fire and Fire Death Rates**

Franklin County had 3.5 fires per 1,000 population. That figure ranks Franklin County tied for fifth in the state and below the state rate of 4.3 fires per 1,000 population. Franklin County had 0.7 fire deaths per 10,000 population ranking it first among Massachusetts counties and above the state rate of 0.09 fire deaths per 10,000 population.

## **5 Civilian Fire Deaths in Franklin County**

Franklin County had five of its residents die in a single fires in 2017.

- On March 4, 2017, at 12:45 a.m., the Warwick Fire Department responded to a fatal heating fire at a single-family home. The fire started when combustibles were left too close to the woodstove. The five victims, a 42-year old woman, her seven-year old son, nine-year old daughter, 12-year old son and 15-year old son were all sleeping at the time of the fire. Her 43-year old husband and 10-year old daughter were able to

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<sup>1</sup> 2017 was a down year for brush fires statewide.

escape with moderate injuries. No one else was injured at this fire. Alarms were present but failed due to a power failure. The home did not have any sprinklers. Damages from this fire were estimated to be \$155,000.

### **Conway Has Franklin County's Largest Loss Fire**

Franklin County did not report any fires with an estimated loss greater than \$1 million. Conway had the county's largest loss fire, representing 21% of the county's total fire loss.

- On March 24, 2017, at 3:32 a.m., the Conway Fire Department was called to a fire in a single-family home. A hot ember ignited an unupholstered chair near a first floor exit. No one was injured at this fire. Alarms were not present. There were no sprinklers. Damages from this fire were estimated to be \$343,750.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down Slightly**

The 118 structure fires caused five civilian deaths, four civilian injuries, two fire service injuries, and an estimated dollar loss of \$1.3 million. These incidents represented 47% of Franklin County's reported fires in 2017. The average estimated dollar loss per structure fire was \$11,201. The total number of reported structure fires decreased by 40, or 25%, from the 158 reported in 2016.

### **Arson Caused 3% of Structure Fires**

There were four reported structure arsons in 2017. Arson was indicated as the cause of 4% of the structure fires and none of Franklin County's structure fire dollar loss. The four structure arsons accounted for 22% of the Franklin County arson fires reported in 2017. The total number of reported structure arsons increased by one from the three reported in 2016.

### **3 of 4 Structure Arsons Occurred in Residences**

Three (3) of Franklin County's structure arsons in 2017 occurred in residential properties. The other arson occurred in a mercantile or business property.

## **BUILDING FIRES**

There were 118 building fires of different types in Franklin County in 2017. These 118 building fires accounted for all of the structure fires in Franklin County.

### **86% of Franklin Building Fires Occurred in People's Homes**

One hundred and one (101), or 86%, of Franklin County's 118 building fires occurred in residential occupancies. Mercantile or business properties and special properties each had four fires. Storage facilities and industrial facilities each had three fires. Institutional facilities had two fires and educational facilities had one fire in Franklin County in 2017.



## RESIDENTIAL FIRES

### Residential Building Fires Down

There were 101 reported residential building fires in Franklin County in 2017. These 101 fires are a decrease of 27, or 21%, from the 128 residential building fires reported in 2016.

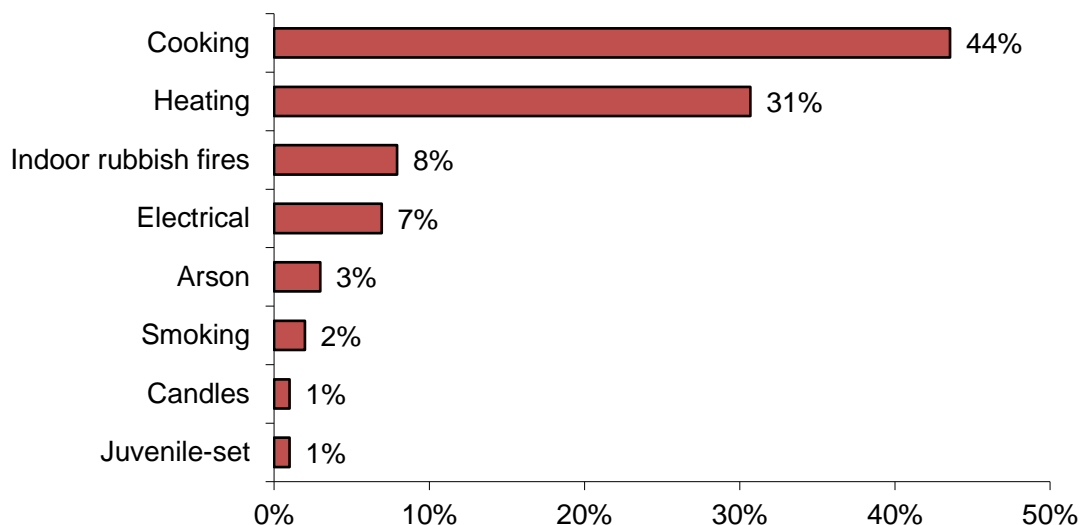
### 1- & 2-Family Homes Accounted for Over 1/2 of Residential Building Fires

The peak fixed property uses for residential building fires were one- & two-family homes, accounting for 56% of the building fires in Franklin County; 41% occurred in apartments; 1% in residential board and care facilities; 1% happened in dormitories; and 1% happened in unclassified residential properties.

### Cooking Was Leading Cause of Residential Fires

Cooking was the leading cause of residential fires in Franklin County in 2017. Forty-four percent (44%) of the residential fires were caused by unattended cooking and other unsafe cooking practices. In the past Franklin County was the only county where cooking was not the leading cause of residential fires. Heating equipment accounted for 31% of the fires in people's homes. Indoor rubbish fires causes 8% and electrical accounted for 7% of the residential building fires. Arsons caused 3% while smoking caused 2% of these fires. Candles and juvenile-set fires each caused 1% of the fires in people's homes in Franklin County in 2017.

### 2017 Leading Causes of Fires in Franklin County Homes



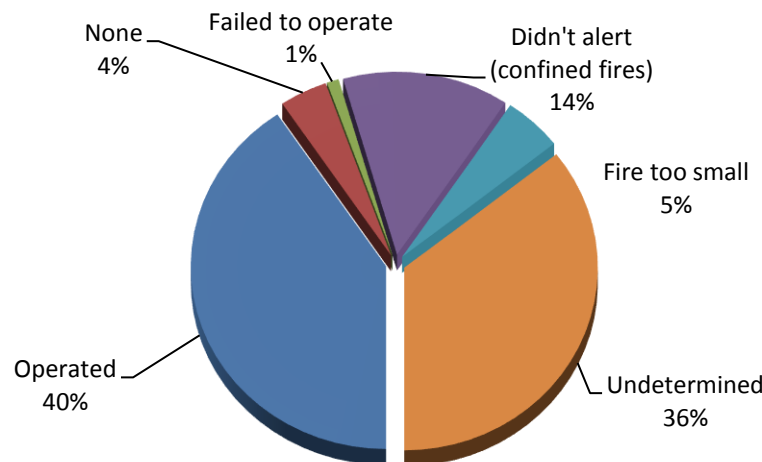
### 73% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

Seventy-four (74), or 73%, of these fires were confined to a non-combustible container. Thirty-nine (39) of the reported fires were cooking fires contained to a non-combustible container, accounting for 39% of residential building fires. Seventeen (17), or 17%, of all residential building fires reported in 2017 were fires confined to a chimney or flue. Ten (10), or 10%, were fires confined to a fuel burner or boiler malfunction. Eight (8), or 8%, of these fires were indoor rubbish fires contained to a non-combustible container in Franklin County in 2017.

### Detector Operation Undetermined in Over 1/3 of Fires

Smoke or heat detectors operated and alerted the occupants in 41, or 41%, of the residential building fires. In 14% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 1% of these fires. In 4% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 5% of the residential fires. Smoke detector performance was undetermined in 36 incidents, or 36%, of Franklin County's residential building fires.

## Detector Status in Franklin County's Residential Structure Fires 2017



<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

## **VACANT BUILDINGS**

### **2% of Building Fires Occurred in Vacant Buildings**

Franklin County reported two fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the total 118 building fires reported to MFIRS in 2017. One (1) fire occurred at vacant residences, and one at an industrial facility.

None of the vacant building fires in Franklin County in 2017 were determined to be intentionally set.

## **JUVENILE-SET FIRES**

### **4 Juvenile-set Fires**

There were four reported juvenile-set fires in Franklin County in 2017. Three (3) were brush fires and one was a structure fire.

## **ARSONS**

### **18 Total Arsons — 4 Structure & 14 Other Arsons**

Eighteen (18), or 7%, of Franklin County's 253 fires were intentionally set, or, for purposes of this analysis, arson. There were four structure arsons and 14 outside and other arsons.

### **All Arson Up Slightly**

The number of arsons increased by two, or 13%, from the 16 reported in 2016. Structure arsons increased by one from three in 2016. Motor vehicle arsons remained the same with none reported in both 2016 and 2017. Outside and other arsons increased by one from the 13 reported in 2016.

## **ALL INCIDENTS**

### **Rescue & EMS Calls Are 54% of All Reported Responses**

In 2017, Franklin County fire departments reported 8,458 responses<sup>4</sup> to MFIRS. Of these 8,458 incidents, 8,048 non-fire calls were voluntarily reported.

Of these 8,048 non-fire calls, 4,548, or 54%, of all of the responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 918, or 11%, were reported false alarm or false calls; 900, or 11%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 683, or 8%, were reported hazardous condition calls with no fire; 675, or 8%, were reported good intent calls; 251, or 3%, were special incident type calls such as citizen complaints; 48, or

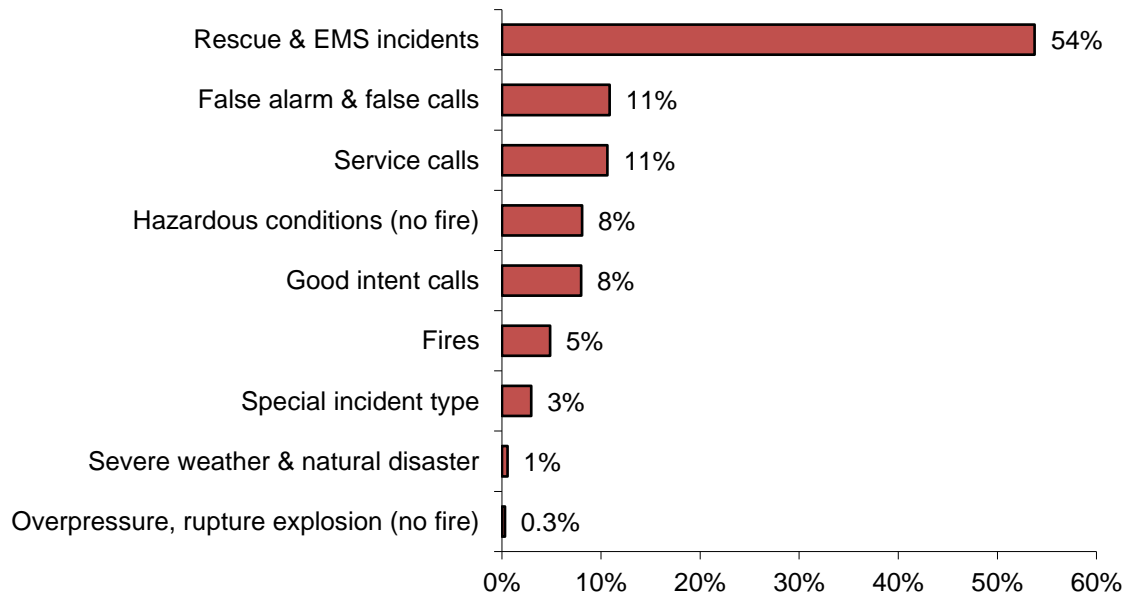
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<sup>4</sup> These figures include responses in which Franklin County fire departments gave mutual aid to other fire departments.

1%, were severe weather responses; and 25, or 0.3%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Four hundred and ten (410), or 5%, of the total incidents submitted by Franklin County fire departments were fires.

### 2017 Responses by Incident Type



### Franklin County Fire Departments Gave Mutual Aid 629 Times

In 2017, Franklin County fire departments reported coming to the aid of other fire departments 629 times. Of these 629 responses, 329, or 52%, were for rescue or EMS calls; 152, or 24%, were for fires; 59, or 9%, were for service calls such as cover assignments; 49, or 8%, were for good intent calls; 24, or 4%, were for hazardous conditions calls with no fire; eight, or 1%, were for severe weather or natural disaster calls; six, or 1%, were for false alarms or false calls; and two, or 0.3%, were overpressure, rupture explosions with no fire calls.

### Franklin County Received Mutual Aid in 521 Incidents

In 2017, Franklin County fire departments reported receiving aid from surrounding departments in 521 incidents. Of these 521 incidents, 441, or 85%, were rescue and emergency medical services calls; 44, or 8%, were for fires; 11, or 2%, were service calls; nine, or 2%, were hazardous conditions calls with no fire; six, or 1%, were false alarm or false calls; five, or 1%, were good intent calls; two, or 0.4%, were for severe weather or natural disaster calls; two, or 0.4%, were overpressure, rupture explosions with no fire calls; and one, or 0.2%, were special incident type calls.

**Franklin County****Population: 71,372****3.5 Fires/1,000 Population****Total Fires: 253 \$1,641,127**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	118	47%	\$1,321,667
Vehicle Fires	22	9%	98,900
Other Fires	113	45%	220,560

1 Fatal Fires 19.76 Civilian Deaths/1,000 Fires  
 5 Civilian Deaths 0.70 Civilian Deaths/10,000 Population  
 5 Civilian Injuries 2 Fire Service Injuries

**Building Fires: 118****Residential Structure Fires: 101****Residential Structure Fires Confined to Non-Combustible Containers: 74****Unconfined Residential Structure Fires: 27**

5 Civilian Deaths 4 Civilian Injuries 2 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	57	56%	Operated	41	41%
Apartments	41	41%	Didn't operate	1	1%
Residential board & care	1	1%	None	4	4%
Dormitories	1	1%	Fire too small	5	5%
Residential, other	1	1%	Didn't Alert (confined)	14	14%
			Undetermined	36	36%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	45%	Radiated heat from oper. eq.	6%	22%
Chimney or flue	17%	Hot ember or ash	5%	19%
Heating room or area	12%	Arcing	4%	15%
Living room	4%	Spark, ember, flame fr.op eq.	2%	7%
Bedroom	3%			
Wall assembly, concealed space	3%			

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Cooking materials	43%	Equipment unattended	14%	52%
Film, residue (creosote)	17%	Failure to clean	22%	6%
Flamm. or combustible liquid	10%	Abandoned, discarded mat.	19%	5%
Structural member, framing	3%	Too close to combustibles	11%	3%
		Unspecif. short circuit arc	11%	3%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	44%	Unintentional	18%	67%
Chimney or flue	18%	Failure of eq. or heat source	6%	22%
None	13%	Intentional	1%	4%
Boiler, furnace, cent. heat. unit	10%	Act of nature	0%	0%
		Cause under investigation	0%	0%
		Undetermined	2%	7%

#### **Detector Alerted Occupants (Confined Fires in Non-Combustible Containers)**

Alerted occupants	38%
Didn't alert occupants	19%
Undetermined	43%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	18	13	2	3
February	24	16	2	6
March	38	19	1	18
April	37	7	0	30
May	17	10	1	6
June	18	7	4	7
July	18	4	3	11
August	17	8	2	7
September	20	10	3	7
October	14	5	1	8
November	20	11	2	7
December	12	8	1	3

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	42	18	1	23
Monday	35	15	7	13
Tuesday	35	19	2	14
Wednesday	34	17	4	13
Thursday	33	15	4	14
Friday	35	21	2	12
Saturday	39	13	2	24

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	12	8	0	4
04:01 - 08:00	20	13	1	6
08:01 - 12:00	41	22	5	14
12:01 - 16:00	67	16	7	44
16:01 - 20:00	70	38	4	28
20:01 - 00:00	43	21	5	17

### **Motor Vehicle Fires**

Total: 22

Automobiles: 16 (73%)

0, or 0%, of the automobile fires were considered intentionally set.

## Arson Fires

**Total Arsons: 18**

**Dollar loss: \$0**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	4	3%	22%	\$0
Vehicle Arsons	0	0%	0%	0
Other Arsons	14	12%	78%	0

0.06 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.20 Other arsons/1,000 population

No Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
20:01 - 00:00	3	75%			
04:01 - 08:00	1	25%			

Other Arsons	#	%
12:01 - 16:00	5	36%
16:01 - 20:00	3	21%
20:01 - 00:00	3	21%

Peak Fixed Property Uses for Structure Arsons	#	%
Multifamily dwellings	2	50%
1 or 2-Family home	1	25%
Mercantile, business, other	1	25%



**Ashfield****Population: 1,737**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	3	2	5	1	0	0	1
2014	17	8	1	8	0	0	0	0
2015	23	10	8	5	0	0	0	0
2016	15	3	1	11	0	0	0	0
2017	7	2	0	5	0	0	0	0

**Bernardston****Population: 2,129**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	21	9	3	9	3	0	0	3
2014	4	1	0	3	0	0	0	0
2015	5	2	0	3	0	0	0	0
2016	7	2	0	5	0	0	0	0
2017	4	0	1	3	0	0	0	0

**Buckland****Population: 1,902*****Buckland Fire District******Est. Pop. Protected: 951***

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	4	0	3	0	0	0	0
2014	6	3	0	3	2	0	0	2
2015	11	2	0	9	1	0	0	1
2016	5	0	1	4	0	0	0	0
2017	5	1	0	4	0	0	0	0

**Charlemont****Population: 1,266**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	8	6	0	2	0	0	0	0
2014	3	0	1	2	0	0	0	0
2015	16	7	1	8	0	0	0	0
2016	7	1	1	5	0	0	0	0
2017	5	2	1	2	0	0	0	0

<b>Colrain</b>					<b>Population: 1,671</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	2	0	4	0	0	0	0
2014	12	7	0	5	0	0	0	0
2015	10	4	0	6	2	0	0	2
2016	13	5	0	8	0	0	0	0
2017	8	4	1	3	0	0	0	0

<b>Conway</b>					<b>Population: 1,897</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	8	2	0	0	0	0	0
2014	5	4	0	1	0	0	0	0
2015	6	6	0	0	0	0	0	0
2016	7	5	0	2	0	0	0	0
2017	9	7	0	2	0	0	0	0

<b>DEERFIELD FIRE DISTRICTS</b>					<b>Population: 5,125</b>			
<b>Deerfield</b>					<b>Est. Pop. Protected: 2,819</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	2	1	2	0	0	0	0
2014	Non-Reporting Community							
2015	Non-Reporting Community							
2016	2	0	0	2	1	0	0	1
2017	4	1	0	3	0	0	0	0

<b>South Deerfield</b>					<b>Est. Pop. Protected: 2,306</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	20	2	4	14	5	0	0	5
2014	18	4	3	11	1	0	0	1
2015	10	4	0	6	2	0	0	2
2016	6	1	2	3	0	0	0	0
2017	13	4	2	7	3	0	0	3

**Erving** **Population: 1,800**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	4	0	0	4	0	0	0	0
2015	6	2	0	4	0	0	0	0
2016	15	7	1	7	1	1	0	0
2017	6	2	2	2	0	0	0	0

**Gill** **Population: 1,500**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	3	0	4	1	0	0	1
2014	12	1	4	7	1	0	0	1
2015	9	2	0	7	1	0	0	1
2016	7	1	0	6	1	0	0	1
2017	7	3	0	4	2	0	0	2

**Greenfield** **Population: 18,745**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	70	41	5	24	4	0	0	4
2014	57	30	3	24	5	1	0	4
2015	44	23	5	16	2	1	0	1
2016	68	40	5	23	2	0	0	2
2017	58	30	6	22	7	2	0	5

**Hawley** **Population: 337**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	1	1	0	0	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	1	1	0	0	0	0	0	0
2016	2	0	0	2	0	0	0	0
2017	3	2	0	1	0	0	0	0



**MONTAGUE FIRE DISTRICTS****Population: 8,437****Montague Center****Est. Pop. Protected: 2,109**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	15	7	3	5	0	0	0	0
2014	17	4	0	13	2	0	0	2
2015	9	8	0	1	2	1	0	1
2016	10	5	0	5	2	1	0	1
2017	14	6	1	7	0	0	0	0

**Turners Falls****Est. Pop. Protected: 6,328**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	40	19	4	17	2	0	0	2
2014	19	9	1	9	4	1	0	3
2015	38	22	3	13	1	0	0	1
2016	32	19	2	11	1	0	0	1
2017	23	15	2	6	1	0	0	1

**New Salem****Population: 990**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	4	1	0	3	1	0	0	1
2014	8	3	1	4	1	0	0	1
2015	1	0	0	1	0	0	0	0
2016	4	2	1	1	0	0	0	0
2017	6	1	0	5	0	0	0	0

**Northfield****Population: 3,032**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	21	8	1	12	1	0	0	1
2014	8	4	1	3	0	0	0	0
2015	15	6	2	7	2	0	1	1
2016	13	6	1	6	0	0	0	0
2017	8	2	1	5	0	0	0	0

**Orange****Population: 7,839**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Non-Reporting Community							
2014	37	15	3	19	1	0	0	1
2015	50	19	9	22	0	0	0	0
2016	48	19	3	26	2	0	0	2
2017	22	4	1	17	1	0	0	1

**Rowe****Population: 393**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	3	0	2	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	1	0	1	0	0	0	0	0
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	Fire Department in Good Standing, Certified No Reportable Fires							

**SHELBURNE FIRE DISTRICTS****Population: 1,893*****Shelburne Center******Est. Pop. Protected: 965***

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	14	7	3	4	1	1	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Non-Reporting Community							
2016	3	1	1	1	0	0	0	0
2017	Fire Department in Good Standing, Certified No Reportable Fires							

***Shelburne Falls******Est. Pop. Protected: 1,879***

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	3	1	2	0	0	0	0
2014	5	1	1	3	0	0	0	0
2015	4	2	1	1	0	0	0	0
2016	3	2	0	1	1	1	0	0
2017	2	0	0	2	0	0	0	0

<b>Shutesbury</b>					<b>Population: 1,771</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	4	1	2	1	0	0	0	0
2014	7	7	0	0	0	0	0	0
2015	7	6	1	0	0	0	0	0
2016	2	1	1	0	0	0	0	0
2017	2	1	0	1	0	0	0	0

<b>Sunderland</b>					<b>Population: 3,684</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	1	1	0	0	0	0	0	0
2014	4	3	1	0	0	0	0	0
2015	10	8	1	1	0	0	0	0
2016	34	22	1	11	1	0	0	1
2017	29	22	0	7	2	1	0	1

<b>Warwick</b>					<b>Population: 780</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	1	1	0	0	0	0	0	0
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	1	0	1	0	0	0	0	0
2017	2	2	0	0	0	0	0	0

<b>Wendell</b>					<b>Population: 848</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	1	1	0	0	0	0	0	0
2014	2	1	0	1	0	0	0	0
2015	8	6	1	1	0	0	0	0
2016	9	4	1	4	0	0	0	0
2017	3	1	2	0	0	0	0	0

Whately					Population: 1,496			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2013	5	1	1	3	0	0	0	0
2014	4	1	3	0	0	0	0	0
2015	3	2	0	1	0	0	0	0
2016	11	2	2	7	2	0	0	2
2017	3	0	0	3	0	0	0	0



## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
11013	Ashfield	166	9	0	86	25	18	9	12	7	0
11029	Bernardston	207	17	1	148	10	12	5	11	3	0
11047	Buckland	50	7	0	5	19	6	9	3	1	0
11053	Charlemont	88	11	0	34	10	7	10	12	0	4
11066	Colrain	220	20	1	144	20	19	5	9	2	0
11068	Conway	72	17	0	8	26	4	2	14	1	0
11975	Deerfield	120	10	0	26	15	8	14	39	6	2
11091	Erving	183	14	0	105	5	25	8	23	0	3
11106	Gill	123	12	0	17	19	27	14	30	1	3
11114	Greenfield	2,627	78	3	1,558	225	189	219	343	2	10
11129	Hawley	40	6	0	18	10	2	3	1	0	0
11130	Heath	96	10	0	65	7	9	1	4	0	0
11154	Leverett	128	13	0	81	11	6	12	5	0	0
11156	Leyden	7	1	0	0	4	1	0	1	0	0
11190	Monroe**	0	0	0	0	0	0	0	0	0	0
11192	Montague Center	183	17	1	12	25	9	107	11	0	1
11204	New Salem	112	9	0	71	11	8	4	8	1	0

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any departments that want to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
11217	Northfield	113	10	0	16	28	21	7	31	0	0
11223	Orange	2,229	29	6	1,360	61	355	80	110	11	217
11253	Rowe*	0	0	0	0	0	0	0	0	0	0
11990	Shelburne Ctr*	0	0	0	0	0	0	0	0	0	0
11989	Shelburne Falls	70	7	2	3	11	17	10	16	3	1
11272	Shutesbury	55	4	0	40	1	3	5	2	0	0
11976	South Deerfield	199	25	6	24	41	12	15	71	5	0
11289	Sunderland	132	33	2	22	20	12	12	31	0	0
11984	Turners Falls	1,129	36	2	660	66	124	117	112	2	10
11312	Warwick	2	2	0	0	0	0	0	0	0	0
11319	Wendell	60	5	0	25	9	4	6	11	0	0
11337	Whately	47	8	1	20	4	2	1	8	3	0
<b>Total</b>	<b>Franklin County</b>	<b>8,458</b>	<b>410</b>	<b>25</b>	<b>4,548</b>	<b>683</b>	<b>900</b>	<b>675</b>	<b>918</b>	<b>48</b>	<b>251</b>

\* Certified no reportable fires.

\*\*Non reporting department.

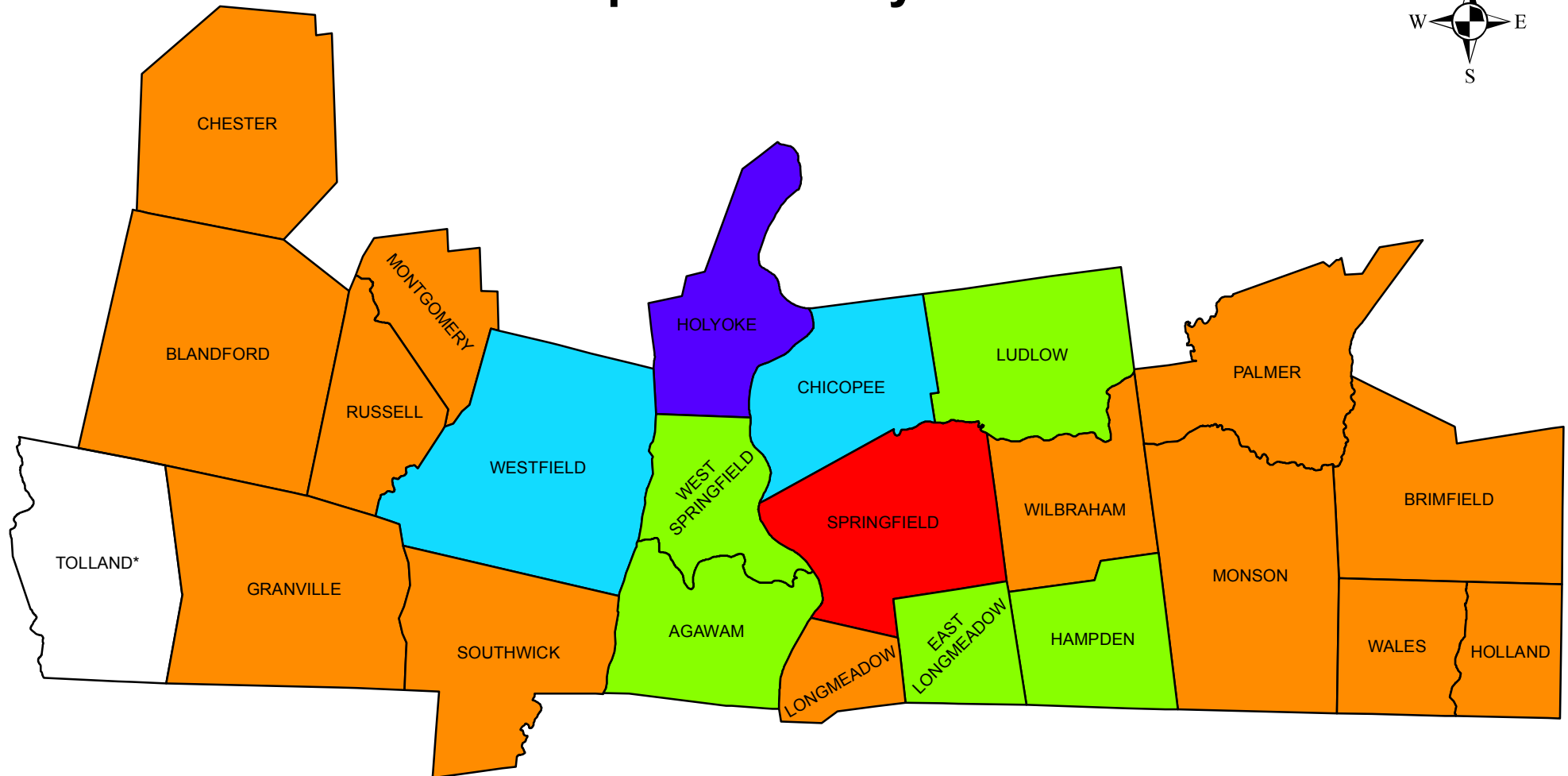
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any departments that want to send all of their responses to do so.



# Hampden County

## 2017 Fire Data Analysis

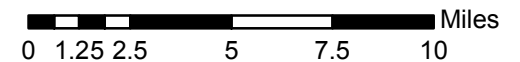
# Hampden County Fires 2017



## 2017 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2017

# Hampden County Fires in 2017

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## **1,641 Total Fires — 939 Structures, 222 Vehicles & 480 Other Fires**

Hampden County ranked eighth out of the fourteen Massachusetts counties in total reported fires. Hampden County fire departments reported 1,641 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 939 structure fires, 222 motor vehicle fires, 203 brush, tree or lawn fires, 146 outside rubbish fires, 43 special outside fires, and 88 other fires caused 12 civilian fire deaths, one fire service death, 23 civilian injuries, 52 fire service injuries and an estimated dollar loss of \$13.4 million. Hampden County's 1,641 fires accounted for 6% of the 27,895 fire incidents reported to MFIRS in 2017.

Twenty-four (24), or 96%, of the 25 of the fire departments in Hampden County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017.

## **Structure & Outside & Other Fires Down**

The total number of reported fire incidents decreased by 494 from the 2,135 reported in 2016. Reported structure fires decreased by 95 from the 1,034 reported during the previous year. Motor vehicle fires increased by seven from the 215 reported during 2016. Outside and other fires decreased by 406 from the 886 reported the year before.<sup>1</sup>

## **HAMPDEN COUNTY FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2,057	1,088	240	729	60	13	19	28
2014	1,979	1,088	226	665	55	17	6	32
2015	2,076	1,021	228	827	105	29	15	61
2016	2,135	1,034	215	886	94	21	12	61
2017	1,641	939	222	480	59	17	11	31

## **Fire and Fire Death Rates**

Hampden County had 3.5 fires per 1,000 population. That figure ranks Hampden County tied for fifth in the state and just below the state rate of 4.3 fires per 1,000 population. Hampden County also had 0.26 fire deaths per 10,000 population ranking it second among Massachusetts counties and above the state rate of 0.09 fire deaths per 10,000 population.

## **12 People Died in 7 Hampden County Fires**

In 2017, Hampden County had seven fatal fires that killed 12 people.

- On January 1, 2017, at 8:53 a.m., the Holyoke Fire Department was called to a fatal electrical fire in a 24-unit apartment building. The fire was started by arcing in a third-floor living room. The victims were a 48-year old woman, a 55-year old man

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<sup>1</sup> 2017 was a down year for brush fires throughout the state.

and a 34-year old man. The 48-year old woman was killed when she jumped in an attempt to escape. The other two victims were trapped and overcome by the fire. Two (2) firefighters were injured at this fire. Alarms were present and operated. There were no sprinklers. Damages from this fire were not estimated.

- On June 17, 2017, at 2:58 p.m., the Westfield Fire Department was dispatched to a fire in a single-family home of undetermined cause. Firefighters had a difficult time fighting this fire and locating the victims because of hoarding conditions. The victims were a 92-year old woman and a 54-year old woman. There were no other injuries associated with this fire. It was undetermined if alarms were present. The building was not sprinklered. Damages from this fire were estimated to be \$70,000.
- On July 4, 2017, at 6:22 a.m., the Ludlow Fire Department was called to a fatal electrical fire in a single-family home. The fire was caused by an air conditioner in the living room. The victims, an 82-year old man, his 78-year old wife and their 50-year old son were sleeping at the time of the fire and overcome while trying to escape. No one else was injured at this fire. There were no alarms present. Sprinklers were not present in the home. Damages were estimated to be \$100,000.
- On November 10, 2017, at 5:19 p.m., the West Springfield Fire Department was called to a fatal smoking fire in an 80-unit apartment building. The fire was started by the victim smoking while using home oxygen. The victim, a 71-year old man, was the only thing that was burned. EMS crews transported him to a local hospital where he later succumbed to his injuries. There were no other injuries at this fire. Alarms were present but did not operate because the fire was too small. The building did not have sprinklers. Damages from this fire were not estimated.
- On November 11, 2017, at 5:06 a.m., the Holyoke Fire Department was called to a fatal fire in a single-family home of undetermined cause. The victim was a 30-year old man. No one else was injured at this fire. It was undetermined if alarms were present. The building was not sprinklered. Damages from the blaze were not estimated.
- On November 20, 2017, at 3:23 p.m., the Springfield Fire Department was called to a fatal fire in an eight-unit apartment building of undetermined cause. The fire started in the attic. The victim, a 32-year old woman, is believed to have been in the area of origin. One (1) firefighter was injured at this fire. It was undetermined if alarms were present. The building was not sprinklered. Damages from the blaze were estimated to be \$60,000.
- On December 5, 2017, at 1:25 p.m., the Springfield Fire Department was called to a fatal smoking fire in a single-family home. The fire was started by smoking materials igniting a couch in the basement. The victim was a 69-year old man who was possibly impaired by alcohol and was in the area of origin and involved in ignition. One (1) firefighter was injured at this fire. It was undetermined if alarms were present. It was

undetermined if the home had any sprinklers. Damages from this fire were estimated to be \$25,000.

### **1 Fire Service Death in 2017 Chief Stephen P. Frye, Age 59**

In 2017 there was one fire-related fire service death in Hampden County.

- On Tuesday, December 5, 2017, at 11:08 p.m., the Montgomery Fire Department was called to a chimney fire in a single-family home at 1524 Southampton Rd. Chief Stephen Frye was coordinating suppression efforts outside of the building when he suddenly collapsed. His brother firefighters immediately rendered aid at the scene. He was transported to Baystate Noble Hospital in Westfield where he succumbed to his injuries, he was 59-year old

### **East Longmeadow Had Largest Loss Fire in Hampden County**

There was no reported large loss fire in Hampden County in 2017 with a dollar greater than \$1 million. East Longmeadow had the county's largest loss fire.

- On December 11, 2017, at 1:37 p.m., the East Longmeadow Fire Department was dispatched to an explosion with ensuing fire to the business at 305 Shaker Rd., WB Hill Truck Equipment. An employee was testing a repair he had made to one of the trucks in the garage area. He was flowing fuel through a hose that became loose and caused a spark that ignited the fuel vapors. One civilian was injured at this fire. Alarms were present but it was undetermined if they operated. The sprinklers operated and suppress the fire. Damages from this fire were estimated to be \$700,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 939 structure fires caused all 12 of the civilian deaths, the one fire service death, 16 civilian injuries, 47 fire service injuries and an estimated dollar loss of \$11.5 million. These incidents represented 57% of Hampden County's reported fires in 2017. The average estimated dollar loss per structure fire was \$12,281. The total number of reported structure fires decreased by 95, or 9%, from the 1,034 reported in 2016.

### **Arson Caused 2% of Structure Fires**

The 17 structure arsons caused one fire service injury and an estimated dollar loss of \$44,000. Arson was indicated as the cause of 2% of the structure fires and less than 1% of Hampden County's structure fire dollar loss. The 17 structure arsons accounted for 29% of the Hampden County arson fires reported in 2017. The total number of reported structure arsons decreased by four, or 19%, from the 21 reported in 2016.

### **71% of Structure Arsons Occurred in Residences**

Seventy-one percent (71%) of Hampden County's 17 structure arsons occurred in residential occupancies. Eighteen percent (18%) occurred in special properties. Six percent (6%) each occurred in public assembly properties and educational facilities.

## **BUILDING FIRES**

There were 932 building fires of different types in Hampden County in 2017. These 932 building fires accounted for 99.3% of all structure fires in Hampden County.

### **84% of Hampden Building Fires Occurred in People's Homes**

Seven hundred and seventy-nine (779), or 84%, of Hampden County's 932 building fires occurred in residential occupancies. Thirty-eight (38) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 28 fires. Mercantile and business properties experienced 24 fires. Special properties had 23 fires. Eighteen (18) fires took place in storage properties. Thirteen (13) building fires took place on educational properties. Six (6) fires took place in manufacturing and processing facilities; and three fires happened at industrial facilities.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Down**

There were 779 reported residential building fires in Hampden County in 2017. These 779 fires are a decrease of 71, or 8%, from the 850 residential building fires reported in 2016.

