

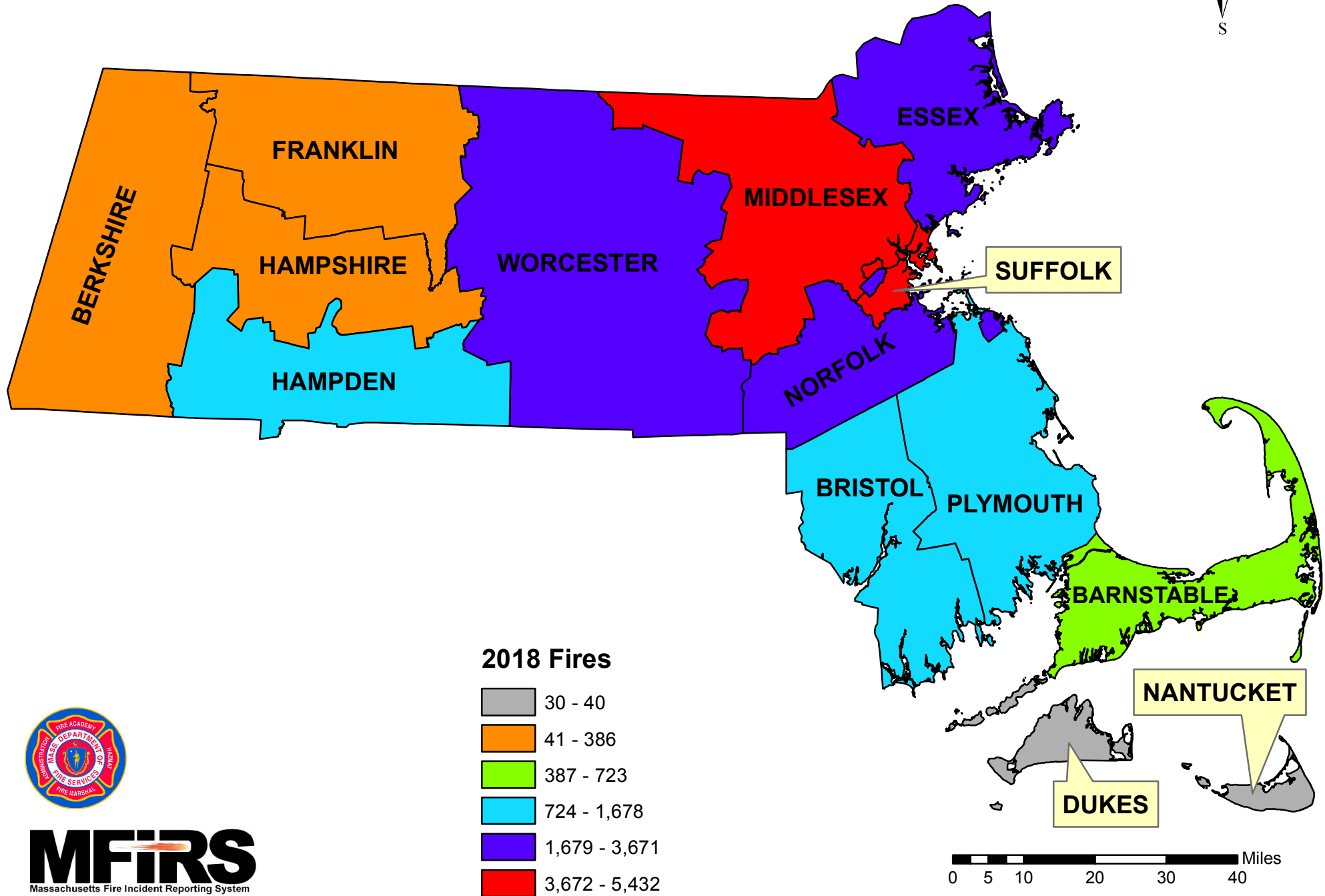


# County Profiles

## 2018 Fire Data Analysis

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

# 2018 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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## 2018 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	723	307	88	224	1	15	0	10	\$9,933,591
Berkshire	386	230	42	57	2	14	0	8	6,091,708
Bristol	1,678	782	292	401	6	48	0	14	14,425,040
Dukes	30	17	5	5	0	0	0	0	149,500
Essex	2,160	1,193	246	471	1	25	0	118	22,623,269
Franklin	295	146	39	69	3	8	0	5	3,347,277
Hampden	1,547	913	217	256	8	22	0	36	12,991,890
Hampshire	351	180	52	74	2	5	0	3	2,126,237
Middlesex	5,432	3,674	397	807	7	35	0	110	39,202,987
Nantucket	40	33	2	1	0	0	0	0	158,700
Norfolk	2,134	1,310	225	404	4	21	0	20	12,218,339
Plymouth	1,626	820	219	388	3	38	0	16	18,482,417
Suffolk	5,431	4,139	277	492	3	7	0	33	51,707,681
Worcester	3,671	2,425	364	404	5	51	1	52	35,456,995
<b>Total</b>	<b>25,504</b>	<b>16,169</b>	<b>2,465</b>	<b>4,053</b>	<b>45</b>	<b>189</b>	<b>1</b>	<b>425</b>	<b>\$228,915,631</b>

## 2018 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	31	3	2	26	0	1	0	0	\$69,001
Berkshire	15	2	1	12	0	0	0	0	51,550
Bristol	53	12	22	19	0	4	0	0	343,951
Dukes	0	0	0	0	0	0	0	0	0
Essex	39	11	4	24	0	0	0	0	639,963
Franklin	11	2	0	9	0	0	0	0	50,000
Hampden	78	28	13	37	0	1	0	0	221,100
Hampshire	23	2	1	20	1	0	0	1	1,000
Middlesex	49	18	5	26	2	2	0	2	289,272
Nantucket	0	0	0	0	0	0	0	0	0
Norfolk	40	7	3	30	0	2	0	0	89,030
Plymouth	38	11	4	23	0	3	0	0	88,760
Suffolk	88	8	10	70	0	0	0	0	1,824,028
Worcester	86	30	13	43	1	0	1	1	1,782,692
<b>Total</b>	<b>551</b>	<b>134</b>	<b>78</b>	<b>339</b>	<b>4</b>	<b>13</b>	<b>1</b>	<b>4</b>	<b>\$5,450,346</b>



## 2018 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	723	3.3	1	1.4	0.05	31	0.1
Berkshire	131,219	386	2.9	2	5.2	0.15	15	0.1
Bristol	548,285	1,678	3.1	6	3.6	0.11	53	0.1
Dukes	16,535	30	1.8	0	0.0	0.00	0	0.0
Essex	743,159	2,160	2.9	1	0.5	0.01	39	0.1
Franklin	71,372	295	4.1	3	10.2	0.42	11	0.2
Hampden	463,490	1,547	3.3	8	5.2	0.17	78	0.2
Hampshire	158,080	351	2.2	2	5.7	0.13	23	0.1
Middlesex	1,503,085	5,432	3.6	7	1.3	0.05	49	0.03
Nantucket	10,172	40	3.9	0	0.0	0.00	0	0.0
Norfolk	670,850	2,134	3.2	4	1.9	0.06	40	0.1
Plymouth	494,919	1,626	3.3	3	1.8	0.06	38	0.1
Suffolk	722,023	5,431	7.5	3	0.6	0.04	88	0.1
Worcester	798,552	3,671	4.6	5	1.4	0.06	86	0.1
<b>Massachusetts</b>	<b>6,547,629</b>	<b>25,504</b>	<b>3.9</b>	<b>45</b>	<b>1.8</b>	<b>0.07</b>	<b>551</b>	<b>0.1</b>

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

## 2018 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	60,237	59	41,404	3,463	4,682	2,574	7,597	249	209
Berkshire	12,711	19	6,746	794	1,826	766	2,455	31	74
Bristol	66,232	70	41,912	3,135	4,606	4,196	11,807	154	352
Dukes	1,458	2	76	148	72	400	748		12
Essex	110,727	114	62,076	5,436	15,439	8,210	18,644	487	321
Franklin	8,351	22	4,811	666	986	640	951	30	245
Hampden	48,558	74	30,053	1,894	3,984	4,327	8,081	27	118
Hampshire	18,177	27	12,279	753	951	1,014	3,046	18	89
Middlesex	201,734	146	117,946	11,722	21,765	12,261	32,392	420	5,082
Nantucket	2,611	4	1,296	83	26	71	1,123	2	6
Norfolk	102,389	127	62,988	6,685	10,187	6,022	14,632	305	1,443
Plymouth	92,861	81	60,875	6,164	8,430	5,763	10,554	746	248
Suffolk	106,439	65	52,459	4,843	17,236	10,160	20,507	43	1,126
Worcester	104,859	122	68,416	4,417	9,924	7,204	13,849	116	811
<b>Massachusetts</b>	<b>937,344</b>	<b>932</b>	<b>563,337</b>	<b>50,203</b>	<b>100,114</b>	<b>63,608</b>	<b>146,386</b>	<b>2,628</b>	<b>10,136</b>

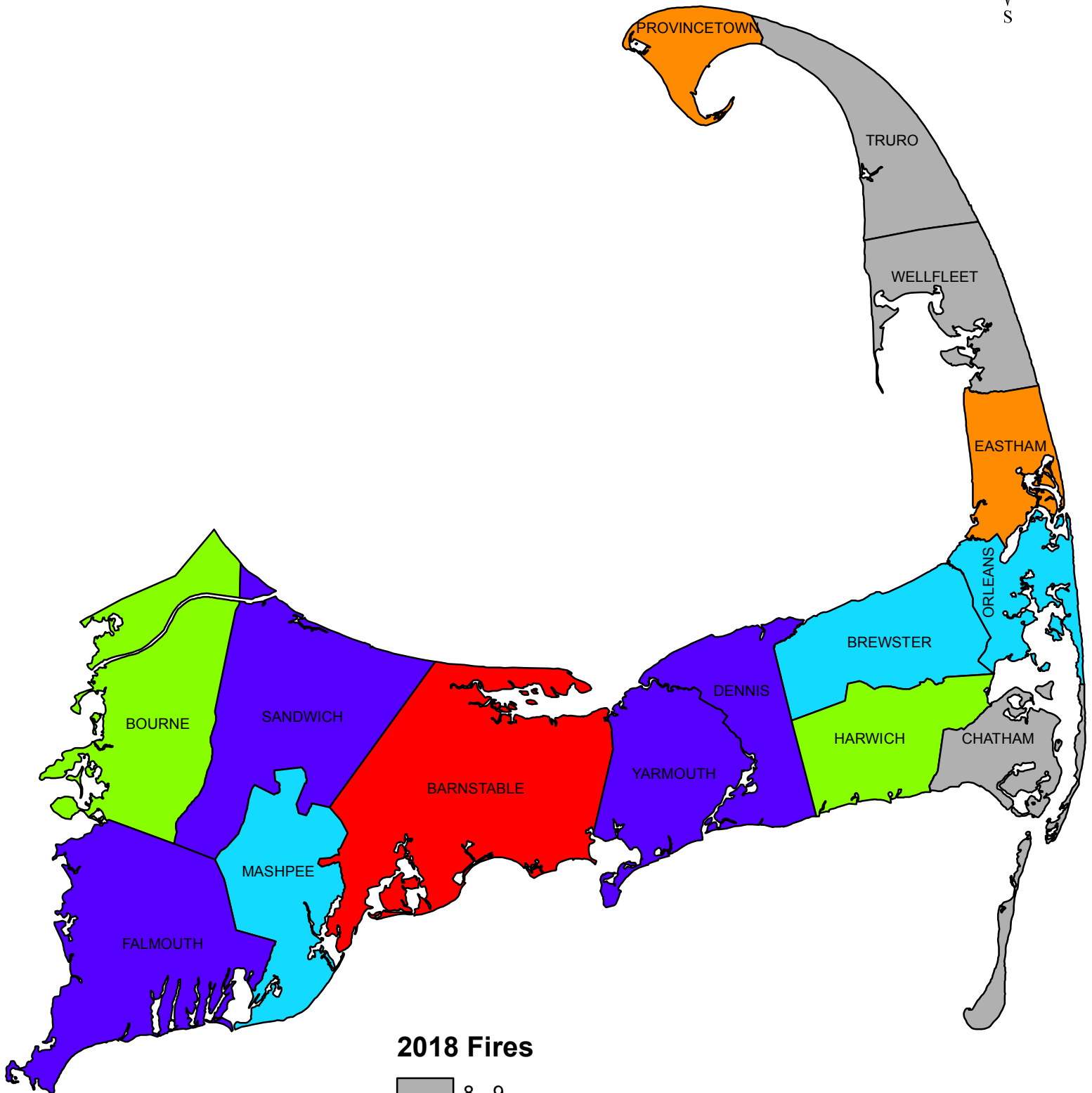
<sup>1</sup> WX is the abbreviation for Weather.



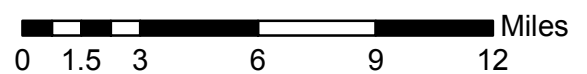
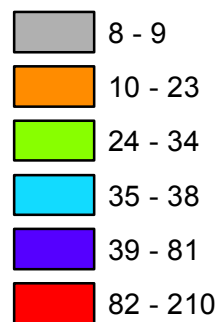
# Barnstable County

## 2018 Fire Data Analysis

# Barnstable County Fires 2018



## 2018 Fires



Massachusetts Fire Incident Reporting System 2018



**MFIRS**  
Massachusetts Fire Incident Reporting System

# Barnstable County Fires in 2018

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## 723 Total Fires — 307 Structures, 88 Vehicles & 328 Other Fires

Barnstable County ranked ninth out of the 14 Massachusetts counties in total reported fires. Barnstable County fire departments reported 723 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 307 structure fires, 88 motor vehicle fires, 195 brush, tree, or lawn fires, 60 outside rubbish fires, 40 special outside fires, four cultivated crop or vegetation fires, and 29 unclassified fires caused one civilian death, 15 civilian injuries, 10 fire service injuries and an estimated dollar loss of \$9.9 million. Barnstable County's fires accounted for 3% of the 25,504 Massachusetts fires reported in 2018.

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 2018.