### **1 & 2-Family Homes Accounted for Over 1/2 of Residential Building Fires**

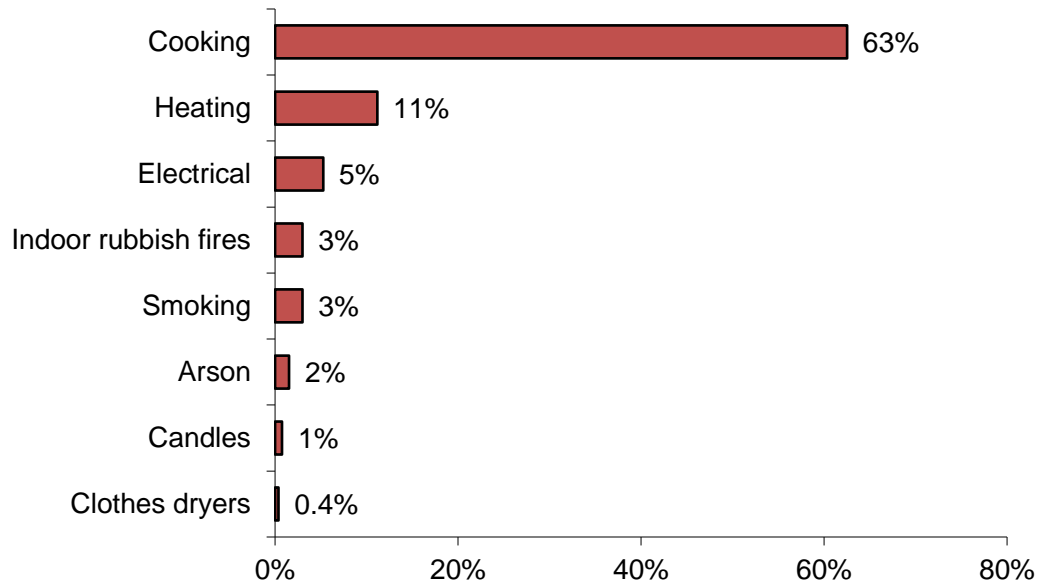
The peak fixed property uses for residential building fires were 1- & 2-family homes, accounting for over half, or 52%, of the building fires in Hampden County; 42% occurred in apartments; 2% happened in residential board and care facilities; 1% happened in dormitories; 2% occurred in rooming houses; and 1% happened in hotels or motels. Ten (10), or 1%, of the residential building fires in Hampden County occurred in unclassified residential buildings.

### **Cooking Causes 63% of Residential Fires**

The leading cause of residential building fires in Hampden County was unattended cooking and other unsafe cooking practices, accounting for 63% of these fires. Heating was the second leading cause of fires in people's homes, accounting for 11% of these fires. Electrical problems caused 5%. Indoor rubbish fires and smoking each caused 3%. Arson started 2% of these fires. Candles caused 1% of these fires and clothes dryers caused less than 1% of residential fires in Hampden County in 2017.



## 2017 Leading Causes of Fires in Hampden County Homes



### 72% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

Five hundred and fifty-eight (558), or 72% of all residential building fires, were reported as confined to non-combustible containers in 2017. Four hundred and fifty-eight (458) of the reported fires were cooking fires contained to a non-combustible container, accounting for 59% of residential building fires. Thirty-eight (38), or 5%, of all residential building fires reported in 2017 were fires confined to a chimney. Thirty-six (36), or 5%, were fires confined to a fuel burner or boiler malfunction. Twenty-six (26), or 3%, of these fires were contained rubbish fires.

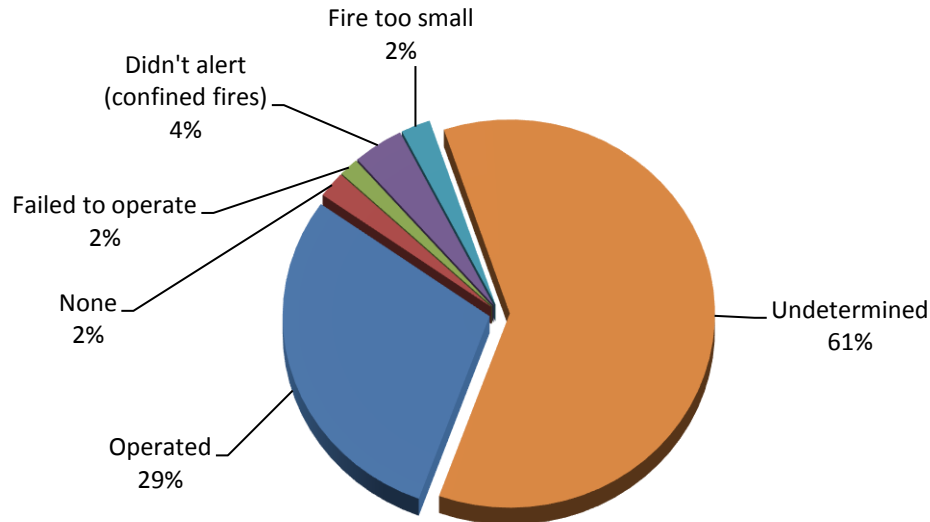
### Detector Operation Undetermined in 61% of Fires

Smoke or heat detectors operated and alerted the occupants in 228, or 29%, of the residential building fires. In 4% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 2% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 2% of the residential fires. Smoke detector performance was undetermined in 473 incidents, or 61%, of Hampden County's residential building fires.

<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

## Detector Status in Hampden County's Residential Structure Fires 2017



### 4 of Failed Detectors Had Missing or Dead Batteries

Of the 12 fires where smoke detectors were present but failed to operate, two, or 17%, failed because the batteries were either missing or disconnected; and another two, or 17%, failed because of dead batteries. In three fires, or 25%, the detector failed because of a power failure, shut off or disconnect. Two (2), or 17%, failed because of a lack of maintenance. Five (2), or 25%, of the detectors failed for unclassified or undetermined reasons.

### VACANT BUILDINGS

#### 2% of Building Fires Occurred in Vacant Buildings

Hampden County reported 15 fires that occurred in buildings that were vacant, under construction or demolition. This represents 2% of the total 932 building fires reported to MFIRS in 2017. Ten (10) fires occurred in vacant residential properties. Two (2) fires each in storage facilities and public assembly properties were reported as vacant building fires. Mercantile and business properties accounted for the other vacant building fire.

One (1), or 7%, of the vacant building fires in Hampden County in 2017 was determined to be intentionally set.

## JUVENILE-SET FIRES

### 4 Juvenile-set Fires

There were four reported juvenile-set fires in Hampden County in 2017. There was one structure fire, two brush fires and one unclassified fire. These four fires did not cause any injuries or estimated damages.

## ARSONS

### 59 Total Arsons — 17 Structures, 11 Vehicles & 31 Other Arsons

Fifty-nine (59), or 4%, of Hampden County's 1,641 fires were considered intentionally set, or, for purposes of this analysis, arson. The 17 structure arsons, 11 motor vehicle arsons and 31 outside and other arsons caused one fire service injury and an estimated dollar loss of \$94,510.

### All Arson Down

The total number of reported arson fires decreased by 35 from the 94 reported in 2016. Structure arsons decreased by four from the 21 reported in 2016. Motor vehicle arsons decreased by one from the 12 reported in 2016. Outside and other fires decreased by 30 from the 61 reported in 2016.

## ALL INCIDENTS

### Rescue & EMS Calls Are 58% of All Reported Responses

In 2017, fire departments in Hampden County reported 48,261 responses<sup>4</sup> to MFIRS. Of these 48,261 incidents, 46,501 non-fire calls were voluntarily reported.

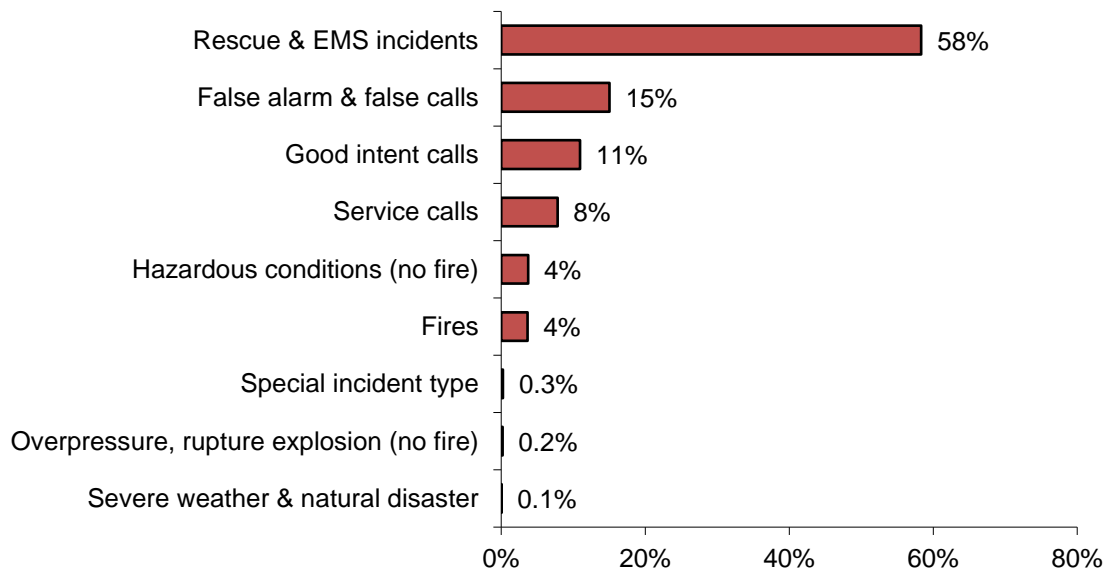
Of these 46,501 non-fire calls, 28,144, or 58% of all reported responses in 2017 were reported rescue and emergency medical services (EMS) calls; 7,265, or 15%, were reported false alarm or false calls; 5,276, or 11%, were reported good intent calls; 3,773, or 8%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 1,810, or 4%, were reported hazardous condition calls with no fire; 121, or 0.3%, were special incident type calls such as citizen complaints; 87, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 25, or 0.1%, were severe weather responses.

One thousand seven hundred and sixty (1,760), or 4%, of the total responses submitted by Hampden County fire departments were fires.

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<sup>4</sup> These figures include responses in which Hampden County fire departments gave mutual aid to other fire departments.

## 2017 Responses by Incident Type



### Hampden County Fire Departments Gave Mutual Aid 569 Times

In 2017, Hampden County fire departments reported coming to the aid of other fire departments 569 times. Of these 569 responses, 250, or 44%, were for rescue or EMS calls; 115, or 20%, were for fires; 94, or 17%, were for service calls such as cover assignments; 71, or 12%, were for good intent calls; 19, or 3%, were for false alarms or false calls; 14, or 2%, were for hazardous conditions calls with no fire; four, or 1%, were special incident types; and two, or 0.4% were overpressure, rupture explosions with no fire calls.

### Hampden County Received Mutual Aid in 608 Incidents

In 2017, Hampden County fire departments reported receiving aid from surrounding departments in 608 incidents. Of these 608 incidents, 495, or 81%, were rescue and emergency medical services calls; 76, or 13%, were for fires; 12, or 2%, were false alarms or false calls; 10, or 2%, were hazardous conditions calls with no fire; nine, or 1%, were service calls; four, or 1%, were good intent calls; and two, or 0.3%, were special incident types.

**Hampden County****Population: 463,490****3.5 Fires/1,000 Population****Total Fires: 1,641 \$13,411,119**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	939	57%	\$11,531,425
Vehicle Fires	222	14%	1,067,426
Other Fires	480	29%	812,268

7 Fatal Fires 0.94 Civilian Deaths/1,000 Fires<sup>2</sup>  
 12 Civilian Deaths 0.04 Civilian Deaths/10,000 Population  
 1 Fire Service Death 23 Civilian Injuries 52 Fire Service Injuries

**Building Fires: 932****Residential Structure Fires: 779****Residential Structure Fires Confined to Non-Combustible Containers: 558****Unconfined Residential Structure Fires: 221**

12 Civilian Deaths 1 Fire Service Death 25 Civilian Injuries 37 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	402	52%	Operated	228	29%
Apartments	325	42%	Didn't operate	12	2%
Residential board & care	16	2%	None	17	2%
Dormitories	10	1%	Fire too small	18	2%
Rooming houses	9	1%	Didn't alert (confined)	31	4%
Hotels or motels	7	1%	Undetermined	473	61%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>% Unconfined<sup>6</sup></b>
Kitchen	65%	Heat from operating equip.	4%	12%
Heating room or area	5%	Rad., cond. heat/oper. eq.	3%	10%
Chimney, flue	5%	Arcing	3%	10%
Bedroom	3%	Cigarette	2%	6%
Substructure area, crawl space	2%	Hot or smoldering object	2%	5%

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Food, cooking materials	61%	Equipment unattended	97%	32%
Flammable or combust. liquid	5%	Abandoned materials	4%	14%
Film, residue (creosote)	5%	Misuse of mat./prod. other	4%	13%
Rubbish, trash, waste	4%	Too close to combustibles	4%	13%
Structural member, framing	2%	Failure to clean	4%	9%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	62%	Unintentional	11%	51%
None	18%	Failure of eq./heat source	4%	16%
Boiler, furnace, cent. heat unit	5%	Intentional	1%	3%
Chimney or flue	5%	Act of Nature	0.2%	1%
Electrical wiring, other	1%	Undetermined	2%	9%
		Cause under investigation	4%	19%

**Detector Alerted Occupants  
(Confined Fires in Non-Combustible Containers)**

Alerted occupants	26%
Didn't alert occupants	6%
Undetermined	68%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	150	106	18	26
February	114	75	21	18
March	148	102	14	32
April	187	80	20	87
May	156	80	23	53
June	76	39	13	24
July	140	67	24	49
August	125	65	17	43
September	147	92	19	36
October	146	73	21	52
November	128	79	14	35
December	124	81	18	25

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	278	160	33	85
Monday	230	136	26	68
Tuesday	226	124	28	74
Wednesday	236	138	35	63
Thursday	206	104	41	61
Friday	219	133	28	58
Saturday	246	144	31	71

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 – 04:00	123	56	25	42
04:01 – 08:00	118	66	25	27
08:01 – 12:00	267	170	33	64
12:01 – 16:00	433	230	53	150
16:01 – 20:00	447	277	55	115
20:01 – 00:00	253	140	31	82

### **Motor Vehicle Fires**

Total: 222

Automobiles: 185 (83%)

10, or (5%), of the automobile fires considered intentionally set.

## Arson Fires

**Total Arsons: 59**

**Dollar loss: \$94,510**

### 0.13 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	17	2%	29%	\$44,000
Vehicle Arsons	11	5%	19%	50,000
Other Arsons	31	6%	53%	510

0.04 Structure arsons/1,000 population

0.02 Vehicle arsons/1,000 population

0.07 Other arsons/1,000 population

1 Fire Service Injury

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
20:01 - 00:00	7	41%	00:01 - 04:00	5	45%
00:01 - 04:00	3	18%	16:01 - 20:00	2	18%
16:01 - 20:00	3	18%	20:01 - 00:00	2	18%

Other Arsons	#	%
16:00 - 20:00	11	35%
20:01 - 00:00	9	29%
12:01 - 16:00	7	23%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartment buildings	6	35%
1- and 2-Family homes	5	29%



**Agawam** **Population: 28,438**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	60	30	10	20	1	0	1	0
2014	87	38	12	31	1	1	0	0
2015	80	34	8	38	1	0	0	1
2016	77	26	8	43	4	0	0	0
2017	83	30	11	42	1	0	0	1

**Blandford** **Population: 1,233**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	12	1	1	10	8	0	0	8
2014	2	1	0	1	0	0	0	0
2015	7	3	3	1	0	0	0	0
2016	4	0	0	4	0	0	0	0
2017	2	2	0	0	0	0	0	0

**Brimfield** **Population: 3,609**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	16	10	3	3	0	0	0	0
2014	15	6	0	9	1	0	0	1
2015	13	2	4	7	1	1	0	0
2016	21	8	5	8	0	0	0	0
2017	4	2	1	1	0	0	0	0

**Chester** **Population: 1,337**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	2	0	4	0	0	0	0
2014	3	2	0	1	0	0	0	0
2015	13	5	0	8	4	0	0	4
2016	2	2	0	0	0	0	0	0
2017	2	2	0	0	0	0	0	0

**Chicopee** **Population: 55,298**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	206	116	28	62	4	3	1	0
2014	164	95	17	52	2	0	0	2
2015	197	85	19	93	3	0	0	3
2016	176	85	13	78	3	0	1	2
2017	183	93	22	68	2	1	1	0

**East Longmeadow** **Population: 15,720**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	39	21	2	16	0	0	0	0
2014	51	25	3	23	7	2	0	5
2015	57	24	6	27	3	0	1	2
2016	46	21	5	20	4	0	0	4
2017	43	22	5	16	1	0	0	1

**Granville** **Population: 1,566**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	14	5	3	6	0	0	0	0
2014	6	3	0	3	0	0	0	0
2015	13	3	4	6	1	0	0	1
2016	4	0	1	3	0	0	0	0
2017	5	3	0	2	0	0	0	0

**Hampden** **Population: 5,139**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	22	3	9	4	0	0	4
2014	36	27	0	9	0	0	0	0
2015	40	24	3	13	0	0	0	0
2016	38	20	0	18	0	0	0	0
2017	50	32	1	17	0	0	0	0

**Holland****Population: 2,481**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	7	0	0	0	0	0	0
2014	4	2	1	1	0	0	0	0
2015	15	6	3	6	1	0	0	1
2016	11	8	0	3	0	0	0	0
2017	10	5	1	4	0	0	0	0

**Holyoke****Population: 39,880**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	272	128	23	121	6	2	0	4
2014	324	181	29	114	11	5	0	6
2015	362	222	33	107	42	12	2	28
2016	445	262	36	147	39	8	4	27
2017	335	227	27	81	16	5	1	10

**Longmeadow****Population: 15,784**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	32	16	6	10	1	0	0	1
2014	35	15	6	14	1	0	0	1
2015	36	18	7	11	2	0	0	2
2016	42	15	8	19	4	0	0	4
2017	24	12	9	3	1	0	0	1

**Ludlow****Population: 21,103**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	64	32	12	20	3	1	0	2
2014	45	18	12	15	2	0	1	1
2015	53	24	4	25	2	0	1	1
2016	64	33	7	24	0	0	0	0
2017	58	33	8	17	0	0	0	0

**Monson****Population: 8,560**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	51	18	1	32	3	0	0	3
2014	34	15	2	17	5	0	0	5
2015	40	14	5	21	7	1	0	6
2016	22	5	1	16	4	0	0	4
2017	25	13	5	7	5	0	1	4

**Montgomery****Population: 838**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Non-Reporting Community							
2014	Non-Reporting Community							
2015	Non-Reporting Community							
2016	Non-Reporting Community							
2017	1	1	0	0	0	0	0	0

**Town of Palmer Fire Districts****Population: 12,140****Bondsville****Est. Pop. Protected: 2,792**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	3	0	2	0	0	0	0
2014	Non-Reporting Community							
2015	7	5	0	2	1	0	0	1
2016	15	6	1	8	1	0	0	1
2017	4	1	0	3	1	0	0	1

**Palmer District # 1****Est. Pop. Protected: 5,584**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	33	20	7	6	1	0	0	1
2014	36	19	7	10	2	1	0	1
2015	40	19	16	5	1	1	0	0
2016	38	17	9	12	1	0	0	1
2017	28	10	11	7	1	0	0	1

**Three Rivers****Est. Pop. Protected: 3,763**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	3	1	2	0	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	15	5	0	10	0	0	0	0
2016	13	2	1	10	3	0	0	3
2017	6	4	0	2	1	1	0	0

**Russell****Population: 1,775**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	2	1	7	0	0	0	0
2014	8	3	1	4	0	0	0	0
2015	2	0	1	1	1	0	0	1
2016	7	2	1	4	0	0	0	0
2017	11	5	1	5	0	0	0	0

**Southwick****Population: 9,502**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	13	2	19	0	0	0	0
2014	32	17	2	13	2	0	0	2
2015	40	17	3	20	11	5	0	6
2016	56	22	2	32	1	0	0	1
2017	27	14	5	8	3	1	0	2

**Springfield****Population: 153,060**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	838	464	96	277	21	5	13	3
2014	779	439	87	253	18	6	5	7
2015	723	356	74	293	23	8	11	4
2016	782	371	87	324	24	11	7	6
2017	503	314	113	20	8	7	5	

**Tolland****Population: 485**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Non-Reporting Community							
2016	Non-Reporting Community							
2017	Non-Reporting Community							

**Wales****Population: 1,838**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Non-Reporting Community							
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Non-Reporting Community							
2016	1	1	0	0	0	0	0	0
2017	9	6	0	3	0	0	0	0

**West Springfield****Population: 28,391**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	118	61	21	36	4	0	3	1
2014	124	67	20	37	1	0	0	1
2015	129	60	14	55	2	1	0	1
2016	91	47	8	36	4	0	0	4
2017	90	44	19	27	7	2	0	5

**Westfield****Population: 41,094**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	161	94	16	51	2	1	1	0
2014	141	89	17	35	2	2	0	0
2015	139	72	20	47	0	0	0	0
2016	148	62	18	68	1	1	0	0
2017	103	47	17	39	1	0	0	1

<b>Wilbraham</b>					<b>Population: 14,219</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	41	21	3	17	2	1	0	1
2014	39	19	7	13	0	0	0	0
2015	54	22	1	31	0	0	0	0
2016	31	18	4	9	1	1	0	0
2017	37	19	3	15	1	0	1	0

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
13005	Agawam	2,533	85	1	1,519	53	466	114	280	3	12
13033	Blandford	5	2	0	2	1	0	0	0	0	0
13987	Bondsville	70	12	0	1	9	8	9	31	0	0
13043	Brimfield	364	14	1	272	10	11	28	26	2	0
13059	Chester	2	2	0	0	0	0	0	0	0	0
13061	Chicopee	6,028	184	3	3,132	135	800	880	853	0	41
13085	East Longmeadow	1,939	44	3	1,242	109	90	110	341	0	0
13112	Granville	201	6	0	147	14	16	8	10	0	0
13120	Hampden	348	57	3	192	18	18	12	47	0	1
13135	Holland	206	17	0	132	14	22	9	12	0	0
13137	Holyoke	5,175	342	17	2,418	167	222	1,036	962	0	11
13159	Longmeadow	2,367	35	4	1,581	75	238	122	307	2	3
13161	Ludlow	875	62	1	333	71	103	92	212	0	1
13191	Monson	239	30	0	69	32	34	29	45	0	0
13194	Montgomery	3	1	0	2	0	0	0	0	0	0
13986	Palmer #1	347	37	5	21	75	71	41	96	0	1

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
13256	Russell	95	23	0	35	13	3	7	14	0	0
13279	Southwick	266	34	0	53	40	34	30	72	3	0
13281	Springfield	13,775	509	42	7,438	670	690	1,950	2,453	4	19
13988	Three Rivers	127	6	0	11	16	47	15	30	1	1
13297	Tolland**	0	0	0	0	0	0	0	0	0	0
13306	Wales	195	18	0	143	7	4	0	21	1	1
13325	West Springfield	7,310	91	3	6,071	117	282	250	481	0	15
13329	Westfield	3,017	109	1	1,423	109	351	361	646	3	14
13339	Wilbraham	2,774	40	3	1,907	55	263	173	326	6	1
<b>Hampden County</b>		<b>48,261</b>	<b>1,760</b>	<b>87</b>	<b>28,144</b>	<b>1,810</b>	<b>3,773</b>	<b>5,276</b>	<b>7,265</b>	<b>25</b>	<b>121</b>

\* Certified no reportable fires.

\*\*Non reporting department.

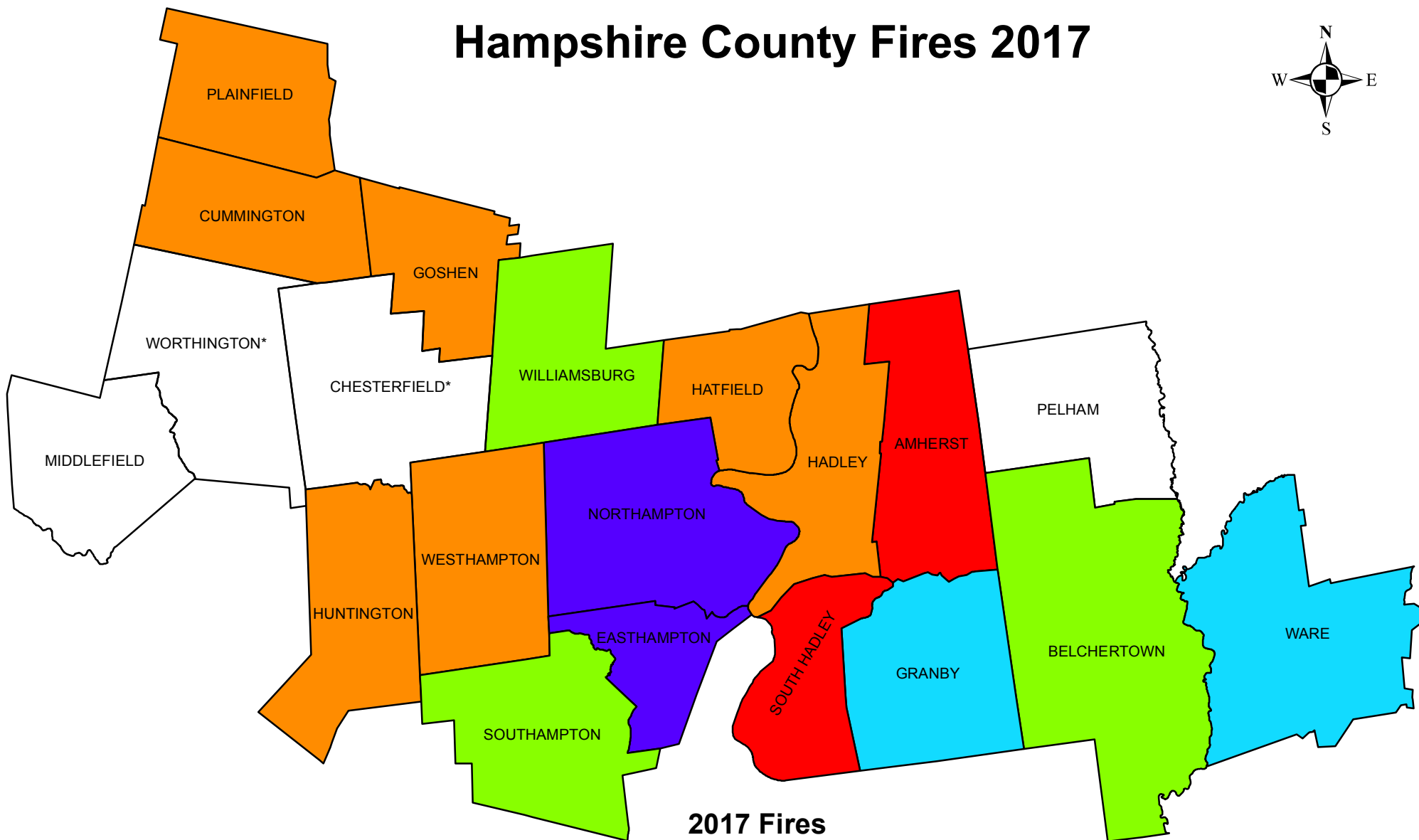
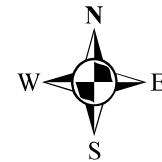
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



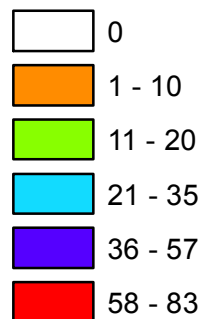
# Hampshire County

## 2017 Fire Data Analysis

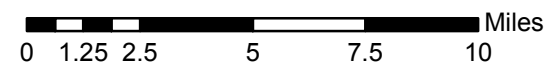
# Hampshire County Fires 2017



## 2017 Fires



\*Non-reporting Department



Massachusetts Fire Incident Reporting System 2017



**MFIRS**  
Massachusetts Fire Incident Reporting System

# Hampshire County Fires in 2017

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## **384 Total Fires — 190 Structures, 41 Vehicles & 153 Other Fires**

Hampshire County ranked eleventh out of the fourteen Massachusetts counties in total reported fires. Hampshire County fire departments reported 384 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 190 structure fires, 41 motor vehicle fires, 73 brush, tree or lawn fires, 32 outside rubbish fires, 25 special outside fires, and 23 other fires caused one civilian injury, three fire service injuries and an estimated dollar loss of \$4.1 million. Hampshire County's 384 total reported fires accounted for 1% of the 27,895 fires reported to MFIRS in 2017.

Nineteen (19) of the 21 fire departments in Hampshire County, or 90%, either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017.

## **All Fires Down**

The total number of reported fire incidents decreased by 51 from the 435 reported in 2016. Reported structure fires decreased by six from the 196 reported during the previous year. Motor vehicle fires increased by four from 37 the year before. The number of outside and other fires decreased by 49 from 202 in 2016.<sup>1</sup>

## **HAMPSHIRE COUNTY FIRES FROM 2013 TO 2017**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2013	512	244	42	226	33	5	0	28
2014	415	210	34	171	30	2	0	28
2015	505	202	45	258	35	6	1	28
2016	435	196	37	202	29	5	1	23
2017	384	190	41	153	26	6	1	19

## **Fire and Fire Death Rates**

Hampshire County had 2.4 fires per 1,000 population. That figure ranks Hampshire County thirteenth in the state and below the state rate of 4.3 fires per 1,000 population. Hampshire County also had zero fire deaths per 10,000 population, ranking it tied for twelfth among Massachusetts counties and below the state rate of 0.09 fire deaths per 10,000 population.

## **Hampshire County Has 0 Fire Deaths in 2017**

There were no reported fire deaths in Hampshire County in 2017.

## **Northampton Has County's Largest Loss Fire**

There were no reported fires in Hampshire County with a dollar loss greater than \$1 million in 2017. The largest loss fire was reported by Northampton. This fire was responsible for 17% of the county's total dollar loss in 2017.

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<sup>1</sup> 2017 was a down year statewide for all brush fires.

- On April 18, 2017, at 8:41 a.m., the Northampton Fire Department was dispatched to a smoking fire in a three-unit apartment building that started on a rear porch. No one was injured at this fire. Alarms were present and alerted the occupants. The building was not sprinklered. Damages from this fire were estimated to be \$700,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 190 structure fires caused one civilian injury, two fire service injuries and an estimated dollar loss of \$3.8 million. These incidents represent 49% of Hampshire County's reported fires in 2017. The average estimated dollar loss per structure fire was \$20,208. The total number of reported structure fires decreased by six, or 3%, from the 196 reported in 2016.

### **6 Structure Arsons**

Six (6) structure arsons caused an estimated dollar loss of \$80,020. Arson was indicated as the cause of 3% of the structure fires and 2% of Hampshire County's structure fire dollar loss. The six structure arsons accounted for 23% of the Hampshire County arson fires reported in 2017. The total number of reported structure arsons increased by one, or 20%, from five reported in 2016.

## **BUILDING FIRES**

There were 188 building fires of different types in Hampshire County in 2017. These 188 building fires accounted for 98.9% of the structure fires in Hampshire County.

### **82% of Hampshire Building Fires Occurred in People's Homes**

One hundred and fifty-five (155), or 82%, of Hampshire County's 188 building fires occurred in residential occupancies. Eight (8) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties also had eight fires; and eight fires occurred in educational facilities. Institutional facilities had three fires. Storage facilities and special properties each experienced two fires. A manufacturing and processing facility and an industrial facility each had one fire in Hampshire County in 2017.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Stay the Same**

There were 155 reported residential building fires in Hampshire County in 2017. Residential fires remained the same with 155 reported in both 2016 and 2017.

### **1- & 2-Family Homes Accounted for 55% of Residential Building Fires**

The peak fixed property use for residential building fires were 1- & 2-family homes, accounting for 55% of the residential building fires in Hampshire County; 33% occurred in apartments; and 10% occurred in dormitories. One percent (1%) each happened in rooming houses and residential board and care facilities. One percent (1%) of the

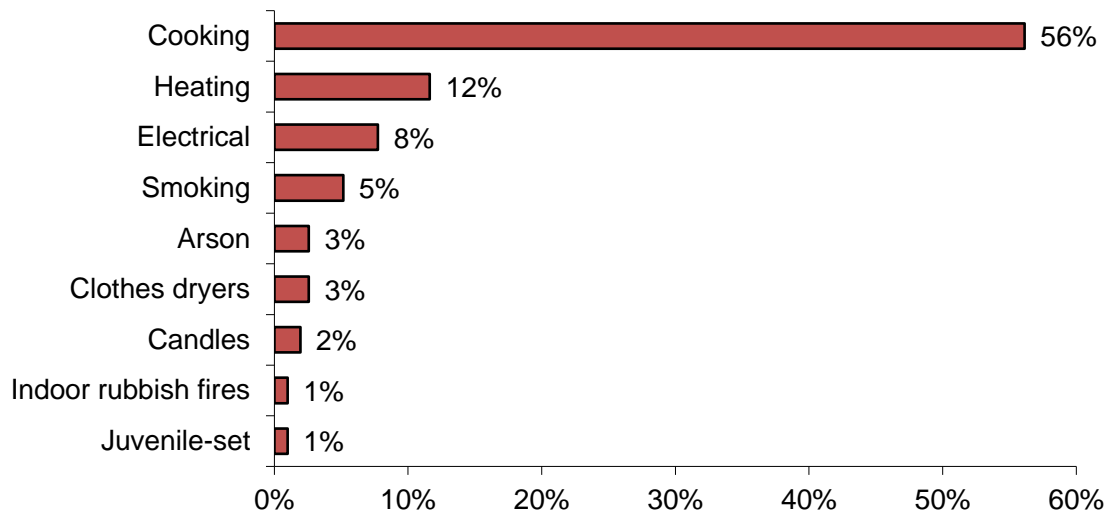
residential building fires in Hampshire County also occurred in unclassified residential buildings.

Although much of Hampshire County is rural, the county is home to several colleges and the main campus of the University of Massachusetts. Fifteen (15), or 17%, of Hampshire County's residential fires occurred in dormitories. Dormitory fires make up smaller percentages of the other counties' fires.

### **Cooking Causes Over 1/2 of Residential Fires**

Unattended cooking and other unsafe cooking practices was the leading cause of the 155 residential building fires in Hampshire County, accounting for 56% of these fires. Heating equipment fires accounted for 12% of home fires. Electrical problems caused 8% of the residential fires. Smoking fires were responsible for 5% of these fires. Arson and clothes dryer fires each accounted for 3% and candles caused 2%. Indoor rubbish fires and juvenile-set fires each accounted for 1% of the residential fires in Hampshire County in 2017.

## **2017 Leading Causes of Fires in Hampshire County Homes**



### **66% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>**

Eighty-eight (103), or 66%, of all residential building fires were reported as confined to non-combustible containers in 2017. Eighty-five (85) of the reported fires were cooking

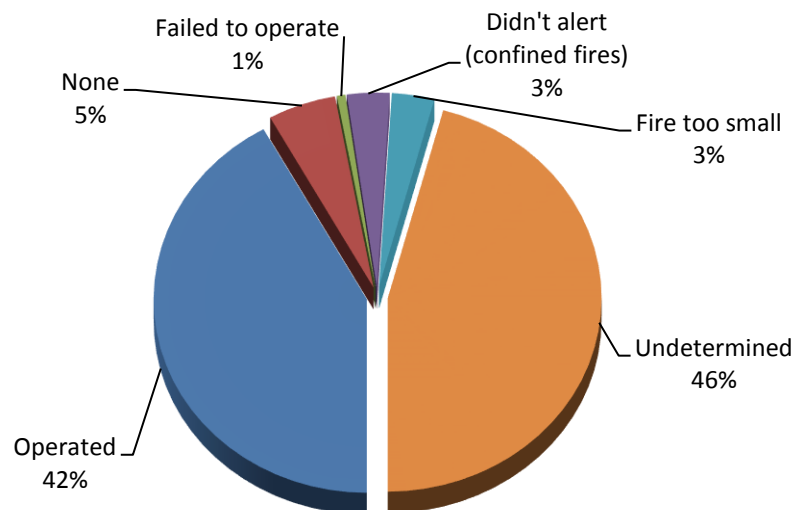
<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

fires contained to a non-combustible container, accounting for 51% of residential building fires. Eleven (11), or 7%, were fires confined to a fuel burner or boiler malfunction. Five (5), or 3%, of all residential building fires reported in 2017 were fires confined to a chimney. Two (2), or 1%, of these fires were indoor rubbish fires contained to a non-combustible container in Hampshire County in 2017.

### **Detectors Operated in Only 42% of Fires**

Smoke or heat detectors operated and alerted the occupants in 65, or 42%, of the residential building fires. In 3% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 1% of these incidents. In 5% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 3% of the residential fires. Smoke detector performance was undetermined in 71 incidents, or 46%, of Hampshire County's residential building fires.

### **Detector Status in Hampshire County's Residential Structure Fires 2017**



### **1 Detector Failed From a Dead Battery**

One (1) detector failed in Hampshire County in 2017 because of a dead battery.

### **VACANT BUILDINGS**

#### **6 Building Fires Occurred in Vacant Buildings**

Hampshire County reported six fires that occurred in buildings that were vacant, under construction or demolition. This represented 3% of the 190 building fires reported to MFIRS in 2017. Three (3) residential properties, a business, an educational facility, and a storage property each had a reported fire in a vacant building.

<sup>3</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

None of the vacant building fires in Hampshire County in 2017 were determined to be intentionally set.

## **JUVENILE-SET FIRES**

### **6 Juvenile-set Fires**

There were six reported juvenile-set fires in Hampshire County in 2017. There was one structure fire, three brush fires, one outside rubbish fire and one unclassified fire. These fires caused \$7 in estimated damages.

## **ARSONS**

### **26 Total Arsons — 6 Structures, 1 Motor Vehicle & 19 Other Arsons**

Twenty-six (26), or 7%, of Hampshire County's 384 fires were intentionally set, or, for purposes of this analysis, arson. The six structure arsons, one motor vehicle arson, 10 brush arsons, two outside rubbish arsons, four special outside arsons, and three unclassified arsons caused an estimated dollar loss of \$82,120.