## Outside Fires Down

The total number of reported fire incidents decreased by 47 from the 770 reported in 2017. Reported structure fires increased by four from the 303 reported during the previous year. Motor vehicle fires remained the same with 88 reported during both 2017 and 2018. Outside and other fires decreased by 51 from the 379 reported the year before.<sup>1</sup>

## BARNSTABLE COUNTY FIRES FROM 2014 TO 2018

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
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	770	303	88	379	35	6	2	27
2018	723	307	88	328	31	3	2	26

## Fire and Fire Death Rates

Barnstable County had 3.3 fires per 1,000 population. That figure ranks Barnstable County tied for sixth in the state and below the state rate of 3.9 fires per 1,000 population. Barnstable County also had 0.05 fire deaths per 10,000 population, ranking it tied for ninth and below the state rate of 0.07 fire deaths per 10,000 population.

## 1 Fatal Fire in Barnstable County

In 2018, Barnstable County had one fatal fire kill one person.

- On April 27, 2018, at 9:34 p.m., the Barnstable Fire Department was called to a fatal electrical fire in a single-family home. The fire was started by an oil filled space heater that was plugged into a lightweight extension cord that was also pinched by furniture. The victim, an 86-year old physically disabled man was overcome while

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<sup>1</sup> 2018 was another down year for brush fires statewide.

trying to escape. No one else was injured at this fire. Alarms were present but failed to operate because of missing batteries. There were no sprinklers. Damages from this fire were estimated to be \$175,000.

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

In 2018 Barnstable County did not have any large loss fires over \$1 million in estimated damages. They did have 29 fires with a dollar loss between \$100,000 and \$999,999. The combined losses were estimated to be \$7.8 million, or 79% of Barnstable County's total reported dollar loss in 2018.

- On August 9, 2018, at 11:12 a.m., the Orleans Fire Department responded to a fire at a single-family home under construction. The home was hit by lightning. No one was injured at this fire. Alarms were not present yet; and the building did not have any sprinklers. Damages were estimated to be \$800,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Up Slightly**

The 307 structure fires caused the one civilian death, 13 civilian injuries, 10 fire service injuries and an estimated dollar loss of \$8.7 million. These incidents represented 42% of Barnstable County's reported fires in 2018. The total number of reported structure fires increased by four, or 1%, from the 303 reported in 2017. The average estimated dollar loss per structure fire was \$28,459.

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

There were three structure arsons in 2018. Arson was indicated as the cause of 1% of the structure fires and none of Barnstable County's structure fire dollar loss. The three structure arsons accounted for 10% of the Barnstable County arson fires reported in 2018. The total number of reported structure arsons decreased by three from the six reported in 2017.

### **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 305 building fires of different types in Barnstable County in 2018. These 305 building fires accounted for 99.3% of all building fires in Barnstable County.

### **80% of Barnstable County Building Fires Occurred in People's Homes**

Two hundred and forty-four (244), or 80%, of Barnstable County's 305 building fires occurred in residential occupancies. Eighteen (18) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 15 fires. Ten (10) fires took place in storage properties. Hospitals, prisons, and other institutional buildings experienced seven fires. Four (4) happened at special properties. Three (3) fires took place in manufacturing or processing facilities. Two (2) fires took place in educational facilities. One (1) fire occurred at an industrial facility. There was one fire where the property use was not known.

## RESIDENTIAL FIRES

### Residential Building Fires Were Down

There were 244 reported residential building fires in Barnstable County in 2018. These 244 fires are a decrease of six, or 2%, from the 250 residential building fires reported in 2017.

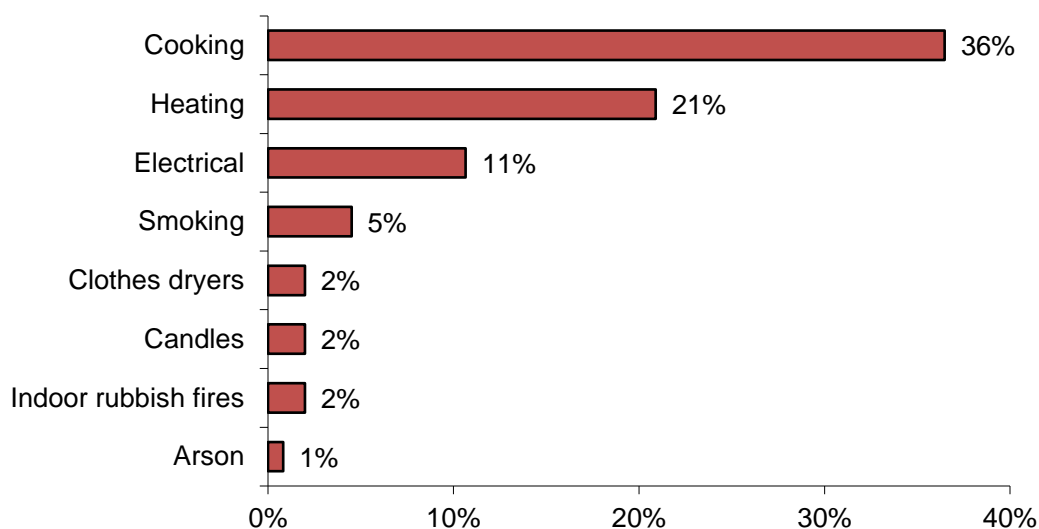
### 1- & 2-Family Homes Accounted for 78% of Residential Building Fires

The peak fixed property use for residential building fires were one- or two-family homes, accounting for 78% of the building fires in Barnstable County; 14% occurred in apartments; 4% happened in hotels or motels; 1% occurred in residential board and care facilities; less than 1% occurred in rooming houses; and less than 1% happened in dormitories. Four (4), 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 36% of the fires. Heating fires accounted for 21% of the fires in people's homes in 2018; 57% involved a chimney or flue and 43% involved a fuel burner or boiler. Electrical problems caused 11% of fires in residential buildings. Smoking caused 5% of these fires. Clothes dryers, indoor rubbish fires, and candles each caused 2% of these fires. Arson was responsible for 1% of these fires.

### 2018 Leading Causes of Fires in Barnstable County Homes



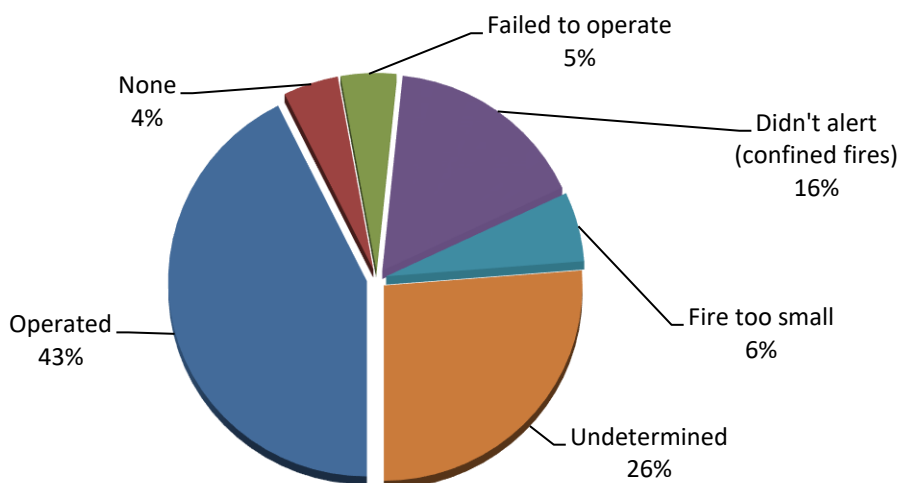
### 52% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

One hundred and twenty-eight (128), or 52%, of all residential building fires were reported as confined to non-combustible containers in Barnstable County in 2018. Seventy-eight (78), or 32%, of all residential building fires reported in 2018 were cooking fires contained to a non-combustible container. Twenty-six (26) of the reported fires were confined to a chimney, accounting for 11% of residential building fires. Twenty (20), or 8%, were fires confined to a fuel burner or boiler malfunction. Four (4), 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 104, or 43%, of the residential building fires. In 16% of these fires<sup>3</sup>, the detectors did not alert the occupants. Detectors were present but did not operate in 5% of these incidents. In 4% 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 64 incidents, or 26%, of Barnstable County's residential building fires.

### Detector Status in Barnstable County's Residential Structure Fires 2018



<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.



**Over 1/2 Failed from Missing Batteries**

Of the 11 fires where smoke detectors were present but failed to operate, six, or 55%, failed from missing or disconnected batteries. Two (2), or 18%, failed from a power failure, shut off or disconnect; and one, or 9%, failed because of an improper installation. It was undetermined in the other two cases, or 18%, why the detector failed.

**VACANT BUILDINGS****5% of Building Fires Occurred in Vacant Buildings**

Barnstable County reported 14 fires that occurred in buildings that were vacant, under construction or demolition. This represented 5% of the 305 building fires reported to MFIRS in 2018. Twelve (12) residential buildings, one mercantile or business property and one special property were reported as vacant building fire incidents.

None of the vacant building fires in Barnstable County in 2018 were determined to be intentionally-set.

**JUVENILE-SET FIRES****5 Juvenile-set Fires**

There were five reported juvenile-set fires in Barnstable County in 2018. There was one brush fire, one structure fire, and three unclassified fires.

**ARSONS****31 Total Arsons — 3 Structures, 2 Vehicle & 26 Other Arsons**

Thirty-one (31), or 4%, of Barnstable County's 723 fires were considered intentionally-set, or, for purposes of this analysis, arson. The three structure arsons, two motor vehicle arsons and 26 outside and other arsons caused one civilian injury and an estimated dollar loss of \$69,000.

**All Arson Down Slightly**

The total number of reported arson fires decreased by four, or 11%, from the 35 reported in 2017. Reported structure arsons decreased by three from the six reported in 2017. Motor vehicle arsons remained the same with two reported in 2017 and 2018. Reported outside and other arsons decreased by one from the 27 reported in 2017.

**ALL INCIDENTS****Rescue & EMS Calls Are 68% of All Reported Incidents**

In 2018, Barnstable County fire departments reported 61,081 responses<sup>4</sup> to MFIRS. Of these 61,081 incidents, 60,237 non-fire calls were voluntarily reported.

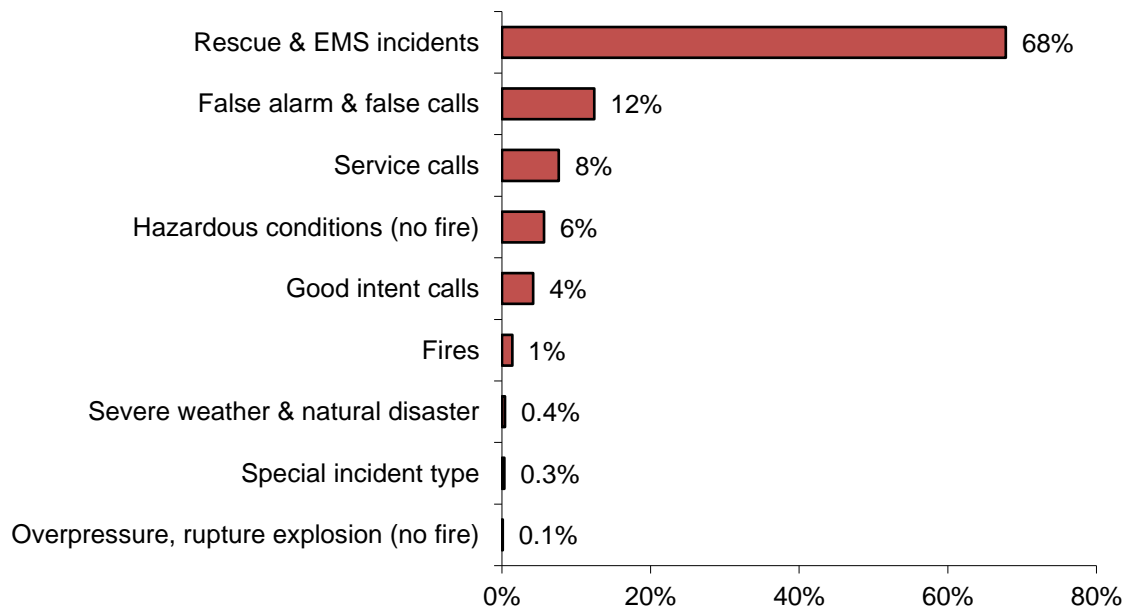
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<sup>4</sup> These figures include responses in which Barnstable County fire departments gave mutual aid to other fire departments.

Of these 60,237 non-fire calls, 41,404, or 68%, of all of the responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 7,597, or 12%, were reported false alarm or false calls; 4,682, or 8%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 3,463, or 6%, were reported hazardous condition calls with no fire; 2,574, or 4%, reported good intent calls; 249, or 0.4%, were severe weather responses; 209, or 0.3%, were special incident type calls such as citizen complaints; and 59, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Eight hundred and forty-four (844), or 1%, of the total responses submitted by Barnstable County fire departments were fires.

### 2018 Responses by Incident Type



### Barnstable County Departments Gave Aid 1,682 Times

In 2018, Barnstable County fire departments reported coming to the aid of other fire departments 1,682 times. Of these 1,682 responses, 980, or 58%, were for rescue or EMS incidents; 257, or 15%, were for good intent calls; 244, or 15%, were for service calls such as cover assignments; 121, or 7%, were for fires; 34, or 2%, were for hazardous conditions calls with no fire; 24, or 1%, were for false alarms or false calls; 18, or 1%, were special incident types; and four, or 0.2%, was for a severe weather call.

### Barnstable County Received Mutual Aid in 1,058 Incidents

In 2018, Barnstable County fire departments received aid from surrounding departments in 1,058 incidents. Of these 1,058 incidents, 830, or 78%, were rescue and emergency medical services calls; 100, or 9%, were for fires; 41, or 4%, were false alarms or false calls; 27, or 3%, were good intent calls; 22, or 2%, were service calls; 20, or 2%, were

hazardous conditions calls with no fire; 14, or 1%, were special incident types; 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****3.3 Fires/1,000 Population****Total Fires: 723                      \$9,933,591**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	307	42%	\$8,736,847
Vehicle Fires	88	12%	1,121,974
Other Fires	328	45%	74,770

1 Fatal Fire                      1.38 Civilian Deaths/1,000 Fires  
 1 Civilian Deaths              0.05 Civilian Deaths/10,000 Population  
 15 Civilian Injuries            10 Fire Service Injuries

**Building Fires: 305****Residential Structure Fires: 244****Residential Structure Fires Confined to Non-Combustible Containers: 128****Unconfined Residential Structure Fires: 116**

1 Civilian Death                      11 Civilian Injuries              9 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	191	78%	Operated	104	43%
Apartments	34	14%	Didn't operate	11	4%
Hotels or motels	10	4%	None	11	4%
Residential board & care	3	1%	Fire too small	14	6%
Dormitories	1	0.4%	Didn't Alert (confined)	40	16%
Rooming houses	1	0.4%	Undetermined	64	26%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>% Unconfined<sup>6</sup></b>
Kitchen	41%	Arcing	8%	16%
Chimney or flue	11%	Radiated heat/oper. eq.	6%	12%
Heating room or area	9%	Heat from operating eq.	5%	10%
Bedroom	4%	Hot or smold. object, other	4%	8%
Laundry room	4%	Hot ember or ash	4%	8%

<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	34%	Too close to combustibles	8%	16%
Film, residue (creosote)	11%	Abandoned materials	5%	9%
Flammable or comb. liquid	8%	Failure to clean	4%	9%
Structural member, framing	5%	Electrical failure, malfunct.	3%	7%
Electrical wire, cable insulation	4%			

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	35%	Unintentional	25%	52%
None	29%	Failure of eq. or heat source	7%	16%
Chimney or flue	11%	Intentional	0%	0%
Boiler, furnace, cent. heat unit	9%	Act of nature	2%	3%
Clothes dryer	2%	Undetermined	7%	14%
		Cause Under Investigation	7%	15%

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

Alerted Occupants	41%
Didn't Alert Occupants	31%
Undetermined	28%

<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	51	27	7	17
February	42	28	7	7
March	71	43	7	21
April	78	30	6	42
May	64	19	11	34
June	73	21	6	46
July	103	28	14	61
August	78	30	10	38
September	56	22	11	23
October	26	16	0	10
November	43	22	2	19
December	38	21	7	10

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	105	43	14	48
Monday	91	43	14	34
Tuesday	101	42	17	42
Wednesday	111	44	14	53
Thursday	101	46	8	47
Friday	106	47	9	50
Saturday	108	42	12	54

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	35	14	5	16
04:01 - 08:00	64	28	10	26
08:01 - 12:00	135	60	19	56
12:01 - 16:00	219	69	29	121
16:01 - 20:00	183	94	16	73
20:01 - 24:00	87	42	9	36

### **Motor Vehicle Fires**

Total: 88

Automobiles: 64 (73%)

1 (2%), of the automobile fires were considered intentionally-set.

## Arson Fires

**Total Arsons: 31**

**Dollar loss: \$69,000**

### 0.1 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	3	1%	10%	\$0
Vehicle Arsons	2	2%	6%	69,000
Other Arsons	26	8%	84%	0

0.01 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.12 Other arsons/1,000 population

1 Civilian Injury

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 - 20:00	2	67%	00:01 – 04:00	1	50%
08:01 - 12:00	1	33%	04:01 – 08:00	1	50%

Other Arsons	#	%
16:01 - 20:00	9	35%
08:01 - 12:00	7	27%
12:01 - 16:00	6	23%

Peak Fixed Property Uses for Structure Arsons	#	%
1- & 2-Family homes	2	67%
High/junior high/middle school	1	33%

**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>
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
2018	24	9	1	14	2	0	0	2

***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>
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
2018	44	22	5	17	0	0	0	0

***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>
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
2018	10	7	1	2	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>
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
2018	116	29	9	78	2	0	1	1

<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>
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
2018	16	6	3	7	2	1	0	1

**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>
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
2018	29	10	7	12	4	0	0	4

**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>
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
2018	37	19	5	13	1	0	0	1

**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>
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
2018	8	4	1	3	0	0	0	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>
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
2018	68	32	5	31	5	0	0	5

**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>
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
2018	18	9	3	6	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>
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
2018	81	37	11	33	2	1	0	1

**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>
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
2018	32	14	6	12	2	0	0	2

**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>
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
2018	5	0	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>
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
2018	38	17	3	18	6	1	0	5

**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>
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
2018	36	11	5	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>
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
2018	23	20	0	3	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>
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
2018	62	34	9	19	2	0	1	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>
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
2018	8	3	1	4	0	0	0	0

**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>
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
2018	9	4	1	4	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>
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
2018	59	20	12	27	2	1	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
01919	Barnstable	1,423	30	4	826	74	169	46	237	33	4
01036	Bourne	1,584	35	1	1,150	103	95	51	140	3	6
01041	Brewster	3,425	46	2	2,572	83	140	121	404	48	9
01055	Chatham	2,304	8	1	1,466	100	245	114	349	8	13
01921	Cotuit	919	12	4	533	43	124	60	125	9	9
01920	C.O.M.M.	4,884	47	8	3,209	229	323	170	862	15	21
01075	Dennis	5,333	78	7	3,469	473	526	216	536	21	7
01086	Eastham	2,198	24	2	1,439	176	164	127	247	12	7
01096	Falmouth	8,002	83	9	6,109	218	273	454	839	4	13
01126	Harwich	4,079	58	3	2,886	294	285	162	372	5	14
01922	Hyannis	4,691	119	7	3,177	213	329	104	736	1	5
01936	Joint Base Cape Cod	830	5	0	92	109	274	8	341	1	0
01172	Mashpee	4,046	53	1	2,590	188	397	136	669	9	3
01224	Orleans	2,502	43	0	1,763	154	143	73	297	19	10
01242	Provincetown	186	24	0	17	45	16	8	65	10	1
01261	Sandwich	4,893	66	3	3,025	657	473	191	403	4	71
01300	Truro	939	9	0	436	22	219	107	128	4	14
01318	Wellfleet	934	14	0	578	60	86	74	116	6	0
01923	West Barnstable	612	24	1	359	41	88	20	69	10	0
01351	Yarmouth	7,297	66	6	5,708	181	313	332	662	27	2
<b>Total</b>	<b>Barnstable County</b>	<b>61,081</b>	<b>844</b>	<b>59</b>	<b>41,404</b>	<b>3,463</b>	<b>4,682</b>	<b>2,574</b>	<b>7,597</b>	<b>249</b>	<b>209</b>

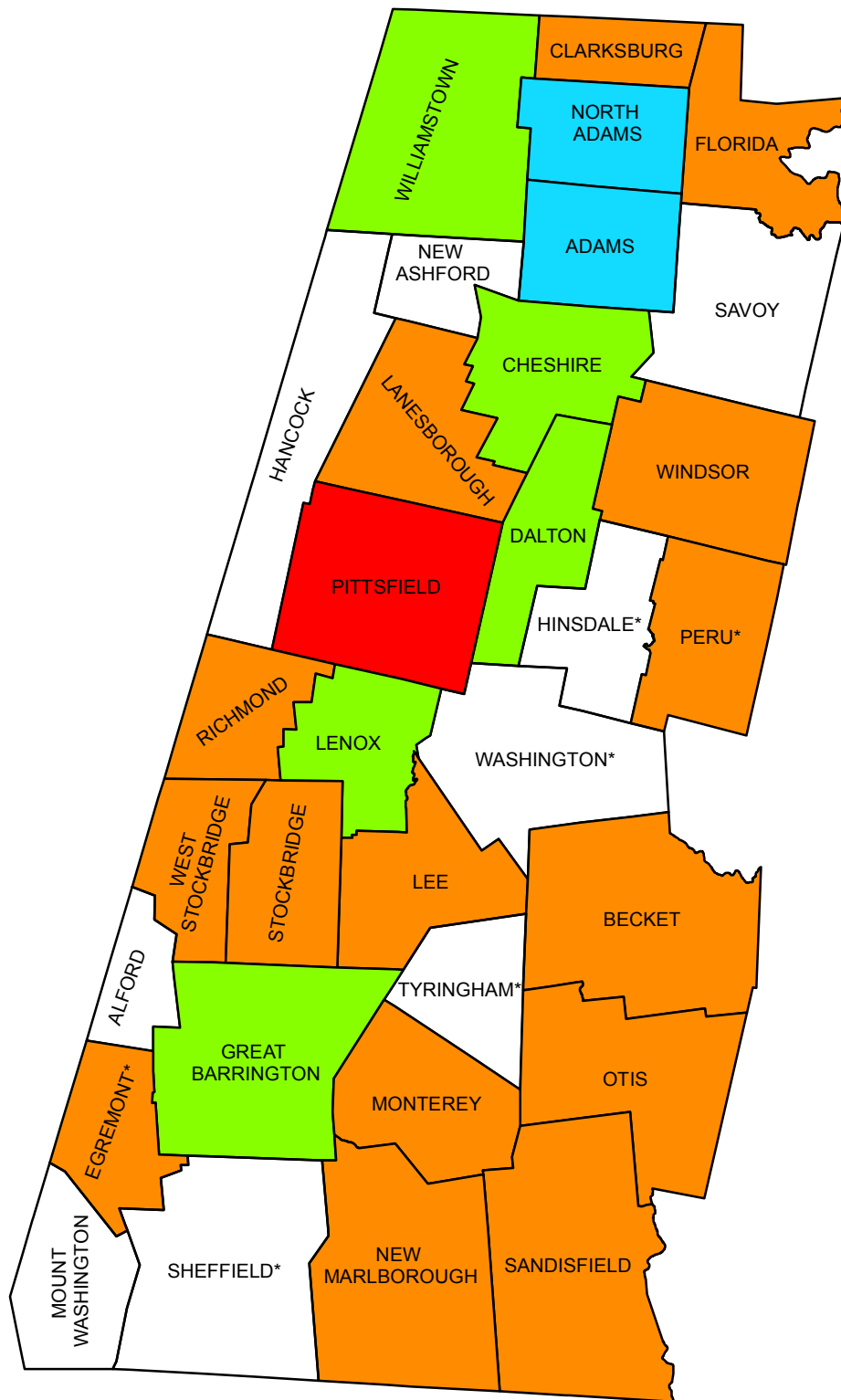
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



# Berkshire County

## 2018 Fire Data Analysis

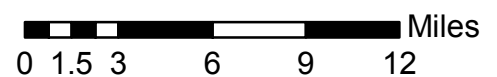
# Berkshire County Fires 2018



## 2018 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

# Berkshire County Fires in 2018

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## **386 Total Fires — 230 Structures, 42 Vehicles & 114 Outside and Other Fires**

Berkshire County ranked tenth out of the fourteen Massachusetts counties in total reported fires. Berkshire County fire departments reported 386 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 230 structure fires, 42 motor vehicle fires, 37 brush, tree or lawn fires, 37 outside rubbish fires, 20 special outside fires; and 20 other fires caused two civilian deaths, 14 civilian injuries, eight fire service injuries and an estimated dollar loss of \$6.1 million. Berkshire County's fires accounted for 2% of the 25,504 Massachusetts fires reported in 2018.

Twenty-seven (27), or 87.1%, 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 2018.

## **All Fires Down**

The total number of reported fire incidents decreased by 58 from the 444 reported in 2017. Reported structure fires decreased by 29 from the 259 reported during the previous year. Motor vehicle fires decreased by 10 from the 52 reported in 2017. Outside and other fires decreased by 19 from the 133 reported in 2017.<sup>1</sup>

## **BERKSHIRE COUNTY FIRES FROM 2014 TO 2018**

<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>
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	444	259	52	133	11	1	0	10
2018	386	230	42	114	15	2	1	12

## **Fire and Fire Death Rates**

Berkshire County had 2.9 fires per 1,000 population. That figure ranks Berkshire County tied for eleventh in the state and below the state rate of 3.9 fires per 1,000 population. Berkshire County also had 0.15 fire deaths per 10,000 populations ranking it third among Massachusetts counties and above the state rate of 0.07 fire deaths per 10,000 population.

## **2 People Killed in a Berkshire County Fire**

Two (2) people died in a fire in Berkshire County in 2018.

- On October 10, 2018, at 3:55 a.m., the Pittsfield 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, a 75-year old man, and his 75-year old wife were sleeping at the time of the fire and overcome while trying to escape. One (1)

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<sup>1</sup> 2018 was another down year for brush fires statewide.



firefighter was also injured at this fire. It was undetermined if alarms were present. Sprinklers were not present in the home. Damages were estimated to be \$230,000.

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

Berkshire County had one fire that reported a dollar loss over \$1 million. Adams reported the incident that had the greatest dollar loss in Berkshire County in 2018. This fire was responsible for 42% of the total county fire loss in 2018.

- On September 23, 2018, at 2:17 p.m., the Adams Fire Department was called to a fire at Broadlawn Farms. An unspecified electrical event caused the fire the large barn. 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 \$2.6 million.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 230 structure fires caused both civilian deaths, 14 civilian injuries, eight fire service injuries and an estimated dollar loss of \$5.7 million. These incidents represented 60% of Berkshire County's reported fires in 2018. The average estimated dollar loss per structure fire was \$24,994. The total number of reported structure fires decreased by 29, or 11%, from the 259 reported in 2017.

### **Arson Caused 2 Structure Fires**

The two structure arsons caused an estimated dollar loss of \$500. Arson was indicated as the cause of 1% of the structure fires and less than 1% of Berkshire County's structure fire dollar loss. The two structure arsons accounted for 13% of the Berkshire County arson fires reported in 2018. The total number of reported structure arsons increased by one from the one reported in 2017.

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

Both Berkshire County structure arsons occurred in single-family homes, in 2018.

## **BUILDING FIRES**

There were 230 building fires of different types in Berkshire County in 2018. These 230 building fires accounted for 100% of structure fires in Berkshire County.

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

One hundred and ninety-five (195), or 85%, of Berkshire County's 230 building fires occurred in residential occupancies. Mercantile and business properties had 11 fires. Storage facilities had four fires. Industrial facilities had nine fires. Eight (8) fires took place in public assembly properties, including restaurants and churches. Two (2) fires occurred at educational facilities. Hospitals, prisons, and other institutional buildings experienced two fires. Special properties, such as outbuildings or sheds had two fires. Manufacturing or processing facilities had one fire in Berkshire County in 2018.

## RESIDENTIAL FIRES

### Residential Building Fires Down

There were 195 reported residential building fires in Berkshire County in 2018. These 195 fires are a decrease of 23, or 11%, from the 218 residential building fires reported in 2017.