### **All Arsons Decreases Slightly**

The total number of reported arson fires decreased by three from the 29 reported in 2016. Structure arsons increased by one from five reported the previous year. Motor vehicle arsons remained the same with one reported in both 2016 and 2017. Reported outside and other arsons decreased by four from the 23 reported in 2016.

## **ALL INCIDENTS**

### **Rescue & EMS Calls Are 64% of All Reported Responses**

In 2017, Hampshire County fire departments reported 16,019 responses<sup>4</sup> to MFIRS. Of these 16,019 incidents, 15,534 non-fire calls were voluntarily reported.

Of these 15,534 non-fire calls, 10,234, or 64%, of all the responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 2,752, or 17%, were reported false alarm or false calls; 882, or 6%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 864, or 5%, were reported good intent calls; 693, or 4%, were reported hazardous condition calls with no fire; 74, or 0.5%, were special incident type calls such as citizen complaints; 25, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 10, or 0.1%, were severe weather responses.

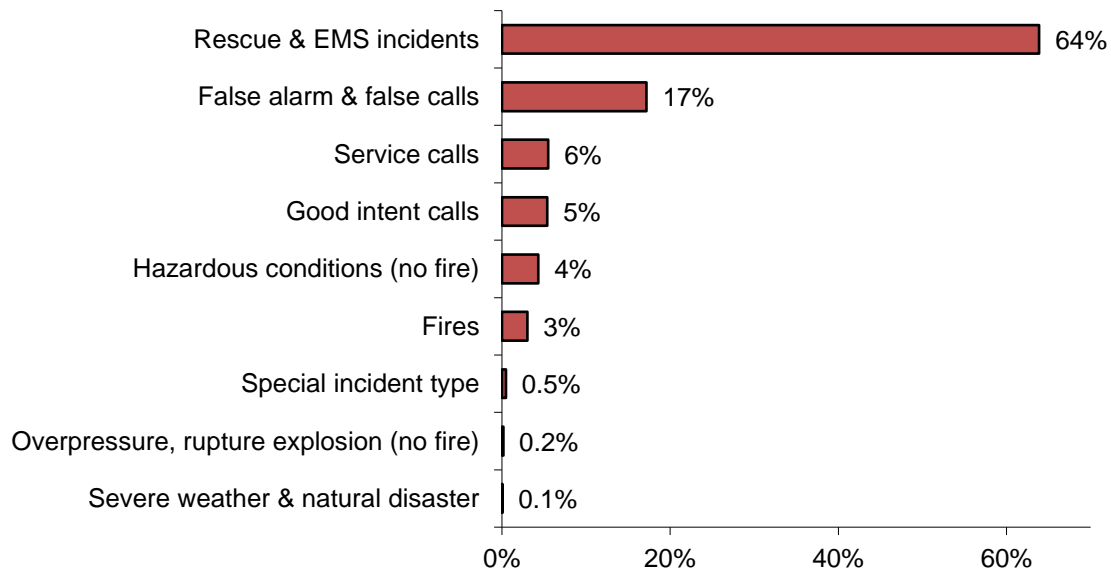
Four hundred and eighty-five (485), or 3%, of the total responses submitted by Hampshire County fire departments were fires.

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<sup>4</sup> These figures include responses in which Hampshire County fire departments gave mutual aid to other fire departments.



## 2017 Responses by Incident Type



### Hampshire County Fire Departments Gave Mutual Aid 636 Times

In 2017, Hampshire County fire departments reported coming to the aid of other fire departments 636 times. Of these 636 responses, 388, or 61%, were for rescue or EMS calls; 85, or 13%, were for fires; 67, or 11%, were for good intent calls; 63, or 10%, were for service calls such as cover assignments; 16, or 3%, were for false alarms or false calls; 14, or 2%, were hazardous conditions calls with no fire; two, or less than 1%, were for overpressure, rupture explosion with no fire calls; and one call, or less than 1%, were for special incident types.

### Hampshire County Received Mutual Aid in 305 Incidents

In 2017, Hampshire County fire departments received aid from surrounding departments in 305 incidents. Of these 305 incidents, 217, or 71%, were rescue and emergency medical services calls; 46, or 15%, were for fires; 16, or 5%, were false alarm or false calls; nine were good intent calls accounting for 3%; nine, or 3%, was a hazardous conditions call with no fire; and eight, or 3%, were service calls in Hampshire County in 2017.

**Hampshire County****Population: 158,080****2.4 Fires/1,000 Population****Total Fires: 384 \$4,127,990**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	190	49%	\$3,839,610
Vehicle Fires	41	11%	170,453
Other Fires	153	40%	117,927

0 Fatal Fire 0.00 Civilian Deaths/1,000 Fires  
 0 Civilian Death 0.00 Civilian Deaths/10,000 Population  
 1 Civilian Injury 3 Fire Service Injuries

**Building Fires: 188****Residential Structure Fires: 155****Residential Structure Fires Confined to Non-Combustible Containers: 103****Unconfined Residential Structure Fires: 52**

1 Civilian Injury 2 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	86	55%	Operated	65	42%
Apartments	51	33%	Didn't operate	1	1%
Dormitories	15	10%	None	8	5%
Rooming houses	1	1%	Fire too small	5	3%
Residential board & care	1	1%	Didn't alert (confined)	5	3%
			Undetermined	71	46%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>% Unconfined<sup>6</sup></b>
Kitchen	56%	Hot embers or ash	4%	12%
Heating room or area	7%	Cigarette	4%	12%
Chimney or flue	3%	Hot or smoldering obj., other	4%	12%
Ext. balcony, unencl. porch	3%	Arcing	4%	12%
Bedroom	3%	Candles	2%	6%
Wall surface, exterior	3%	Radiated, con. Heat op. eq.	2%	6%
		Lighter	2%	6%

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>% Unconfined<sup>8</sup></b>
Food, cooking materials	55%	Abandoned materials	6%	19%
Flamm. or combustible liquid	9%	Failure to clean	5%	15%
Film, residue (creosote)	7%	Misuse of mat. or prod. other	4%	12%
Structural comp. or finish, other	3%	Mechanical failure, malfunc.	4%	12%
Exterior sidewall covering	3%	Operational deficiency, other	3%	10%
Structural member, framing	3%			

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>% Unconfined<sup>10</sup></b>
Cooking equipment	56%	Unintentional	19%	56%
None	23%	Failure of eq. or heat source	5%	15%
Boiler, furnace, cent. heat unit	7%	Intentional	2%	6%
Chimney or flue	3%	Cause under investigation	5%	15%
Clothes dryer	3%	Undetermined	1%	4%
		Act of nature	1%	2%

#### **Detector Alerted Occupants (Confined Fires in Non-Combustible Containers)**

Alerted occupants	34%
Didn't alert occupants	5%
Undetermined	61%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined Fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	22	13	4	5
February	17	12	3	2
March	41	16	4	21
April	47	16	2	29
May	24	9	3	12
June	25	10	4	11
July	32	19	5	8
August	32	19	4	9
September	35	15	4	16
October	39	23	2	14
November	44	24	3	17
December	26	14	3	9

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	63	27	5	31
Monday	56	29	9	18
Tuesday	43	21	4	18
Wednesday	55	30	4	21
Thursday	49	24	6	19
Friday	61	25	10	26
Saturday	57	34	3	20

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	25	12	3	10
04:01 - 08:00	34	14	8	12
08:01 - 12:00	65	35	7	23
12:01 - 16:00	109	51	8	50
16:01 - 20:00	102	47	9	46
20:01 - 00:00	49	31	6	12

### **Motor Vehicle Fires**

Total: 41

Automobiles: 29 (71%)

1, or (3%), of the automobile fires were considered intentionally set.

## Arson Fires

**Total Arsons: 26**

**Dollar loss: \$82,120**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	6	3%	23%	\$80,020
Vehicle Arsons	1	2%	4%	2,000
Other Arsons	19	12%	73%	100

0.04 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.12 Other arsons/1,000 population

No Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	2	33%	20:01 – 00:00	1	100%
20:01 - 00:00	2	33%			
00:01 - 04:00	1	17%			
04:01 - 08:00	1	17%			

Other Arsons	#	%
12:01 - 16:00	5	26%
16:01 - 20:00	5	26%
08:01 - 12:00	4	21%

Peak Fixed Property Uses for Structure Arsons	#	%
1- or 2-Family home	3	50%
Apartments	1	17%
Church, mosque, synagogue, temple, chapel	1	17%
Outside material storage area	1	17%

**Amherst****Population: 37,819**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	99	42	6	51	9	3	0	6
2014	80	44	9	27	5	1	0	4
2015	93	26	5	62	8	0	0	8
2016	75	27	4	44	1	0	0	1
2017	76	34	11	31	4	1	1	2

**Belchertown****Population: 14,649**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	59	28	6	25	2	0	0	2
2014	37	14	2	21	8	0	0	8
2015	34	14	2	18	0	0	0	0
2016	8	2	0	6	0	0	0	0
2017	27	19	0	8	0	0	0	0

**Chesterfield****Population: 1,222**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	4	1	2	0	0	0	0
2014	7	3	0	4	2	0	0	2
2015	4	2	0	2	1	0	0	1
2016	Non-reporting Department							
2017	Non-reporting Department							

**Cummington****Population: 872**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	2	0	0	0	0	0	0
2014	1	0	0	1	0	0	0	0
2015	1	1	0	0	0	0	0	0
2016	2	0	0	2	0	0	0	0
2017	1	0	0	1	0	0	0	0

**Easthampton** **Population: 16,053**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	55	31	5	19	0	0	0	0
2014	43	27	4	12	0	0	0	0
2015	44	27	3	14	1	0	0	1
2016	44	18	6	20	2	0	0	2
2017	41	25	2	14	2	1	0	1

**Goshen** **Population: 1,054**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	4	4	0	0	0	0	0	0
2014	4	4	0	0	0	0	0	0
2015	6	4	0	2	0	0	0	0
2016	3	2	0	1	0	0	0	0
2017	2	0	1	1	0	0	0	0

**Granby** **Population: 6,240**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	31	12	1	18	4	0	0	4
2014	25	11	4	10	1	0	0	1
2015	24	12	3	9	0	0	0	0
2016	19	8	2	9	0	0	0	0
2017	21	9	4	8	4	0	0	4

**Hadley** **Population: 5,250**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	4	3	0	1	0	0	0	0
2014	Non-reporting Department							
2015	11	6	3	2	0	0	0	0
2016	6	3	3	0	1	1	0	0
2017	7	2	2	3	1	0	0	1

**Hatfield** **Population: 3,279**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	1	2	2	0	0	0	0
2014	9	3	0	6	1	0	0	1
2015	11	4	2	5	1	0	0	1
2016	13	2	0	11	2	0	0	2
2017	9	0	1	8	2	0	0	2

**Huntington** **Population: 2,180**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	11	1	0	10	6	0	0	6
2014	6	2	1	3	0	0	0	0
2015	25	5	1	19	0	0	0	0
2016 <sup>11</sup>	Fire Department in Good Standing, Certified No Reportable Fires							
2017	10	2	2	6	0	0	0	0

**Middlefield** **Population: 521**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	3	2	0	1	0	0	0	0
2017	Fire Department in Good Standing, Certified No Reportable Fires							

**Northampton** **Population: 28,549**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	81	36	9	36	1	1	0	0
2014	67	24	7	36	0	0	0	0
2015	67	21	10	36	6	4	0	2
2016	73	36	9	28	0	0	0	0
2017	57	30	9	18	3	2	0	1

<sup>11</sup> In 2016 Huntington reported 28 calls after the database was closed for analysis. The three fires were all aid given.



**Pelham****Population: 1,321**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	3	2	1	0	0	0	0	0
2014	2	2	0	0	0	0	0	0
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	Fire Department in Good Standing, Certified No Reportable Fires							

**Plainfield****Population: 648**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	2	0	0	0	0	0	0
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	2	2	0	0	0	0	0	0
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	1	1	0	0	0	0	0	0

**SOUTH HADLEY FIRE DISTRICTS****Population: 17,514*****South Hadley District # 1******Est. Pop. Protected: 11,734***

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	19	2	13	2	0	0	2
2014	31	18	3	10	1	1	0	0
2015	56	23	4	29	3	0	0	3
2016	2	2	0	0	0	0	0	0
2017	32	15	2	15	7	2	0	5

***South Hadley District # 2******Est. Pop. Protected: 5,780***

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	39	33	2	4	1	1	0	0
2014	35	34	0	1	0	0	0	0
2015	30	21	1	8	1	0	0	1
2016	51	44	2	5	2	1	1	0
2017	51	43	1	7	0	0	0	0

<b>Southampton</b>					<b>Population: 5,792</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	0	3	3	1	0	0	1
2014	5	1	0	4	0	0	0	0
2015	2	1	1	0	0	0	0	0
2016	12	4	1	7	0	0	0	0
2017	19	6	0	13	0	0	0	0

<b>Ware</b>					<b>Population: 9,872</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	53	18	2	33	7	0	0	7
2014	36	7	3	26	11	0	0	11
2015	43	14	4	25	8	0	0	8
2016	41	11	3	27	13	2	0	11
2017	23	10	4	9	3	0	0	3

<b>Westhampton</b>					<b>Population: 1,607</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	2	0	3	0	0	0	0
2014	6	3	0	3	1	0	0	1
2015	16	7	0	9	0	0	0	0
2016	6	1	0	5	1	0	0	1
2017	7	2	1	4	0	0	0	0

<b>Williamsburg</b>					<b>Population: 2,482</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	3	2	5	0	0	0	0
2014	9	5	1	3	0	0	0	0
2015	15	4	4	7	0	0	0	0
2016	10	5	0	5	2	1	0	1
2017	16	6	1	9	0	0	0	0

## Worthington

**Population: 1,156**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2013	1	1	0	0	0	0	0	0
2014	3	2	0	1	0	0	0	0
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	1	1	0	0	0	0	0	0
2017	Non-reporting Department							

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
15008	Amherst	1,625	83	5	379	83	62	117	892	1	3
15024	Belchertown	280	31	1	9	80	57	12	89	0	1
15060	Chesterfield**	0	0	0	0	0	0	0	0	0	0
15069	Cummington	1	1	0	0	0	0	0	0	0	0
15087	Easthampton	2,856	51	2	2,313	45	92	99	222	4	28
15108	Goshen	92	5	0	60	8	8	5	6	0	0
15111	Granby	274	27	2	41	36	58	23	85	0	2
15117	Hadley	7	7	0	0	0	0	0	0	0	0
15127	Hatfield	93	10	1	14	17	8	10	31	0	2
15143	Huntington	285	20	0	182	35	17	10	17	2	2
15183	Middlefield*	0	0	0	0	0	0	0	0	0	0
15214	Northampton	6,977	59	8	5,105	227	233	401	927	1	16
15230	Pelham*	0	0	0	0	0	0	0	0	0	0
15237	Plainfield	1	1	0	0	0	0	0	0	0	0
15978	South Hadley #1	509	45	1	20	46	93	68	231	0	5
15979	South Hadley #2	761	72	2	411	17	128	45	82	0	4

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
15276	Southampton	614	19	1	457	26	27	28	56	0	0
15309	Ware	1,075	27	2	895	31	31	26	60	0	3
15331	Westhampton	210	11	0	123	17	45	3	11	0	0
15340	Williamsburg	359	16	0	225	25	23	17	43	2	8
15349	Worthington**	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>Hampshire County</b>	<b>16,019</b>	<b>485</b>	<b>25</b>	<b>10,234</b>	<b>693</b>	<b>882</b>	<b>864</b>	<b>2,752</b>	<b>10</b>	<b>74</b>

\* Certified no reportable fires.

\*\*Non reporting department.

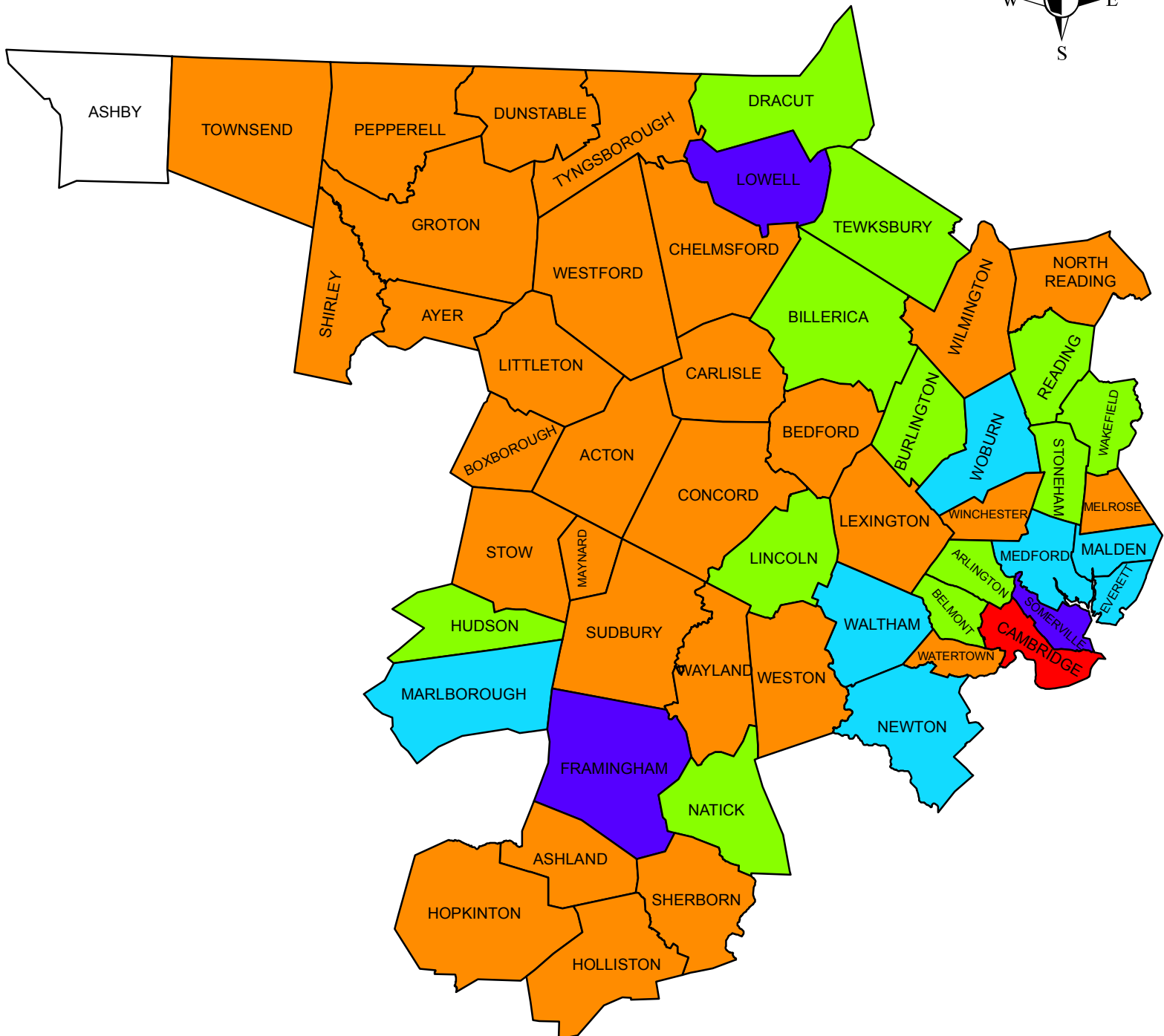
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



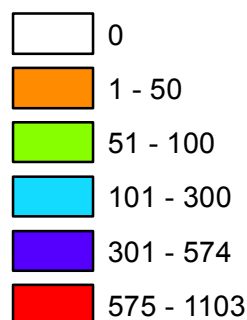
# Middlesex County

## 2017 Fire Data Analysis

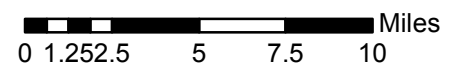
# Middlesex County Fires 2017



## 2017 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2017

# Middlesex County Fires in 2017

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## **5,294 Total Fires — 3,501 Structures, 379 Vehicles & 1,414 Other Fires**

Middlesex County ranked second out of the fourteen Massachusetts counties in total reported fires. Middlesex County fire departments reported 5,294 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 3,501 structure fires, 379 motor vehicle fires, 765 brush fires, 359 outside rubbish fires, 139 special outside fires, seven cultivated vegetation or crop fires, and 144 unclassified fires caused eight civilian deaths, one fire service death, 48 civilian injuries, 98 fire service injuries and an estimated dollar loss of \$154.6 million. Middlesex County's fires accounted for 19% of the 27,895 Massachusetts fires reported in 2017.

All 55, or 100%, of the fire departments in Middlesex County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017.

## **Structure & MV Fires Up**

The total number of reported fire incidents decreased by 841 from the 6,135 reported in 2016. Reported structure fires increased by 145 from 3,356 in the previous year. Motor vehicle fires increased by 28 from the 351 reported during 2016. Reported outside and other fires decreased by 1,014 from 2,428 the year before.<sup>1</sup>

## **MIDDLESEX COUNTY FIRES FROM 2013 TO 2017**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2013	5,054	3,000	429	1,625	109	33	11	65
2014	4,861	3,116	410	1,335	72	28	9	35
2015	5,662	3,038	412	2,212	68	21	9	38
2016	6,135	3,356	351	2,428	72	10	11	51
2017	5,294	3,501	379	1,414	43	11	4	28

## **Fire and Fire Death Rates**

Middlesex County had 3.5 fires per 1,000 population. That figure ranks Middlesex County tied for fifth in the state and below the state rate of 4.3 fires per 1,000 population. Middlesex County also had 0.03 fire deaths per 10,000 population ranking it tenth among Massachusetts counties and below the state rate of 0.09 fire deaths per 10,000 population.

## **7 Fatal Fires Killed 8 Middlesex County Residents**

In 2017, seven fatal fires killed eight people in Middlesex County.

- On January 23, 2017, at 3:55 a.m., the Belmont Fire Department was dispatched to a fire in a two-family home of undetermined cause. The victim, a 20-year old man, was overcome as he tried to escape. Two (2) firefighters were also injured at this fire.

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<sup>1</sup> 2017 was a down year for brush fires across the state.



Alarms were present but did not operate. The building was not sprinklered. Damages from this fire were estimated to be \$450,000.

- On February 14, 2017, at 11:32 p.m., the Malden Fire Department was called to a fatal smoking fire in a four-unit apartment building. The victims, an 81-year old woman and her 86-year old husband were overcome by the heat and smoke. The husband fell asleep while smoking in the living room. The cigarette ignited the furniture. Both victims were asleep at the time of the fire. The wife was transported to a local hospital where she succumbed to her injuries. No one else was injured at this fire. There were no alarms present. Sprinklers were not present. Damages were estimated to be \$100,000.
- On February 17, 2017, at 6:26 a.m., the Lowell Fire Department was called to a fatal fire in a three-unit apartment building of undetermined cause. The fire started in a first floor kitchen. The victim, a three-year old boy, was sleeping at the time of the fire. His 27-year old father was injured attempting to rescue him. It was undetermined if alarms were present and the building was not sprinklered. Damages from the blaze were estimated to be \$290,000.
- On April 20, 2017, at 3:51 a.m., the Marlborough Fire Department was called to a fatal smoking fire in a two-family home. The fire was caused by a smoking materials in the living room. The victim, a 59-year old physically disabled woman, was in the area of origin and involved with the start of the fire. No one else was injured at this fire. Alarms were present and operated. There were no sprinklers. Damages from this fire were estimated to be \$130,000.
- On September 4, 2017, at 11:34 p.m., the Wakefield Fire Department was called to a fatal smoking fire in a six-unit apartment building. The fire was started by a cigarette igniting a mattress in the bedroom. The victim, a 71-year old woman, was in the area of origin and asleep at the time of the fire. No one else was injured at this fire. Alarms were present and operated. The building was not sprinklered. Damages from this fire were estimated to be \$150,000.
- On September 21, 2017, at 9:29 p.m., the North Reading Fire Department responded to a fatal fire on and around a high voltage power line tower. The victim was a 30-year old man whose body ignited as he came into contact with the high voltage wires while he was still in contact with the steel tower. First arriving firefighters discovered the victim's body at the base of the tower. No one else was injured at this fire. It was determined that it was death by suicide. Damages from this fire were not estimated.
- On September 27, 2017, at 3:50 p.m., the Melrose Fire Department was called to a fatal cooking fire in a two-family home. The victim, a 101-year old woman was cooking when a stove top fire flared up and her clothing ignited as she tried to extinguish the fire. No one else was injured at this fire. Alarms were present but did not operate because of missing batteries. The building was not sprinklered. Damages from this fire were estimated to be \$150,000.

**1 Fire Service Death in 2017 - FF Joseph A. Toscano, Age 54**

In 2017 there was one fire-related fire service death in Middlesex County.

- On Friday, March 17, 2017, at 10:16 a.m., the Watertown Fire Department was called to a smoking fire in a single-family home at 29 Merrifield Avenue. FF. Joseph Toscano was inside the building performing suppression duties with the rest of his crew when he suddenly collapsed. His brother firefighters extricated him from the home and immediately began CPR at the scene. He was transported to Mt. Auburn Hospital where he succumbed to his medical issues. He was 54-years old

**Largest Loss Fire in 2017**

In 2017, Middlesex County fire departments reported five fires with a reported dollar loss of \$1 million or greater. The combined dollar loss of these five fires totaled \$120.8 million, or 78%, of the county's total dollar loss.

- On July 23, 2017, at 3:47 a.m., the Waltham Fire Department was called to an intentionally set fire at the 265-unit apartment building under construction at 20 Cooper St. The fire started on the second floor. Four (4) firefighters were injured at this fire. Alarms were present but did not operate because there was no power. The building did have sprinklers but they were shut off. Damages from this fire were estimated to be \$110 million.

**STRUCTURE FIRES****Reported Structure Fires Increase**

The 3,501 structure fires caused eight civilian deaths, one fire service death, 37 civilian injuries, 89 fire service injuries and an estimated dollar loss of \$150.1 million. These incidents represented 66% of Middlesex County's reported fires in 2017. The average estimated dollar loss per structure fire was \$42,886. The total number of reported structure fires increased by 145, or 4%, from the 3,356 reported in 2016.

**Arson Caused Less Than 1% of Structure Fires**

The 11 structure arsons caused an estimated dollar loss of \$110 million<sup>2</sup>. Arson was indicated as the cause of less than 1% of the structure fires and 73% of Middlesex County's structure fire dollar loss. The 11 structure arsons accounted for 26% of the Middlesex County arson fires reported in 2017. The total number of reported structure arsons increased by one, or 10%, from 10 in 2016.

**55% of Structure Arsons Occurred in Residences**

Fifty-five percent (55%) of Middlesex County's 11 structure arsons occurred in residential occupancies. Public assembly properties and educational facilities each

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<sup>2</sup> \$110 million is from a single arson fire in Waltham. It was the county's largest loss fire of the year. See anecdote.

accounted for 18%, and an industrial facility accounted for 9% of the structure arsons in Middlesex County in 2017.

## **BUILDING FIRES**

There were 3,478 building fires of different types in Middlesex County in 2017. These 3,478 building fires accounted for 99.3% of all structure fires in Middlesex County.

### **81% of Middlesex Building Fires Occurred in People's Homes**

Two thousand eight hundred and sixteen (2,816), or 81%, of Middlesex County's 3,478 building fires occurred in residential occupancies. One hundred and eighty-eight (188) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 158 fires. Hospitals, prisons, and other institutional buildings experienced 102 fires. Seventy-one (71) building fires took place in educational facilities. Seventy-one (71) building fires in Middlesex County occurred in special properties such as outbuildings, bus stop shelters and tollbooths. Thirty-seven (37) fires took place in storage properties. Twenty-two (22) fires in Middlesex County in 2017 took place in industrial, utility, defense, agricultural or mining facilities. Twelve (12) fires occurred in manufacturing and processing facilities. The *Property Use* field was coded as 'Other' or was not reported for one fire.

## **RESIDENTIAL FIRES**

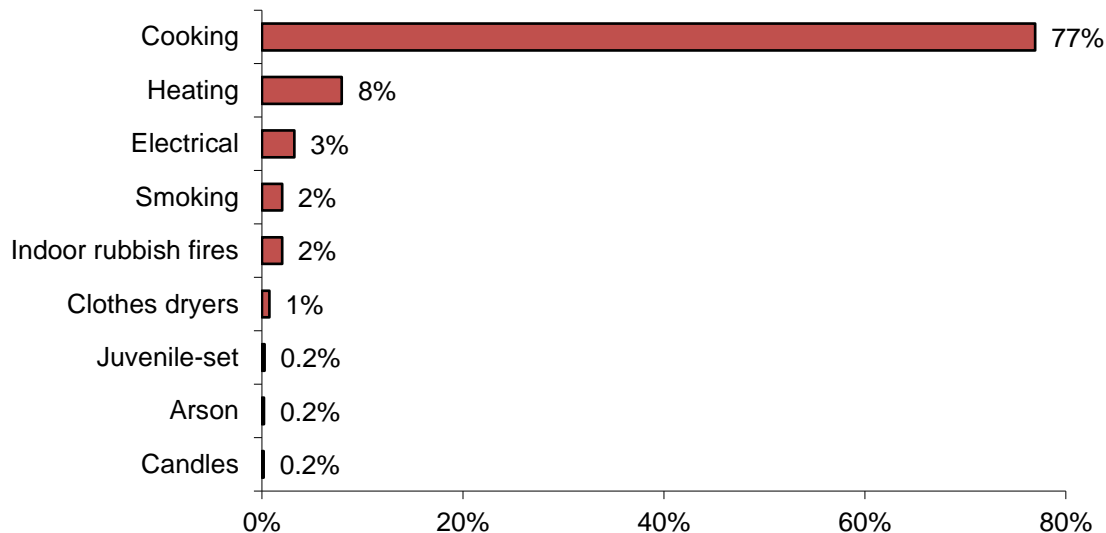
### **Residential Building Fires Are Up**

There were 2,816 reported residential building fires in Middlesex County in 2017. These 2,816 fires are an increase of 80, or 3%, from the 2,736 residential building fires reported in 2016.

### **Unsafe Cooking Causes Over 3/4 of All Residential Fires**

The leading cause of residential building fires in Middlesex County was unattended cooking and other unsafe cooking practices, accounting for 77% of these fires. Heating caused 8% of fires in people's homes. Electrical problems caused 3%. Smoking and indoor rubbish fires each accounted for 2% of these fires. Clothes dryers caused 1%; and arson, juvenile-set fires and candles each caused less than 1% of the residential fires in Middlesex County in 2017.

## 2017 Leading Causes of Fires in Middlesex County Homes



### 83% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>3</sup>

Two thousand three hundred and forty-nine (2,349), or 83%, of all residential building fires were reported as confined to non-combustible containers in 2017. Two thousand and ninety-seven (2,097) of the reported fires were cooking fires contained to a non-combustible container accounting for 74% of residential building fires. One hundred and twenty-four (124), or 4%, were fires confined to a fuel burner or boiler malfunction. Seventy-five (75), or 3%, of all residential building fires reported in 2017 were fires confined to a chimney. Forty-eight (48), or 2%, of these fires were rubbish fires contained to a non-combustible container. Four (4) commercial compactor fires and one incinerator overload or malfunction each accounted for less than 1% of the residential fires in Middlesex County in 2017.

### Alarms Alerted Occupants in 3/4 of Fires

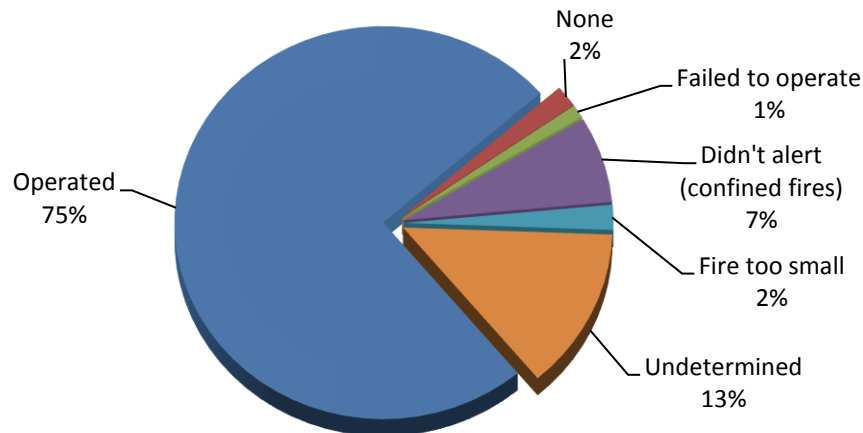
Smoke or heat alarms operated and alerted the occupants in 2,102, or 75%, of the residential building fires. In 7% of these fires<sup>4</sup>, the alarms did not alert the occupants. Alarms were present but did not operate in 1% of these incidents. In 2% of these fires, no alarms were present at all. The fire was too small to trigger the alarm in 2% of the

<sup>3</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>4</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

residential fires. Smoke alarm performance was undetermined in 375 incidents, or 13%, of Middlesex County's residential building fires.

### Detector Status in Middlesex County's Residential Structure Fires 2017



#### 1/3 of Failed Alarms Had Missing or Dead Batteries

Of the 31 fires where smoke alarms were present but failed to operate, seven, or 23%, failed because the batteries were either missing or disconnected. In three, or 10%, of these cases the batteries were dead. Seven (7), or 23%, failed from a power failure, shutoff or disconnect. Two (2), or 6%, failed from a lack of maintenance. One (1), or 3%, didn't work because of improper installation or placement. It was undetermined or unclassified in 11 cases, or 35%, why the alarms failed to operate.

### VACANT BUILDINGS

#### 1% of Building Fires Occurred in Vacant Buildings

Middlesex County reported 42 fires that occurred in buildings that were vacant, under construction or demolition. This represented 1% of the total 3,478 building fires reported to MFIRS in 2017. Twenty-one (21) fires occurred in vacant residential properties. Public assembly facilities had four of these fires. Storage facilities had 11 of these fires. Three (3) vacant building fires occurred in public assembly properties. Two occurred in educational facilities and another two in special properties. Industrial facilities, manufacturing or processing facilities and mercantile or business properties each had one vacant fire incident in Middlesex County in 2017.

Two (2), or 5%, of the vacant building fires in Middlesex County in 2017 was determined to be intentionally set. One was the large loss apartment building fire under construction and the other was an elementary school.

## **JUVENILE-SET FIRES**

### **50 Juvenile-set Fires**

There were 50 reported juvenile-set fires in Middlesex County in 2017. The nine structure fires, 35 brush fires, four special outside fires, and two unclassified fires caused one fire service injury and an estimated \$457,632 in damages.

## **ARSONS**

### **43 Total Arsons — 11 Structures, 4 Vehicles & 28 Other Arsons**

Forty-three (43), or 1%, of Middlesex County's 5,294 fires were considered intentionally set, or, for purposes of this analysis, arson. The 11 structure arsons, four motor vehicle arsons and 28 outside and other arsons caused one civilian death, four fire service injuries and an estimated dollar loss of \$110 million.

### **All Arson Down**

The total number of reported arson fires decreased by 28 from the 71 reported in 2016. Reported structure arsons increased by one from the 10 reported in the previous year. Motor vehicle arsons decreased by seven from the 11 reported in both 2016. Reported outside and other arsons decreased by 22 from 50 the year before.

## **ALL INCIDENTS**

### **Rescue & EMS Calls Are 58% of All Reported Responses**

In 2017, fire departments in Middlesex County reported 200,477 responses<sup>5</sup> to MFIRS. This is a 3% increase from the 193,863 responses reported in 2016. Of these 200,477 incidents, 194,934 non-fire calls were voluntarily reported.

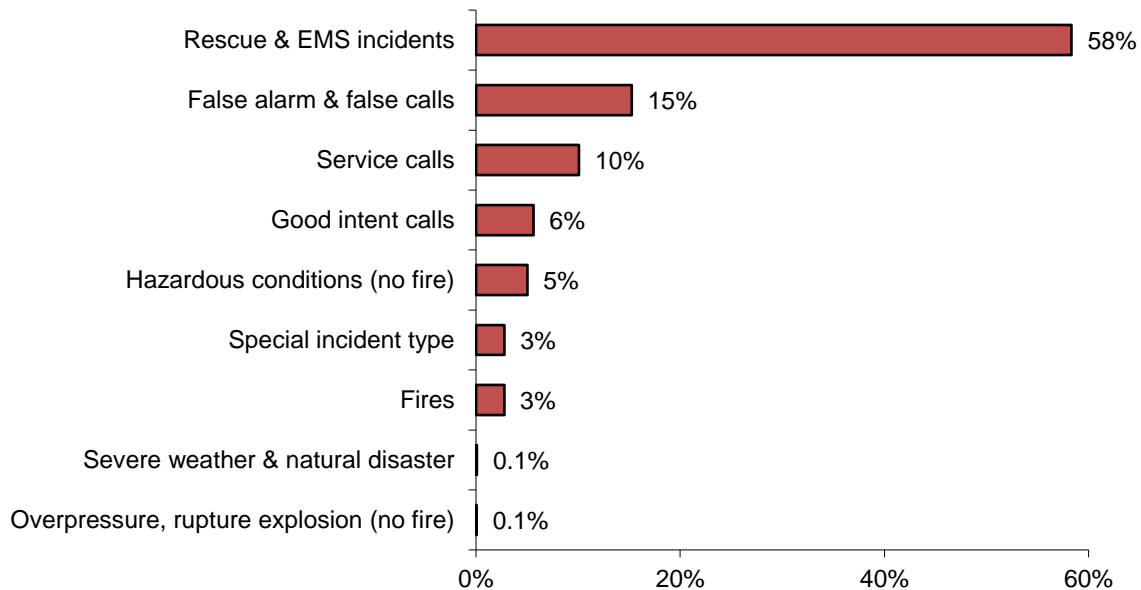
Of these 194,934 non-fire calls, 116,913, or 58%, of all the responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 30,559, or 15%, were reported false alarm or false calls; 20,204, or 10%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 11,289, or 6%, were reported good intent calls; 10,091, or 5%, were reported hazardous condition calls with no fire; 5,563, or 3%, were special incident type calls such as citizen complaints; 194, or 0.1%, were severe weather responses; and 118, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

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<sup>5</sup> These figures include incidents in which Middlesex County fire departments gave mutual aid to other fire departments.

Five thousand four hundred and forty-three (5,543), or 3%, of the total responses submitted by Middlesex County fire departments were fires.

### 2017 Responses by Incident Type



### Middlesex County Fire Departments Gave Mutual Aid 3,527 Times

In 2017, Middlesex County fire departments reported coming to the aid of other fire departments 3,527 times. Of these 3,527 responses, 1,680, or 48%, were for rescue or EMS calls; 715, or 20%, were for service calls such as cover assignments; 610, or 17%, were for good intent calls; 246, or 7%, were for fires; 196, or 6%, were for false alarms or false calls; 60, or 2%, were for hazardous conditions calls with no fire; 19, or 1%, were special incident types; and one, or 0.03%, was a severe weather or natural disaster call.

### Middlesex County Received Mutual Aid in 1,759 Incidents

In 2017, Middlesex County fire departments reported receiving aid from surrounding departments in 1,759 incidents. Of these 1,759 incidents, 1,231, or 70%, were rescue and emergency medical services calls; 203, or 12%, were for fires; 174, or 10%, were false alarms or false calls; 51, or 3%, were hazardous conditions calls with no fire; 50, or 3%, were good intent calls; 40, or 2%, were service calls; five, or 0.3%, were special incident types; four, or 0.2%, were for reported overpressure, rupture, explosion or overheat calls with no fire; and one, or 0.1%, was for a severe weather or natural disaster call.

**Middlesex County****Population: 1,503,085****3.5 Fires/1,000 Population**

<b>Total Fires:</b>	<b>5,294</b>	<b>\$154,635,597</b>
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<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	3,501	66%	\$150,143,144
Vehicle Fires	379	7%	3,854,308
Other Fires	1,414	27%	638,145

7 Fatal Fires	1.51 Civilian Deaths/1,000 Fires
8 Civilian Deaths	0.05 Civilian Deaths/10,000 Population
1 Fire Service Death	48 Civilian Injuries      98 Fire Service Injuries

**Building Fires: 3,478****Residential Building Fires: 2,816****Residential Building Fires Confined to Non-Combustible Containers: 2,349****Unconfined Residential Building Fires: 467**

7 Civilian Deaths	1 Fire Service Death	33 Civilian Injuries	84 Fire Service Injuries
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<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	1,357	48%	Operated	2,102	75%
1- & 2-Family homes	910	32%	Didn't operate	31	1%
Dormitories	249	9%	None	50	2%
Rooming houses	62	2%	Fire too small	58	2%
Residential board & care	35	1%	Didn't alert (confined)	200	7%
Hotels or motels	21	1%	Undetermined	375	15%

<b>Area of Origin<sup>6</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>7</sup></b>
Kitchen	78%	Heat from operating eq.	3%	18%
Heating equipment room	5%	Cigarette	2%	10%
Chimney or flue	3%	Arcing	2%	10%
Bedroom	2%	Radiated heat/oper. eq.	2%	9%
Exterior balcony/unencl. porch	1%	Hot ember or ash	1%	4%
		Hot or smoldering obj. other	1%	4%

<sup>6</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>7</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.



<b>Item First Ignited<sup>8</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>9</sup></b>
Food, cooking materials	76%	Too close to combustibles	2%	10%
Flammable, combustible liquid	4%	Electrical failure or malf.	1%	7%
Film, residue (creosote)	3%	Abandoned materials	1%	6%
Rubbish, trash, waste	2%	Equipment unattended	0.5%	3%
Electrical wire, cable insulation	2%	Improper contain. or stor.	0.4%	2%
		Mechanical failure or malf.	0.4%	2%

<b>Equipment<sup>10</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>11</sup></b>
Cooking equipment	76%	Unintentional	10%	59%
None	10%	Failure of eq. or heat source	3%	18%
Boiler, furnace, cent. heat unit	5%	Intentional	0.2%	1%
Chimney or flue	3%	Act of nature	0.2%	1%
Clothes dryer	1%	Undetermined	2%	11%
Electrical wiring, other	1%	Cause under investigation	1%	7%
Stove, heating	0.3%			

#### **Detector Alerted Occupants (Confined Fires in Non-Combustible Containers)**

Alerted occupants	79%
Didn't alert occupants	9%
Undetermined	12%

<sup>8</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>9</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>10</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>11</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	395	323	21	51
February	418	340	31	47
March	458	322	35	101
April	600	298	30	272
May	441	287	38	116
June	475	250	42	183
July	414	225	40	149
August	419	233	24	162
September	396	268	23	105
October	496	329	38	129
November	414	320	25	69
December	368	306	32	30

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	892	586	49	257
Monday	765	500	56	209
Tuesday	741	487	56	198
Wednesday	669	460	60	149
Thursday	732	464	67	201
Friday	696	480	42	174
Saturday	799	524	49	226

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	265	190	24	51
04:01 - 08:00	332	212	33	87
08:01 - 12:00	870	566	84	220
12:01 - 16:00	1,393	777	107	509
16:01 - 20:00	1,662	1,175	82	405
20:01 - 00:00	772	581	49	142

### **Motor Vehicle Fires**

Total: 379

Automobiles: 308 (81%)

4, or (1%), of the automobile fires considered intentionally set.

## Arson Fires

**Total Arsons: 43**

**Dollar loss: \$110,035,685**

### 0.03 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	11	0.3%	26%	\$110,015,000
Vehicle Arsons	4	1%	9%	20,500
Other Arsons	28	2%	65%	185

0.01 Structure arsons/1,000 population

0.003 Vehicle arsons/1,000 population

0.02 Other arsons/1,000 population

1 Civilian Death

4 Fire Service Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
00:01 - 04:00	4	31%	16:01 - 20:00	2	50%
04:01 - 08:00	2	15%	00:01 - 04:00	1	25%
08:01 - 12:00	2	15%	12:01 - 16:00	1	25%
16:01 - 20:00	2	15%			
20:01 - 00:00	2	15%			

Other Arsons	#	%
12:01 - 16:00	8	29%
16:01 - 20:00	7	25%
08:01 - 12:00	5	21%
20:01 - 00:00	6	21%

Peak Fixed Property Uses for Structure Arsons	#	%
1- & 2-Family homes	4	36%
Apartment buildings	2	18%

**Acton** **Population: 21,924**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	58	23	3	32	1	0	0	1
2014	38	18	3	17	3	0	0	3
2015	43	24	1	18	1	0	0	1
2016	55	22	5	28	0	0	0	0
2017	38	17	3	18	0	0	0	0

**Arlington** **Population: 42,844**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	89	43	7	39	7	0	2	5
2014	62	32	7	23	3	1	0	2
2015	104	46	13	45	1	0	0	4
2016	93	43	7	43	5	0	0	5
2017	76	43	4	29	3	0	0	3

**Ashby** **Population: 3,074**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	5	0	2	0	0	0	0
2014	3	3	0	0	0	0	0	0
2015	Non-Reporting Community							
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	Fire Department in Good Standing, Certified No Reportable Fires							

**Ashland** **Population: 16,593**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	4	0	2	1	1	0	0
2014	1	1	0	0	0	0	0	0
2015	3	3	0	0	0	0	0	0
2016	43	12	1	30	0	0	0	0
2017	46	15	1	30	1	1	0	0

<b>Ayer</b>					<b>Population: 7,427</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	25	16	6	3	1	0	0	1
2014	14	8	0	6	1	0	0	1
2015	33	14	2	17	0	0	0	0
2016	28	14	3	11	1	0	0	1
2017	18	8	2	8	0	0	0	0

<b>Bedford</b>					<b>Population: 13,320</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	15	2	17	2	0	0	2
2014	23	12	3	8	2	0	0	2
2015	22	10	3	9	0	0	0	0
2016	31	11	1	19	0	0	0	0
2017	13	6	2	5	1	0	0	1

<b>Belmont</b>					<b>Population: 24,729</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	109	85	2	22	3	1	0	2
2014	97	74	5	18	2	0	0	2
2015	81	58	4	19	1	0	0	1
2016	140	78	3	59	0	0	0	0
2017	72	54	2	16	1	0	0	1

<b>Billerica</b>					<b>Population: 40,243</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	141	55	14	72	5	1	0	4
2014	103	47	17	39	5	4	1	0
2015	164	40	19	105	0	0	0	0
2016	130	33	13	84	0	0	0	0
2017	94	46	15	33	0	0	0	0

**Boxborough****Population: 4,996**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	16	2	4	10	0	0	0	0
2014	16	3	2	11	0	0	0	0
2015	17	6	4	7	0	0	0	0
2016	26	3	1	22	0	0	0	0
2017	22	4	4	14	0	0	0	0

**Burlington****Population: 24,498**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	95	27	11	57	5	0	1	4
2014	74	33	7	34	0	0	0	0
2015	155	28	10	117	1	1	0	0
2016	122	23	16	83	0	0	0	0
2017	70	22	12	36	0	0	0	0

**Cambridge****Population: 105,162**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	932	778	11	143	0	0	0	0
2014	824	741	10	73	4	2	0	2
2015	932	766	7	159	1	1	0	0
2016	1,048	903	15	130	0	0	0	0
2017	1,103	974	11	118	0	0	0	0

**Carlisle****Population: 4,852**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	4	3	1	0	0	0	0	0
2014	2	1	1	0	0	0	0	0
2015	1	1	0	0	0	0	0	0
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	2	2	0	0	0	0	0	0

**Chelmsford****Population: 33,802**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	15	8	4	3	0	0	0	0
2014	24	9	12	3	0	0	0	0
2015	33	17	11	5	2	0	1	1
2016	39	15	14	10	1	0	1	0
2017	37	15	17	5	0	0	0	0

**Concord****Population: 17,668**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	43	20	4	19	0	0	0	0
2014	44	17	8	19	2	0	0	2
2015	58	17	5	36	3	2	1	0
2016	67	18	5	44	3	0	0	3
2017	36	12	3	21	0	0	0	0

**Devens****Population: 3,290**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	35	4	1	30	0	0	0	0
2014	24	1	2	18	0	0	0	0
2015	49	3	1	45	0	0	0	0
2016	13	4	2	7	0	0	0	0
2017	13	2	4	7	0	0	0	0

**Dracut****Population: 29,457**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	77	39	8	30	4	0	1	3
2014	53	24	12	17	3	1	1	1
2015	64	22	16	26	4	1	1	2
2016	74	27	7	40	3	0	0	3
2017	53	29	4	20	1	0	0	1

<b>Dunstable</b>					<b>Population: 3,179</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	8	0	1	7	0	0	0	0
2014	12	7	1	4	0	0	0	0
2015	12	6	0	6	1	0	0	1
2016	17	6	2	9	2	0	0	2
2017	8	2	1	5	0	0	0	0

<b>Everett</b>					<b>Population: 41,667</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	154	81	20	53	12	6	0	6
2014	128	78	10	40	7	3	0	4
2015	132	32	7	93	5	1	0	4
2016	140	53	8	79	2	1	0	1
2017	106	59	9	38	6	2	0	4

<b>Framingham</b>					<b>Population: 68,318</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	471	366	21	84	4	2	1	1
2014	494	401	27	66	2	0	1	1
2015	632	483	28	121	0	0	0	0
2016	599	455	28	116	2	2	0	0
2017	574	466	20	88	0	0	0	0

<b>Groton</b>					<b>Population: 10,646</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	9	0	1	0	0	0	0
2014	1	1	0	0	0	0	0	0
2015	20	12	1	7	1	0	0	1
2016	48	13	0	35	0	0	0	0
2017	25	11	3	11	2	0	1	1



**Holliston** **Population: 13,547**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	5	1	1	0	0	0	0
2014	5	4	1	0	0	0	0	0
2015	1	1	0	0	0	0	0	0
2016	7	7	0	0	0	0	0	0
2017	8	8	0	0	0	0	0	0

**Hopkinton** **Population: 14,925**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	65	21	11	33	2	0	0	2
2014	51	24	5	22	2	0	1	1
2015	29	16	4	9	0	0	0	0
2016	78	22	6	50	1	0	0	1
2017	42	19	5	18	0	0	0	0

**Hudson** **Population: 19,063**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	47	18	5	24	2	0	0	2
2014	30	15	3	12	3	1	1	1
2015	50	24	4	22	2	0	1	1
2016	74	24	1	49	10	1	0	9
2017	57	17	7	33	3	1	0	2

**Lexington** **Population: 31,394**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	42	24	10	8	0	0	0	0
2014	26	16	8	2	0	0	0	0
2015	40	14	10	16	2	1	0	1
2016	27	13	6	8	0	0	0	0
2017	33	11	8	14	0	0	0	0

**Lincoln** **Population: 6,362**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	39	32	2	5	2	0	0	2
2014	36	35	1	0	1	1	0	0
2015	75	69	1	5	2	0	0	2
2016	30	28	0	2	0	0	0	0
2017	73	73	0	0	0	0	0	0

**Littleton** **Population: 8,924**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	50	18	13	19	0	0	0	0
2014	28	12	6	10	0	0	0	0
2015	40	10	6	24	0	0	0	0
2016	27	11	6	10	0	0	0	0
2017	19	5	6	8	0	0	0	0

**Lowell** **Population: 106,519**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	514	305	44	165	22	13	4	5
2014	478	307	43	128	11	8	2	1
2015	496	314	28	154	10	6	3	1
2016	544	337	21	186	9	3	0	6
2017	385	261	33	91	4	0	2	2

**Malden** **Population: 59,450**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013 <sup>12</sup>	97	61	10	26	0	0	0	0
2014	148	94	9	45	0	0	0	0
2015	169	91	8	70	1	1	0	0
2016	133	60	3	70	0	0	0	0
2017	122	64	5	53	0	0	0	0

<sup>12</sup> Malden only reported the last 6 months of runs for 2013.

**Marlborough****Population: 38,499**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	141	55	15	71	4	1	0	3
2014	130	56	23	51	1	1	0	0
2015	142	43	21	78	2	0	0	2
2016	116	31	11	74	1	0	0	1
2017	105	22	16	67	0	0	0	0

**Maynard****Population: 10,106**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	23	13	2	8	1	1	0	0
2014	19	17	1	1	0	0	0	0
2015	18	9	1	8	2	0	1	1
2016	21	9	1	11	1	1	0	0
2017	27	19	1	7	0	0	0	0

**Medford****Population: 56,173**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	276	166	21	89	5	0	0	5
2014	225	125	15	85	0	0	0	0
2015	286	143	20	123	1	1	0	0
2016	242	143	16	83	0	0	0	0
2017	239	169	9	61	0	0	0	0

**Melrose****Population: 26,983**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	9	5	2	2	0	0	0	0
2014	26	19	4	3	1	1	0	0
2015	17	9	4	4	0	0	0	0
2016	23	12	5	6	0	0	0	0
2017	20	15	4	1	3	3	0	0

**Natick****Population: 33,006**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	106	61	6	39	0	0	0	0
2014	86	31	8	47	0	0	0	0
2015	92	24	8	60	0	0	0	0
2016	107	29	8	70	0	0	0	0
2017	68	28	7	33	1	1	0	0

**Newton****Population: 85,146**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	178	80	11	87	1	0	0	1
2014	118	61	14	43	0	0	0	0
2015	152	57	12	83	0	0	0	0
2016	205	87	8	110	0	0	0	0
2017	295	211	16	68	0	0	0	0

**North Reading****Population: 14,892**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	30	16	5	9	2	1	0	1
2014	12	11	0	1	0	0	0	0
2015	26	9	2	15	3	1	0	2
2016	46	13	7	26	5	0	0	5
2017	34	23	3	8	1	1	0	0

**Pepperell****Population: 11,497**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	58	47	4	7	0	0	0	0
2014	35	15	4	16	0	0	0	0
2015	40	18	6	16	0	0	0	0
2016	35	15	2	18	0	0	0	0
2017	26	14	1	11	0	0	0	0

**Reading** **Population: 24,747**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	66	42	6	18	1	0	1	3
2014	62	39	7	16	2	0	0	2
2015	63	30	7	26	4	0	0	4
2016	77	34	9	34	1	0	0	1
2017	58	28	10	20	5	0	0	5

**Sherborn** **Population: 4,119**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	29	12	1	16	2	0	0	2
2014	15	5	2	8	0	0	0	0
2015	22	8	3	11	1	1	0	0
2016	9	0	1	8	0	0	0	0
2017	15	4	1	10	0	0	0	0

**Shirley** **Population: 7,211**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	4	1	0	0	0	0	0
2014 <sup>13</sup>	Fire Department in Good Standing, Certified No Reportable Fires							
2015	1	1	0	0	0	0	0	0
2016	3	2	0	1	0	0	0	0
2017	13	4	3	6	1	0	1	0

**Somerville** **Population: 75,754**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	29	21	7	1	0	0	0	0
2014	370	275	14	81	2	0	1	1
2015	199	109	8	82	0	0	0	0
2016	413	309	12	92	5	0	5	0
2017	433	334	16	83	1	0	0	1

<sup>13</sup> In 2014 Shirley did not report any fires but they did report 1 Hazardous conditions with no fire incident.

**Stoneham****Population: 21,437**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	67	57	8	2	0	0	0	0
2014	67	52	9	6	0	0	0	0
2015	101	40	10	51	0	0	0	0
2016	138	73	7	58	0	0	0	0
2017	96	63	8	25	0	0	0	0

**Stow****Population: 6,590**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	21	8	2	11	1	0	0	1
2014	13	8	0	5	0	0	0	0
2015	22	11	1	10	2	0	0	2
2016	20	6	1	13	1	0	0	1
2017	11	5	1	5	0	0	0	0

**Sudbury****Population: 17,659**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	33	14	0	19	2	0	0	2
2014	21	12	3	6	2	1	0	1
2015	33	8	5	20	0	0	0	0
2016	32	11	2	19	1	0	0	1
2017	8	6	0	2	0	0	0	0

**Tewksbury****Population: 28,961**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	110	46	12	52	2	0	0	2
2014	84	30	13	41	2	0	0	2
2015	86	34	11	41	2	1	0	1
2016	91	19	11	61	1	0	0	1
2017	81	25	15	41	1	0	0	1

<b>Townsend</b>					<b>Population: 8,926</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	10	4	4	2	0	0	0	0
2014	7	4	1	2	0	0	0	0
2015	26	7	2	17	3	0	0	3
2016	31	6	2	23	4	0	0	4
2017	23	14	1	8	3	0	0	3

<b>Tyngsborough</b>					<b>Population: 11,292</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	30	7	4	17	0	0	0	0
2014	35	6	5	24	0	0	0	0
2015	26	2	9	15	0	0	0	0
2016	29	6	10	13	6	0	5	1
2017	25	11	7	7	1	0	0	1

<b>Wakefield</b>					<b>Population: 24,932</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	47	37	9	1	0	0	0	0
2014	46	38	7	1	0	0	0	0
2015	51	43	7	1	0	0	0	0
2016	54	39	11	4	0	0	0	0
2017	60	48	8	4	0	0	0	0

<b>Waltham</b>					<b>Population: 60,632</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	170	59	26	85	4	3	1	0
2014	167	73	16	78	3	1	1	1
2015	226	88	23	115	4	2	0	2
2016	249	79	14	156	2	1	0	1
2017	165	67	21	77	3	2	0	1

**Watertown** **Population: 31,915**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	77	32	9	36	0	0	0	0
2014	63	16	5	42	2	0	0	2
2015	76	24	9	43	1	0	1	0
2016	50	20	2	28	0	0	0	0
2017	40	17	4	19	0	0	0	0

**Wayland** **Population: 12,994**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	35	13	3	19	1	1	0	0
2014	20	8	3	9	0	0	0	0
2015	30	9	2	19	0	0	0	0
2016	29	8	1	20	0	0	0	0
2017	21	11	1	9	0	0	0	0

**Westford** **Population: 21,951**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	54	15	8	31	2	1	0	1
2014	29	5	3	21	0	0	0	0
2015	64	19	5	40	0	0	0	0
2016	71	15	2	54	1	0	0	1
2017	45	17	5	23	0	0	0	0

**Weston** **Population: 11,261**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	49	19	7	23	0	0	0	0
2014	38	20	11	7	1	1	0	0
2015	36	7	9	20	0	0	0	0
2016	38	12	5	21	0	0	0	0
2017	30	13	9	8	0	0	0	0



**Wilmington** **Population: 22,325**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	88	40	17	31	0	0	0	0
2014	67	35	12	20	1	0	0	1
2015	100	47	12	41	0	0	0	0
2016	95	26	8	61	0	0	0	0
2017	22	5	9	8	0	0	0	0

**Winchester** **Population: 21,374**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	52	17	3	32	5	1	0	4
2014	39	22	1	16	2	1	0	1
2015	44	22	6	16	1	1	0	0
2016	37	19	1	17	0	0	0	0
2017	26	10	2	14	0	0	0	0

**Woburn** **Population: 38,120**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	70	42	23	5	0	0	0	0
2014	230	114	26	90	2	1	0	1
2015	228	90	16	122	1	0	0	1
2016	243	99	20	124	4	1	0	3
2017	164	75	20	69	1	0	0	1

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
17002	Acton	5,250	38	5	1,770	227	607	108	369	1	2,125
17010	Arlington	5,260	83	1	3,370	421	471	156	742	13	3
17012	Ashby*	0	0	0	0	0	0	0	0	0	0
17014	Ashland	2,277	56	1	1,524	81	127	147	336	1	4
17019	Ayer	692	25	0	89	68	275	51	179	0	5
17023	Bedford	2,663	16	1	1,346	158	192	98	407	0	445
17026	Belmont	2,621	72	1	1,428	83	293	222	509	6	7
17031	Billerica	4,916	96	8	3,324	302	461	100	600	11	14
17037	Boxborough	566	28	0	191	33	118	28	156	0	12
17048	Burlington	4,447	70	1	2,844	146	654	145	584	1	2
17049	Cambridge	14,681	1,103	9	6,723	896	788	2,111	3,040	6	5
17051	Carlisle	2	2	0	0	0	0	0	0	0	0
17056	Chelmsford	38	37	1	0	0	0	0	0	0	0
17067	Concord	2,420	44	0	1,241	144	228	143	613	0	7
17919	Devens	724	21	0	238	26	276	12	146	0	5

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
17081	Dunstable	334	13	0	159	31	55	13	47	15	1
17079	Dracut	4,028	53	3	2,528	125	434	190	687	5	3
17093	Everett	5,427	121	5	3,417	233	324	495	829	1	2
17100	Framingham	11,138	577	2	7,586	243	879	603	1,244	1	3
17115	Groton	512	25	8	123	56	38	39	219	1	3
17136	Holliston	8	8	0	0	0	0	0	0	0	0
17139	Hopkinton	2,273	56	6	1,373	103	226	189	315	0	5
17141	Hudson	3,472	62	2	1,803	149	316	158	431	3	548
17155	Lexington	37	33	0	0	3	1	0	0	0	0
17157	Lincoln	863	74	0	484	33	75	38	147	1	11
17158	Littleton	1,782	32	2	1,189	63	132	123	238	0	3
17160	Lowell	16,287	401	12	10,312	788	1,265	825	2,573	27	84
17165	Malden	8,916	123	1	6,226	213	766	451	1,128	2	6
17170	Marlborough	7,053	108	10	4,299	257	734	586	1,032	0	27
17174	Maynard	1,397	29	1	840	51	175	84	212	1	4
17176	Medford	9,675	246	4	6,582	544	730	293	1,228	25	23

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any departments that wants to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
17178	Melrose	24	22	0	0	1	1	0	0	0	0
17198	Natick	4,801	71	0	3,112	307	424	234	641	1	11
17207	Newton	8,177	295	4	4,259	451	884	354	1,928	0	2
17213	North Reading	2,207	38	1	1,129	173	323	194	310	34	5
17232	Pepperell	1,324	28	0	905	38	73	60	213	7	0
17246	Reading	210	59	0	4	72	14	12	48	1	0
17269	Sherborn	518	19	0	277	50	59	36	77	0	0
17270	Shirley	899	13	0	525	17	234	24	82	2	2
17274	Somerville	13,900	463	9	6,242	1,105	2,514	677	2,467	5	418
17284	Stoneham	4,541	111	4	2,814	151	182	279	307	2	691
17286	Stow	827	21	1	564	24	64	32	114	2	5
17288	Sudbury	1,444	12	0	906	103	71	51	272	1	28
17295	Tewksbury	4,757	81	1	2,972	95	930	218	447	3	10
17299	Townsend	1,324	26	3	841	58	153	131	109	3	0

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## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
17301	Tyngsborough	1,542	26	1	903	102	186	74	248	1	1
17305	Wakefield	147	60	0	0	11	0	0	76	0	0
17308	Waltham	8,296	174	2	5,025	554	635	410	1,461	0	35
17314	Watertown	5,272	41	0	3,215	251	875	160	699	1	30
17315	Wayland	3,057	22	1	1,147	247	507	64	212	0	857
17330	Westford	3,150	53	1	1,916	90	323	99	643	3	22
17333	Weston	2,320	36	0	1,273	163	170	114	560	3	1
17342	Wilmington	3,209	22	0	2,136	129	286	182	415	1	38
17344	Winchester	2,361	34	1	1,312	278	179	143	409	4	1
17347	Woburn	6,411	164	5	4,427	144	477	333	810	2	49
<b>Middlesex County</b>		<b>200,477</b>	<b>5,543</b>	<b>118</b>	<b>116,913</b>	<b>10,091</b>	<b>20,204</b>	<b>11,289</b>	<b>30,559</b>	<b>197</b>	<b>5,563</b>

\* Certified no reportable fires.

\*\*Non reporting department.

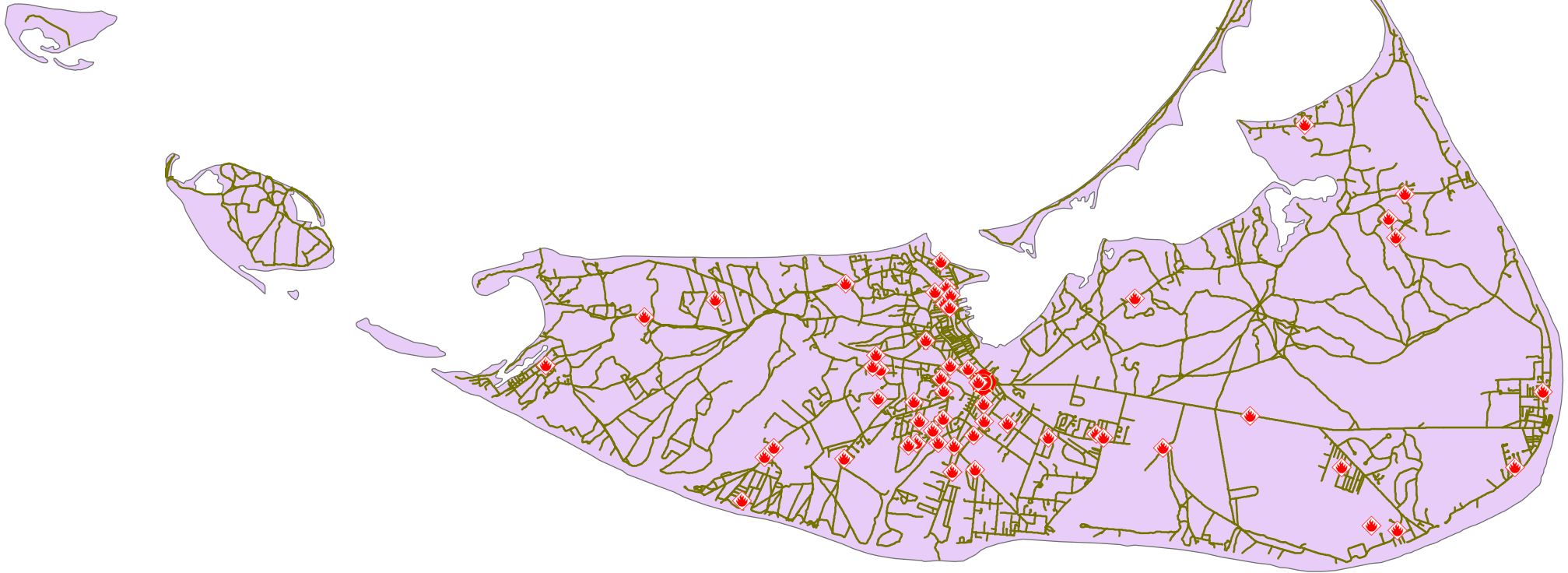
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# Nantucket County

## 2017 Fire Data Analysis

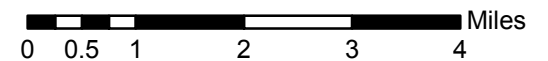
# Nantucket County Fires 2017



## 2017 Nantucket Fires

-  2017 Nantucket Fires
-  Fire Stations

**MFIRS**  
Massachusetts Fire Incident Reporting System



Massachusetts Fire Incident Reporting System 2017

# Nantucket County Fires in 2017

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## **54 Total Fires — 19 Structures, 13 Vehicles & 22 Outside and Other Fires**

Nantucket County ranked thirteenth out of the fourteen Massachusetts counties in total reported fires. The Nantucket Fire Department reported 54 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 19 structure fires, 13 motor vehicle fires, nine brush fires, five outside rubbish fires, two special outside fires, and six unclassified fires caused one fire service injury and an estimated dollar loss of \$339,000. Nantucket County's fires accounted for 0.2% of the 27,895 Massachusetts fires reported in 2017.

## **Structure Fires Down**

The total number of reported fire incidents increased by two from the 52 fires reported in 2016. Structure fires decreased by eight from the 27 reported in 2016. Motor vehicle fires increased by nine from four reported the previous year. Reported outside and other fires increased by one from the 21 reported in 2016.<sup>1</sup>

Nantucket is an island community with a small year round population. During the summer months, the population increases immensely. Consequently, 44% of Nantucket's fires occurred between the months of May and September.

## **NANTUCKET FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	46	36	0	10	0	0	0	0
2014	90	46	11	33	3	0	1	2
2015	80	51	7	22	0	0	0	0
2016	52	27	4	21	0	0	0	0
2017	54	19	13	22	4	2	1	1

## **Fire and Fire Death Rates**

Nantucket County had 5.3 fires per 1,000 population. That figure ranks Nantucket County third in the state and above the state rate of 4.3 fires per 1,000 population. Nantucket County also had 0.0 fire deaths per 10,000 population, ranking it tied for last among Massachusetts counties and below the state rate of 0.09 fire deaths per 10,000 population.

## **0 Reported Fire Deaths in Nantucket County**

There were no fire deaths in 2017 in Nantucket County

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<sup>1</sup> 2017 was a down year across the state for brush fires.



**1-Family Home Fire Largest Dollar Loss in 2017**

In 2017 Nantucket did not have a fire with a dollar loss greater than \$1 million. The largest loss fire caused \$115,000 in estimated damages and was responsible for 34% of the total dollar for Nantucket in 2017.

- On March 10, 2017, at 8:37 p.m., the Nantucket Fire Department was called to an arson in a single-family home. The fire started on the exterior of the home. No one was injured at this fire. Alarms were present but the fire was too small to activate them. The building did not have any sprinklers. Damages to the building were estimated to be \$115,000.

**STRUCTURE FIRES****Reported Structure Fires Down**

There were 19 structure fires in Nantucket in 2017. These incidents represented 35% of Nantucket County's reported fires in 2017. These 19 fires caused one fire service injury and \$301,000 in estimated losses in 2017. The total number of reported structure fires decreased by eight from the 27 reported in 2014.

**Arson Caused 11% of Structure Fires**

The two structure arsons caused one fire service injury and an estimated dollar loss of \$125,000. Arson was indicated as the cause of 11% of the structure fires and 42% of Nantucket County's structure fire dollar loss. The two structure arsons accounted for 50% of the Nantucket County arson fires reported in 2017. The total number of reported structure arsons increased by two, or 200%, from none reported in 2016.

**BUILDING FIRES**

There were 19 building fires of different types in Nantucket County in 2017. These 19 building fires accounted for all of the structure fires in Nantucket County.

**74% of Nantucket Building Fires Occurred in People's Homes**

Fourteen (14), or 74%, of Nantucket County's 19 building fires occurred in residential occupancies. Three (3) happened in public assembly properties, one at a mercantile or business property and one occurred at a storage facility.

**RESIDENTIAL FIRES****Residential Building Fires Down**

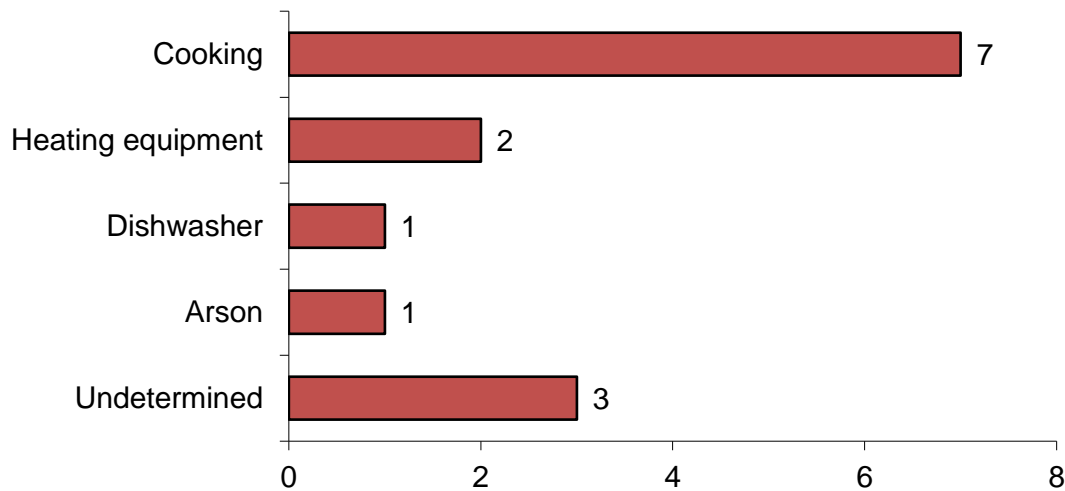
There were 14 reported residential building fires in Nantucket County in 2017. These 14 fires are a decrease of nine, or 39%, over the 23 reported in 2016. Twelve (12), or 86%, occurred in one- or two-family homes; and two, or 14%, occurred in apartments.

**Cooking Fires Cause 1/2 of Residential Fires**

The leading cause of residential building fires in Nantucket County was unattended cooking and other unsafe cooking practices, accounting for seven, or 50%, of these fires.

Heating equipment caused two, or 14%, of these fires. Arson and a dishwasher were each the cause of one, or 7%, of Nantucket's 2017 residential fires. The cause was not determined for three of the residential fires.

### 2017 Leading Causes of Fires in Nantucket Homes



### 8 Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

Eight (8), or 57%, of all residential building fires were reported as confined to non-combustible containers in 2017. Six (6) of the reported fires were cooking fires contained to a non-combustible container accounting for 43% of the residential fires. One (1), or 7%, were confined to a chimney or flue and one, or 7%, of Nantucket's residential fires were fuel burner or boiler malfunctions.

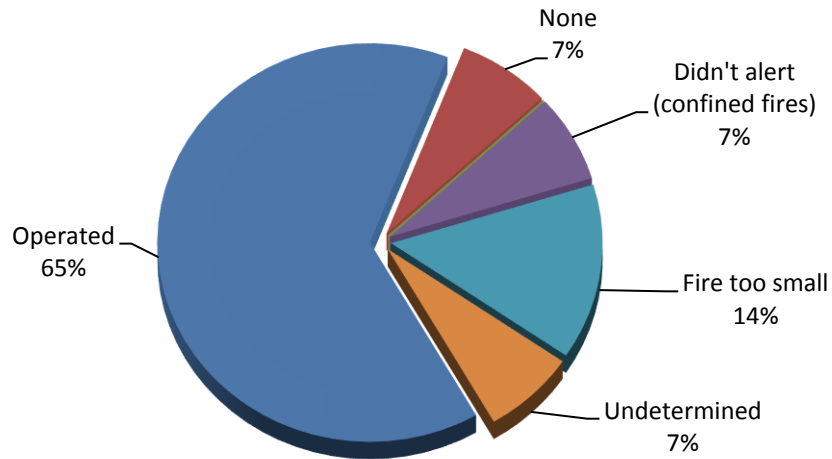
### Detectors Alerted Occupants in 65% of Fires

Smoke or heat detectors operated and alerted the occupants in nine, or 65%, of the residential building fires. In one, or 7%, of these fires<sup>3</sup>, detectors did not alert the occupants. There was no fires where the detector failed to operate. There was one reported fire where there were no detectors, accounting for 7% of these fires. The fire was too small to activate the detector in two, or 14%, of these fires. Detector performance was undetermined in one, or 7%, of Nantucket's residential fires.

<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

## Detector Status in Nantucket County's Residential Fires 2017



### VACANT BUILDING FIRES

#### 0 Building Fires Occurred in Vacant Buildings

Nantucket County did not report any fires that occurred in a building that was vacant, under construction or demolition.

None of the vacant building fires in Nantucket County in 2017 were determined to be intentionally set.

### JUVENILE-SET FIRES

#### 0 Juvenile-set Fire

Nantucket County did not report any juvenile-set fires in 2017.