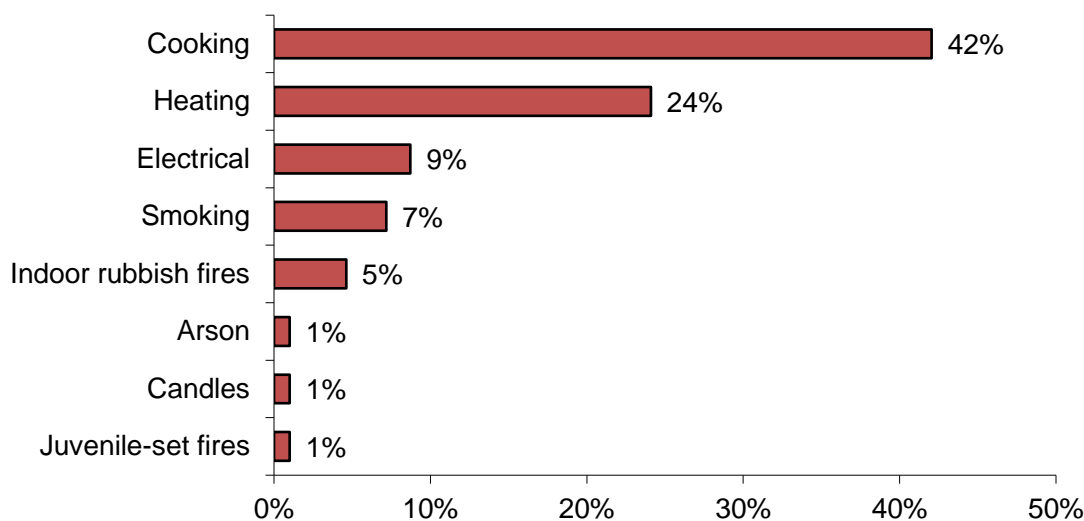
### 1- & 2-Family Homes Accounted for 62% of Residential Building Fires

The peak fixed property uses for residential building fires were one- or two-family homes, accounting for 62% of the building fires in Berkshire County; 28% occurred in apartments; 6% happened in rooming houses; 2% occurred in hotels or motels; 1% occurred in residential board and care facilities; and 1% happened in dormitories. Three (3), or 2%, of the building fires in Berkshire County occurred in unclassified residential buildings.

### Unattended Cooking Caused 42% of Residential Fires

The leading cause of residential building fires in Berkshire County was unattended cooking and other unsafe cooking practices, accounting for 42% of the fires. Heating caused 24% of the residential building fires, of which 24, or 51%, were caused by chimney, fireplace or flue fires. Electrical fires caused 9% of these fires. Smoking caused 7% of the fires. Indoor rubbish fires caused 5% of these fires. Arson, candles and juvenile-set fires each caused 1% of Berkshire County's residential building fires in 2018.

### 2018 Leading Causes of Fires in Berkshire County Homes



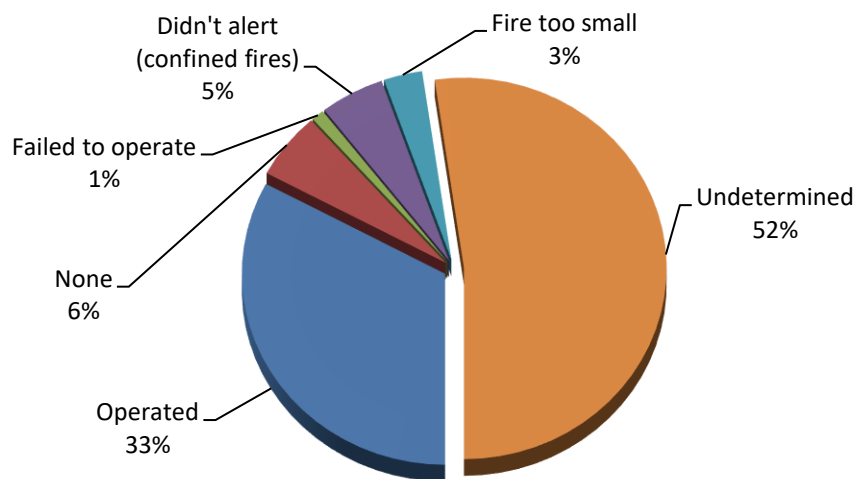
### 61% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

One hundred and eighteen (118), or 61%, of these fires were confined to a non-combustible container. Seventy-four (74), or 38% of all residential building fires reported in 2018 were cooking fires contained to a non-combustible container. Nineteen (19) of the reported fires were confined to a chimney, accounting for 10% of residential building fires. Fires confined to a fuel burner or boiler malfunction accounted for 16, or 8% of these fires. Nine (9), or 5%, of these fires were confined indoor rubbish fires.

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

Smoke or heat detectors operated and alerted the occupants in 64, or 33%, of the residential building fires. In 5% 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 6% 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 102 incidents, or 52%, of Berkshire County's residential building fires.

## Detector Status in Berkshire County's Residential Structure Fires 2018



### 2 Detectors Failed

Of the two fires where smoke detectors were present but failed to operate, one, or 50%, failed because the battery was either missing or disconnected; and the other, or 50%, failed because of improper installation or placement.

<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

Berkshire County reported six fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the total 230 building fires reported to MFIRS in 2018. Two (2) of these occurred in residential buildings. One (1) each occurred in a mercantile or business property, a storage facility, and a special property.

None of the vacant building fires in Berkshire County in 2018 were determined to be intentionally-set.

## JUVENILE-SET FIRES

### 2 Juvenile-set Fires

There were two reported juvenile-set fires in Berkshire County in 2018. One was a structure fire and the other was an unclassified fire. These two fires caused \$550 in estimated dollar loss.

## ARSONS

### 15 Total Arsons — 2 Structure, 1 Vehicle & 12 Other Arsons

Fifteen (15), or 4%, of Berkshire County's 230 fires were intentionally-set, or, for purposes of this analysis, arson. The two structure arsons, one motor vehicle arson and 12 outside and other arsons caused an estimated dollar loss of \$51,550.

### All Arsons Up Slightly

The total number of reported arson fires increased by four from the 11 reported in 2017. Reported structure arsons increased by one from the one reported in 2017. Motor vehicle arsons increased by one from zero reported in 2017. Reported outside and other arsons increased by two from the 10 reported in both 2017.

## ALL INCIDENTS

### Rescue & EMS Calls Are 51% of All Reported Responses

In 2018, Berkshire County fire departments reported 13,151 responses<sup>4</sup> to MFIRS. Of these 13,151 incidents, 12,711 non-fire incidents were voluntarily reported.

Of these 12,711 non-fire responses, 6,746, or 51%, of all the responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 2,455, or 19%, were reported false alarm or false calls; 1,826, or 14%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance;

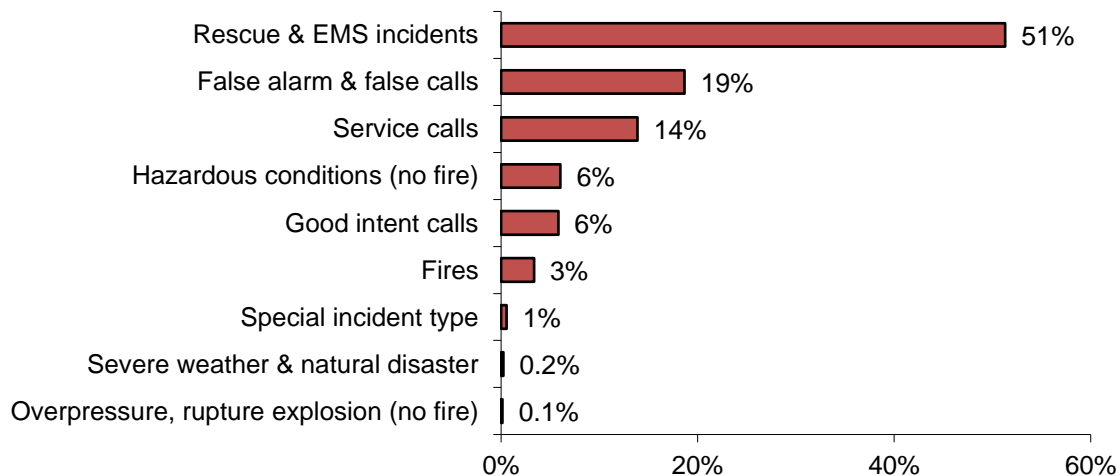
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<sup>4</sup> These figures include responses in which Berkshire County fire departments gave mutual aid to other fire departments.

794, or 6%, were reported hazardous condition calls with no fire; 766, or 6%, were reported good intent calls; 74, or 1%, were special incident type calls such as citizen complaints; 31, or 0.2%, were severe weather responses; and 19, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Four hundred and forty (440), or 3%, of the total responses submitted by Berkshire County fire departments were fires.

### 2018 Responses by Incident Type



### Berkshire County Departments Reported Giving Mutual Aid 226 Times

In 2018, Berkshire County fire departments reported coming to the aid of other fire departments 226 times. Of these 226 responses, 84, or 37%, were for rescue or EMS calls; 54, or 24%, were for fires; 44 or 19%, were for service calls such as cover assignments; 24, or 11%, were good intent calls; 10, or 4%, were for false alarms; nine, or 4%, were for hazardous condition calls with no ensuing fire; and one, or 0.4%, was a special incident type call.

### Berkshire County Received Mutual Aid in 531 Incidents

In 2018, Berkshire County fire departments reported receiving aid from surrounding departments in 531 incidents. Of these 531 incidents, 473, or 89%, were rescue and emergency medical services calls; 31, or 6%, were for fires; 12, or 2%, were false alarms or false calls; seven, or 1%, were hazardous conditions calls with no fire; four, or 1%, were service calls; and four, or 1%, were good intent calls.

**Berkshire County****Population: 131,219****2.9 Fires/1,000 Population****Total Fires: 386 \$6,091,708**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	230	60%	\$5,748,668
Vehicle Fires	42	11%	270,190
Other Fires	114	30%	72,850

1 Fatal Fires 5.18 Civilian Deaths/1,000 Fires  
 2 Civilian Deaths 0.15 Civilian Deaths/10,000 Population  
 14 Civilian Injuries 8 Fire Service Injuries

**Building Fires: 230****Residential Structure Fires: 195****Residential Structure Fires Confined to Non-Combustible Containers: 118****Unconfined Residential Structure Fires: 77**

2 Civilian Deaths 11 Civilian Injuries 8 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	120	52%	Operated	64	33%
Apartments	54	23%	Didn't operate	2	1%
Rooming houses	11	5%	None	11	6%
Hotels or motels	4	2%	Fire too small	6	3%
Dormitories	2	1%	Didn't alert (confined)	10	5%
Residential board & care	1	0.4%	Undetermined	102	52%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	45%	Arcing	7%	18%
Chimney or flue	10%	Cigarette	4%	10%
Heating equipment room	9%	Radiated heat from op. eq.	3%	8%
Living room	6%	Hot ember or ash	3%	8%
Bedroom	5%	Spark, ember, flame op. eq.	3%	6%
Ext. balcony, unencl. porch	3%	Heat from operating equip.	3%	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	39%	Failure to clean	5%	13%
Film, residue (creosote)	10%	Too close to combustibles	3%	6%
Flammable, combustible liquid	8%	Equipment unattended	3%	6%
Rubbish, trash, waste	5%	Mechanical failure/malfunc.	2%	5%
Electrical wire, cable insulation	4%	Electrical failure/malfunc.	2%	5%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	41%	Unintentional	24%	60%
None	20%	Failure of eq. or heat source	5%	13%
Chimney or flue	11%	Intentional	1%	3%
Boiler, furnace, cent. heat unit	9%	Act of Nature	0%	0%
Outlet, receptacle	3%	Undetermined	5%	12%
Stove, heating	1%	Cause under investigation	4%	10%

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

Alerted occupants	25%
Didn't alert occupants	8%
Undetermined	66%

<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	29	1	0
February	16	11	2	3
March	23	16	1	6
April	48	26	0	22
May	45	19	4	22
June	34	19	5	10
July	31	11	4	16
August	26	15	3	8
September	31	22	2	7
October	35	20	7	8
November	35	22	6	7
December	32	20	7	5

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	47	27	4	16
Monday	69	47	9	13
Tuesday	50	27	7	16
Wednesday	51	25	7	19
Thursday	48	34	0	14
Friday	58	34	8	16
Saturday	63	36	7	20

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	27	17	0	10
04:01 - 08:00	14	7	4	3
08:01 - 12:00	64	43	7	14
12:01 - 16:00	100	51	10	39
16:01 - 20:00	123	80	14	29
20:01 - 00:00	58	32	7	19

### **Motor Vehicle Fires**

Total: 42

Automobiles: 34 (81%)

1, or (3%), of the automobile fires were considered intentionally-set.



## Arson Fires

**Total Arsons: 15**

**Dollar loss: \$51,550**

### 0.11 Arson Fires/1,000 Population

<b>Situation</b>	<b>Arsons</b>	<b>% Situation</b>	<b>% Arson</b>	<b>\$ Loss</b>
Structure Arsons	2	1%	13%	500
Vehicle Arsons	1	2%	7%	10,000
Other Arsons	12	11%	80%	41,050

0.02 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.09 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>
16:01 - 20:00	2	100%	16:01 - 20:00	1	100%

<b>Other Arsons</b>	<b>#</b>	<b>%</b>
12:01 - 16:00	5	42%
00:01 - 00:00	3	25%
16:01 - 20:00	3	25%

<b>Peak Fixed Property Uses for Structure Arsons</b>	<b>#</b>	<b>%</b>
1- and 2-Family homes	2	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>
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
2018	35	26	1	8	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>
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
2018	Fire Department in Good Standing, Certified No Reportable Fires							

**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>
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
2018	5	4	0	1	1	1	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>
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
2018	13	5	4	4	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>
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
2018	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>
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
2018	17	7	5	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>
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
2018	3	2	0	1	1	0	0	1

**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>
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
2018	1	1	0	0	0	0	0	0

**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>
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
2018	20	14	4	2	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>
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
2018	Fire Department in Good Standing, Certified No Reportable Fires							

**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>
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
2018	Non-Reporting Community							

**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>
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
2018	4	2	1	1	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>
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
2018	2	2	0	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>
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
2018	16	10	4	2	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>
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							
2018	2	2	0	0	0	0	0	0

<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>
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
2018 <sup>11</sup>	Fire Department in Good Standing, Certified No Reportable Fires							

<sup>11</sup> In 2018 New Ashford reported 21 non-fire incidents to MFIRS.

**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>
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
2018	2	0	0	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>
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
2018	38	21	4	13	0	0	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>
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							
2018	1	1	0	0	0	0	0	0

**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>
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
2018	3	1	1	1	1	0	0	1



**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>
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							
2018	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>
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
2018	10	6	2	2	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>
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							
2018	Non-Reporting Community							

**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>
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							
2018	Non-Reporting Community							

<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 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>
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
2018	3	1	1	1	0	0	0	0

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**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>
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
2018	17	12	2	3	0	0	0	0

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**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>
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
2018	1	1	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	383	38	3	139	30	32	28	100	10	3
03006	Alford*	0	0	0	0	0	0	0	0	0	0
03022	Becket	5	5	0	0	0	0	0	0	0	0
03058	Cheshire	316	16	1	250	10	11	13	15	0	0
03063	Clarksburg	1	1	0	0	0	0	0	0	0	0
03070	Dalton	1,007	27	0	638	26	91	49	112	1	63
03090	Egremont	203	4	1	15	8	23	86	66	0	0
03098	Florida	76	3	0	51	3	7	9	3	0	0
03113	Great Barrington	598	26	6	153	51	32	39	290	1	0
03121	Hancock*	0	0	0	0	0	0	0	0	0	0
03132	Hinsdale**	0	0	0	0	0	0	0	0	0	0
03148	Lanesborough	352	8	2	254	13	11	17	47	0	0
03150	Lee	2	2	0	0	0	0	0	0	0	0
03152	Lenox	633	24	2	159	67	89	29	257	5	1
03193	Monterey	18	3	0	8	0	0	2	5	0	0
03200	New Ashford	21	0	0	19	1	1	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	176	7	0	100	15	0	1	53	0	0
03209	North Adams	1,300	42	0	325	143	390	81	315	0	4
03225	Otis	1	1	0	0	0	0	0	0	0	0
03233	Peru	53	4	1	35	5	5	0	3	0	0
03236	Pittsfield	6,999	186	2	4,183	317	1,085	369	844	10	3
03249	Richmond	123	4	0	26	32	11	6	42	2	0
03260	Sandisfield	181	6	0	124	17	10	4	19	1	0
03263	Savoy*	0	0	0	0	0	0	0	0	0	0
03267	Sheffield**	0	0	0	0	0	0	0	0	0	0
03283	Stockbridge	366	11	1	167	18	9	1	158	1	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
03326	West Stockbridge	139	3	0	73	13	12	3	35	0	0
03341	Williamstown	171	17	0	5	24	6	29	90	0	0
03345	Windsor	27	2	0	22	1	1	0	1	0	0
<b>Total</b>	<b>Berkshire County</b>	<b>13,151</b>	<b>440</b>	<b>19</b>	<b>6,746</b>	<b>794</b>	<b>1,826</b>	<b>766</b>	<b>2,455</b>	<b>31</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 departments that wants to send all of their responses to do so.

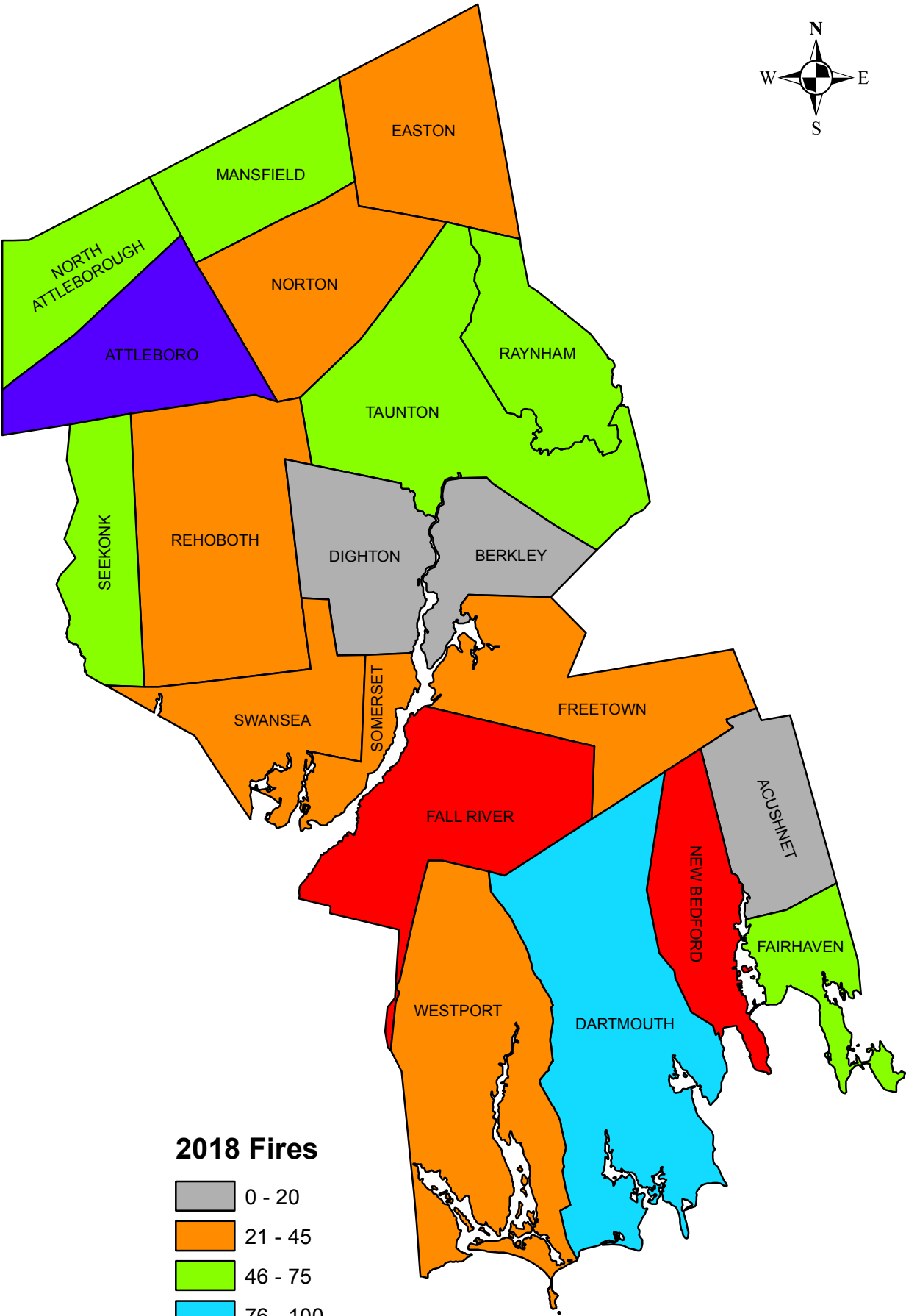


# Bristol County

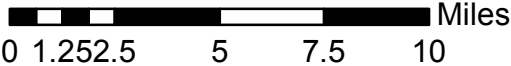
## 2018 Fire Data Analysis

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# Bristol County Fires 2018



## 2018 Fires



# Bristol County Fires in 2018

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## **1,678 Total Fires — 782 Structures, 292 Vehicles & 604 Other Fires**

Bristol County ranked sixth out of the fourteen Massachusetts counties in total reported fires. The county reported 1,678 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 782 structure fires, 292 motor vehicle fires, 290 brush, tree or lawn fires, 146 outside rubbish fires, 55 special outside fires, two cultivated vegetation or crop fires, and 111 other fires caused six civilian deaths, 48 civilian injuries, 14 fire service injuries and an estimated dollar loss of \$14.4 million. Bristol County's fires accounted for 7% of the 25,504 Massachusetts fires reported in 2018.

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 199 from the 1,877 reported in 2017. Reported structure fires decreased by 64 from the 846 reported during the previous year. The total number of reported motor vehicle fires increased by 12 from the 280 incidents reported during 2017. Reported outside and other fires decreased by 147 from the 751 reported the year before<sup>1</sup>.

## **BRISTOL COUNTY FIRES FROM 2014 TO 2018**

<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>
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	1,877	846	280	751	96	36	16	44
2018	1,678	782	292	604	53	12	22	19

## **Fire and Fire Death Rates**

Bristol County had 3.1 fires per 1,000 population. That figure ranks Bristol County tenth in the state and below the state rate of 3.9 fires per 1,000 population. Bristol County also had 0.11 fire deaths per 10,000 populations ranking it fifth among Massachusetts counties and above the state rate of 0.07 fire deaths per 10,000 population.

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

In 2018, six fires in Bristol County killed six people.

- On January 17, 2018, at 1:46 a.m., the New Bedford Fire Department was called to a fatal smoking fire in a 3-unit apartment building. The fire was started by a cigarette in the bedroom. The victim, a 56-year old woman, fell asleep while smoking. No one else was injured at this fire. Alarms were present but did not operate because of

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<sup>1</sup> 2018 was another down year for brush fires.

missing batteries. There were no sprinklers. Damages from this fire were estimated to be \$35,000.

- On February 6, 2018, at 11:01 p.m., the Taunton Fire Department was called to a fatal fire in a three-unit apartment building of undetermined cause, but the most likely cause is improper disposal of smoking materials. The fire started in a third floor bedroom. The victim, a 54-year old man, was intimately involved with the start of the fire. One (1) firefighter was injured at this fire. Alarms were present but it was undetermined if they operated. The building was not sprinklered. Damages from the blaze were estimated to be \$400,000.
- On April 7, 2018, at 4:33 p.m., the Fall River Fire Department was called to a fatal smoking fire in an 80-unit apartment building. The fire was caused by a cigar igniting the victim's clothing in the living room. The victim, a 69-year old 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. Sprinklers were present but the fire was too small to activate them. Damages from this fire were estimated to be \$1,500.
- On April 11, 2018, at 7:18 a.m., the New Bedford Fire Department was dispatched to a house fire in a single-family home. The fire was started when an occupant was using a butane lighter to light smoking materials in a ceramic bowl. The victim, a 22-year old man, was in a second floor bedroom and could not escape. It was undetermined if alarms were present. The building did not have any sprinklers. Damages from this fire were estimated to be \$161,200.
- On October 6, 2018, at 2:50 a.m., the New Bedford Fire Department was called to a fatal fire in a 3-unit apartment building of undetermined cause. The most likely cause was cooking on the gas range. The victim was a 51-year old woman. 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 estimated to be \$80,000.
- On December 16, 2018, at 1:04 a.m., the Fall River Fire Department was called to a fatal fire in a 3-unit apartment building of undetermined cause. The most likely cause was the improper disposal of smoking materials. The victim was a 67-year old man. No one else was injured at this fire. Alarms were present and alerted the occupants of the building. The building was not sprinklered. Damages from the fire were estimated to be \$110,000.

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

In 2018, 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 Norton with \$900,000 in estimated damages.

- On March 30, 2018, at 7:20 a.m., the Norton Fire Department responded to a smoking fire in a 6-unit apartment building. One (1) civilian was injured at this fire. Alarms were present and alerted the building's occupants. The building did not have sprinklers. Damages were estimated to be \$900,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 782 structure fires caused all six civilian deaths, 38 civilian injuries, 12 fire service injuries and an estimated dollar loss of \$12.1 million. These incidents represented 47% of Bristol County's reported fires in 2018. The average estimated dollar loss per structure fire was \$15,430. The total number of reported structure fires decreased by 64, or 8%, from the 846 reported in 2017.

### **Structure Arsons Down**

The 12 structure arsons caused one civilian injury and an estimated dollar loss of \$155,000. Arson was indicated as the cause of 2% of the structure fires and 1% of Bristol County's structure fire dollar loss. The 12 structure arsons accounted for 23% of the Bristol County arson fires reported in 2018. The total number of reported structure arsons decreased by 24 from the 36 reported in 2017.

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

Sixty-seven percent (67%) of Bristol County's 12 structure arsons occurred in residential occupancies. Assembly properties, mercantile and business properties, manufacturing facilities and storage facilities each had 8% of these fires.

## **BUILDING FIRES**

There were 779 building fires of different types in Bristol County in 2018. These 779 building fires accounted for 99.6% of all structure fires in Bristol County.

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

Six hundred and fifty-four (654), or 84%, of Bristol County's 779 building fires occurred in residential occupancies. Mercantile and business properties had 36 fires. Twenty-eight (28) fires took place in public assembly properties, including restaurants and churches. Twenty-three (23) fires took place in storage properties. Manufacturing and processing facilities experienced 12 fires. Hospitals, prisons, and other institutional buildings had nine fires. Educational facilities had nine fires. Special properties had seven fires. Industrial facilities had one fire.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Down**

There were 654 reported residential building fires in Bristol County in 2018. These 654 fires are a decrease of 54, or 8%, from the 708 residential building fires reported in 2017.

### **Apartments Accounted for 58% of Residential Building Fires**

The peak fixed property uses for residential building fires were apartments, accounting for 58% of the building fires in Bristol County; 38% occurred in 1- & 2-family homes; 2% happened in rooming houses; 1% occurred in residential board and care facilities.

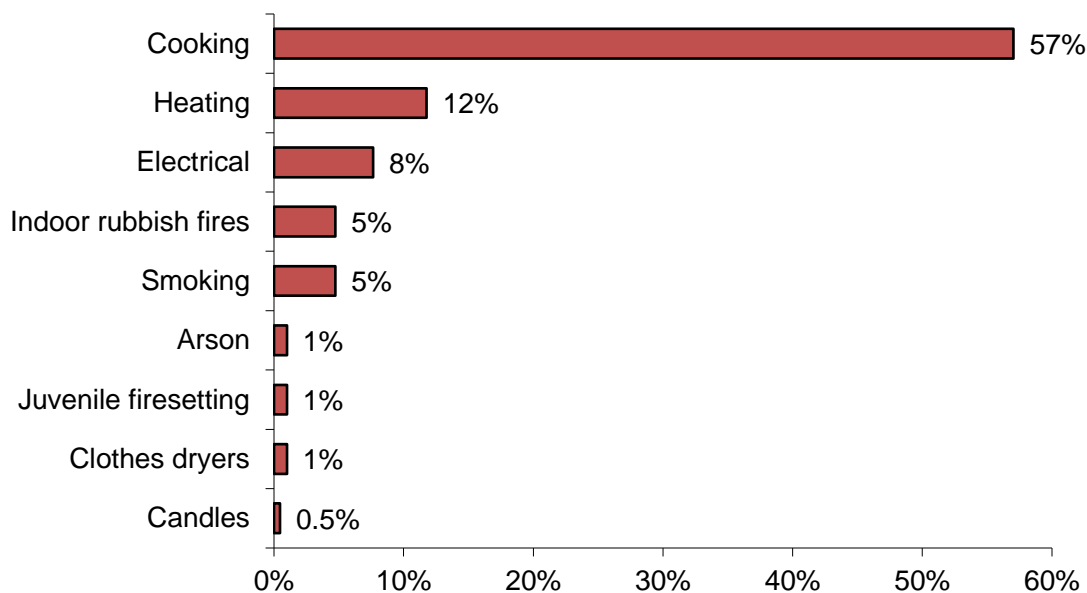


Less than 1% occurred each in dormitories and hotels or motels. Two (2), or less than 1%, of the residential building fires in Bristol County occurred in unclassified residential buildings.