### ARSONS

#### 4 Total Arsons<sup>4</sup> — 2 Structures, 1 Vehicles & 1 Other Arsons

Four (4), or 7%, of Nantucket County's 54 fires were considered intentionally set, or, for purposes of this analysis, arson. The two structure arsons, one motor vehicle arson and one outside and other arson caused one fire service injury and an estimated dollar loss of \$155,000.

<sup>4</sup> In MFIRS v5 a fire is considered an arson if the Cause of Ignition = 1 (Intentional) and the Age of Person (Fire Module) is greater than 17 or if the field is blank; or if the Wildland Module is used, the Wildland Fire Cause = 7 (Incendiary) and the Age of the Person (Wildland Module) is greater than 17 or if the field is left blank.

### All Arson Up Slightly

The total number of arsons increased by four from none in 2016. Reported structure arsons increased by two from the none reported in 2016. Motor vehicle arsons and outside and other arson each increased by one from none reported in 2016.

### ALL INCIDENTS

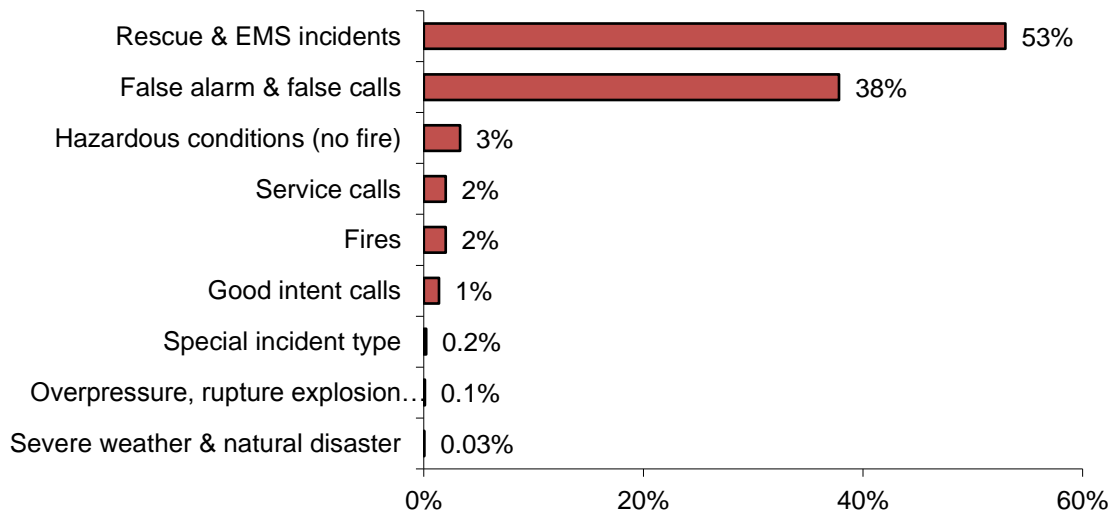
#### Rescue & EMS Calls Are 53% of All Reported Incidents

In 2017, Nantucket County reported 2,871 responses to MFIRS. Of these 2,871 incidents, 2,817 non-fire calls were voluntarily reported.

Of these 2,817 non-fire calls, 1,521, or 53%, of the total responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 1,086, or 38%, were reported false alarm or false calls; 95, or 3%, were reported hazardous condition calls with no fire; 65, or 2%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 40, or 1%, were reported good intent calls; six, or 0.2%, were special incident types; three, or 0.1%, were overpressure, rupture or explosion calls with no fire; and one, or 0.03% was a severe weather incident.

Fifty-one (54), or 2%, of the total responses submitted by the Nantucket Fire Department were fires.

### 2017 Incidents by Incident Type



#### Nantucket Received Aid in 1 Call

In 2017, Nantucket reported receiving mutual aid for one call. This call was for a Rescue or EMS incident.

**Nantucket County**

**Population: 10,172**

**5.3 Fires/1,000 Population**

**Total Fires: 54 \$339,000**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	19	35%	\$301,000
Vehicle Fires	13	24%	36,000
Other Fires	22	41%	2,000

0 Fatal Fires 0.00 Civilian Deaths/1,000 Fires  
 0 Civilian Deaths 0.0 Civilian Deaths/10,000 Population  
 1 Fire Service Injury

**Building Fires: 19****Residential Structure Fires: 14****Residential Structure Fires Confined to Non-Combustible Containers: 8****Unconfined Residential Structure Fires: 6**

1 Fire Service Injury

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	12	86%	Operated	9	64%
Apartments	2	14%	Didn't operate	0	0%
			None	1	7%
			Fire too small	2	14%
			Didn't alert (confined)	1	7%
			Undetermined	1	7%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	57%	Spark/ember/flame op. eq.	14%	33%
Heating room or area	7%	Rad, cond. heat from op. eq	7%	17%
Chimney or flue	7%			

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Cooking materials	50%	Equipment unattended	7%	17%
Film, residue (creosote)	7%	High winds	7%	17%
Structural member, flaming	7%			

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	43%	Unintentional	36%	83%
None	36%	Act of nature	0%	0%
Chimney or flue	7%	Failure of eq. or heat source	0%	0%
Boiler, furnace, cent. heat. unit	7%	Cause under investigation	0%	0%
Dishwasher	7%	Undetermined	0%	0%
		Intentional	7%	17%

**Detector Alerted Occupants  
(Confined Fires in Non-Combustible Containers)**

Alerted Occupants	88%
Didn't Alert Occupants	13%
Undetermined	0%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined Fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	2	1	1	0
February	4	1	2	1
March	4	2	1	1
April	6	2	2	2
May	6	2	1	3
June	2	2	0	0
July	7	0	3	4
August	8	2	1	5
September	1	0	0	1
October	2	1	1	0
November	6	3	0	3
December	6	3	1	2

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	7	2	1	4
Monday	8	3	1	4
Tuesday	12	3	6	3
Wednesday	5	1	1	3
Thursday	5	2	0	3
Friday	11	4	3	4
Saturday	6	4	1	1

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	3	3	0	0
04:01 - 08:00	6	1	3	2
08:01 - 12:00	10	3	2	5
12:01 - 16:00	20	5	6	9
16:01 - 20:00	11	3	2	6
20:01 - 00:00	4	4	0	0

### **Motor Vehicle Fires**

Total: 13

Automobiles: 13 (100%)

1, or (8%), of the automobile fires were considered intentionally set.

## Arson Fires

**Total Arsons: 4**

**Dollar loss: \$155,000**

### 0.4 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	2	11%	50%	\$125,000
Vehicle Arsons	1	5%	25%	30,000
Other Arsons	1	5%	25%	0

0.20 Structure arsons/1,000 population

0.10 Vehicle arsons/1,000 population

0.10 Other arsons/1,000 population

1 Fire Service Injury

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
00:01 – 04:00	1	50%	00:01 – 04:00	1	100%
20:01 – 00:00	1	50%			

Other Arsons	#	%
16:01 – 20:00	1	100%



## Responses Reported to MFIRS by Month

<b>Incident Type</b>	<b># of Incidents</b>	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>	<b>November</b>	<b>December</b>
Fires	54	2	4	4	6	6	2	7	8	1	2	6	6
Overpressure, rupture explosion (no fire)	3	0	0	0	1	0	0	0	0	0	0	2	0
Rescue & EMS incidents	1,521	107	71	92	107	98	178	248	176	133	112	97	102
Hazardous conditions (no fire)	95	5	5	7	1	8	15	12	15	12	7	4	4
Service calls	65	5	4	4	2	2	3	2	9	7	3	11	13
Good intent calls	40	5	4	4	4	1	5	1	4	3	3	2	4
False alarm & false calls	1,086	56	52	58	71	113	119	151	141	103	82	70	70
Severe weather & natural disaster	1	0	0	0	1	0	0	0	0	0	0	0	0
Special incident type	6	0	0	0	1	0	0	1	0	2	0	2	0
<b>Total</b>	<b>2,871</b>	<b>180</b>	<b>140</b>	<b>169</b>	<b>194</b>	<b>228</b>	<b>322</b>	<b>422</b>	<b>353</b>	<b>261</b>	<b>209</b>	<b>194</b>	<b>199</b>

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any departments that want to send all of their responses to do so.



# Norfolk County

## 2017 Fire Data Analysis



0  
1 - 25  
26 - 50  
51 - 100  
101 - 402  
403 - 641

Massachusetts Fire Incident Reporting System 2017



# Norfolk County Fires in 2017

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## **2,990 Total Fires — 1,808 Structures, 220 Vehicles & 962 Other Fires**

Norfolk County ranked fourth out of the fourteen Massachusetts counties in total reported fires. Norfolk County fire departments reported 2,990 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 1,808 structure fires, 220 motor vehicle fires, 580 brush, tree or lawn fires, 151 outside rubbish fires, 105 special outside fires, 26 cultivated vegetation or crop fires, and 100 other fires caused six civilian deaths, 25 civilian injuries, 53 fire service injuries and an estimated dollar loss of \$29.9 million. Norfolk County's fires accounted for 11% of the 27,895 Massachusetts fires reported in 2017.

Twenty-seven (27) of the 28 fire departments in Norfolk County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017. This represents 96.4% of all Norfolk County fire departments.

## **Structure Fires Up**

The total number of reported fire incidents decreased by 217 from the 3,207 reported in 2016. Reported structure fires increased by 129 from the 1,679 reported during the previous year. Motor vehicle fires increased by four from the 216 reported the year before. Reported outside and other fires decreased 350 from the 1,312 reported a year earlier.<sup>1</sup>

## **NORFOLK COUNTY FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2,886	1,800	240	846	59	6	4	49
2014	3,153	1,820	249	1,084	79	11	5	63
2015	3,223	1,825	225	1,173	59	8	5	46
2016	3,207	1,679	216	1,312	54	9	2	43
2017	2,990	1,808	220	962	68	16	1	51

## **Fire and Fire Death Rates**

Norfolk County had 4.5 fires per 1,000 population. That figure ranks Norfolk County fourth in the state and above the state rate of 4.3 fires per 1,000 population. Norfolk County also had 0.09 fire deaths per 10,000 population ranking it tied for fifth among Massachusetts counties and equal to the state rate of 0.09 fire deaths per 10,000 population.

## **4 Norfolk Fires Kill 6 People**

In 2017, four fires killed six people in Norfolk County.

- On February 11, 2017, at 1:24 a.m., the Quincy Fire Department was called to a fatal smoking fire in a three-family home. The fire was started by someone smoking while

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<sup>1</sup> 2017 was a down year for brush fires.

using home oxygen. The victims, a 19-year old man and a 67-year old woman were overcome while trying to escape. Thirteen (13) firefighters were injured at this fire. It was undetermined if alarms were present. The home did not have sprinklers. Damages from this fire were estimated to be \$375,000.

- On March 6, 2017, at 12:29 a.m., the Milton Fire Department was called to a fatal electrical fire in a single-family home. The fire started in a bedroom. The victims, an 87-year old man and a 91-year old man were both asleep at the time of the fire. Two (2) firefighters were also injured at this fire. Alarms were present and alerted the occupants. There were no sprinklers. The fire caused an estimated \$530,000 worth of damage.
- On August 10, 2017, at 6:43 p.m., the Weymouth Fire Department was called to a fatal motor vehicle crash with ensuing fire. A motorcycle collided with a car and both vehicles ignited. The victim, a 47-year old man and driver of the motorcycle was on fire near both of the vehicles. Damages were estimated to be \$5,500 for the motorcycle and \$15,000 for the car.
- On November 19, 2017, at 10:56 p.m., the Braintree Fire Department was called to a fatal fire in a single-family home of undetermined cause. The victim was a 46-year old man. No one else was injured at this fire. Alarms were not present. The building was not sprinklered. Damages from the fire were estimated to be \$450,000.

### **Weymouth Has Norfolk County's Largest Loss Fire in 2017**

There were two fires in Norfolk County that caused over \$1 million in estimated damages. These two fires accounted for \$16.5 million in estimated damages and 55% of the total dollar loss for the county.

- The Weymouth Fire Department was dispatched to a fire of undetermined cause in a 50-unit apartment building that was under construction at 2:38 p.m. on September 14, 2017. One (1) firefighter was injured at this fire. It was undetermined if alarms were present. Sprinklers were present but were shut off. Damages from this fire were estimated to be \$15 million.

## **STRUCTURE FIRES**

### **Reported Structure Fires Up**

The 1,808 structure fires caused five civilian deaths, 23 civilian injuries, 48 fire service injuries and an estimated dollar loss of \$26.5 million. These incidents represented 60% of Norfolk County's reported fires in 2017. The average estimated dollar loss per structure fire was \$14,635. The total number of reported structure fires increased by 129, or 8%, from the 1,679 reported in 2016.

### **Arson Caused 1% of Structure Fires**

The 16 structure arsons caused an estimated dollar loss of \$172,601. Arson was indicated as the cause of 1% of the structure fires and 1% of Norfolk County's structure fire dollar loss. The 16 structure arsons accounted for 24% of the Norfolk County arson fires

reported in 2017. The total number of reported structure arsons increased by seven, or 78%, from nine in 2016.

### **3/4 of Structure Arsons Occur in Residential Properties**

Twelve (12), or 75%, of Norfolk County's 16 structure arsons occurred in residential occupancies. Three (3) fires, or 16%, took place in special properties and one, or 6%, happened at public an assembly property.

## **BUILDING FIRES**

There were 1,800 building fires of different types in Norfolk County in 2017. These 1,800 building fires accounted for 99.6% of all structure fires in Norfolk County.

### **84% of Norfolk Building Fires Occurred in People's Homes**

One thousand five hundred and forty-eight (1,548), or 84%, of Norfolk County's 1,800 building fires occurred in residential occupancies. Seventy-nine (79) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 63 fires. Hospitals, prisons, and other institutional buildings experienced 42 fires. Twenty-three (23) building fires took place in educational properties. Seven (7) fires took place in manufacturing and processing facilities. Nineteen (19) fires took place in storage properties. Six (6) building fires in Norfolk County occurred in special properties such as outbuildings, bus stop shelters and telephone booths. Three (3) fires occurred in an industrial buildings and two fires occurred in unclassified buildings in Norfolk County in 2017.

## **RESIDENTIAL FIRES**

### **Apartments Accounted for Almost 1/2 of Residential Building Fires**

The peak fixed property uses for residential building fires were apartments, accounting for 49% of the residential building fires in Norfolk County; 37% occurred in 1- or 2-family homes; 4% happened in rooming houses; 3% occurred in dormitories; 1% occurred in residential board and care facilities; and 1% happened in hotels or motels. Ninety (90), or 6%, of the residential building fires in Norfolk County occurred in unclassified residential buildings.

### **Residential Building Fires Increased**

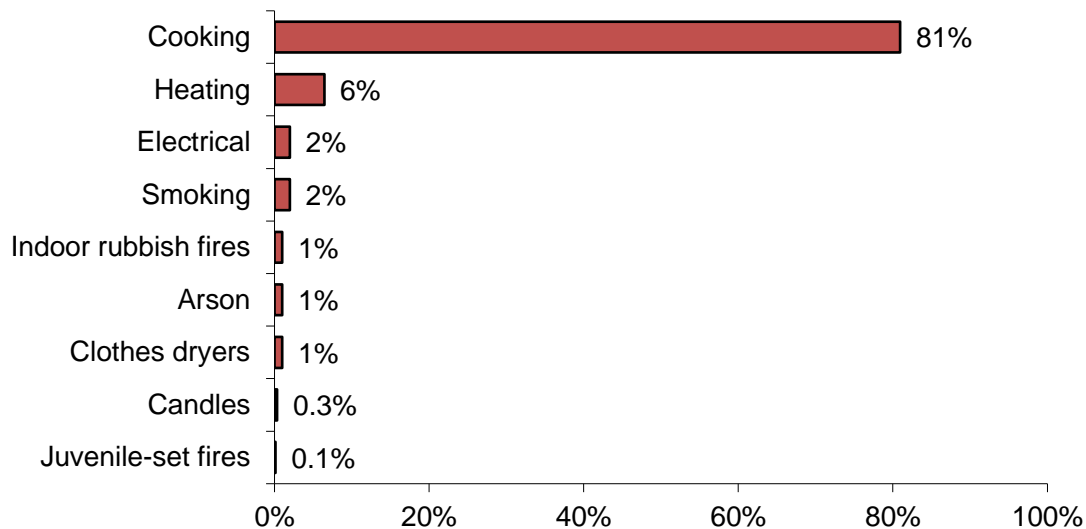
There were 1,548 reported residential building fires in Norfolk County in 2017. These 1,548 fires are an increase of 143, or 10%, from the 1,405 residential building fires reported in 2016.

### **Cooking Caused 81% of Residential Fires**

The leading cause of residential building fires in Norfolk County was unattended cooking and other unsafe cooking practices, accounting for 81% of the fires. Heating caused 6% of fires in people's homes. Electrical problems and smoking each caused 2%. Indoor rubbish fires, arsons and clothes dryers each caused 1% of these fires. Candles and

juvenile-set fires each caused less than 1% of the residential building fires in Norfolk County in 2017.

### 2017 Leading Causes of Fires in Norfolk County Homes



#### 86% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

One thousand three hundred and thirty-nine (1,339), or 86%, of all residential building fires were reported as confined to non-combustible containers in 2017. One thousand and two hundred and twenty-nine (1,229) of the reported fires were cooking fires contained to a non-combustible container, accounting for 79% of residential building fires. Fifty-two (52), or 3%, were fires confined to a fuel burner or boiler malfunction. Thirty-eight (38), or 2%, of all residential building fires reported in 2017 were fires confined to a chimney. Nineteen (19), or 1% of Norfolk County's residential fires in 2017 were contained rubbish fires; and one, or less than 1%, was a confined commercial compactor fire.

#### Detectors Alerted Occupants in 59% of Fires

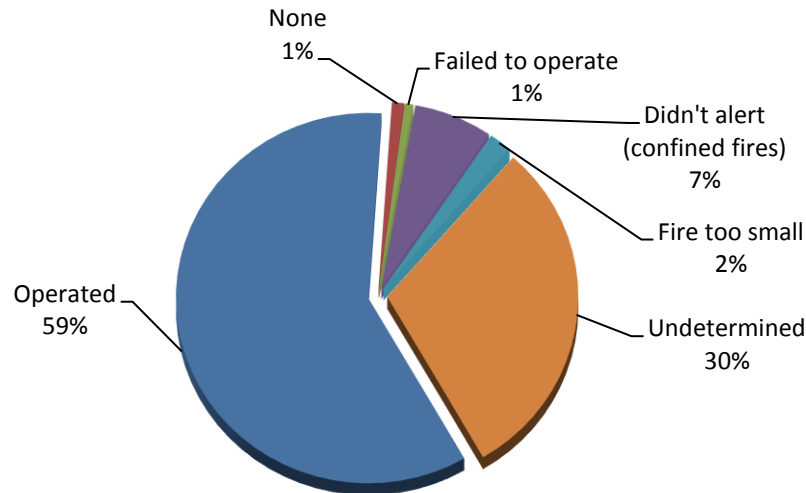
Smoke or heat detectors operated and alerted the occupants in 920, or 59%, of the residential building fires. In 7% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 1% of these incidents. In 1% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 2% of the

<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

residential fires. Smoke detector performance was undetermined in 468 incidents, or 30%, of Norfolk County's residential building fires.

### Detector Status in Norfolk County's Residential Structure Fires 2017



#### 3 Detectors Failed from Missing Batteries

Of the 11 fires where smoke detectors were present but failed to operate, three, or 27%, failed because of missing or disconnected batteries. In another case, or 9%, the detector failed because of a power failure, shut off or disconnect. It was undetermined or unclassified in seven cases, or 64%, why the detectors failed to operate.

#### VACANT BUILDINGS

##### 1% of Building Fires Occurred in Vacant Buildings

Norfolk County reported 21 fires that occurred in buildings that were vacant, under construction or demolition. This represented 1% of the total 1,813 building fires reported to MFIRS in 2017. Sixteen (16) fires occurred in vacant residential properties. Four (4) fires occurred at storage facilities; and one in a manufacturing or processing facility.

Three (3), or 14%, of the vacant building fires in Norfolk County in 2017 were determined to be intentionally set. All three were in residential buildings.

#### JUVENILE-SET FIRES

##### 10 Juvenile-set Fires

There were 10 reported juvenile-set fires in Norfolk County in 2017. The two structure fires and eight brush fires caused one civilian injury and \$6,501 in estimated damages.



## ARSONS

### **68 Total Arsons - 16 Structures, 1 Vehicle & 51 Other Arsons**

Sixty-eight (68), or 2%, of Norfolk County's 2,990 fires were intentionally set, or, for purposes of this analysis, arson. The 16 structure arsons, one motor vehicle arson and 51 outside and other arsons caused an estimated loss of \$172,738.

### **All Arsons Up**

The total number of reported arson fires increased by 14 from the 54 reported in 2016. Reported structure arsons increased by seven from the nine reported the previous year. Motor vehicle arsons decreased by one from the one reported in 2016. Reported outside and other arsons increased by eight from 43 the year before.

## ALL INCIDENTS

### **Rescue & EMS Calls Are 62% of All Reported Incidents**

In 2017, fire departments in Norfolk County reported 99,184 responses<sup>4</sup> to MFIRS. Of these 99,184 incidents, 96,028 non-fire calls were voluntarily reported.

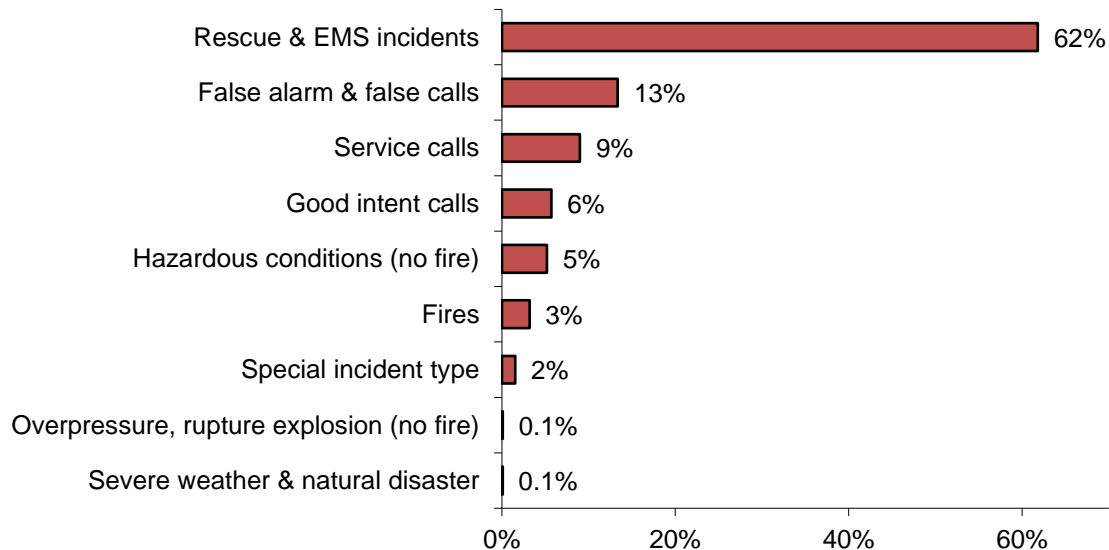
Of these 96,028 non-fire incidents, 61,320, or 62%, of all the incidents reported in 2017 were reported rescue and emergency medical services (EMS) calls; 13,251, or 13%, were reported false alarm or false calls; 8,933, or 9%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 5,666, or 6%, were reported good intent calls; 5,158, or 5%, were reported hazardous condition calls with no fire; 1,524, 2%, were special incident type calls such as citizen complaints; 102, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 74, or 0.1%, were severe weather responses.

Three thousand one hundred and fifty-six (3,156), or 3%, of the total responses submitted by Norfolk County fire departments were fires.

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<sup>4</sup> These figures include responses in which Norfolk County fire departments gave mutual aid to other fire departments.

## 2017 Responses by Incident Type



### Norfolk County Fire Departments Gave Mutual Aid 3,382 Times

In 2017, Norfolk County fire departments reported coming to the aid of other fire departments 3,382 times. Of these 3,382 responses, 2,037, or 60%, were for rescue or EMS calls; 489, or 14%, were for good intent calls; 457, or 14%, were for service calls such as cover assignments; 166, or 5%, were for fires; 158, or 5%, were for false alarms or false calls; 47, or 1%, were for hazardous conditions calls with no fire; 26, or 1%, were special incident types; one, or 0.03%, was a severe weather or natural disaster call; and one, or 0.03%, was an overpressure, rupture explosion with no fire call.

### Norfolk County Received Mutual Aid in 1,709 Incidents

In 2017, Norfolk County fire departments reported receiving aid from surrounding departments in 1,709 incidents. Of these 1,709 incidents, 1,353, or 79%, were rescue and emergency medical services calls; 141, or 8%, were for fires; 132, or 8%, were false alarms or false calls; 43, or 3%, were good intent calls; 21, or 1%, were hazardous conditions calls with no fire; 14 or 1%, were service calls; four, or 0.2%, were overpressure, rupture explosions with no fire; and one, or 0.1%, was for a severe weather or natural disaster call.

**Norfolk County****Population: 670,850****4.5 Fires/1,000 Population****Total Fires: 2,990 \$29,827,456**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	1,808	60%	\$26,460,880
Vehicle Fires	220	7%	2,970,109
Other Fires	962	32%	396,467

4 Fatal Fires 2.01 Civilian Deaths/1,000 Fires  
 6 Civilian Deaths 0.09 Civilian Deaths/10,000 Population  
 25 Civilian Injuries 53 Fire Service Injuries

**Building Fires: 1,800****Residential Structure Fires: 1,548****Residential Structure Fires Confined to Non-Combustible Containers: 1,339****Unconfined Residential Structure Fires: 209**

5 Civilian Deaths 21 Civilian Injuries 45 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	755	49%	Operated	920	59%
1- & 2-Family homes	566	37%	Didn't operate	11	1%
Rooming houses	55	4%	None	16	1%
Dormitories	42	3%	Fire too small	30	2%
Residential board & care	22	1%	Didn't alert (confined)	103	7%
Hotels or motels	18	1%	Undetermined	468	30%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	82%	Arcing	2%	13%
Heating equipment room	4%	Heat from operating equip.	2%	12%
Chimney or flue	2%	Radiated heat from oper. eq.	1%	11%
Bedroom	1%	Cigarette	1%	7%
Ext. balcony, unenclosed porch	1%	Hot ember or ash	1%	7%

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Food, cooking materials	80%	Misuse of mater. or prod.	3%	21%
Flammable/comb. liquid	3%	Too close to combustibles	1%	11%
Film, residue (creosote)	2%	Abandoned materials	1%	8%
Rubbish, trash, waste	1%	Equipment unattended	1%	5%
Electrical wire, cable insulation	1%	Electrical failure, malfunc.	1%	5%
		Mechan. failure, malfunc.	1%	5%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Kitchen & cooking equipment	81%	Unintentional	8%	56%
None	9%	Failure of eq. or heat source	2%	13%
Boiler, furnace, cent. heat. unit	3%	Intentional	0.4%	3%
Chimney, flue	3%	Act of nature	0.1%	1%
Clothes dryer	1%	Cause under investigation	2%	15%
Fan	0.4%	Undetermined	1%	11%

#### **Detector Alerted Occupants (Confined Fires in Non-Combustible Containers)**

Alerted occupants	61%
Didn't alert occupants	8%
Undetermined	31%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

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<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	202	157	18	27
February	177	121	18	38
March	219	152	15	52
April	336	144	20	172
May	248	140	17	91
June	253	129	21	103
July	275	148	25	102
August	308	130	19	159
September	203	122	16	65
October	244	148	17	79
November	258	198	17	43
December	267	219	17	31

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	502	320	20	162
Monday	417	241	33	143
Tuesday	381	234	35	112
Wednesday	421	256	28	137
Thursday	411	230	35	146
Friday	372	219	34	119
Saturday	486	308	35	143

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	131	86	10	35
04:01 - 08:00	166	89	19	58
08:01 - 12:00	580	379	51	150
12:01 - 16:00	753	363	50	340
16:01 - 20:00	914	589	58	267
20:01 - 00:00	446	302	32	112

### **Motor Vehicle Fires**

Total: 220

Automobiles: 178 (81%)

0, or (0%), of the automobile fires were considered intentionally set.

## Arson Fires

**Total Arsons: 68**

**Dollar loss: \$172,738**

### 0.08 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	16	1%	24%	\$172,601
Vehicle Arsons	1	0.5%	1%	0
Other Arsons	51	5%	75%	137

0.02 Structure arsons/1,000 population

0.001 Vehicle arsons/1,000 population

0.08 Other arsons/1,000 population

No Injuries

### Peak Times of Day for

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 - 20:00	6	38%	16:01 - 20:00	1	100%
00:01 - 04:00	3	19%			
20:01 - 00:00	3	19%			

Other Arsons	#	%
16:01 - 20:00	15	29%
12:01 - 16:00	13	25%
08:01 - 12:00	10	20%
20:01 - 00:00	10	20%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	9	56%
Apartments	3	19%

<b>Avon</b>					<b>Population: 4,356</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	27	2	8	17	0	0	0	0
2014	3	2	1	0	1	0	1	0
2015	42	4	13	25	2	0	1	1
2016	43	3	10	30	2	0	0	2
2017	35	7	8	20	0	0	0	0

<b>Bellingham</b>					<b>Population: 16,332</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	63	28	15	20	0	0	0	0
2014	50	25	4	21	0	0	0	0
2015	58	25	8	25	2	2	0	0
2016	40	11	6	23	1	1	0	0
2017	50	13	8	29	1	1	0	0

<b>Braintree</b>					<b>Population: 35,744</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	90	30	14	46	0	0	0	0
2014	128	27	21	80	5	2	1	2
2015	115	31	15	69	6	0	2	4
2016	89	20	12	57	1	1	0	0
2017	90	23	16	51	4	0	0	4

<b>Brookline</b>					<b>Population: 58,732</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	478	401	15	62	1	1	0	0
2014	442	377	8	57	3	1	0	2
2015	391	332	11	48	3	2	0	1
2016	442	346	7	89	1	0	0	1
2017	402	340	11	51	1	0	0	1

<b>Canton</b>					<b>Population: 21,561</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	16	3	8	5	0	0	0	0
2014	35	14	13	8	0	0	0	0
2015	25	13	6	6	0	0	0	0
2016	34	15	8	11	0	0	0	0
2017	58	27	15	16	0	0	0	0

<b>Cohasset</b>					<b>Population: 7,542</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	50	31	2	17	6	0	0	6
2014	73	43	6	24	4	0	0	4
2015	92	74	1	17	3	0	0	3
2016	78	52	4	22	3	0	0	3
2017	79	61	4	14	4	0	0	4

<b>Dedham</b>					<b>Population: 24,729</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	170	101	9	60	6	0	0	6
2014	206	123	16	64	12	1	1	10
2015	210	120	11	79	6	0	0	6
2016	181	86	13	82	7	0	0	7
2017	146	78	9	59	4	1	0	3

<b>Dover</b>					<b>Population: 5,589</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	15	7	0	8	0	0	0	0
2014	1	1	0	0	0	0	0	0
2015	8	6	0	2	1	1	0	0
2016	12	4	0	8	0	0	0	0
2017	11	7	0	4	0	0	0	0



**Foxborough****Population: 16,865**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	21	10	2	9	0	0	0	0
2014	43	11	10	22	1	0	0	1
2015	36	8	2	26	0	0	0	0
2016	50	12	11	27	0	0	0	0
2017	44	15	8	21	0	0	0	2

**Franklin****Population: 31,635**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	71	23	10	38	5	1	0	4
2014	46	16	7	23	1	0	0	1
2015	76	24	12	40	0	0	0	0
2016	71	12	15	44	3	1	1	1
2017	50	19	5	26	3	0	0	3

**Holbrook****Population: 10,791**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	37	26	0	11	0	0	0	0
2014	67	32	6	29	1	1	0	0
2015	44	18	2	24	2	1	0	1
2016	52	28	3	21	0	0	0	0
2017	42	32	5	5	2	2	0	0

**Medfield****Population: 12,024**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	19	12	1	6	3	0	0	3
2014	20	6	0	14	8	0	0	8
2015	22	8	1	13	2	0	0	2
2016	17	5	0	12	7	0	0	7
2017	25	5	0	20	9	0	0	9

**Medway****Population: 12,752**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013 <sup>11</sup>	Fire Department in Good Standing							
2014	4	2	0	2	0	0	0	0
2015	39	32	1	6	0	0	0	0
2016	49	21	5	23	2	1	0	1
2017	52	39	1	12	2	1	0	1

**Millis****Population: 7,891**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	1	1	0	0	0	0	0
2014	Non-Reporting Community							
2015	Non-Reporting Community							
2016	Non-Reporting Community							
2017	Non-Reporting Community							

**Milton****Population: 27,003**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	142	103	12	27	9	0	0	9
2014	169	121	17	31	8	0	1	7
2015	193	126	17	50	4	0	0	4
2016	191	128	21	42	6	0	0	6
2017	166	116	14	36	3	0	0	3

**Needham****Population: 28,886**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	57	17	10	30	1	0	1	0
2014	39	10	6	23	0	0	0	0
2015	101	34	5	62	2	0	0	2
2016	59	11	4	44	0	0	0	0
2017	53	13	11	29	3	1	0	2

<sup>11</sup> Medway only reported 95 total incidents in 2013. None of these were fires, and almost all were in December.

**Norfolk** **Population: 11,227**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	53	43	0	10	1	0	0	1
2014	51	38	7	6	0	0	0	0
2015	59	41	3	15	1	1	0	0
2016	54	40	1	13	1	1	0	0
2017	71	53	1	17	3	1	0	2

**Norwood** **Population: 28,602**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	118	44	11	63	0	0	0	0
2014	98	33	3	62	2	1	1	0
2015	159	44	9	106	0	0	0	0
2016	143	42	3	98	2	1	0	1
2017	89	34	9	46	0	0	0	0

**Plainville** **Population: 8,264**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	21	9	5	7	0	0	0	0
2014	40	15	4	21	2	0	0	2
2015	53	30	2	21	1	0	0	1
2016	47	20	5	22	2	0	0	2
2017	40	21	2	17	1	0	0	1

**Quincy** **Population: 92,271**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	554	357	33	164	9	1	2	6
2014	699	389	27	283	17	0	0	17
2015	658	402	35	221	13	0	0	13
2016	540	258	22	260	11	0	1	10
2017	641	406	19	216	9	0	0	9

**Randolph****Population: 32,112**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	177	136	16	25	2	0	1	1
2014	220	146	18	56	2	0	0	2
2015	138	103	8	27	0	0	0	0
2016	193	120	15	58	0	0	0	0
2017	196	127	17	52	8	4	0	4

**Sharon****Population: 17,612**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	31	14	7	10	1	0	0	1
2014	47	27	4	16	2	1	0	1
2015	64	35	5	24	1	1	0	0
2016	47	23	5	19	2	2	0	0
2017	41	25	4	12	0	0	0	0

**Stoughton****Population: 26,962**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	94	59	12	23	5	1	0	4
2014	86	45	19	22	2	0	0	2
2015	111	74	6	31	2	0	0	2
2016	138	99	8	31	0	0	0	0
2017	108	76	9	23	1	1	0	0

**Walpole****Population: 24,070**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	80	51	6	23	0	0	0	0
2014	83	43	9	31	1	0	0	1
2015	90	44	8	38	1	0	0	1
2016	50	24	4	22	0	0	0	0
2017	79	43	4	32	1	0	0	1

**Wellesley** **Population: 27,982**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	57	31	8	18	0	0	0	0
2014	50	30	6	14	1	0	0	1
2015	37	14	9	14	0	0	0	0
2016	60	25	3	32	0	0	0	0
2017	53	25	7	21	1	1	0	0

**Westwood** **Population: 14,618**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	106	77	10	19	0	0	0	0
2014	97	70	9	18	2	1	0	1
2015	138	61	16	61	2	0	0	2
2016	142	80	9	53	1	0	0	1
2017	105	63	10	32	1	0	1	0

**Weymouth** **Population: 53,743**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	317	174	21	122	8	2	0	6
2014	322	160	20	142	3	3	0	0
2015	243	116	14	113	3	0	2	1
2016	319	149	17	153	2	1	0	1
2017	252	136	21	95	4	3	0	1

**Wrentham** **Population: 10,955**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	18	10	2	6	2	0	0	2
2014	11	6	1	4	0	0	0	0
2015	21	6	5	10	2	0	0	2
2016	13	4	2	7	0	0	0	0
2017	12	7	2	3	1	0	0	1

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
21018	Avon	1,264	43	2	796	34	163	99	125	0	2
21025	Bellingham	2,448	51	1	1,709	59	222	197	194	4	11
21040	Braintree	5,875	90	37	3,596	235	738	399	774	2	4
21046	Brookline	7,398	413	12	4,272	428	773	282	1,209	2	7
21050	Canton	1,740	62	0	1,054	50	189	101	283	0	1
21065	Cohasset	1,866	83	4	952	225	175	130	274	12	11
21073	Dedham	4,808	150	5	3,312	319	190	183	645	0	4
21078	Dover	199	12	0	37	15	6	10	119	0	0
21099	Foxborough	3,201	52	5	2,067	158	347	170	398	1	3
21101	Franklin	4,174	63	1	3,083	125	173	213	510	2	4
21133	Holbrook	2,731	55	1	1,526	118	524	259	242	1	5
21175	Medfield	1,199	30	0	618	129	192	52	169	4	5
21177	Medway	1,659	56	5	1,053	167	109	91	169	7	2
21187	Millis**	0	0	0	0	0	0	0	0	0	0
21189	Milton	4,252	172	0	2,357	202	315	96	658	1	451
21199	Needham	3,966	53	3	2,102	146	747	208	693	0	14

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
21208	Norfolk	1,825	98	0	1,184	241	31	11	260	0	0
21220	Norwood	4,609	91	1	3,437	185	255	144	493	0	3
21238	Plainville	2,869	40	2	1,249	78	228	103	203	18	948
21243	Quincy	10,752	644	9	6,713	728	766	545	1,335	4	8
21244	Randolph	4,661	200	0	3,147	241	444	157	467	0	5
21266	Sharon	2,228	45	2	1,226	153	240	215	339	2	6
21285	Stoughton	5,349	116	4	3,376	165	507	325	842	1	13
21307	Walpole	3,333	84	0	2,341	98	235	185	389	1	0
21317	Wellesley	4,114	53	3	2,067	213	410	260	1,107	0	1
21335	Westwood	3,097	135	0	2,081	159	175	89	450	4	4
21336	Weymouth	7,604	253	3	4,624	393	491	1,040	783	5	12
21350	Wrentham	1,963	12	2	1,341	94	288	102	121	3	0
<b>Norfolk County</b>		<b>99,184</b>	<b>3,156</b>	<b>102</b>	<b>61,320</b>	<b>5,158</b>	<b>8,933</b>	<b>5,666</b>	<b>13,251</b>	<b>74</b>	<b>1,524</b>

\* Certified no reportable fires.