### 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 57% of these fires. The second leading cause of residential building fires was heating equipment, accounting for 12%. Electrical problems caused 8% of the fires in people's homes. Indoor rubbish fires and smoking were each responsible for 5% of these fires. Arsons, juvenile-set fires and clothes dryers each accounted for 1%. Candles accounted for less than 1% of Bristol County's residential building fires in 2018.

### 2018 Leading Causes to Fires in Bristol County Homes



### 2/3 of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

Four hundred and thirty-four (434), or 66%, of all residential building fires were reported as confined to non-combustible containers in 2018. Three hundred and forty-three (343), or 52%, of all residential building fires reported in 2018 were cooking fires contained to a non-combustible container. Thirty-two (32), or 5%, were fires confined to a fuel burner

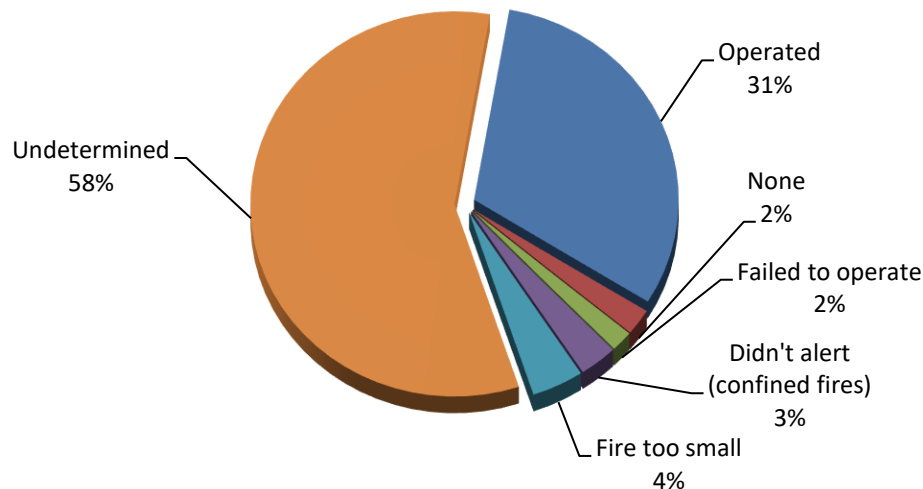
<sup>2</sup> In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing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

or boiler malfunction. Thirty-one (31) of the reported fires were confined to a chimney, accounting for 5% of residential building fires. Twenty-eight (28), or 4%, of these fires were rubbish fires.

### **Detectors Alerted Occupants in Only 31% of Fires**

Smoke or heat detectors operated and alerted the occupants in 197, or 31%, 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 2% 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 367 incidents, or 58%, of Bristol County's residential building fires.

### **Detector Status in Bristol County's Residential Structure Fires 2018**



### **3 of Detectors Failed from Lack of Maintenance**

Of the 11 fires where smoke detectors were present but failed to operate, three, or 27%, failed because of a lack of maintenance. Two (2), or 18%, failed from a power failure, shutoff or disconnect. Missing or disconnected batteries caused one, or 9% of the detectors to fail to operate. It was undetermined or unclassified in five cases, or 45%, 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 779 building fires reported to MFIRS in 2018. Seventeen (17) fires occurred in vacant residential properties. Two (2) vacant building fires occurred in storage facilities. Four (4) happened in mercantile or business facilities. Three (3) vacant storage facilities had fires. A public assembly property, a manufacturing facility and a special property each had one of these fire incidents in Bristol County in 2018.

Two (2), or 7%, of the vacant building fires in Bristol County in 2018 were determined to be intentionally-set. A manufacturing facility and an outbuilding or shed each had a vacant arson in 2018.

## **JUVENILE-SET FIRES**

### **40 Juvenile-set Fires**

There were 40 reported juvenile-set fires in Bristol County in 2018. The six structure fires, 29 brush fires, three special outdoor fires, and two unclassified fires caused \$93,001 in estimated damages.

## **ARSONS**

### **53 Total Arsons — 12 Structures, 22 Vehicles & 19 Other Arsons**

Bristol County fire departments reported that 53, or 3%, of Bristol County's 1,678 fires were considered intentionally-set, or, for purposes of this analysis, arson. The 12 structure arsons, 22 motor vehicle arsons and 19 outside and other arsons caused four civilian injuries, one fire service injury and an estimated dollar loss of \$343,951.

### **All Arsons Down**

The total number of reported arson fires decreased by 43 from the 96 reported in 2017. Structure arsons decreased by 24 from 36 in 2017. Motor vehicle arsons increased by six from the 16 reported last year. Outside and other arsons dropped by 25 from the 44 reported in 2017.

## ALL INCIDENTS

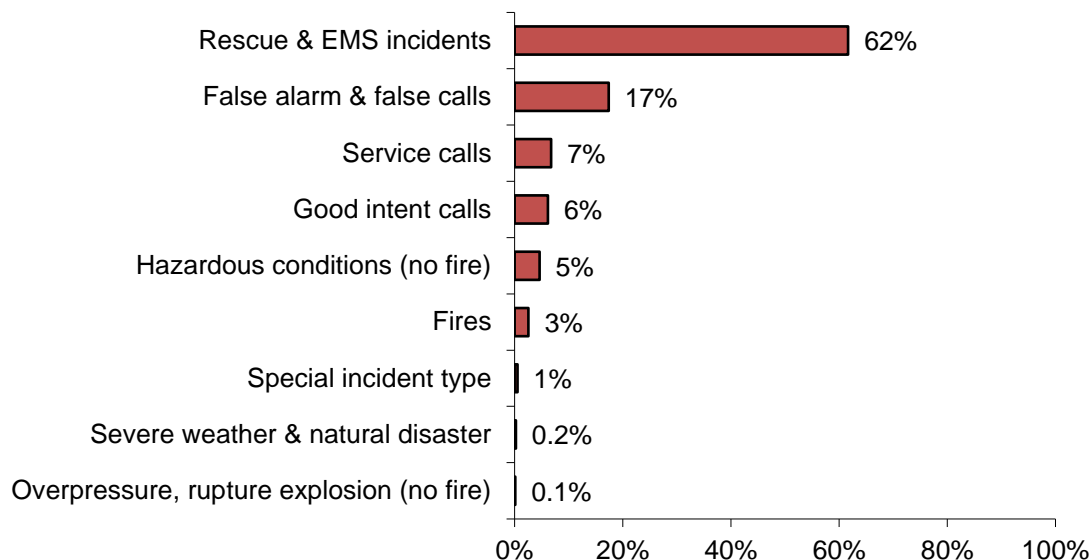
### Rescue & EMS Calls Are 62% of All Reported Responses

In 2018, fire departments in Bristol County reported 67,972 responses<sup>4</sup> to MFIRS. Of these 67,972 incidents, 66,232 non-fire calls were voluntarily reported.

Of these 66,232 non-fire calls, 41,912, or 62%, of all the reported responses were reported rescue and emergency medical services (EMS) calls; 11,807, or 17% were reported false alarm or false calls; 4,606, or 7%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 4,196, or 6%, were reported good intent calls; 3,135, or 5%, were reported hazardous condition calls with no fire; 352, or 1%, were special incident type calls such as citizen complaints; 154, or 0.2%, were severe weather responses; and 70, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

One thousand seven hundred and forty (1,740), or 3%, of the total responses submitted by Bristol County fire departments were fires.

### 2018 Responses by Incident Type



### Bristol County Fire Departments Gave Mutual Aid 1,675 Times

In 2018, Bristol County fire departments reported coming to the aid of other fire departments 1,675 times. Of these 1,675 responses, 1,192, or 71%, were for rescue or EMS calls; 274, or 16%, were for good intent calls; 133, or 8%, were for service calls such as cover assignments; 62, or 4%, were for fires; seven, or less than 1%, were for

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

hazardous conditions calls with no fire; six, or less than 1%, were for false alarms or false calls; and one, or less than 1%, was a special incident type.

**Bristol County Received Mutual Aid in 996 Incidents**

In 2018, Bristol County fire departments reported receiving aid from surrounding departments in 996 incidents. Of these 996 incidents, 845, or 85%, were rescue and emergency medical services calls; 61, or 6%, were for fires; 38, or 4%, were false alarms or false calls; 25, or 3%, were good intent calls; 15, or 2%, were hazardous conditions calls with no fire; 10, 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****3.1 Fires/1,000 Population****Total Fires: 1,678 \$14,425,040**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	782	47%	\$11,254,232
Vehicle Fires	292	17%	2,024,744
Other Fires	604	36%	334,214

6 Fatal Fires 3.58 Civilian Deaths/1,000 Fires  
 6 Civilian Deaths 0.11 Civilian Deaths/10,000 Population  
 48 Civilian Injuries 14 Fire Service Injuries

**Building Fires: 779****Residential Structure Fires: 654****Residential Structure Fires Confined to Non-Combustible Containers: 434****Unconfined Residential Structure Fires: 220**

6 Civilian Deaths 35 Civilian Injuries 9 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	378	58%	Operated	197	31%
1- & 2-Family homes	248	38%	Didn't operate	11	2%
Rooming houses	14	2%	None	14	2%
Residential board & care	8	0.5%	Fire too small	26	4%
Dormitories	3	0.2%	Didn't alert (confined)	9	3%
Hotel or motel	1	0.1%	Undetermined	367	58%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	60%	Arcing	6%	17%
Heating room or area	6%	Heat from operating eq.	4%	11%
Chimney or flue	5%	Cigarettes	3%	10%
Living room	4%	Rad., cond. heat from op eq.	3%	9%
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	56%	Abandoned materials	2%	6%
Flammable or combust. Liquid	5%	Electrical failure, malfunc.	2%	5%
Rubbish, trash, waste	5%	Too close to combustibles	1%	4%
Film or residue (creosote)	5%	Misuse of mater. or product	1%	2%
Structural member, framing	3%	Mechanical failure, malfunc.	1%	2%
Exterior sidewall covering	2%	Playing with heat source	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	56%	Unintentional	19%	56%
None	19%	Failure of eq. or heat source	3%	10%
Boiler, furnace, cent. Heat unit	5%	Intentional	2%	5%
Chimney or flue	5%	Cause under investigation	1%	4%
Electrical wiring, other	2%	Undetermined	8%	24%
		Act of Nature	0%	0%

#### **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	128	81	30	17
February	107	64	17	26
March	155	83	24	48
April	187	86	29	72
May	172	70	29	73
June	162	48	24	90
July	216	64	35	117
August	133	47	25	61
September	107	67	15	25
October	90	46	24	20
November	102	53	23	26
December	119	73	17	29

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	261	120	51	90
Monday	223	109	37	77
Tuesday	295	131	50	114
Wednesday	235	101	43	91
Thursday	207	93	35	79
Friday	234	118	38	78
Saturday	223	110	38	75

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 – 04:00	111	53	33	25
04:01 – 08:00	119	57	30	32
08:01 – 12:00	252	129	49	74
12:01 – 16:00	478	179	75	224
16:01 – 20:00	476	246	65	165
20:01 – 24:00	242	118	40	84

### **Motor Vehicle Fires**

Total: 292

Automobiles: 224 (77%)

13, or 6%, of the automobile fires considered intentionally-set.



## Arson Fires

**Total Arsons: 53**

**Dollar loss: \$343,951**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	12	2%	23%	\$155,000
Vehicle Arsons	22	8%	42%	186,451
Other Arsons	19	3%	36%	2,500

0.02 Structure arsons/1,000 population

0.04 Vehicle arsons/1,000 population

0.03 Other arsons/1,000 population

4 Civilian Injuries

1 Fire Service Injury

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
08:01 – 12:00	4	33%	00:01 – 04:00	14	64%
16:01 – 20:00	3	25%	20:01 – 00:00	4	18%
04:01 – 08:00	2	17%	12:01 – 16:00	2	9%
20:01 – 00:00	2	17%			

Other Arsons	#	%
16:01 – 20:00	6	32%
12:01 – 16:00	5	26%
20:01 – 00:00	5	26%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	3	25%
Apartments	2	17%
Boarding/rooming house	2	17%

**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>
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
2018	20	10	3	7	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>
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
2017	110	37	23	50	3	1	1	1

**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>
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
2018	14	6	6	2	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>
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
2018	19	0	1	8	1	0	1	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>
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
2018	5	2	1	2	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>
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
2018	66	24	11	31	0	0	0	0

**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>
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
2018	9	2	1	6	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>
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
2018	45	14	6	25	0	0	0	0

<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>
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
2018	52	18	4	30	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>
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
2018	447	270	59	118	15	3	10	2

**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>
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
2018	41	15	11	15	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>
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
2018	46	16	12	18	1	0	0	1

**New Bedford** **Population: 95,072**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	399	215	61	123	15	3	10	2

**North Attleboro** **Population: 28,712**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	48	28	10	10	1	0	0	1

**Norton** **Population: 19,031**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	34	9	8	17	2	2	0	0

**Raynham** **Population: 13,383**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	68	13	28	27	1	0	0	1

**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>
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
2018	41	14	5	22	10	2	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>
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
2018	49	10	6	33	1	0	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>
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
2018	29	9	10	10	1	1	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>
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
2018	44	19	16	9	0	0	0	0

**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>
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
2018 <sup>14</sup>	47	25	5	17	0	0	0	0

**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>
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
2018	45	16	5	24	2	0	0	2

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<sup>14</sup> Taunton only reported January through April in 2018.

## 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
05003	Acushnet	668	22	0	247	107	186	21	80	0	5
05016	Attleboro	8,037	116	4	5,767	171	453	560	953	6	7
05027	Berkley	742	21	0	523	28	49	55	60	5	1
05972	Dartmouth Distr.#1	474	19	6	21	97	66	23	240	2	0
05973	Dartmouth Distr.#2	130	6	0	13	20	24	8	33	23	3
05974	Dartmouth Distr.#3	1,149	71	6	295	100	205	127	332	13	0
05076	Dighton	250	9	0	62	32	44	19	84	0	0
05088	Easton	3,746	45	2	2,489	220	381	92	496	8	13
05094	Fairhaven	3,735	54	3	2,827	173	221	114	332	1	10
05095	Fall River	7,896	450	9	2,795	588	310	610	3,118	1	15
05102	Freetown	1,557	41	7	944	84	164	138	152	10	17
05167	Mansfield	3,359	47	2	2,142	177	270	209	492	12	8
05201	New Bedford	15,420	400	11	10,178	489	594	1,237	2,444	31	36
05211	North Attleboro	2,751	53	1	1,825	123	232	102	411	2	2
05218	Norton	3,589	38	0	2,149	193	441	30	555	0	183
05245	Raynham	2,709	78	5	1,866	80	159	99	396	9	17

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	652	44	1	243	64	107	31	156	4	2
05265	Seekonk	3,627	49	1	2,425	70	220	347	503	6	6
05273	Somerset	3,069	31	0	2,545	65	114	122	186	1	5
05292	Swansea	494	47	6	42	80	52	53	209	4	1
05293	Taunton	3,294	48	4	2,404	100	204	137	376	14	7
05334	Westport	624	51	2	110	74	110	62	199	2	14
	<b>Bristol County</b>	<b>67,972</b>	<b>1,740</b>	<b>70</b>	<b>41,912</b>	<b>3,135</b>	<b>4,606</b>	<b>4,196</b>	<b>11,807</b>	<b>154</b>	<b>352</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.

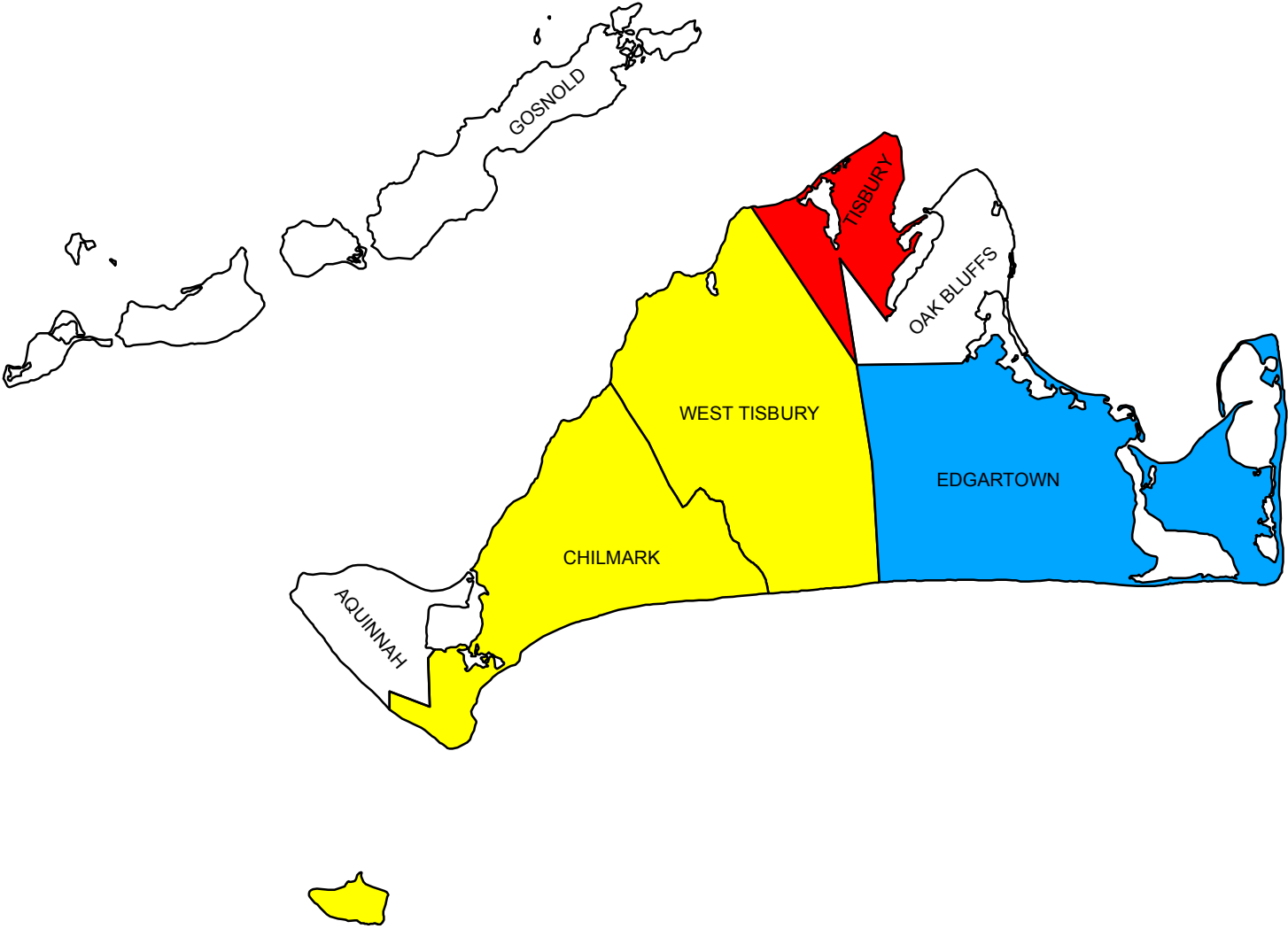


# Dukes County

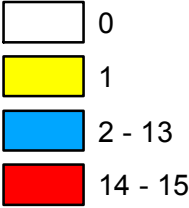
## 2018 Fire Data Analysis

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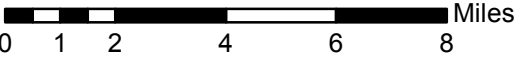
# Dukes County Fires 2018



## 2018 Fires



\*Non-reporting department



# Dukes County Fires in 2018

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## **30 Total Fires — 17 Structures, 5 Vehicles Fires & 8 Outside & Other Fires**

Dukes County ranked last out of the fourteen Massachusetts counties in total fires. Dukes County fire departments reported 30 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2017. The reported 17 structure fires, five motor vehicle fires, five brush fires, one outside rubbish fire, and two special outside fires caused an estimated dollar loss of \$149,500. Dukes County's fires accounted for 0.1% of the 25,504 Massachusetts fires reported in 2018.

All seven of the fire departments in Dukes County reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS). One (1) department certified that they had no reportable fires in 2018.

## **All Fires Up Slightly**

The total number of reported fire incidents increased by four from the 26 reported in 2017. Reported structure fires increased by two from the 15 reported in 2017. Motor vehicle fires decreased by one from the six reported the previous year. Outside and other fires increased by three from the 5 reported in 2017<sup>1</sup>.

## **DUKES COUNTY FIRES FROM 2014 TO 2018**

<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>
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
2018	30	17	5	8	0	0	0	0

## **Fire and Fire Death Rates**

Dukes County had 1.8 fires per 1,000 population. That figure ranks Dukes County last in the state and below the state rate of 3.9 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 0.07 fire deaths per 10,000 population.

## **No Fire Deaths in Dukes County in 2018**

In 2018 there were no fatal fires and fire deaths in Dukes County.

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

Dukes County did not have any large loss fires over \$1 million in 2018. Tisbury had the largest loss fire in the County.

- The largest loss fire in Dukes County in 2018 was a boat fire at the docks in Tisbury. This fire occurred on September 1, 2018, at 1:07 a.m. No one was

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<sup>1</sup> 2018 was another down year statewide for brush fires.

injured at this fire. Damages were estimated at \$110,000. This one fire accounted for 74% of Dukes County total estimated damages.

## **STRUCTURE FIRES**

### **Reported Structure Fires 57% of All Reported Fires**

There were 17 reported structure fires in Dukes County in 2018. These incidents represented 57% of Dukes County's reported fires in 2018 and 24% of the county's reported dollar loss. The total number of reported structure fires increased by two from the 15 reported in 2017.

### **0 Reported Structure Arson in 2018**

There was no reported structure arson in Dukes County in 2018

## **BUILDING FIRES**

There were 17 building fires of different types in Dukes County in 2018. These 17 building fires accounted for all of the structure fires in Dukes County.

### **82% of Dukes Building Fires Occurred in People's Homes**

Fourteen (14), or 82%, of Dukes County's 17 building fires occurred in residential occupancies. The other three fires occurred in an assembly property, a business property, and a storage facility.

## **RESIDENTIAL FIRES**

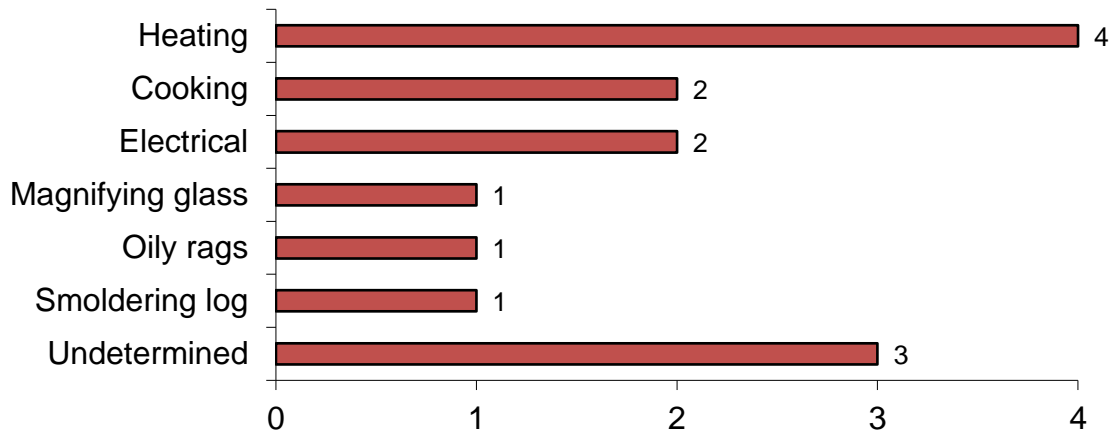
### **14 Residential Building Fires**

There were 14 reported residential building fires in Dukes County in 2018. These 14 fires are an increase of one, or 8%, from the 13 reported in 2017. They caused \$25,500 in estimated damages.

### **Heating Was the Leading Cause of Residential Fires**

Heating equipment was the leading cause of residential fires in Dukes County in 2018. The four heating fires accounted for 23%, of residential building fires in Dukes County in 2018. Cooking and electrical fires each caused two, or 14%, of these fires. A smoldering log that fell from a woodstove, oily rags that self-combusted, a magnifying glass amplifying the sun and light from a lamp were each the cause of one, or 7%, of these fires. The other three fires were undetermined.

### 2018 Leading Causes of Fires in Dukes County Homes



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

Six (6), or 43%, of the reported fires in Dukes County were confined to a non-combustible container. Four (4), or 29%, were confined to a chimney or flue; and two, or 14%, of these fires were confined cooking fires.

#### Detectors Operated in 1/2 of Fires

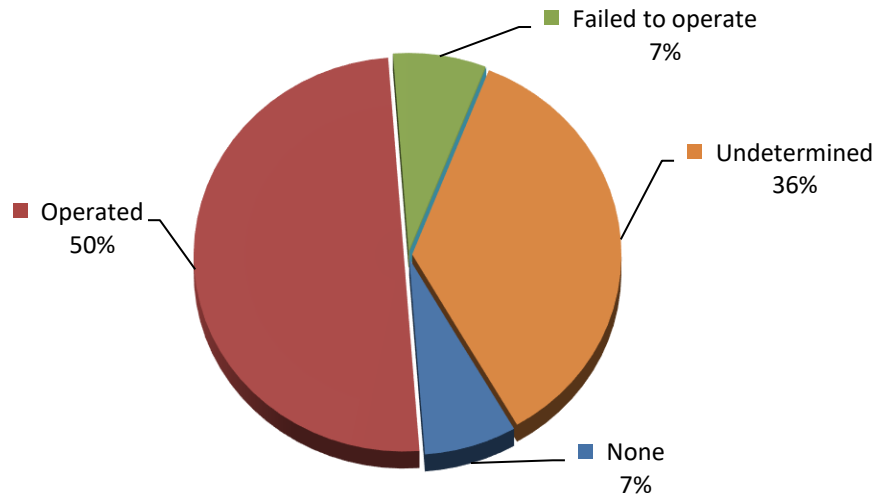
Smoke or heat detectors operated and alerted the occupants in seven, or 50%, of the residential building fires. There were no reported fires<sup>3</sup>, where the detectors did not alert the occupants. Detectors were present but did not operate in 7% of these incidents. In 7% of these fires, no detectors were present at all. There were no reported fires where the fire was too small to trigger the detector. Smoke detector performance was undetermined in five incidents, or 36%, of Dukes County's residential building fires.

The reason the one detector failed to operate was because of a power shutoff or disconnect.

<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 2018



### VACANT BUILDINGS

#### 0 Vacant Building Fires

There were no reported fires in a vacant building in Dukes County in 2018.

### JUVENILE-SET FIRES

#### No Juvenile-set Fires

There were no reported juvenile-set fires in Dukes County in 2018.

### ARSONS

#### 0 Arsons

There were no reported arsons in Dukes County in 2018. This was a decrease of two over the two arsons in Dukes County in 2017.

### ALL INCIDENTS

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

In 2018, Dukes County fire departments reported 1,497 responses<sup>4</sup> to MFIRS. Of these 1,497 incidents, 1,458 non-fire calls were voluntarily reported. The vast majority of these calls came from five departments: Aquinnah, Edgartown, Oak Bluffs, Tisbury and West Tisbury.

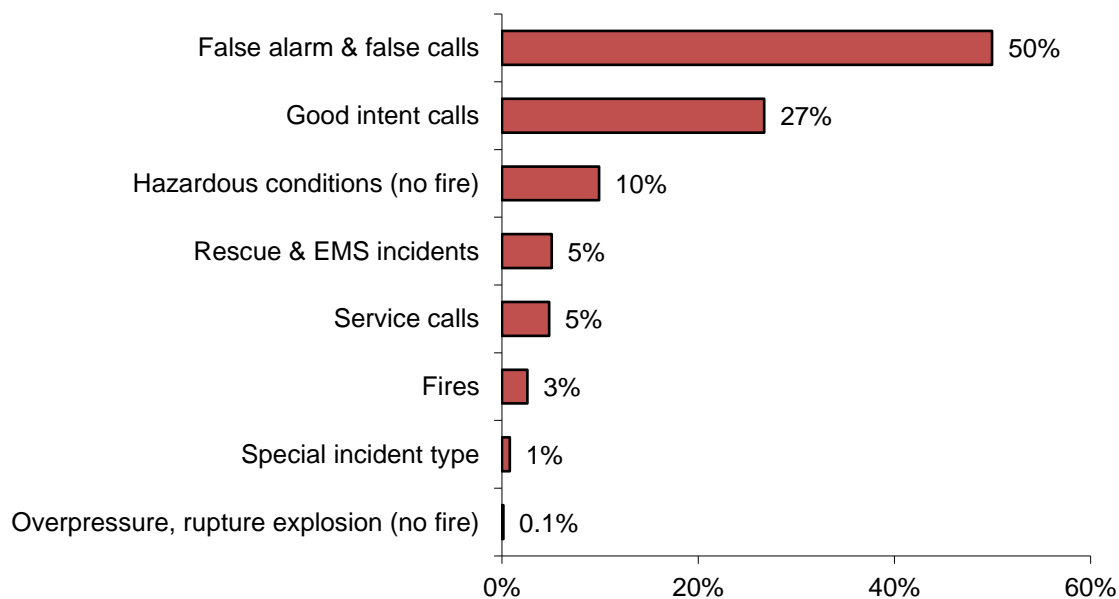
<sup>4</sup> These figures include responses in which Dukes County fire departments gave mutual aid to other fire departments.