\*\*Non reporting department.

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



# Plymouth County

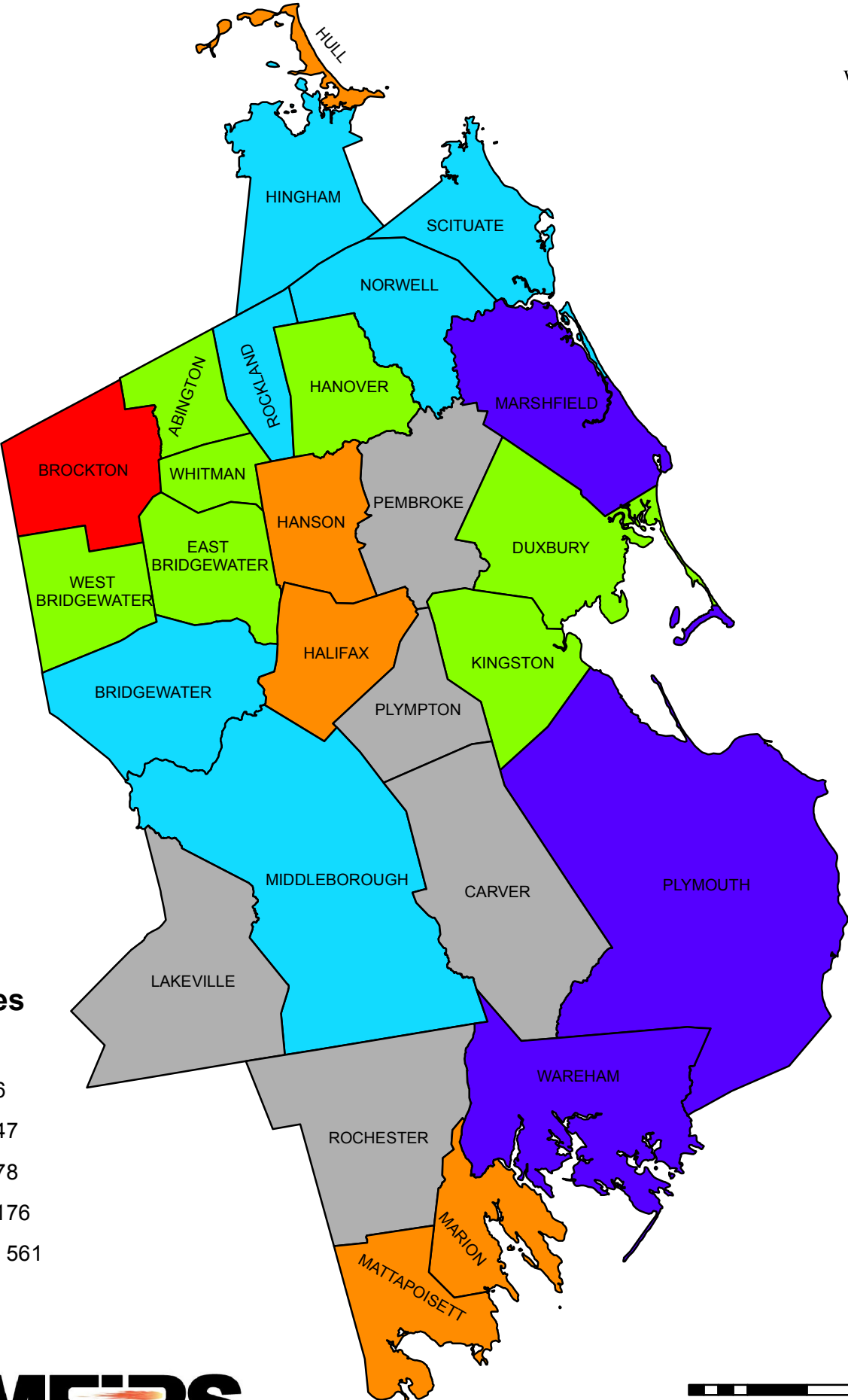
## 2017 Fire Data Analysis



# Plymouth County Fires 2017



## 2017 Fires



# Plymouth County Fires in 2017

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## **1,746 Total Fires — 822 Structures, 199 Vehicles & 725 Other Fires**

Plymouth County ranked seventh out of the fourteen Massachusetts counties in total reported fires. Plymouth County fire departments reported 1,746 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 822 structure fires, 199 motor vehicle fires, 414 brush, tree or lawn fires, 133 outside rubbish fires, 104 special outside fires, seven cultivated vegetation or crop fires and 67 other fires caused three civilian deaths, 45 civilian injuries, 35 fire service injuries and an estimated dollar loss of \$17 million. Plymouth County's fires accounted for 6% of the 27,895 Massachusetts fires reported in 2017.

All 28 fire departments in Plymouth County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017.

## **All Fires Down**

The total number of reported fire incidents decreased by 331, or 16%, from the 2,077 reported in 2016. Reported structure fires increased by two from 820 the year before. Motor vehicle fires decreased by 16 from 215 the previous year. Reported outside and other fires decreased by 317 from 1,042 in 2016.<sup>1</sup>

## **PLYMOUTH COUNTY FIRES FROM 2013 TO 2017**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2013	1,892	824	230	838	73	12	8	53
2014	1,891	814	211	866	72	26	5	41
2015	2,070	897	236	937	38	14	3	21
2016	2,077	820	215	1,042	39	10	1	28
2017	1,746	822	199	725	35	9	4	22

## **Fire and Fire Death Rates**

Plymouth County had 3.5 fires per 1,000 population. That figure ranks Plymouth County tied for fifth in the state and below the state rate of 4.3 fires per 1,000 population. Plymouth County also had 0.06 fire deaths per 10,000 population ranking it tied for eighth among Massachusetts counties and below the state rate of 0.09 fire deaths per 10,000 population.

## **3 Plymouth County Fatal Fires Killed 3 Civilians in 2017**

Three (3) people died in three fatal fires in Plymouth County in 2017.

- On March 28, 2017, at 4:03 p.m., the Brockton Fire Department was dispatched to a fire in a 12-unit apartment building of undetermined cause. The fire started in a third floor kitchen. The victim, an 82-year old physically disabled man was unable to act.

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<sup>1</sup> 2017 was a down year statewide for brush fires.

No one else was injured at this fire. Smoke alarms were present and alerted the occupants. The building was not sprinklered. Damages from this fire were estimated to be \$250,000.

- On April 24, 2017, at 9:05 a.m., the East Bridgewater Fire Department was dispatched to a fatal fire in a single-family home. The victim, an 86-year old man was working on his lawn tractor when it caught fire and spread to his clothes and the deck. No one else was injured at this fire. Alarms were present and operated. The building did not have any sprinklers. Damages from this fire were estimated to be \$242,400.
- On Christmas Eve, December 24, 2017, at 2:34 p.m., the Abington Fire Department was called to a fatal smoking fire in a 65-unit apartment building. The fire was started by a cigarette lighter igniting a piece of upholstered furniture in a third-floor bedroom. The victim, who was intimately involved with the start of the fire, was a 71-year old man who was asleep. There were no other injuries at this fire. Alarms were present but did not operate because the batteries were missing. The home did not have sprinklers. Damages from this fire were estimated to be \$28,000.

### **Brockton Has Plymouth County's Largest Loss Fire in 2017**

In 2017, there were no large loss fires in Plymouth County with a dollar loss greater than \$1 Million. Brockton had the largest loss fire and this fire accounted for 5% of the total dollar loss for Plymouth County in 2017.

- On October 4, 2017, at 2:35 a.m., the Brockton Fire Department responded to a fire of undetermined cause, but most likely arson, to an apartment building under renovation. No one was injured at this fire. It was undetermined if alarms were present and the building did not have any sprinklers. Total damages were estimated to be \$770,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Up Slightly**

The 822 structure fires caused three civilian deaths, 38 civilian injuries, 31 fire service injuries and an estimated dollar loss of \$15.6 million. These incidents represented 47% of Plymouth County's reported fires in 2017. The average estimated dollar loss per structure fire was \$19,032. The total number of reported structure fires decreased by two, or less than 1%, from the 820 reported in 2016.

### **Structure Arsons Down Slightly**

The nine structure arsons caused two civilian injuries and an estimated dollar loss of \$30,825. Arson was indicated as the cause of 1% of the structure fires and less than 1 of Plymouth County's structure fire dollar loss. The nine structure arsons accounted for 26% of the Plymouth County arson fires reported in 2017. The total number of reported structure arsons decreased by one, or 10%, from 11 in 2016.

### **56% of Structure Arsons Occurred in Residences**

Fifty-six percent (53%) of Plymouth County's nine structure arsons occurred in residential occupancies; 11% each occurred in institutional facilities, mercantile or business properties, storage facilities and special properties.

## **BUILDING FIRES**

There were 811 building fires of different types in Plymouth County in 2017. These 811 building fires accounted for 98.7% of all structure fires in Plymouth County.

### **85% of Plymouth Building Fires Occurred in People's Homes**

Six hundred and eighty-six (686), or 85%, of Plymouth County's 811 building fires occurred in residential occupancies. Mercantile and business properties had 33 fires. Thirty-two (32) fires took place in public assembly properties, including restaurants and churches. Twenty-one (21) fires took place in storage facilities. Eighteen (18) building fires took place in educational facilities. Ten (10) building fires in Plymouth County occurred in special properties such as outbuildings and sheds. Hospitals, prisons, and other institutional buildings experienced five fires. Four (4) fires took place in manufacturing and processing facilities. One (1) fire occurred in an industrial, utility, defense, agricultural or mining facility in Plymouth County in 2017.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Up**

There were 686 reported residential building fires in Plymouth County in 2017. These 686 fires are an increase of 11, or 2%, from the 675 residential building fires reported in 2016.

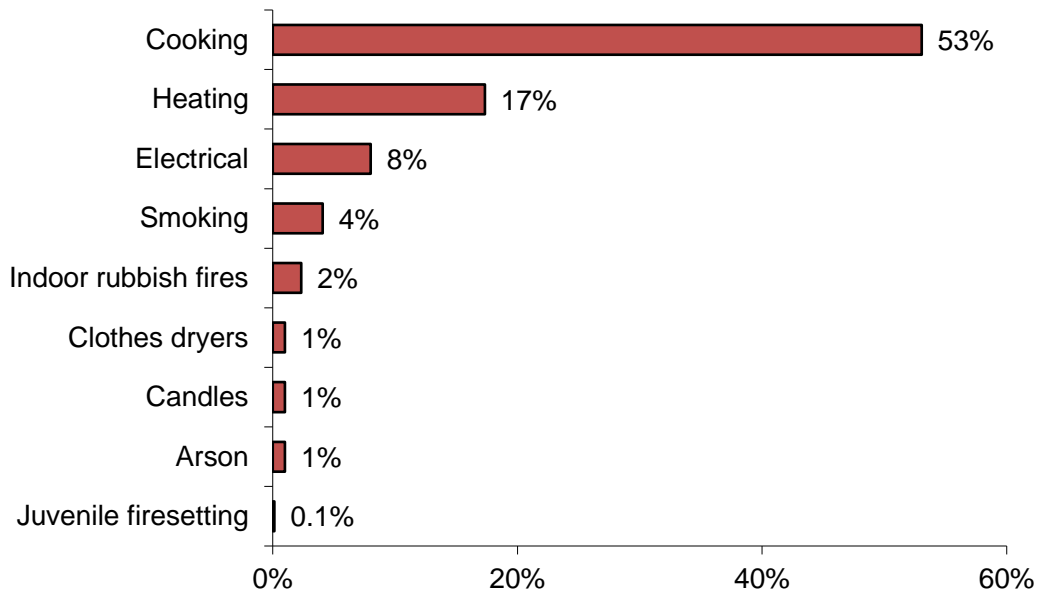
### **1- & 2-Family Homes Accounted for 55% of Residential Building Fires**

The peak fixed property use for residential building fires were 1- & 2-family homes, accounting for 55% of the residential building fires in Plymouth County; 38% occurred in apartments. Rooming houses had 2% of these fires. Residential board and care facilities, and hotels or motels each had 1% of these fires. Dormitories had less than 1% of these fires. Eighteen (18), or 2%, of the residential building fires in Plymouth County occurred in unclassified residential buildings.

### **Cooking & Heating Leading Causes of Residential Fires**

The leading cause of the 686 residential building fires in Plymouth County was unattended cooking and other unsafe cooking practices, accounting for 53% of these fires. Heating problems caused 17% of the fires in people's homes. Electrical problems caused 8% and smoking caused 4% of these fires. Indoor rubbish fires caused 2% and clothes dryers, arsons and candles each caused 1% of these fires. Juvenile-set fires caused less than 1% of residential fires in Plymouth County in 2017.

## 2017 Leading Causes of Fires in Plymouth County Homes



### 66% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

Four hundred and fifty-two (452), or 66%, of all residential building fires were reported as confined to non-combustible containers in 2017. Three hundred and thirty-two (332) of the reported fires were cooking fires contained to a non-combustible container, accounting for 48% of residential building fires. Fifty-six (56), or 8%, were fires confined to a fuel burner or boiler malfunction. Forty-nine (49), or 7%, of all residential building fires reported in 2017 were fires confined to a chimney. Fourteen (14), or 2%, of these fires were contained rubbish fires; and one, or 0.1%, was a confined commercial compactor fire.

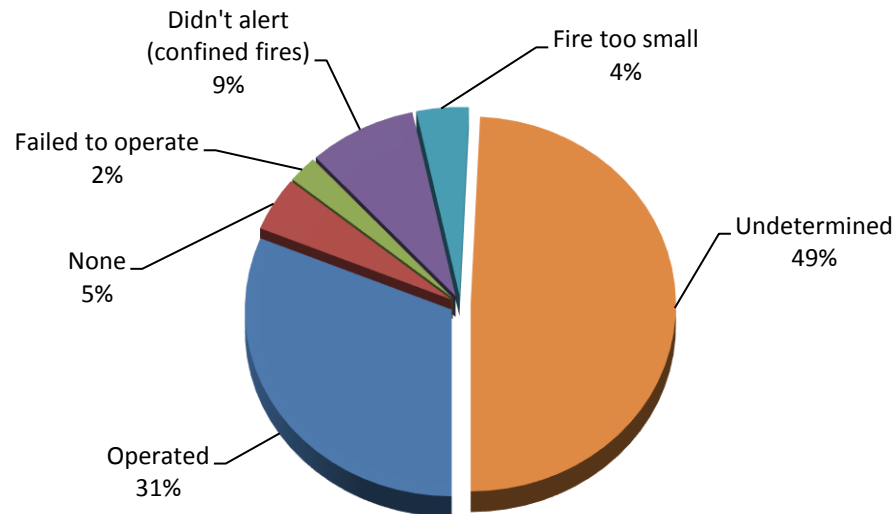
### Detectors Alerted Occupants in Only 31% of Fires

Smoke or heat detectors operated and alerted the occupants in 214, or 31%, of the residential building fires. In 9% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 5% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 4% of the residential fires. Smoke detector performance was undetermined in 338 incidents, or 49%, of Plymouth County's residential building fires.

<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup> These represent confined fires where it was reported that the detector did not alert the occupants.

## Detector Status in Plymouth County's Residential Structure Fires 2017



### 5 of Failed Detectors Had Missing or Disconnected Batteries

Of the 16 fires where smoke detectors were present but failed to operate, five, or 31%, failed because the batteries were either missing or disconnected. Two (2), or 13%, failed because they were defective. One (1), or 6%, failed from a lack of maintenance. It was undetermined or unclassified in eight cases, or 50%, why the detectors failed to operate.

### VACANT BUILDINGS

#### 3% of Building Fires Occurred in Vacant Buildings

Plymouth County reported 22 fires that occurred in buildings that were vacant, under construction or demolition<sup>4</sup>. This represented 3% of the total 811 building fires reported to MFIRS in 2017. Seventeen (17) fires occurred in vacant residential properties. Five (5) fires occurred in storage facilities in Plymouth County.

None of the vacant building fires in Plymouth County in 2017 were determined to be intentionally set.

<sup>4</sup> In version 4 a vacant building was defined by having a Fixed Property Use code in the subsection of construction, unoccupied properties, between 910 & 919. However in version 5, the Property Use is separate from the Building Status. In v5 a building is considered vacant if the Building Status is coded: 1-Under Construction; 3-Idle, not routinely used; 4-Under major renovation; 5-Vacant, secured; 6-Vacant, unsecured; & 7-Being demolished. The building use is coded separately in the Property Use field.

## JUVENILE-SET FIRES

### 4 Juvenile-set Fires

There were four reported juvenile-set fires in Plymouth County in 2017. The four structure fires caused \$31,525 in estimated damages.

## ARSONS

### 35 Total Arsons — 9 Structures, 4 Vehicles & 22 Other Arsons

Thirty-five (35), or 2%, of Plymouth County's 1,746 fires were considered intentionally set, or, for purposes of this analysis, arson. The nine structure arsons, four motor vehicle arsons and 2 outside and other arsons caused three civilian injuries and an estimated dollar loss of \$76,925.

### Structure & Outside Arsons Down

The total number of reported arson fires decreased by four from the 39 reported in 2016. Reported structure arsons decreased by one from the 10 reported in 2016. Motor vehicle arsons increased by three from one in 2016. Reported outside and other arsons decreased by six from 28 reported the year before.

## ALL INCIDENTS

### Rescue & EMS Calls Are 67% of All Reported Responses

In 2017, Plymouth County fire departments reported 90,640 responses<sup>5</sup> to MFIRS. Of these 90,641 incidents, 88,771 non-fire calls were voluntarily reported.

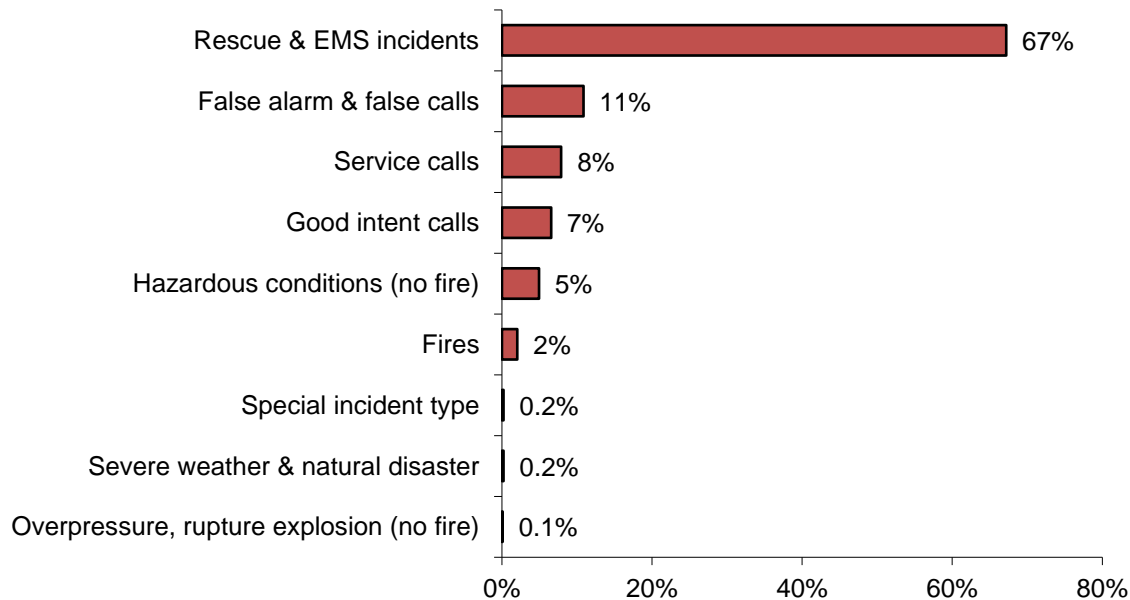
Of these 88,771 non-fire calls, 60,894, or 67%, of the total responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 9,834 or 11%, were reported false alarm or false calls; 7,166, or 8%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 5,936, or 7%, were reported good intent calls; 4,481, or 5%, were reported hazardous condition calls with no fire; 191, or 0.2%, were special incident type calls such as citizen complaints; 186, or 0.2%, were severe weather responses; and 81, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

One thousand eight hundred and sixty-nine (1,869), or 2%, of the total responses submitted by Plymouth County fire departments were fires.

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<sup>5</sup> These figures include responses in which Plymouth County fire departments gave mutual aid to other fire departments.

## 2017 Responses by Incident Type



### Plymouth County Fire Departments Gave Mutual Aid 2,200 Times

In 2017, Plymouth County fire departments reported coming to the aid of other fire departments 2,200 times. Of these 2,200 responses, 1,324, or 60%, were for rescue or EMS calls; 448, or 20%, were for good intent calls; 257, or 12%, were for service calls such as cover assignments; 115, or 5%, were for fires; 39, or 2%, were for hazardous conditions calls with no fire; 12, or 1%, were for false alarms or false calls; three, or 0.1%, were overpressure rupture explosions calls; and two, or 0.1%, were for special incident type calls.

### Plymouth County Received Mutual Aid in 1,737 Incidents

In 2017, Plymouth County fire departments received aid from surrounding departments in 1,737 incidents. Of these 1,737 incidents, 1,496, or 86%, were rescue and emergency medical services calls; 115, or 7%, were for fires; 42, or 2%, were good intent calls; 31, or 2%, were hazardous conditions calls with no fire; 20, or 2%, were false alarms or false calls; 30, or 2%, were service calls; and three, or 0.2%, were reported overpressure, rupture, explosion or overheat call with no fire.



**Plymouth County****Population: 494,919****3.5 Fires/1,000 Population****Total Fires: 1,746 \$16,993,556**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	822	47%	\$15,643,907
Vehicle Fires	199	11%	1,207,181
Other Fires	725	42%	142,468

3 Fatal Fires 1.72 Civilian Deaths/1,000 Fires  
 3 Civilian Deaths 0.06 Civilian Deaths/10,000 Population  
 35 Civilian Injuries 45 Fire Service Injuries

**Building Fires: 811****Residential Building Fires: 686****Residential Building Fires Confined to Non-Combustible Containers: 452****Unconfined Residential Building Fires: 234**

3 Civilian Deaths 45 Civilian Injuries 35 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	379	55%	Operated	214	31%
Apartments	263	38%	Didn't operate	16	2%
Rooming houses	12	2%	None	32	5%
Residential board & care	7	1%	Fire too small	28	4%
Hotels or motels	5	1%	Didn't Alert (confined)	58	9%
Dormitories	2	0.3%	Undetermined	338	49%

<b>Area of Origin<sup>6</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>7</sup></b>
Kitchen	54%	Arcing	6%	18%
Heating room or area	8%	Radiated, cond./heat op. eq.	4%	12%
Chimney or flue	7%	Heat from operating eq.	3%	9%
Bedroom	4%	Hot or smoldering object	2%	6%
Wall surface, exterior	2%	Hot ember or ash	2%	6%

<sup>6</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>7</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>8</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>9</sup></b>
Food, cooking materials	50%	Electrical failure, malfunc.	3%	8%
Flammable or combust. liquid	8%	Too close to combustibles	2%	7%
Film, residue (creosote)	7%	Abandoned materials	1%	6%
Electrical wire, cable insulation	3%	Equipment unattended	1%	3%
Rubbish, trash, waste	3%	Misuse of mater. or product	1%	3%
Structural member, framing	2%	Unspecified short circuit arc	1%	3%
Exterior sidewall covering	2%	Failure to clean	1%	2%

<b>Equipment<sup>10</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>11</sup></b>
Cooking equipment	52%	Unintentional	18%	52%
None	21%	Failure of eq. or heat source	5%	15%
Boiler, furnace, cent. heat. unit	9%	Intentional	0.4%	1%
Chimney or flue	7%	Act of Nature	0.4%	1%
Clothes dryer	1%	Cause under investigation	4%	12%
		Undetermined	6%	16%

#### **Detector Alerted Occupants (Confined Fires in Non-Combustible Containers)**

Alerted Occupants	25%
Didn't Alert Occupants	13%
Undetermined	62%

<sup>8</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>9</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>10</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>11</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	106	66	13	27
February	99	71	10	18
March	178	104	17	57
April	205	74	23	108
May	128	54	19	55
June	157	52	19	86
July	167	61	12	94
August	184	59	14	111
September	162	81	22	60
October	121	49	20	52
November	113	62	18	33
December	125	89	12	24

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	303	142	31	130
Monday	247	120	22	105
Tuesday	221	107	22	92
Wednesday	211	93	27	91
Thursday	240	105	42	93
Friday	259	122	30	107
Saturday	265	133	25	107

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	85	48	8	29
04:01 - 08:00	130	67	14	49
08:01 - 12:00	287	144	42	101
12:01 - 16:00	513	206	58	249
16:01 - 20:00	496	237	49	210
20:01 - 00:00	235	120	28	87

### **Motor Vehicle Fires**

Total: 199

Automobiles: 159 (80%)

3, or (2%), of the automobile fires considered intentionally set.

## Arson Fires

**Total Arsons: 35**

**Dollar loss: \$76,925**

### 0.07 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	9	1%	26%	\$30,825
Vehicle Arsons	4	2%	11%	46,100
Other Arsons	22	3%	63%	0

0.02 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.04 Other arsons/1,000 population

3 Civilian Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 – 20:00	4	44%	20:01 – 00:00	2	50%
20:01 – 00:00	3	33%	12:01 – 16:00	1	25%
			16:01 – 20:00	1	25%

Other Arsons	#	%
20:01 – 00:00	7	32%
12:01 – 16:00	6	27%
16:01 – 20:00	6	27%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	3	33%
1- or 2-family homes	1	11%
Outbuilding or shed	1	11%
Mercantile, business, other	1	11%
Mental retardation/development disability facility	1	11%

**Abington****Population: 15,985**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	58	24	6	28	1	1	0	0
2014	86	18	8	60	0	0	0	0
2015	51	13	4	34	0	0	0	0
2016	71	19	7	45	1	0	0	1
2017	39	13	3	23	1	0	0	1

**Bridgewater****Population: 26,563**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	83	35	16	32	2	0	2	0
2014	119	44	20	55	3	3	0	0
2015	119	56	15	48	0	0	0	0
2016	127	71	13	43	0	0	0	0
2017	77	46	4	27	0	0	0	0

**Brockton****Population: 93,810**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	503	247	44	212	26	4	1	21
2014	561	300	50	211	23	12	0	11
2015	687	380	59	248	5	4	0	1
2016	629	348	57	224	4	2	0	2
2017	561	313	43	205	10	4	1	5

**Carver****Population: 11,509**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	16	11	5	0	2	1	1	0
2014	7	5	2	0	0	0	0	0
2015	2	1	1	0	0	0	0	0
2016	2	2	0	0	0	0	0	0
2017	7	6	1	0	0	0	0	0

**Duxbury****Population: 15,059**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	54	20	14	20	0	0	0	0
2014	39	16	6	17	0	0	0	0
2015	50	21	7	22	1	0	0	1
2016	50	17	6	27	0	0	0	0
2017	40	12	3	25	1	0	0	1

**East Bridgewater****Population: 13,794**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	51	30	1	20	0	0	0	0
2014	53	29	2	22	0	0	0	0
2015	56	24	4	28	1	1	0	0
2016	37	14	2	21	1	0	0	1
2017	34	14	3	17	1	0	1	0

**Halifax****Population: 7,518**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	28	17	1	10	2	1	0	1
2014	46	22	2	22	6	2	0	1
2015	24	8	2	14	1	0	0	1
2016	23	7	1	15	0	0	0	0
2017	23	10	1	12	2	1	0	1

**Hanover****Population: 13,879**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	64	27	7	30	0	0	0	0
2014	56	23	5	28	3	3	0	0
2015	86	32	9	45	1	1	0	0
2016	61	21	1	39	0	0	0	0
2017	47	20	6	21	1	1	0	0

**Hanson****Population: 10,209**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	30	5	5	20	0	0	0	0
2014	31	9	2	20	4	0	0	4
2015	30	11	2	17	0	0	0	0
2016	40	9	1	30	3	0	0	3
2017	22	8	1	13	0	0	0	0

**Hingham****Population: 22,157**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	74	19	12	43	4	1	1	2
2014	68	27	8	33	1	0	0	1
2015	53	18	5	30	2	0	0	2
2016	80	20	5	55	3	0	0	3
2017	66	34	4	28	1	1	0	0

**Hull****Population: 10,293**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	23	12	3	8	1	0	0	1
2014	22	12	2	8	0	0	0	0
2015	24	10	3	11	2	0	0	2
2016	25	4	3	18	3	0	0	3
2017	24	11	2	11	0	0	0	0

**Kingston****Population: 12,629**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	46	16	8	22	1	0	0	1
2014	41	7	7	27	3	1	0	2
2015	38	11	7	20	0	0	0	0
2016	59	17	9	33	1	0	1	0
2017	32	8	4	20	0	0	0	0

<b>Lakeville</b>					<b>Population: 10,602</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	4	0	3	0	0	0	0
2014	32	2	5	25	1	0	0	1
2015	14	6	0	8	0	0	0	0
2016	25	8	3	14	2	1	0	1
2017	8	4	2	2	0	0	0	0

<b>Marion</b>					<b>Population: 4,907</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	16	8	0	8	2	0	0	2
2014	10	3	2	5	1	0	0	1
2015	22	9	5	8	0	0	0	0
2016	16	1	3	12	0	0	0	0
2017	26	7	8	11	2	0	0	2

<b>Marshfield</b>					<b>Population: 25,132</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	115	63	13	39	4	0	0	4
2014	69	42	3	24	2	1	0	1
2015	75	36	7	32	2	0	0	2
2016	79	35	4	40	2	1	0	1
2017	100	41	6	53	2	0	0	2

<b>Mattapoisett</b>					<b>Population: 6,045</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	21	5	1	15	3	0	0	3
2014	10	2	1	7	0	0	0	0
2015	28	14	1	13	2	0	0	1
2016	13	1	1	11	0	0	0	0
2017	17	7	1	9	0	0	0	0



**Middleborough****Population: 23,116**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	115	37	23	55	3	0	0	3
2014	91	36	17	38	3	1	0	2
2015	84	22	16	46	2	1	0	1
2016	88	22	24	42	4	0	1	3
2017	78	37	18	23	3	1	1	1

**Norwell****Population: 10,506**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	47	22	4	21	0	0	0	0
2014	31	16	2	13	3	0	0	3
2015	43	10	10	23	2	0	0	2
2016	45	9	7	29	2	1	0	1
2017	54	20	9	25	3	0	0	3

**Pembroke****Population: 17,837**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	1	1	4	0	0	0	0
2014	6	2	2	2	0	0	0	0
2015	9	5	3	1	0	0	0	0
2016	17	8	5	4	0	0	0	0
2017	4	2	0	2	0	0	0	0

**Plymouth****Population: 56,468**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	223	98	23	102	6	1	1	4
2014	202	70	27	105	4	1	2	1
2015	233	82	21	130	9	7	1	1
2016	246	74	24	148	6	3	0	3
2017	176	81	30	65	1	1	0	0

<b>Plympton</b>					<b>Population: 2,820</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	8	4	1	3	0	0	0	0
2014	13	4	2	7	2	0	0	2
2015	8	4	0	4	1	0	0	1
2016	4	1	0	3	1	0	0	1
2017	2	0	0	2	1	0	0	1

<b>Rochester</b>					<b>Population: 5,232</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5	3	1	1	0	0	0	0
2014	2	2	0	0	0	0	0	0
2015	2	2	0	0	0	0	0	0
2016	1	1	0	0	0	0	0	0
2017	4	4	0	0	1	1	0	0

<b>Rockland</b>					<b>Population: 17,489</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	42	13	2	27	5	0	1	4
2014	65	26	8	31	5	0	1	4
2015	52	17	7	28	1	0	0	1
2016	78	11	7	60	3	1	0	2
2017	58	24	4	30	2	1	0	1

<b>Scituate</b>					<b>Population: 18,133</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	70	27	9	34	2	0	0	2
2014	44	13	2	29	1	0	0	1
2015	68	37	5	26	0	0	0	0
2016	65	23	3	39	4	1	0	3
2017	65	30	3	32	4	0	1	3

**WAREHAM FIRE DISTRICTS****Population: 21,822***Onset**Est. Pop. Protected: 4,801*

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	45	33	5	7	2	1	1	0
2014	30	20	3	7	2	0	1	1
2015	51	26	3	22	0	0	0	0
2016	45	27	3	15	1	0	0	1
2017	33	28	2	3	0	0	0	0

**Wareham District***Est. Pop. Protected: 17,021*

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	95	34	16	45	1	0	0	1
2014	58	32	8	18	1	0	0	1
2015	86	24	17	45	1	0	0	1
2016	106	33	21	52	1	0	0	1
2017	75	22	26	27	1	0	0	1

**West Bridgewater****Population: 6,916**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	41	7	9	25	6	2	0	4
2014	45	12	8	25	2	1	0	1
2015	43	9	13	21	4	0	1	3
2016	27	10	5	12	1	0	0	1
2017	44	11	11	22	1	0	0	1

**Whitman****Population: 14,489**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	7	2	1	4	0	0	0	0
2014	7	1	0	6	0	0	0	0
2015	32	9	10	13	2	0	1	1
2016	18	7	0	11	0	0	0	0
2017	32	11	4	17	1	1	0	0

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
23001	Abington	3,107	39	0	2,164	144	211	210	332	0	7
23042	Bridgewater	4,227	83	4	2,838	178	296	237	561	5	25
23044	Brockton	26,241	568	6	19,934	523	1,584	1,077	2,525	8	16
23052	Carver	10	7	1	0	0	1	0	1	0	0
23082	Duxbury	2,583	42	14	1,572	231	224	112	383	2	3
23083	East Bridgewater	2,382	41	1	1,859	161	75	66	170	2	7
23118	Halifax	1,528	24	0	1,071	86	183	62	94	5	3
23122	Hanover	2,788	51	0	1,668	288	360	155	249	8	9
23123	Hanson	1,465	24	2	987	122	142	21	149	10	8
23131	Hingham	4,384	73	5	2,683	260	345	396	551	67	4
23142	Hull	2,625	25	0	1,781	185	257	108	265	3	1
23145	Kingston	2,407	32	4	1,771	120	127	67	280	0	6
23146	Lakeville	546	9	0	383	13	49	36	56	0	0
23169	Marion	1,294	32	1	847	61	68	76	200	3	6
23171	Marshfield	3,619	105	3	2,452	183	367	60	440	2	7
23173	Mattapoisett	526	21	1	21	173	116	14	175	2	3

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
23182	Middleborough	4,642	86	8	2,460	135	397	1,114	413	11	18
23219	Norwell	2,356	63	2	1,251	249	277	187	293	34	0
23993	Onset	1,442	46	2	889	128	129	119	120	4	5
23231	Pembroke	5	4	1	0	0	0	0	0	0	0
23239	Plymouth	9,120	185	12	5,732	285	640	1,074	1,176	8	8
23240	Plympton	219	8	0	138	30	10	6	27	0	0
23250	Rochester	4	4	0	0	0	0	0	0	0	0
23251	Rockland	3,053	66	4	2,318	161	128	66	307	0	3
23264	Scituate	2,914	68	4	1,807	262	239	194	324	6	10
23992	Wareham	2,532	78	3	1,274	286	210	302	370	0	9
23322	West Bridgewater	2,089	53	2	1,327	83	405	27	160	6	26
23338	Whitman	2,532	32	3	1,667	134	326	150	213	0	7
<b>Total</b>	<b>Plymouth County</b>	<b>90,640</b>	<b>1,869</b>	<b>83</b>	<b>60,894</b>	<b>4,481</b>	<b>7,166</b>	<b>5,936</b>	<b>9,834</b>	<b>186</b>	<b>191</b>

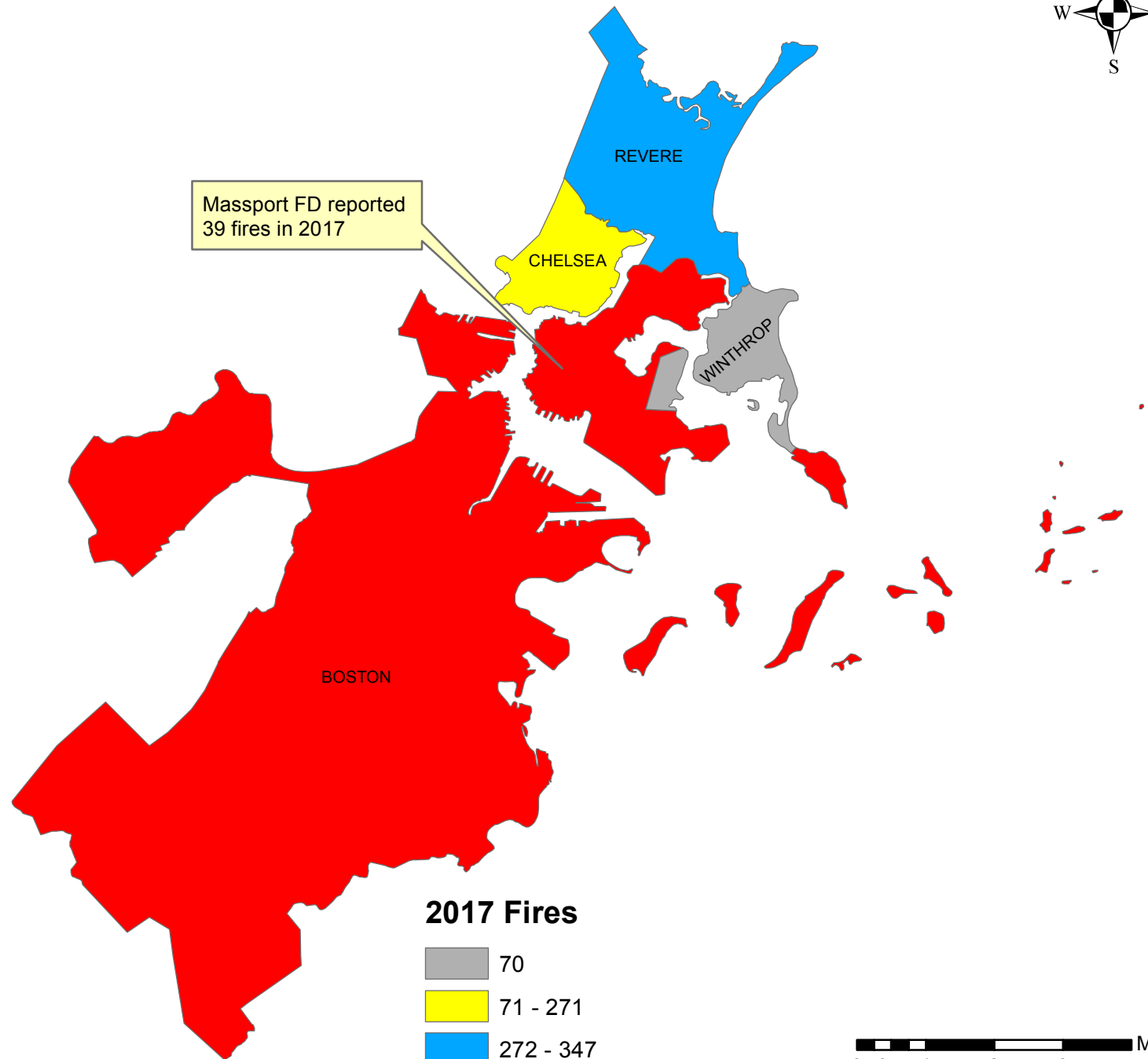
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



# Suffolk County

## 2017 Fire Data Analysis

# Suffolk County Fires 2017



# Suffolk County Fires in 2017

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## **6,196 Total Fires — 4,555 Structures, 256 Vehicles & 1,385 Other Fires**

Suffolk County ranked first out of the fourteen Massachusetts counties in total reported fires. Suffolk County fire departments reported 6,196 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 4,555 structure fires, 256 motor vehicle fires, 535 brush fires, 592 outside rubbish fires, 85 special outside fires, seven cultivated vegetation or crop fires, and 166 unclassified fires caused three civilian deaths, 25 civilian injuries, 51 fire service injuries and an estimated dollar loss of \$83.4 million. Suffolk County's fires accounted for 22% of the 27,895 Massachusetts fires reported in 2017.

All five fire departments in Suffolk County reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS).

## **All Fires Down**

Total fires decreased by 718, or less than 10%, from 6,914 incidents in 2016. Reported structure fires decreased by 72, or 2%, from the 4,627 reported during the previous year. Motor vehicle fires decreased by 48, or 16%, from the 304 reported in 2016. Outside and other fires increased by 598, or 30%, from 1,983 the year before.

## **SUFFOLK COUNTY FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6,885	4,991	349	1,545	151	31	8	112
2014	6,627	4,901	349	1,377	159	33	8	118
2015	6,918	4,710	359	1,849	120	25	10	85
2016	6,914	4,627	304	1,983	123	20	11	92
2017	6,196	4,555	256	1,385	129	33	12	84

## **Fire and Fire Death Rates**

Suffolk County had 8.6 fires per 1,000 population. That figure ranks Suffolk County first in the state and above the state rate of 4.3 fires per 1,000 population. Suffolk County also had 0.04 fire deaths per 10,000 population ranking it eleventh among Massachusetts counties and below the state rate of 0.09 fire deaths per 10,000 population.

## **3 Residents Died in 2 Suffolk County Fires**

Suffolk County had three of its residents die in two fires in 2017.

- On March 18, 2017, at 1:36 a.m., the Winthrop Fire Department was called to a fatal fire in a single-family home of undetermined cause. The fire originated in the second floor bedroom. The victim was a 72-year old man who was sleeping in the area of origin. He was transported to a local hospital where he succumbed to his injuries. No one else was injured at this fire. Alarms were not present, and the building was not sprinklered. Damages from the blaze were estimated to be 150,000.



- On November 22, 2017, at 1:02 a.m., the Boston Fire Department was called to a fatal smoking fire in an eight-unit apartment building. The fire was started by undetermined smoking materials igniting the victim's bedding while he was asleep. The victims, a 33-year old man, died when he jumped in an escape attempt; and a 59-year old man was overcome while he attempted to escape. Three (3) other civilians were injured at this fire. Alarms were present and alerted the occupants. The building did not have any sprinklers. Damages from this fire were estimated to be \$1.5 million.

### **Boston Has Suffolk County's Largest Loss Fire in 2017**

In 2017, Suffolk County fire departments reported five fires with a reported dollar loss of \$1 million or greater. All five of these fires occurred in Boston. The total dollar loss of these five fires was \$49.5 million, or 59%, of the county's total dollar loss.

- On June 28, 2017, at 2:32 p.m., the Boston Fire Department was called to a fire at 1971 Dorchester Ave., an 83-unit apartment building that was under construction. Heat from a generator on the sixth floor ignited a nearby structural member. No one was injured at this fire. Alarms were present but they were shut off. Sprinklers were also present but the system was also shut off. Damages from this fire were estimated to be \$45 million.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 4,555 structure fires caused all three civilian deaths, 21 civilian injuries, 39 fire service injuries and an estimated dollar loss of \$80.1 million. These incidents represented 74% of Suffolk County's reported fires in 2017. The average estimated dollar loss per structure fire was \$17,596. The total number of reported structure fires decreased by 72, or 2%, from the 4,627 reported in 2016.

### **Arson Caused 1% of Structure Fires**

The 33 structure arsons caused an estimated dollar loss of \$847,202. Arson was indicated as the cause of 1% of the structure fires and 1% of Suffolk County's structure fire dollar loss. The 33 structure arsons accounted for 26% of the Suffolk County arson fires reported in 2017. The total number of reported structure arsons increased by 13, or 65%, from the 20 reported in 2016.

### **51% of Structure Arsons Occurred in Residences**

Sixty-one percent (61%) of Suffolk County's 33 structure arsons occurred in residential occupancies; 15% happened in educational facilities, 12% occurred in mercantile and business properties; 3% each occurred in institutional facilities, manufacturing and processing facilities, storage facilities and special properties.

## **BUILDING FIRES**

There were 4,541 building fires of different types in Suffolk County in 2017. These 4,541 building fires accounted for 99.7% of all structure fires in Suffolk County.

### **85% of Suffolk Building Fires Occurred in People's Homes**

Three thousand eight hundred and sixty-five (3,865), or 85%, of Suffolk County's 4,541 building fires occurred in residential occupancies. Mercantile and business properties had 203 fires. One hundred and seventy-one (171) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 157 fires. Seventy-four (74) building fires took place in educational properties. Thirty-two (32) building fires in Suffolk County occurred in special properties such as outbuildings, bus stop shelters and tollbooths. Eighteen (18) fires took place in storage properties. Seven (7) fires took place in manufacturing and processing facilities. Six (6) fires occurred in industrial, utility, defense, agricultural or mining facilities. There were seven fires whose property use were codes as *Other* and one other fires whose property use was unclassified.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Were Down**

There were 3,865 reported residential building fires in Suffolk County in 2017. These 3,865 fires are a decrease of 80, or 2%, from the 3,945 residential building fires reported in 2016.

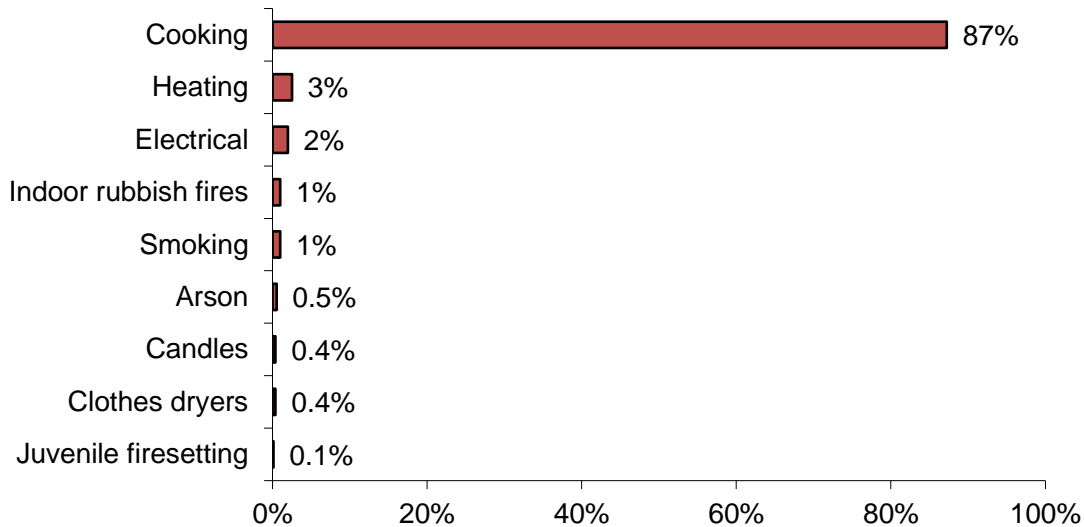
### **Apartments Accounted for 2/3 of Residential Building Fires**

The peak fixed property uses for residential building fires were apartments, accounting for 66% of the residential building fires in Suffolk County; 12% occurred in one- or two-family homes; 5% occurred in dormitories; 4% happened in rooming houses; 1% occurred in residential board and care facilities; 1% happened in hotels or motels. Four hundred and sixty-seven (467), or 12%, of the residential building fires in Suffolk County occurred in unclassified residential buildings.

### **Unattended Cooking Caused 87% of Residential Fires**

The leading cause of residential building fires in Suffolk County was unattended cooking and other unsafe cooking practices, accounting for 87% of these fires. Heating caused 3% of these fires. Electrical problems caused 2% of fires in people's homes. Indoor rubbish fires and smoking each caused 1% of these fires. Candles, arson, clothes dryers and juvenile-set fires each caused less than 1% of these fires in 2017.

## 2017 Leading Causes of Fires in Suffolk County Homes



### 90% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>1</sup>

Three thousand four hundred and seventy-five (3,475), or 90%, of all residential building fires were reported as confined to non-combustible containers in 2017. Three thousand three hundred and sixteen (3,316) of the reported fires were cooking fires contained to a non-combustible container, accounting for 86% of residential building fires. Seventy-four (74), or 2%, of the residential building fires in Suffolk County in 2017 were contained rubbish fires. Seventy-two (72), or 2%, were fires confined to a fuel burner or boiler malfunction. Twelve (12), or less than 1%, of all residential building fires reported in 2017 were confined to a chimney; and one, or less than 1% was confined to a commercial compactor.

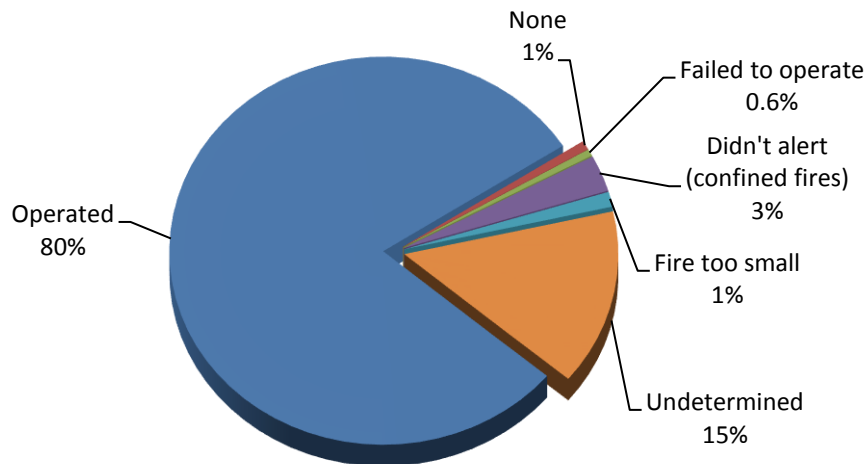
### Alarms Alerted Occupants in 80% of Fires

Smoke or heat alarms operated and alerted the occupants in 3,083, or 80%, of the residential building fires. In 3% of these fires<sup>2</sup>, the alarms did not alert the occupants. Alarms were present but did not operate in less than 0.6% of these incidents. In 1% of these fires, no alarms were present at all. The fire was too small to trigger the alarm in 1% of the residential fires. Smoke alarm performance was undetermined in 566 incidents, or 15%, of Suffolk County's residential building fires.

<sup>1</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>2</sup> These represent confined fires where it was reported that the alarm did not alert the occupants.

## Detector Status in Suffolk County's Residential Structure Fires 2017



### 18% of Failed Alarms Had Missing Batteries

Of the 22 fires where smoke alarms were present but failed to operate, four, or 18%, failed because the batteries were either missing or disconnected. Two (2), or 9%, failed from an improper installation or placement. One (1), or 5%, failed because it was defective. Another one, or 5%, failed because of a lack of maintenance and another failed from a power failure, shut-off or disconnect. It was undetermined or unclassified in 13 cases, or 59%, why the alarms failed to operate.

## VACANT BUILDINGS

### 1% of Building Fires Occurred in Vacant Buildings

Suffolk County reported 25 fires that occurred in buildings that were vacant, under construction or demolition. This represented 1% of the total 4,541 building fires reported to MFIRS in 2017. Eighteen (18) fires occurred in vacant residential properties. Four (4) vacant building fires occurred in storage facilities. One (1) of these fires occurred in a mercantile or business property; and a public assembly property and industrial facility each accounted for one of these fires in Suffolk County in 2017.

Three (3), or 12%, of the vacant building fires in Suffolk County in 2017 were determined to be intentionally set. Two (2) apartments and an outbuilding or shed accounted for the one reported vacant structure arson in 2017.

## JUVENILE-SET FIRES

### 12 Juvenile-set Fires

There were 12 reported juvenile-set fires in Suffolk County in 2017. The seven structure fires, three brush fires, and two unclassified fires caused \$20,100 in estimated damages.

## ARSONS

### 123 Total Arsons<sup>3</sup> — 33 Structures, 12 Vehicles & 84 Other Arsons

One hundred and twenty-three (123), or 2%, of Suffolk County's 6,196 fires were considered intentionally set, or, for purposes of this analysis, arson. The 33 structure arsons, 12 motor vehicle arsons and 84 outside and other arsons caused one civilian injury and an estimated dollar loss of \$1.4 million. Suffolk County's arson fires accounted for 19% of the state's total arson fires and 1% of the state's total dollar loss from arson.

### Structure Arson Up

The total number of arsons increased by six from 123 in 2016. Reported structure arsons increased by 13 from the 20 reported in 2016. Motor vehicle arsons increased by one from the 11 reported in 2016. Outside and other arsons decreased by eight from the 92 reported last year.

## ALL INCIDENTS

### Rescue & EMS Calls Are 1/2 of All Reported Responses

In 2017, fire departments in Suffolk County reported 112,296 responses<sup>4</sup> to MFIRS. This is an increase of 37 runs, or less than 1%, over the 112,259 reported in 2016. Of these 112,296 responses, 106,082 non-fire calls were voluntarily reported.

Of these 106,082 non-fire calls, 56,077, or 50%, of all the responses reported in 2017, were reported rescue and emergency medical services (EMS) calls; 18,738, or 17%, were reported false alarm or false calls; 14,412, or 13%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 10,064, or 9%, were reported good intent calls; 4,674, or 4%, reported hazardous condition calls with no fire; 2,006, or 2%, were special incident type calls such as citizen complaints; 68, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 43, or 0.04%, were severe weather calls.

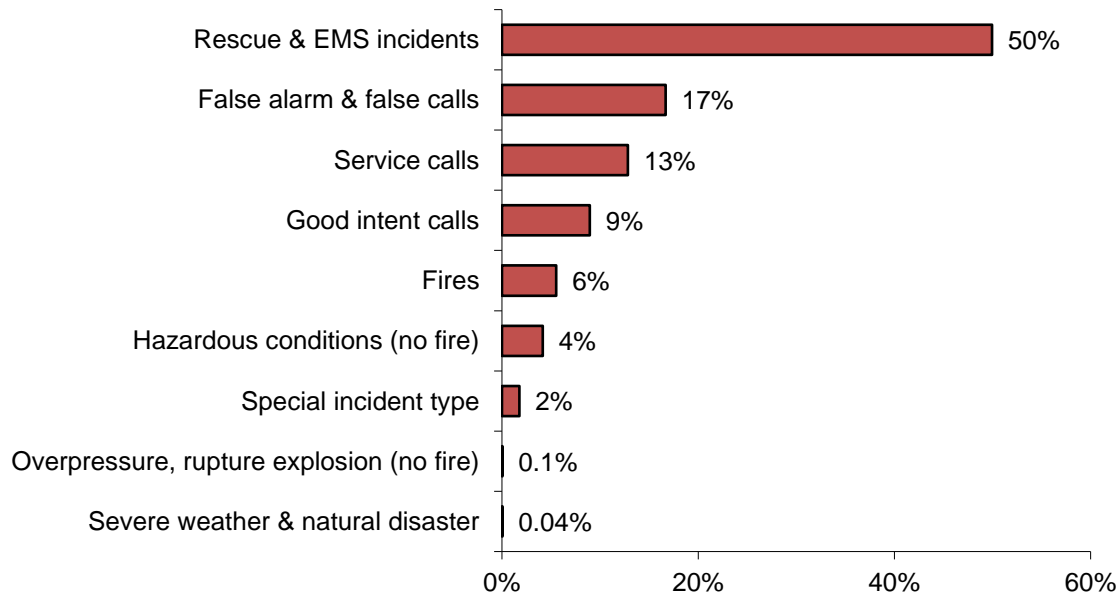
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<sup>3</sup> In MFIRS v5 a fire is considered an arson if the Cause of Ignition = 1 (Intentional) and the Age of Person (Fire Module) is greater than 17 or if the field is blank; or if the Wildland Module is used, the Wildland Fire Cause = 7 (Incendiary) and the Age of the Person (Wildland Module) is greater than 17 or if the field is left blank.

<sup>4</sup> These figures include responses in which Suffolk County fire departments gave mutual aid to other fire departments.

Six thousand two hundred and fourteen (6,214), or 6%, of the total responses submitted by Suffolk County fire departments were fires.

### 2017 Responses by Incident Type



#### Suffolk County Fire Departments Reported Giving Mutual Aid 252 Times

In 2017, Suffolk County fire departments reported coming to the aid of other fire departments 252 times. Of these 252 responses, 185, or 73%, were for service calls such as cover assignments; 20, or 8%, were for rescue or EMS incidents; 17, or 7%, were for fires; 16, or 6%, were for hazardous conditions calls with no fire; 10, or 4%, were for good intent calls; three, or 1%, were special incident types; and one, or 0.4%, was for a false alarm or false call.

#### Suffolk County Fire Departments Received Mutual Aid in 99 Incidents

In 2017, Suffolk County fire departments reported receiving aid from surrounding departments in 99 incidents. Of these 99 incidents, 34, or 34%, were hazardous conditions calls with no fire; 28 or 28% were rescue and emergency medical services calls; 18, or 18%, were for fires; 11, or 11%, were false alarms or false calls; four, or 4%, was a special incident type; two, or 2%, were good intent calls; one, or 1%, was a service call; and another, or 1%, was for an overpressure, rupture explosion with no fire.

**Suffolk County****Population: 722,023****8.6 Fires/1,000 Population****Total Fires: 6,196 \$83,400,982**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	4,555	74%	\$80,148,015
Vehicle Fires	256	4%	2,743,974
Other Fires	1,385	22%	508,993

2 Fatal Fires 0.48 Civilian Deaths/1,000 Fires

3 Civilian Deaths 0.04 Civilian Deaths/10,000 Population

25 Civilian Injuries 51 Fire Service Injuries

**Building Fires: 4,541****Residential Structure Fires: 3,865****Residential Structure Fires Confined to Non-Combustible Containers: 3,475****Unconfined Residential Structure Fires: 390**

3 Civilian Deaths 21 Civilian Injuries 33 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	2,540	66%	Operated	3,083	80%
1- & 2-Family homes	454	12%	Didn't operate	22	0.6%
Dormitories	181	5%	None	29	1%
Rooming houses	142	4%	Fire too small	48	1%
Residential board & care	48	1%	Didn't Alert (confined)	117	3%
Hotels or motels	33	1%	Undetermined	566	15%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	88%	Arcing	1%	14%
Heating room or area	2%	Radiated heat from oper. eq.	1%	13%
Bedroom	1%	Heat from operating eq.	1%	11%
Exterior balcony/unencl. porch	1%	Cigarette	1%	8%
Bathroom	1%	Hot or smoldering object	1%	6%

<sup>5</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>6</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>7</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>8</sup></b>
Food, cooking materials	86%	Abandoned materials	2%	15%
Rubbish, trash, waste	2%	Too close to combustibles	1%	12%
Flammable, combustible liquid	2%	Unspec. short circuit arc	1%	9%
Electrical wire, cable insulation	1%	Elec. fail., malfunc., other	1%	7%
Structural member, framing	1%	Equipment unattended	1%	7%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	87%	Unintentional	7%	71%
None	6%	Failure of eq. or heat source	1%	8%
Boiler, furnace, cent. heat. unit	2%	Intentional	0.5%	5%
Electrical wiring, other	0.4%	Act of Nature	0.1%	1%
Clothes dryer	0.4%	Cause under investigation	0.5%	5%
Chimney or flue	0.3%	Undetermined	1%	8%

#### **Detector Alerted Occupants (Confined Fires in Non-Combustible Containers)**

Alerted Occupants	83%
Didn't Alert Occupants	3%
Undetermined	14%

<sup>7</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>8</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>9</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>10</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.



<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	480	410	16	54
February	461	374	26	61
March	557	445	15	97
April	594	366	26	202
May	545	398	17	130
June	536	339	27	170
July	505	305	29	171
August	514	319	24	171
September	498	376	23	99
October	494	378	18	98
November	503	408	22	73
December	509	437	13	59

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	1,042	749	47	246
Monday	841	619	35	187
Tuesday	813	614	34	165
Wednesday	890	667	43	180
Thursday	846	622	31	193
Friday	851	610	27	214
Saturday	913	674	39	200

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 – 04:00	404	260	39	105
04:01 – 08:00	434	303	29	102
08:01 – 12:00	1,016	799	38	179
12:01 – 16:00	1,390	985	52	353
16:01 – 20:00	1,756	1,328	53	375
20:01 – 00:00	1,196	880	45	271

### **Motor Vehicle Fires**

Total: 256

Automobiles: 213 (83%)

9, or (4%), of the automobile fires considered incendiary or suspicious

## Arson Fires

**Total Arsons: 129**

**Dollar loss: \$1,415,752**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	33	1 %	26%	\$847,202
Vehicle Arsons	12	5%	9%	562,600
Other Arsons	84	6%	65%	5,950

0.05 Structure arsons/1,000 population

0.02 Vehicle arsons/1,000 population

0.12 Other arsons/1,000 population

1 Civilian Injury

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 – 16:00	8	24%	00:01 – 04:00	8	67%
20:01 – 00:00	7	21%	20:01 – 00:00	3	25%
			08:01 – 12:00	1	8%

Other Arsons	#	%
20:01 – 00:00	38	45%
16:01 – 20:00	22	26%
12:01 – 16:00	10	12%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	14	42%
1- or 2-Family home	5	15%
High/junior/middle school	4	12%

**Boston** **Population: 617,594**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	5,831	4,303	295	1,233	136	22	6	108
2014	5,682	4,243	298	1,141	152	31	8	113
2015	5,969	4,123	309	1,537	112	21	10	81
2016	5,979	4,096	252	1,631	117	19	8	90
2017	5,469	4,077	219	1,173	126	32	11	83

**Chelsea** **Population: 35,177**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	435	277	18	140	10	7	1	2
2014	352	267	19	66	6	1	0	5
2015	400	287	23	90	5	4	0	1
2016	359	248	17	94	5	1	3	1
2017	271	199	9	63	1	1	0	0

**Massport** **Population: 0**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	69	8	10	51	1	0	0	1
2014	55	4	16	35	0	0	0	0
2015	111	7	9	95	3	0	0	3
2016	73	2	18	53	0	0	0	0
2017	39	5	8	26	0	0	0	0

**Revere** **Population: 51,755**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	469	345	23	101	3	2	0	1
2014	470	339	16	115	1	1	0	0
2015	375	259	17	99	0	0	0	0
2016	423	233	17	173	1	0	0	1
2017	347	223	18	106	2	0	1	1

**Winthrop** **Population: 17,497**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	82	59	3	20	1	0	1	0
2014	68	48	0	20	0	0	0	0
2015	63	34	1	20	0	0	0	0
2016	80	48	0	32	0	0	0	0
2017	70	51	2	17	0	0	0	0

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
25035	Boston	85,156	5,470	47	37,793	3,757	11,869	8,351	15,956	33	1,880
25057	Chelsea	8,796	277	3	6,170	266	504	610	931	9	26
25935	Massport	3,953	49	11	2,809	345	244	230	255	0	10
25248	Revere	11,063	348	6	7,175	239	1,312	637	1,258	0	88
<b>25346</b>	<b>Winthrop</b>	<b>3,328</b>	<b>70</b>	<b>1</b>	<b>2,130</b>	<b>67</b>	<b>483</b>	<b>236</b>	<b>338</b>	<b>1</b>	<b>2</b>
<b>Total</b>	<b>Suffolk County</b>	<b>112,296</b>	<b>6,214</b>	<b>68</b>	<b>56,077</b>	<b>4,674</b>	<b>14,412</b>	<b>10,064</b>	<b>18,738</b>	<b>43</b>	<b>2,006</b>

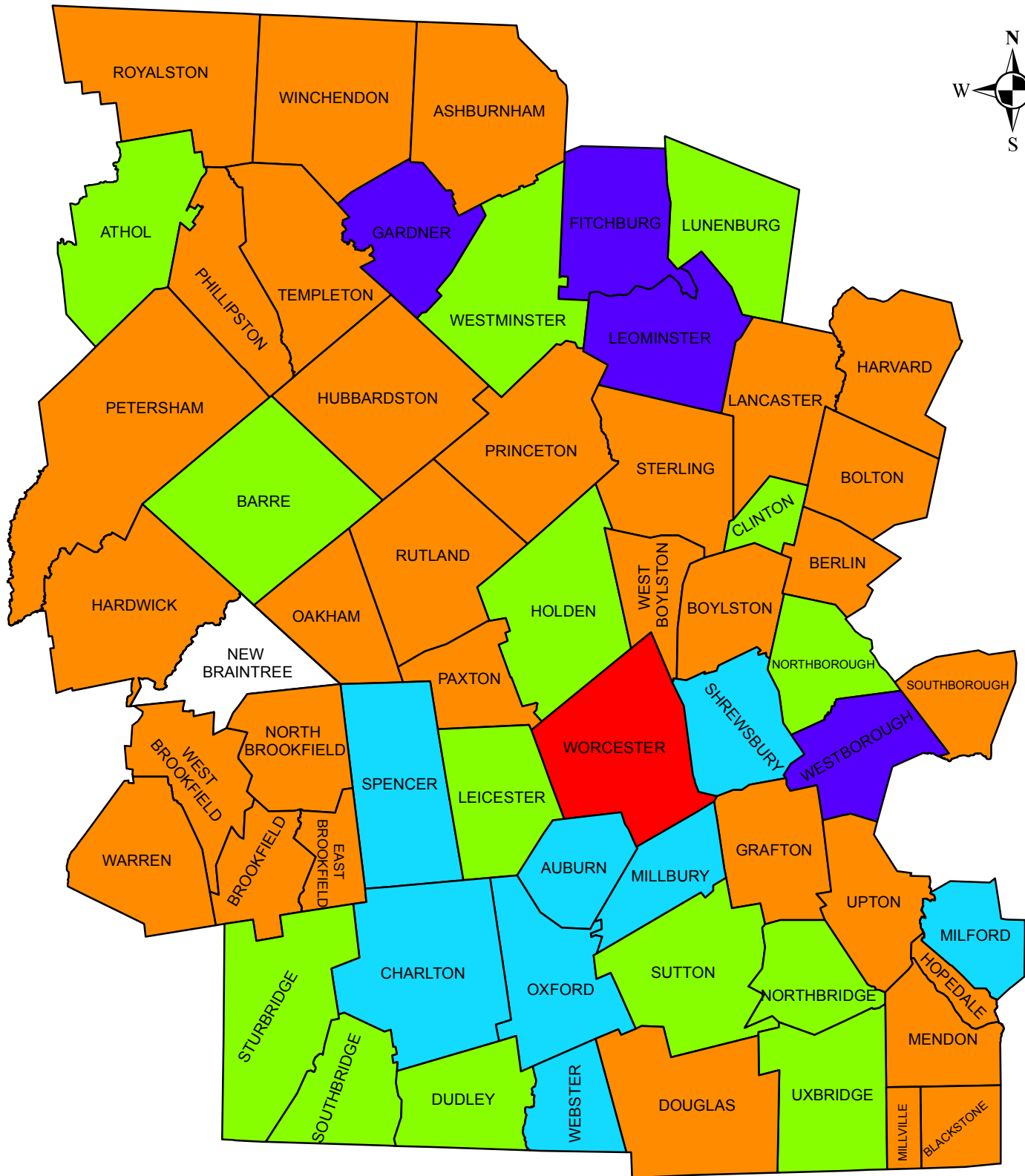
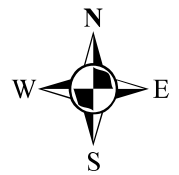
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Division of Fire Safety strongly encourages any department that wants to send in all of their responses to do so.



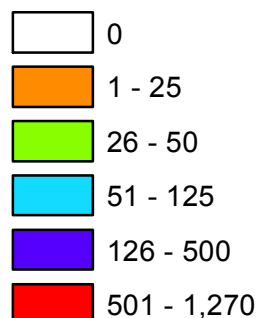
# Worcester County

## 2017 Fire Data Analysis

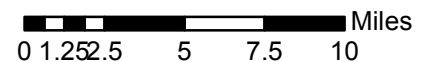
# Worcester County Fires 2017



## 2017 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2017

# Worcester County Fires in 2017

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## **3,764 Total Fires — 2,435 Structures, 338 Vehicles & 991 Other Fires**

Worcester County ranked third out of the fourteen Massachusetts counties in total reported fires. Worcester County fire departments reported 3,764 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The 2,435 structure fires, 338 motor vehicle fires, 471 brush fires, 360 outside rubbish fires, 94 special outside fires, four cultivated vegetation or crop fires, and 62 unclassified fires caused five civilian deaths, 36 civilian injuries, 52 fire service injuries and an estimated dollar loss of \$34.8 million. Worcester County's fires accounted for 13% of the 27,895 Massachusetts fires reported in 2017.

All 60 fire departments in Worcester County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2017.

## **Structure Fires Up**

Total fires decreased by 668, or 15%, from 4,432 incidents in 2016. Reported structure fires increased by 65 from the 2,370 reported during the previous year. Motor vehicle fires decreased by 15 from the 353 reported in both 2016. Outside and other fires decreased by 718 from 1,709 the year before<sup>1</sup>.

## **WORCESTER COUNTY FIRES FROM 2013 TO 2017**

<b>Year</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	3,955	2,124	357	1,474	139	29	11	99
2014	3,721	2,223	374	1,124	79	28	9	42
2015	4,336	2,257	385	1,694	112	40	14	58
2016	4,432	2,370	353	1,709	84	16	16	52
2017	3,764	2,435	338	991	80	31	10	39

## **Fire and Fire Death Rates**

Worcester County had 4.7 fires per 1,000 population. That figure ranks Worcester County third in the state and above the state rate of 4.3 fires per 1,000 population. Worcester County also had 0.06 fire deaths per 10,000 population ranking it tied for eighth among Massachusetts counties and below the state rate of 0.09 fire deaths per 10,000 population.

## **5 Residents Died in 5 Worcester County Fires**

Worcester County had five of its residents die in nine fires in 2017. All but one of the deaths occurred in building fires. The other death occurred in a motor vehicle crash with ensuing fire.

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<sup>1</sup> 2017 was a down year for brush fires.

- On April 12, 2017, at 4:14 a.m., the Winchendon Fire Department was called to a fatal motor vehicle crash with ensuing fire between a tractor trailer and an SUV. The driver of the tractor trailer, a 61-year old man was not able to escape. Damages were estimated to be \$200,000.
- On October 2, 2017, at 7:21 a.m., the Grafton Fire Department was dispatched to a fire in a 5-unit apartment building of undetermined cause. The victim was a 69-year old man. He was transported to a local hospital and succumbed to his injuries. Someone in the home used oxygen. There were no other injuries associated with this fire. Alarms were present and alerted the occupants of the building. The building was not sprinklered. Damages from this fire were estimated to be \$240,000.
- On October 16, 2017, at 11:35 a.m., the Leominster Fire Department was called to a fatal arson fire in a vacant and unsecured two-family home. The victim, a 33-year old man who was possibly impaired by drugs, barricaded himself inside the home when police came to serve a warrant. He set fire to the home. No one else was injured at this fire. Alarms were not present and the home was not sprinklered. Damages from this fire were estimated to be \$300,000.
- On November 28, 2017, at 12:39 p.m., the Fitchburg Fire Department was called to a fatal self-immolation fire in a six-unit apartment building. The victim, a 58-year old man, started the fire because he was being evicted. No one else was injured at this fire. Alarms were present and operated. The home was not sprinklered. Damages from this fire were estimated to be \$11,500.
- On December 14, 2017, at 7:47 p.m., the Oxford Fire Department responded to a fatal heating fire at a single-family home. The fire was started by a woodstove in the first floor living room. The victim was a 93-year old woman. Two (2) firefighters were injured at this fire. It was undetermined if there were alarms and the building did not have any sprinklers. Damages from this fire were estimated to be \$215,000.

### **Worcester Has Largest Loss Fire in 2017**

In 2017, Worcester County fire departments reported four fires with a reported dollar loss of \$1 million or greater. The dollar loss of these four fires totaled \$8.6 million, or 25%, of the county's total dollar loss.

- On February 20, 2017, at 2:21 p.m., the Worcester Fire Department was called to a fire of unknown cause at 96 William St, a 117-year old, 7,500 square foot, single-family home. The fire began in an interior stairway. Two (2) firefighters were injured at this fire. Alarms were present and operated. The home did not have any sprinklers. Damages from this fire were estimated to be \$3.8 million.



## **STRUCTURE FIRES**

### **Reported Structure Fires Up**

The 2,435 structure fires caused four civilian deaths, 31 civilian injuries, 47 fire service injuries and an estimated dollar loss of \$32.4 million. These incidents represented 65% of Worcester County's reported fires in 2017. The average estimated dollar loss per structure fire was \$13,316. The total number of reported structure fires increased by 65, or 3%, from the 2,370 reported in 2016.

### **Arson Caused 1% of Structure Fires**

The 31 structure arsons caused two civilian deaths, five fire service injuries and an estimated dollar loss of \$1 million. Arson was indicated as the cause of 1% of the structure fires and 3% of Worcester County's structure fire dollar loss. The 31 structure arsons accounted for 39% of the Worcester County arson fires reported in 2017. The total number of reported structure arsons increased by 15, or 94%, from the 16 reported in 2016.

### **74% of Structure Arsons Occurred in Residences**

Seventy-four percent (74%) of Worcester County's 31 structure arsons occurred in residential occupancies; 10% happened each in public assembly properties and in mercantile and business properties. Three percent (3%) each occurred in educational facilities and storage properties.

## **BUILDING FIRES**

There were 2,425 building fires of different types in Worcester County in 2017. These 2,425 building fires accounted for 99.5% of all structure fires in Worcester County.

### **85% of Worcester Building Fires Occurred in People's Homes**

Two thousand one hundred (2,100), or 87%, of Worcester County's 2,425 building fires occurred in residential occupancies. Ninety-three (93) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 82 fires. Mercantile and business properties had 67 fires. Twenty-eight (28) building fires took place in educational properties. Twenty-three (23) fires took place in storage properties. Twenty-two (22) fires took place in manufacturing and processing facilities. Five (5) building fires in Worcester County occurred in special properties such as outbuildings, bus stop shelters and tollbooths. Four (4) fires occurred in industrial, utility, defense, agricultural or mining facilities in Worcester County in 2017. One (1) fire was reported to have None as its property use.

## RESIDENTIAL FIRES

### Residential Building Fires Were Up

There were 2,100 reported residential building fires in Worcester County in 2017. These 2,100 fires were an increase of 83, or 4%, from the 2,017 residential building fires reported in 2016.

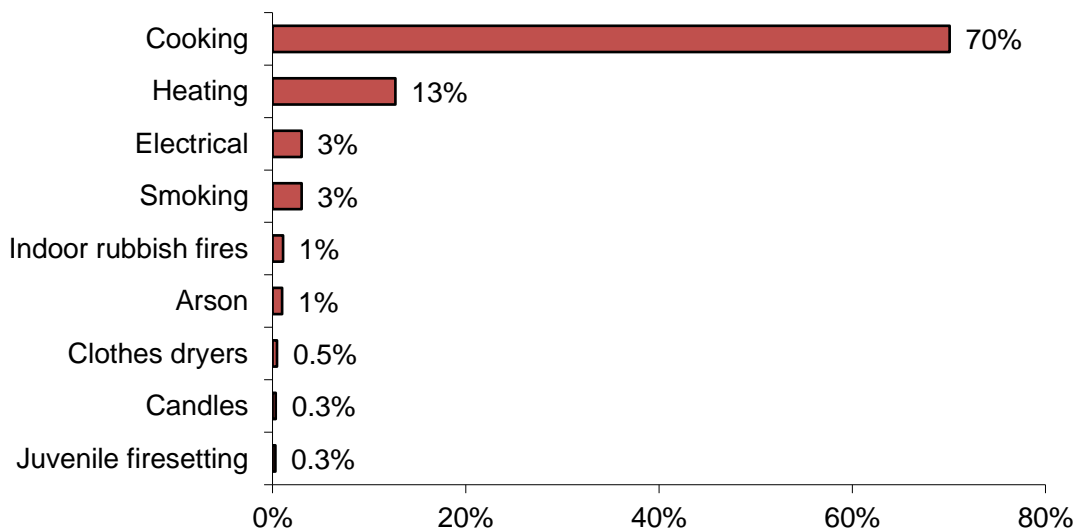
### Apartments Accounted for 47% of Residential Building Fires

The peak fixed property uses for residential building fires were apartments, accounting for 47% of the residential building fires in Worcester County; 34% occurred in one- or two-family homes; 7% happened in rooming houses; 6% occurred in dormitories; 3% happened in hotels or motels; and 2% occurred in residential board and care facilities. Eighteen (18), or 1%, of the residential building fires in Worcester County occurred in unclassified residential buildings.

### Unattended Cooking Caused 70% of Residential Fires

The leading cause of residential building fires in Worcester County was unattended cooking and other unsafe cooking practices, accounting for 70% of these fires. Heating caused 13% of fires in people's homes. Electrical problems and smoking each accounted for 3% of these fires. Indoor rubbish fires and arsons each caused 1%. Clothes dryers, candles and juvenile-set fires each caused less than 1% of the fires in people's homes in Worcester County in 2017.

## 2017 Leading Causes of Fires in Worcester County Homes



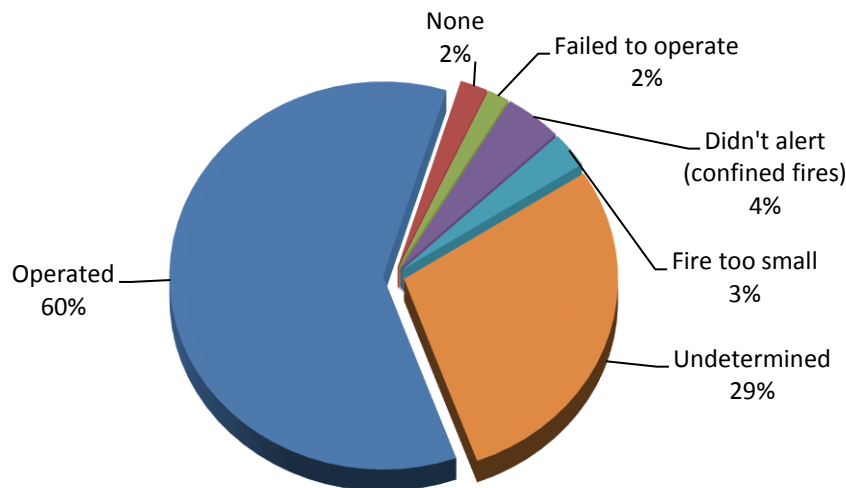
### 80% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

One thousand six hundred and eighty-seven (1,687), or 80%, of all residential building fires were reported as confined to non-combustible containers in 2017. One thousand four hundred and twenty-four (1,424) of the reported fires were cooking fires contained to a non-combustible container, accounting for 68% of residential building fires. One hundred and thirty-one (131), or 6%, were fires confined to a fuel burner or boiler malfunction. One hundred and seven (107), or 5%, of all residential building fires reported in 2017 were confined to a chimney. Twenty-three (23), or 1%, of the residential building fires in Worcester County in 2017 were contained rubbish fires; and two fires, or less than 1%, were incinerator overloads or malfunctions.

### Alarms Alerted Occupants in 60% of Fires

Smoke or heat alarms operated and alerted the occupants in 1,267, or 60%, of the residential building fires. In 4% of these fires<sup>3</sup>, the alarms did not alert the occupants. Alarms were present but did not operate in 2% of these incidents. In 2% of these fires, no alarms were present at all. The fire was too small to trigger the alarm in 3% of the residential fires. Smoke alarm performance was undetermined in 600 incidents, or 29%, of Worcester County's residential building fires.

### Detector Status in Worcester County's Residential Structure Fires 2017



<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing to Ignition, Cause of Ignition, and Equipment Involved In Ignition. These incidents are not included in the analysis of these fields.

<sup>3</sup> These represent confined fires where it was reported that the alarm did not alert the occupants.

**40% of Failed Alarms Had Missing or Dead Batteries**

Of the 35 fires where smoke alarms were present but failed to operate, 10, or 29%, failed because the batteries were either missing or disconnected. Four (4), or 11%, failed because the batteries were dead. Three (3), or 9%, failed from a power failure, shutoff or disconnect. Defective detectors caused another three, or 9%, of the alarms to fail. It was undetermined or unclassified in 14 cases, or 40%, why the alarms failed to operate.

**VACANT BUILDINGS****1% of Building Fires Occurred in Vacant Buildings**

Worcester County reported 34 fires that occurred in buildings that were vacant, under construction or demolition. This represents 1% of the total 2,425 building fires reported to MFIRS in 2017. Twenty-five (25) fires occurred in vacant residential properties. Seven (7) of these fires occurred at storage facilities. One (1) vacant building fire occurred in a public assembly property, and another occurred in a mercantile or business property in Worcester County in 2017.

Three (3), or 9%, of the vacant building fires in Worcester County in 2017 were determined to be intentionally set. Two (2) of these vacant arsons occurred in an apartment buildings and one happened in a storage facility in 2017.

**JUVENILE-SET FIRES****14 Juvenile-set Fires**

There were 14 reported juvenile-set fires in Worcester County in 2017. The nine structure fires, four brush fires, and one motor vehicle fire caused \$60,762 in estimated damages.

**ARSONS****80 Total Arsons<sup>4</sup> — 31 Structures, 10 Vehicles & 39 Other Arsons**

Eighty (80), or 2%, of Worcester County's 3,764 fires were considered intentionally set, or, for purposes of this analysis, arson. The 31 structure arsons, 10 motor vehicle arsons and 39 outside and other arsons caused two civilian deaths, five fire service injuries and an estimated dollar loss of \$1.1 million. Worcester County's arson fires accounted for 12% of the state's total arson fires and 1% of the state's total dollar losses from arson.

**Structure Arson Down**

The total number of arsons decreased by four from 84 in 2016. Reported structure arsons increased by 15 from the 16 reported in 2016. Motor vehicle arsons decreased by six

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<sup>4</sup> In MFIRS v5 a fire is considered an arson if the Cause of Ignition = 1 (Intentional) and the Age of Person (Fire Module) is greater than 17 or if the field is blank; or if the Wildland Module is used, the Wildland Fire Cause = 7 (Incendiary) and the Age of the Person (Wildland Module) is greater than 17 or if the field is left blank.

from the 16 reported in 2016. Outside and other arsons decreased by 13 from the 52 reported last year.

## ALL INCIDENTS

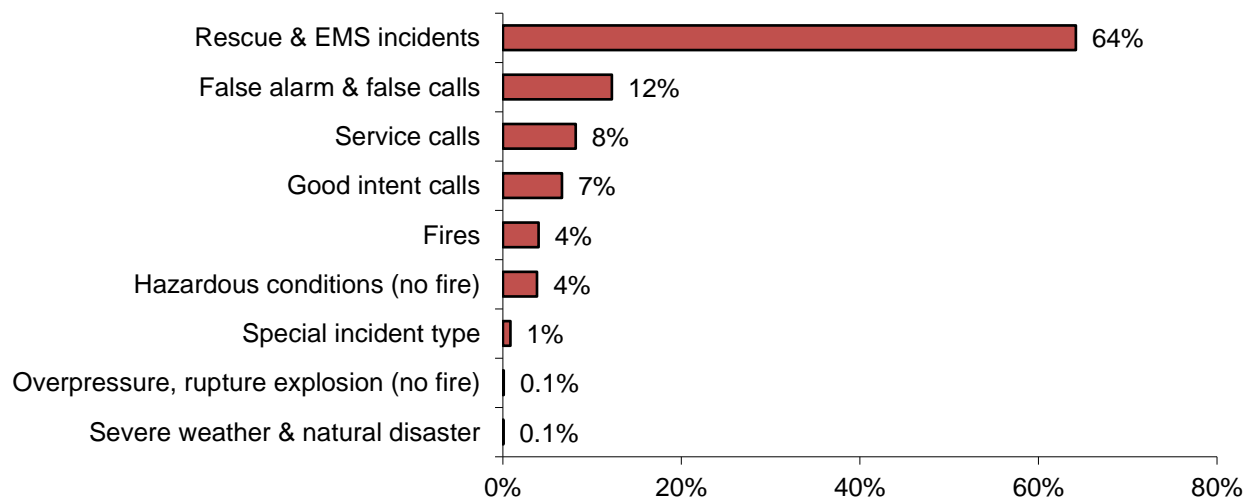
### Rescue & EMS Calls Are 64% of All Reported Responses

In 2017, fire departments in Worcester County reported 107,203 responses<sup>5</sup> to MFIRS. This is an increase of 3,563 runs, or 3%, over the 103,640 reported in 2016. Of these 107,203 responses, 102,927 non-fire calls were voluntarily reported.

Of these 102,927 non-fire calls, 68,801, or 64%, of all the responses reported in 2017 were reported rescue and emergency medical services (EMS) calls; 13,106, or 12%, were reported false alarm or false calls; 8,741, or 8%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 7,106, or 7%, were reported good intent calls; 4,113, or 4%, reported hazardous condition calls with no fire; 893, or 1%, were special incident type calls such as citizen complaints; 111, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 56, or 0.1%, were severe weather calls.

Four thousand two hundred and seventy-six (4,276), or 4%, of the total responses submitted by Worcester County fire departments were fires.

### 2017 Responses by Incident Type



### Worcester County Fire Departments Reported Giving Mutual Aid 3,043 Times

In 2017, Worcester County fire departments reported coming to the aid of other fire departments 3,043 times. Of these 3,043 responses, 1,591, or 52%, were for rescue or EMS incidents; 508, or 17%, were for service calls such as cover assignments; 454, or

<sup>5</sup> These figures include responses in which Worcester County fire departments gave mutual aid to other fire departments.

15%, were for fires; 387, or 13%, were for good intent calls; 49, or 2%, were for false alarms or false calls; 43, or 1%, were for hazardous conditions calls with no fire; seven, or 0.2%, were special incident types; three, or 0.1%, were for overpressure, rupture explosion calls with no fire; and one, or 0.03%, was for a severe weather or natural disasters.

**Worcester County Fire Departments Received Mutual Aid in 1,579 Incidents**

In 2017, Worcester County fire departments reported receiving aid from surrounding departments in 1,579 incidents. Of these 1,579 incidents, 1,137 or 72% were rescue and emergency medical services calls; 200, or 13%, were for fires; 80, or 5%, were good intent calls; 66, or 4%, were false alarms or false calls; 55, or 3%, were service calls; 39, or 2%, were hazardous conditions calls with no fire; one, or 0.1%, was for an overpressure, rupture explosion call with no fire; and one, or 0.1%, was for a severe weather or natural disasters.

**Worcester County****Population: 798,552****4.7 Fires/1,000 Population****Total Fires: 3,764 \$34,754,417**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	2,435	65%	\$32,424,847
Vehicle Fires	338	9%	2,214,904
Other Fires	991	26%	114,666

5 Fatal Fires 1.33 Civilian Deaths/1,000 Fires  
 5 Civilian Deaths 0.06 Civilian Deaths/10,000 Population  
 36 Civilian Injuries 52 Fire Service Injuries

**Building Fires: 2,425****Residential Structure Fires: 2,100****Residential Structure Fires Confined to Non-Combustible Containers: 1,687****Unconfined Residential Structure Fires: 413**

4 Civilian Deaths 30 Civilian Injuries 40 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	977	47%	Operated	1,267	60%
1- & 2-Family homes	722	34%	Didn't operate	35	2%
Rooming houses	156	6%	None	44	2%
Dormitories	118	5%	Fire too small	62	3%
Hotels or motels	58	2%	Didn't Alert (confined)	92	4%
Residential board & care	51	2%	Undetermined	600	29%

<b>Area of Origin<sup>6</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>7</sup></b>
Kitchen	72%	Arcing	2%	12%
Heating room or area	6%	Radiated heat from oper. eq.	2%	11%
Chimney or flue	5%	Heat from operating eq.	2%	9%
Bedroom	2%	Hot or smoldering object	2%	9%
Living room	2%	Cigarette	1%	6%
Exterior stairway	1%	Hot ember or ash	1%	6%

<sup>6</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>7</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Heat Source from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

<b>Item First Ignited<sup>8</sup></b>	<b>%</b>	<b>Factor Contrib. to Ignit.</b>	<b>%</b>	<b>%Unconfined<sup>9</sup></b>
Food, cooking materials	69%	Abandoned materials	2%	9%
Flammable, combustible liquid	6%	Too close to combustibles	1%	8%
Film or residue (creosote)	5%	Equipment unattended	1%	5%
Rubbish, trash, waste	2%	Misuse of mater. or prod.	1%	5%
Structural member, framing	2%	Failure to clean	1%	5%
		Elec. fail., malfunc., other	1%	4%

<b>Equipment<sup>10</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>11</sup></b>
Cooking equipment	69%	Unintentional	12%	60%
None	13%	Failure of eq. or heat source	2%	11%
Boiler, furnace, cent. heat. unit	6%	Intentional	1%	5%
Chimney or flue	5%	Act of Nature	0.2%	1%
Stove, heating	1%	Cause under investigation	1%	6%
		Undetermined	3%	16%

**Detector Alerted Occupants  
(Confined Fires in Non-Combustible Containers)**

Alerted Occupants	64%
Didn't Alert Occupants	5%
Undetermined	31%

<sup>8</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>9</sup> Some fields in version 5 allow for multiple entries. Therefore the number of entries may be greater than the actual number of incidents being analyzed. These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Factors Contributing to Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.

<sup>10</sup> This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

<sup>11</sup> These figures were calculated only from those incidents, which were coded as Unconfined fires (Incident Types 111-112 or 120-129). The USFA & NFPA do not recommend inferring codes for Cause of Ignition from the fires contained to non-combustible containers (Incident Types 113 – 118). This field does not need to be completed for confined fires.



<b>Month</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
January	292	227	31	34
February	275	226	20	29
March	346	244	29	73
April	409	188	30	191
May	331	207	32	92
June	614	173	29	112
July	287	150	38	99
August	311	170	34	107
September	298	180	24	94
October	309	197	21	91
November	272	214	18	40
December	320	259	32	29

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	619	398	44	177
Monday	567	385	40	142
Tuesday	484	306	69	109
Wednesday	491	328	41	122
Thursday	563	359	42	162
Friday	482	315	49	118
Saturday	558	344	53	161

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 – 04:00	210	144	30	36
04:01 – 08:00	244	157	28	59
08:01 – 12:00	664	442	75	147
12:01 – 16:00	973	553	80	340
16:01 – 20:00	1,079	737	79	263
20:01 – 00:00	594	402	46	146

### **Motor Vehicle Fires**

Total: 338

Automobiles: 282 (83%)

10, or (4%), of the automobile fires considered incendiary or suspicious

## Arson Fires

**Total Arsons: 80**

**Dollar loss: \$1,087,416**

### 0.1 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	31	1%	39%	\$1,014,521
Vehicle Arsons	10	3%	13%	72,770
Other Arsons	39	4%	49%	125

0.04 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.05 Other arsons/1,000 population

2 Civilian Deaths

6 Fire Service Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 – 16:00	8	26%	12:01 – 16:00	3	30%
16:01 – 20:00	6	19%	00:01 – 04:00	2	20%
08:01 – 12:00	5	16%	16:01 – 20:00	2	20%

Other Arsons	#	%
20:01 – 00:00	12	31%
16:01 – 20:00	9	23%
08:01 – 12:00	7	18%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	12	39%
1- or 2-Family homes	10	32%

<b>Ashburnham</b>					<b>Population: 6,081</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	27	19	0	8	1	0	0	1
2014	23	8	1	14	0	0	0	0
2015	20	11	0	9	2	0	0	2
2016	14	3	0	11	0	0	0	0
2017	20	8	2	10	1	0	0	1

<b>Athol</b>					<b>Population: 11,584</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	46	20	5	21	5	0	0	5
2014	42	19	4	19	4	0	0	4
2015	47	11	4	32	4	0	0	4
2016	60	27	5	28	2	1	0	1
2017	45	22	7	16	2	1	0	1

<b>Auburn</b>					<b>Population: 16,188</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	50	21	14	15	1	0	0	1
2014	53	23	12	18	3	0	1	2
2015	71	21	16	34	0	0	0	0
2016	71	23	15	33	3	0	0	3
2017	52	25	11	16	6	1	1	4

<b>Barre</b>					<b>Population: 5,398</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	25	15	4	6	2	1	0	1
2014	8	4	3	1	0	0	0	0
2015	25	9	4	12	3	3	0	0
2016	36	9	0	27	2	0	0	2
2017	34	18	2	14	0	0	0	0

<b>Berlin</b>					<b>Population: 2,886</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	32	12	10	10	2	0	1	1
2014	21	10	5	6	0	0	0	0
2015	27	3	7	17	2	0	0	2
2016	21	0	4	17	2	0	1	1
2017	18	5	4	9	0	0	0	0

<b>Blackstone</b>					<b>Population: 9,026</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	31	13	2	16	0	0	0	0
2014	17	7	1	9	1	0	0	1
2015	23	9	2	12	2	1	0	1
2016	20	4	1	15	0	0	0	0
2017	17	8	1	8	1	0	0	1

<b>Bolton</b>					<b>Population: 4,897</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	15	4	3	8	0	0	0	0
2014	20	7	8	5	1	0	0	1
2015	22	5	3	14	0	0	0	0
2016	22	6	5	11	1	0	1	0
2017	13	3	5	5	0	0	0	0

<b>Boylston</b>					<b>Population: 4,355</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	12	2	1	9	0	0	0	0
2014	17	10	2	5	0	0	0	0
2015	18	10	2	6	1	0	0	1
2016	11	3	1	7	2	0	0	2
2017	14	4	1	9	0	0	0	0

<b>Brookfield</b>					<b>Population: 3,390</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	6	0	0	0	0	0	0
2014	1	1	0	0	0	0	0	0
2015	7	3	1	3	1	0	0	1
2016	17	7	1	9	4	2	0	2
2017	13	5	2	6	1	0	0	1

<b>Charlton</b>					<b>Population: 12,981</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	66	35	11	20	3	1	0	2
2014	57	26	12	19	3	0	0	3
2015	58	32	13	13	0	0	0	0
2016	51	25	12	14	2	0	0	2
2017	60	32	16	12	2	0	1	1

<b>Clinton</b>					<b>Population: 13,606</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	78	51	3	24	1	0	0	1
2014	33	25	2	6	0	0	0	0
2015	67	29	2	36	5	0	0	5
2016	66	34	2	30	1	0	0	1
2017	49	31	6	12	2	2	0	0

<b>Douglas</b>					<b>Population: 8,471</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	22	5	0	17	10	1	0	9
2014	30	18	1	11	0	0	0	0
2015	31	10	4	17	1	0	0	1
2016	33	11	1	21	1	0	0	1
2017	18	7	3	8	1	0	0	1

**Dudley****Population: 11,390**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	40	25	6	9	0	0	0	0
2014	33	24	3	6	0	0	0	0
2015	51	24	3	24	1	1	0	0
2016	32	18	2	12	0	0	0	0
2017	41	19	4	18	2	1	0	1

**East Brookfield****Population: 2,183**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	12	1	1	10	0	0	0	0
2014	12	2	1	9	0	0	0	0
2015	14	2	1	11	0	0	0	0
2016	11	4	1	6	0	0	0	0
2017	5	2	0	3	0	0	0	0

**Fitchburg****Population: 40,318**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	387	302	23	62	1	1	0	0
2014	436	331	31	74	5	3	0	2
2015	505	380	33	92	10	7	2	1
2016	548	364	21	163	4	2	2	0
2017	458	406	15	37	6	4	2	0

**Gardner****Population: 20,228**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	106	72	12	22	2	2	0	0
2014	153	121	12	20	2	1	0	1
2015	201	139	10	52	3	1	0	2
2016	232	189	7	36	1	0	1	0
2017	183	150	9	24	3	2	1	0

<b>Grafton</b>					<b>Population: 17,765</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	41	26	2	13	0	0	0	0
2014 <sup>12</sup>	0	0	0	0	0	0	0	0
2015	30	18	1	11	1	0	1	0
2016	8	5	2	1	0	0	0	0
2017	21	15	1	5	0	0	0	0

<b>Hardwick</b>					<b>Population: 2,990</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	1	1	0	0	0	0	0	0
2014	Non-Reporting Community							
2015	5	5	0	0	0	0	0	0
2016	15	10	1	4	0	0	0	0
2017	10	6	0	4	0	0	0	0

<b>Harvard</b>					<b>Population: 6,520</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	28	13	3	12	9	0	1	8
2014	38	16	5	17	2	0	0	2
2015	40	19	2	19	3	3	0	0
2016	19	6	2	11	0	0	0	0
2017	19	10	7	2	0	0	0	0

<b>Holden</b>					<b>Population: 17,346</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	46	21	6	19	0	0	0	0
2014	49	26	3	20	3	3	0	0
2015	36	18	2	16	2	0	1	1
2016	36	20	3	13	0	0	0	0
2017	37	21	3	13	2	0	0	2

<sup>12</sup> Grafton reported only 14 incidents in 2014. Non of them were fires.

**Hopedale** **Population: 5,911**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	20	11	0	9	3	0	0	3
2014	19	7	3	9	3	0	0	3
2015	14	7	0	7	2	0	0	2
2016	35	19	0	16	4	0	0	4
2017	19	8	3	8	4	0	0	4

**Hubbardston** **Population: 4,382**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	18	11	2	5	0	0	0	0
2014	15	9	3	3	0	0	0	0
2015	23	9	2	12	3	0	0	3
2016	33	13	3	17	2	0	0	2
2017	14	6	1	7	0	0	0	0

**Lancaster** **Population: 8,055**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	24	10	3	11	1	0	0	1
2014	13	3	3	7	1	0	0	1
2015	18	7	4	7	0	0	0	0
2016	21	4	3	14	0	0	0	0
2017	22	9	5	8	0	0	0	0

**Leicester** **Population: 10,970**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	8	5	21	3	0	0	3
2014	31	12	5	14	2	1	0	1
2015	18	8	1	9	1	0	0	1
2016	31	7	7	17	4	0	0	4
2017	33	30	2	1	0	0	0	0



**Leominster****Population: 40,759**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	140	85	11	44	4	1	1	2
2014	153	91	20	42	2	0	0	2
2015	205	80	16	109	7	3	0	4
2016	257	142	8	107	2	0	0	2
2017	245	176	15	54	5	4	0	1

**Lunenburg****Population: 10,086**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	43	20	6	17	2	1	1	0
2014	45	29	5	11	1	0	1	0
2015	41	19	2	20	2	1	0	1
2016	17	4	0	13	0	0	0	0
2017	45	21	5	19	1	0	0	1

**Mendon****Population: 5,839**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	15	4	1	10	1	0	0	1
2014	13	6	1	6	0	0	0	0
2015	22	7	1	14	2	1	0	1
2016	4	1	1	2	0	0	0	0
2017	6	1	2	3	0	0	0	0

**Milford****Population: 27,999**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	147	48	12	87	2	1	0	1
2014	104	50	11	43	1	1	0	0
2015	99	36	11	52	1	1	0	0
2016	118	41	14	63	1	0	0	1
2017	104	50	13	41	2	1	0	1

**Millbury** **Population: 13,261**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	48	28	9	11	0	0	0	0
2014	47	23	10	14	3	2	1	0
2015	53	26	7	20	2	1	1	0
2016	56	29	6	21	0	0	0	0
2017	55	30	5	20	0	0	0	0

**Millville** **Population: 3,190**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	12	9	0	3	0	0	0	0
2014	7	4	0	3	0	0	0	0
2015	10	3	2	5	0	0	0	0
2016	10	8	1	1	0	0	0	0
2017	4	2	1	1	0	0	0	0

**New Braintree** **Population: 999**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	1	1	0	0	0	0	0	0
2016	1	1	0	0	0	0	0	0
2017	6	2	1	3	0	0	0	0

**North Brookfield** **Population: 4,680**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	16	6	2	8	0	0	0	0
2014	10	8	0	2	0	0	0	0
2015	16	7	0	9	2	0	0	2
2016	1	0	1	0	0	0	0	0
2017	20	8	0	12	1	0	0	1

**Northborough****Population: 14,155**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	42	12	7	23	5	1	0	4
2014	37	10	7	20	1	1	0	0
2015	37	11	2	24	1	0	0	1
2016	45	9	7	29	2	0	0	2
2017	32	11	5	16	0	0	0	0

**Northbridge****Population: 15,707**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	64	34	7	23	2	0	1	1
2014	41	24	3	14	0	0	0	0
2015	56	27	3	26	0	0	0	0
2016	54	23	2	29	2	0	0	2
2017	42	18	5	19	0	0	0	0

**Oakham****Population: 1,902**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	6	3	1	2	0	0	0	0
2014	8	7	0	1	0	0	0	0
2015	15	8	3	4	0	0	0	0
2016	9	3	0	6	0	0	0	0
2017	4	0	2	2	0	0	0	0

**Oxford****Population: 13,709**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	36	18	7	11	0	0	0	0
2014	43	21	6	16	1	1	0	0
2015	61	25	11	25	4	0	0	4
2016	66	22	9	35	0	0	0	0
2017	61	32	6	23	1	0	1	0

**Paxton** **Population: 4,806**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	16	13	0	3	0	0	0	0
2014	20	11	5	4	0	0	0	0
2015	16	14	1	1	0	0	0	0
2016	19	9	1	9	0	0	0	0
2017	12	9	0	3	0	0	0	0

**Petersham** **Population: 1,234**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Fire Department in Good Standing, Certified No Reportable Fires							
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Fire Department in Good Standing, Certified No Reportable Fires							
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	1	0	1	0	0	0	0	0

**Phillipston** **Population: 1,682**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	1	0	0	1	0	0	0	0
2014	1	1	0	0	0	0	0	0
2015	5	1	0	4	0	0	0	0
2016	10	3	1	6	0	0	0	0
2017	5	2	0	3	0	0	0	0

**Princeton** **Population: 3,413**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	12	3	1	8	0	0	0	0
2014	17	12	2	3	0	0	0	0
2015	11	5	1	5	0	0	0	0
2016	7	3	1	3	0	0	0	0
2017	14	13	0	1	1	0	0	1

**Royalston** **Population: 1,258**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	2	1	1	0	0	0	0	0
2014	9	5	2	2	0	0	0	0
2015	1	1	0	0	0	0	0	0
2016	Fire Department in Good Standing, Certified No Reportable Fires							
2017	7	3	0	4	0	0	0	0

**Rutland** **Population: 7,973**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	24	13	3	8	1	1	0	0
2014	21	13	2	6	0	0	0	0
2015	19	10	1	8	0	0	0	0
2016	26	6	7	13	2	0	0	2
2017	22	13	0	9	0	0	0	0

**Shrewsbury** **Population: 35,608**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	118	55	12	51	5	1	1	3
2014	119	64	14	41	5	2	0	3
2015	141	74	16	51	1	0	1	0
2016	150	77	17	56	1	0	0	1
2017	99	54	14	31	2	1	0	1

**Southborough** **Population: 9,767**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	27	9	6	12	0	0	0	0
2014	16	7	1	8	0	0	0	0
2015	34	6	6	22	1	0	0	1
2016	36	10	4	22	1	0	0	1
2017	25	8	7	10	0	0	0	0

<b>Southbridge</b>							<b>Population: 16,719</b>	
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	61	26	8	27	1	1	0	0
2014	41	18	8	15	2	1	0	1
2015	69	40	14	15	3	1	1	1
2016	49	30	6	13	0	0	0	0
2017	36	21	12	3	0	0	0	0

<b>Spencer</b>							<b>Population: 11,688</b>	
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	89	59	5	25	0	0	0	0
2014	71	52	7	12	2	1	0	1
2015	67	41	3	23	1	0	0	1
2016	62	44	5	13	0	0	0	0
2017	56	39	3	14	1	0	0	1

<b>Sterling</b>							<b>Population: 7,808</b>	
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	38	14	5	19	0	0	0	0
2014	22	7	6	9	0	0	0	0
2015	28	4	8	16	0	0	0	0
2016	24	7	3	14	1	0	1	0
2017	21	8	6	7	3	1	0	2

<b>Sturbridge</b>							<b>Population: 9,268</b>	
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	43	23	10	10	3	0	0	3
2014	42	22	10	10	1	0	0	1
2015	52	15	9	28	2	0	0	2
2016	44	14	5	25	5	1	0	4
2017	44	16	8	20	0	0	0	0

<b>Sutton</b>					<b>Population: 8,963</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	41	20	5	16	0	0	0	0
2014	37	16	5	16	1	0	0	1
2015	47	14	5	28	2	0	0	2
2016	41	16	7	18	1	1	0	0
2017	26	8	6	12	0	0	0	0

<b>Templeton</b>					<b>Population: 8,013</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	Non-Reporting Community							
2014	Non-Reporting Community							
2015	8	5	2	1	0	0	0	0
2016	8	6	1	1	0	0	0	0
2017	11	9	0	2	0	0	0	0

<b>Upton</b>					<b>Population: 7,542</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	28	10	2	16	3	0	0	3
2014	9	2	2	5	0	0	0	0
2015	12	3	4	5	1	0	0	1
2016	21	10	2	9	2	0	0	2
2017	14	10	0	4	2	0	0	2

<b>Uxbridge</b>					<b>Population: 13,457</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	56	23	9	24	4	2	0	2
2014	69	23	9	37	5	0	0	5
2015	33	12	7	14	0	0	0	0
2016	53	23	8	22	2	1	1	0
2017	36	11	6	19	50	0	0	5

<b>Warren</b>					<b>Population: 5,135</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	24	11	4	9	1	1	0	0
2014	18	8	8	2	0	0	0	0
2015	23	9	5	9	1	1	0	0
2016	23	4	3	16	1	0	0	1
2017	14	5	3	6	0	0	0	0

<b>Webster</b>					<b>Population: 16,767</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	47	25	3	19	0	0	0	0
2014	57	31	6	20	3	1	0	2
2015	67	32	8	27	9	3	1	5
2016	62	31	10	21	6	0	1	5
2017	57	36	10	11	5	2	1	2

<b>West Boylston</b>					<b>Population: 7,669</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	24	6	3	15	4	0	0	4
2014	19	6	6	7	2	0	0	2
2015	23	6	8	9	0	0	0	0
2016	38	17	4	17	0	0	0	0
2017	17	7	4	6	0	0	0	0

<b>West Brookfield</b>					<b>Population: 3,701</b>			
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	3	3	0	0	0	0	0	0
2014	2	2	0	0	0	0	0	0
2015	2	2	0	0	0	0	0	0
2016	1	0	1	0	0	0	0	0
2017	10	6	3	1	1	0	0	1



<b>Westborough</b>						<b>Population: 18,272</b>		
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	52	29	6	17	0	0	0	0
2014	110	82	9	19	0	0	0	0
2015	120	62	12	42	3	0	0	3
2016	135	81	12	42	2	0	0	2
2017	138	109	9	20	5	3	0	2

<b>Westminster</b>						<b>Population: 7,277</b>		
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	26	11	8	7	2	0	1	1
2014	34	15	5	14	0	0	0	0
2015	31	13	5	13	1	0	0	1
2016	43	18	10	15	1	0	0	1
2017	27	10	11	6	0	0	0	0

<b>Winchendon</b>						<b>Population: 10,300</b>		
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	34	26	5	3	1	1	0	0
2014	38	24	1	13	1	0	0	1
2015	29	23	0	6	0	0	0	0
2016	37	23	3	11	1	0	1	0
2017	19	10	3	6	1	0	0	1

<b>Worcester</b>						<b>Population: 181,045</b>		
	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2013	1,454	774	82	598	54	12	4	38
2014	1,273	791	76	406	21	10	6	5
2015	1,510	826	91	593	19	12	6	1
2016	1,426	827	88	511	16	8	7	1
2017	1,270	852	70	348	11	8	3	0

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
27011	Ashburnham	710	20	0	455	25	62	35	108	4	1
27015	Athol	2,529	47	4	1,890	87	195	147	153	1	5
27017	Auburn	3,632	83	5	2,519	141	302	270	303	0	9
27021	Barre	1,066	44	2	745	82	108	28	57	0	0
27028	Berlin	587	23	0	354	11	43	40	113	0	3
27032	Blackstone	463	22	0	198	30	26	54	131	1	1
27034	Bolton	272	13	1	68	24	27	59	80	0	0
27039	Boylston	487	19	0	369	14	14	6	64	0	1
27045	Brookfield	127	23	0	44	7	7	15	29	2	0
27054	Charlton	2,450	73	4	1,846	87	165	121	147	1	6
27064	Clinton	1,748	56	0	1,214	33	88	32	319	1	5
27077	Douglas	230	28	0	78	23	22	16	55	4	4
27080	Dudley	516	60	2	130	37	41	93	148	1	4
27084	East Brookfield	109	13	0	26	19	19	13	19	0	0
27097	Fitchburg	4,912	469	3	2,202	195	523	502	1,016	0	2

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Division of Fire Safety strongly encourages any department that wants to send in all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
27103	Gardner	6,131	196	5	3,656	143	761	221	496	0	653
27110	Grafton	216	27	3	23	17	22	45	79	0	0
27124	Hardwick	85	13	0	11	8	11	4	34	2	2
27125	Harvard	270	19	1	65	19	36	40	88	2	0
27134	Holden	2,108	44	2	1,536	41	124	148	208	2	3
27138	Hopedale	906	24	0	629	34	96	55	62	4	2
27140	Hubbardston	625	14	0	403	22	75	54	57	0	0
27147	Lancaster	911	22	0	623	15	58	44	123	0	26
27151	Leicester	275	42	2	41	35	54	15	83	3	0
27153	Leominster	7,866	246	4	5,471	228	645	446	795	5	26
27162	Lunenburg	530	50	0	112	66	80	39	172	1	10
27179	Mendon	793	6	0	551	16	50	61	102	0	7
27185	Milford	5,317	116	1	3,518	173	790	208	493	2	16
27186	Millbury	345	66	3	10	36	60	37	132	0	1
27188	Millville	371	8	0	225	21	21	66	30	0	0

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## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
27202	New Braintree	41	9	0	4	13	9	0	6	0	0
27212	North Brookfield	195	39	0	45	16	7	5	83	0	0
27215	Northborough	2,318	48	1	1,454	58	321	111	321	0	4
27216	Northbridge	1,176	47	1	483	96	95	180	272	1	1
27222	Oakham	185	13	0	104	14	10	30	14	0	0
27226	Oxford	662	61	1	192	38	104	122	142	0	2
27228	Paxton	660	28	1	491	7	27	47	58	0	1
27234	Petersham	1	1	0	0	0	0	0	0	0	0
27235	Phillipston	85	19	0	33	8	9	4	12	0	0
27241	Princeton	362	14	0	216	15	35	18	63	1	0
27255	Royalston	10	10	0	0	0	0	0	0	0	0
27257	Rutland	1,145	22	1	835	28	95	77	84	1	2
27271	Shrewsbury	3,879	103	5	2,697	160	237	135	530	1	11
27277	Southborough	1,310	31	2	737	42	143	111	243	0	1
27278	Southbridge	711	56	0	177	60	91	87	220	1	19

All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Division of Fire Safety strongly encourages any department that wants to send in all of their responses to do so.

## Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
27280	Spencer	445	72	3	12	108	46	43	156	3	2
27282	Sterling	1,226	34	1	735	30	201	110	115	0	0
27287	Sturbridge	1,798	49	12	1,160	76	208	89	200	0	4
27290	Sutton	479	53	1	252	24	31	24	92	1	1
27294	Templeton	11	11	0	0	0	0	0	0	0	0
27303	Upton	353	16	0	36	82	59	16	140	2	2
27304	Uxbridge	795	44	3	176	57	140	150	221	0	4
27311	Warren	207	20	0	51	14	42	43	37	0	0
27316	Webster	751	74	1	157	76	87	93	256	0	7
27321	West Boylston	1,279	26	0	904	44	83	79	141	2	0
27323	West Brookfield	109	19	1	8	26	12	6	36	1	0
27328	Westborough	3,657	154	4	2,455	184	237	187	427	2	7
27332	Westminster	1,438	28	1	838	60	192	92	209	2	16
27343	Winchendon	2,044	19	1	1,422	33	235	143	184	1	6
27348	Worcester	33,284	1,270	29	24,115	1,055	1,460	2,190	3,148	1	16
<b>Total</b>	<b>Worcester County</b>	<b>107,203</b>	<b>4,276</b>	<b>111</b>	<b>68,801</b>	<b>4,113</b>	<b>8,741</b>	<b>7,106</b>	<b>13,106</b>	<b>56</b>	<b>893</b>

\* Certified no reportable fires.

\*\*Non reporting department.

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