Of these 1,458 non-fire calls, 748, or 50%, were reported false alarm or false calls; 400, or 27%, were reported good intent calls; 148, or 10%, were reported hazardous condition calls with no fire; 76, or 5%, of all of the responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 72, or 5%, 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 two, or less than 1%, were overpressure, rupture explosions with no ensuing fire calls.

Thirty-nine (39), or 3%, of the total incidents submitted by Dukes County fire departments were fires.

### 2018 Incidents by Incident Type



### Dukes County Fire Departments Gave Mutual Aid 26 Times

In 2018, Dukes County fire departments reported coming to the aid of other fire departments 26 times. Of these responses, 10, or 38%, were for good intent calls; nine, or 35%, were for fires; five, or 19%, were rescue or EMS calls; and two, or 8%, were service calls.

### Dukes County Fire Departments Received Mutual Aid in 22 Incidents

In 2018, Dukes County fire departments reported receiving aid from surrounding departments in 22 incidents. Eleven (11), or 50%, were for fires; four, or 18%, of these incidents were for false alarms or false calls; three, or 11%, were for rescue or EMS calls; two, or 9%, were good intent calls; one, or 5%, was a hazardous condition call with no fire; and one, or 5%, was a service call.

**Dukes County****Population: 16,535****1.6 Fires/1,000 Population****Total Fires: 30 \$149,500**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	17	57%	\$36,500
Vehicle Fires	5	17%	111,000
Other Fires	8	27%	2,000

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: 17****Residential Structure Fires: 14****Residential Structure Fires Confined to Non-Combustible Containers: 6****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	12	86%	Operated	7	50%
Hotels or motels	1	7%	Didn't operate	1	7%
Residential, other	1	7%	None	1	7%
			Fire too small	0	0%
			Didn't alert (confined)	0	0%
			Undetermined	5	36%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Chimney or flue	29%	Arcing	14%	25%
Kitchen	14%	Hot or smoldering object	14%	25%
Function room, other	14%	Chemical/natural heat source	7%	13%
Structural area, other	14%			

<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)	29%	Abandoned materials	7%	13%
Cooking materials	14%	Improper container/storage	7%	13%
		Electrical failure, malf.	7%	13%
		Operational deficiency, other	7%	13%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
None	43%	Unintentional	14%	25%
Chimney or flue	29%	Failure of eq. or heat source	21%	38%
Kitchen & cooking equipment	14%	Undetermined	0%	0%
Fan	7%	Cause under investigation	21%	38%
Dehumidifier	7%			

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

Alerted occupants	33%
Didn't alert occupants	0%
Undetermined	67%

<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	3	2	1	0
February	1	1	0	0
March	1	0	0	1
April	7	5	2	0
May	3	2	1	0
June	2	0	0	2
July	2	1	0	1
August	1	1	0	0
September	4	1	1	2
October	2	2	0	0
November	2	0	0	2
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	4	4	0	1
Monday	4	3	0	1
Tuesday	6	2	1	3
Wednesday	6	4	1	1
Thursday	6	2	2	2
Friday	1	0	0	1
Saturday	3	2	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	5	3	2	0
04:01 - 08:00	1	1	0	0
08:01 - 12:00	4	3	0	1
12:01 - 16:00	10	3	1	6
16:01 - 20:00	6	4	2	0
20:01 - 00:00	4	3	0	1

### Motor Vehicle Fires

Total: 5

Automobiles: 2 (40%)

0 (0%) of the automobile fires were intentionally-set in 2018.

**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>
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>							
2018	Fire Department in Good Standing, Certified No Reportable Fires <sup>12</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>
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							
2018	1	1	0	0	0	0	0	0

**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>
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
2018	13	7	2	4	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>
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							
2018	Fire Department in Good Standing, Certified No Reportable Fires							

<sup>11</sup> Aquinnah did report 59 total runs to MFIRS in 2017.<sup>12</sup> Aquinnah did report 62 total runs to MFIRS in 2018.

**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>
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
2018	Fire Department in Good Standing, Certified No Reportable Fires <sup>13</sup>							

**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>
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
2018	15	8	3	4	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>
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
2018	1	1	0	0	0	0	0	0

<sup>13</sup> Oak Bluffs did report 83 total runs to MFIRS in 2018.

## 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	62	2	0	1	1	2	18	38	0	0
07062	Chilmark	1	1	0	0	0	0	0	0	0	0
07089	Edgartown	691	15	2	25	94	38	127	388	0	2
07109	Gosnold*	0	0	0	0	0	0	0	0	0	0
07221	Oak Bluffs	83	0	0	8	6	9	5	55	0	0
07296	Tisbury	369	18	0	33	37	20	77	183	0	1
07327	West Tisbury	291	3	0	9	10	3	173	84	0	9
<b>Total</b>	<b>Dukes County</b>	<b>1,497</b>	<b>39</b>	<b>2</b>	<b>76</b>	<b>148</b>	<b>72</b>	<b>400</b>	<b>748</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.



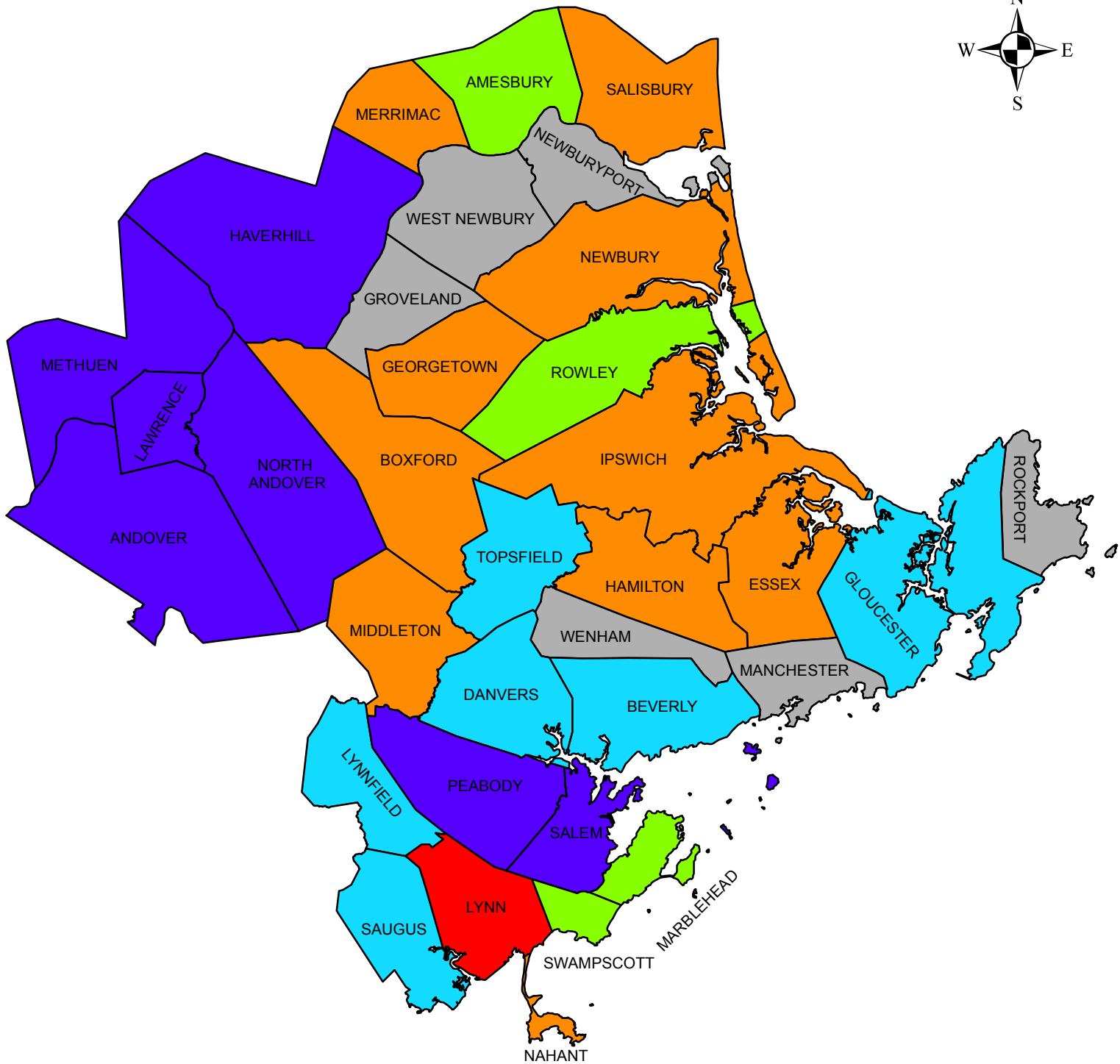


# Essex County

## 2018 Fire Data Analysis

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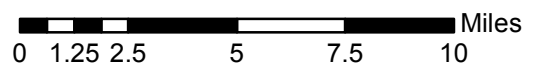
# Essex County Fires 2018



## 2018 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2018

# Essex County Fires in 2018

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## **2,160 Total Fires — 1,193 Structures, 246 Vehicles & 721 Other Fires**

Essex County ranked fourth out of the fourteen Massachusetts counties in total reported fires. The county reported 2,160 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 1,193 structure fires, 246 motor vehicle fires, 360 brush, tree or lawn fires, 188 outside rubbish fires, 60 special outside fires, two cultivated crop or vegetation fires, and 111 other fires caused one civilian death, 25 civilian injuries, 118 fire service injuries and an estimated dollar loss of \$22.6 million. Essex County's fires accounted for 8% of the 25,504 Massachusetts fires reported in 2018.

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 2018.

## **All Fires Down**

The total number of reported fire incidents decreased by 332 incidents from the 2,492 that were reported in 2017. Reported structure fires decreased by 112 from the 1,305 reported during the previous year. The total number of motor vehicle fires decreased by 11 from the 257 incidents reported during 2017. Reported outside and other fires decreased by 209 from the 930 reported the year before.

## **ESSEX COUNTY FIRES FROM 2014 TO 2018**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
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	2,492	1,305	257	930	68	15	6	47
2018	2,160	1,193	246	721	39	11	4	24

## **Fire and Fire Death Rates**

Essex County had 2.9 fires per 1,000 population. That figure ranks Essex County tied for eleventh in the state and below the state rate of 3.9 fires per 1,000 population. Essex County had 0.01 fire deaths per 10,000 population making it twelfth among Massachusetts counties and below the state rate of 0.07 deaths per 10,000 population.

## **1 Person Died in 1 Essex County Fire**

In 2018 there was one fatal fire in Essex County that killed one person.

- On March 8, 2018, at 10:50 a.m., the Andover Fire Department was called to a fatal smoking fire in a 175-unit apartment building. The fire was started when the victim was smoking while using home oxygen. The 84-year old man was overcome while trying to escape because his clothes had ignited. No one else was injured at this fire. Alarms were present and operated. Sprinklers were present but the fire was not in an area protected by them. Damages from this fire were estimated to be \$195,000.

**Merrimack Valley Natural Gas Explosions**

On Thursday, September 13, 2018 at approximately 4:30 p.m., Lawrence, Andover and North Andover experienced a man-made disaster that caused multiple explosions and fires that killed one person and injured many others.

- On September 13, 2018, at approximately 4:30 p.m., 60 to 80 fires, three explosions and numerous gas leaks occurred in parts of Lawrence, Andover and North Andover. There was a large mobilization of state, fire and law enforcement resources to support the suppression efforts and public safety needs of the three communities. Approximately 25 people were transported for related injuries. The cause was discovered to be an over pressurized gas line by Columbia Gas. An 18-year old man died when a chimney toppled over onto his parked car from the explosion and fires.

**Salem Had Largest Loss Fire in 2018**

In 2018, Essex County had two fires that were considered large loss, or greater than \$1 million in estimated damages. These fires combined for \$2.1 million in estimated damages and 9% of Essex County's total dollar loss in 2018.

- On November 24, 2018, at 5:41 a.m., the Salem Fire Department was dispatched to an electrical fire in a 12-unit apartment building. One (1) firefighter was injured at this fire. Alarms were present and alerted the occupants of the building. The building did not have sprinklers. Damages from this fire were estimated to be \$1.1 million.

**STRUCTURE FIRES****Reported Structure Fires Down**

The 1,193 structure fires caused one civilian death, 20 civilian injuries, 112 fire service injuries and an estimated dollar loss of \$20 million. These incidents represented 55% of Essex County's reported fires in 2018. The average estimated dollar loss per structure fire was \$16,750. The total number of reported structure fires decreased by 112, or 9%, from the 1,305 reported in 2017.

**Arson Caused 1% of Structure Fires**

The 11 structure arsons caused 34 fire service injuries and an estimated dollar loss of \$614,310. Arson was indicated as the cause of 1% of the structure fires and 3% of Essex County's structure fire dollar loss. The 11 structure arsons accounted for 28% of the Essex County arson fires reported in 2018. The number of reported structure arsons decreased by four from the 15 reported in 2017.

**64% of Structure Arsons Occurred in Residences**

Sixty-four percent (64%) of Essex County's 11 structure arsons occurred in residential occupancies. Eighteen percent (18%) took place in educational facilities. Mercantile properties and special properties each accounted for 9% of structure arsons.

## **BUILDING FIRES**

There were 1,185 building fires of different types in Essex County in 2018. These 1,185 building fires accounted for 99.3% of all structure fires in Essex County.

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

One thousand and ten (1,010), or 86%, of Essex County's 1,185 building fires occurred in residential occupancies. Mercantile and business properties had 57 fires. Forty-two (42) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 30 fires. Twelve (12) building fires took place in educational properties. Eleven (11) fires took place in manufacturing and processing facilities. Nine (9) fires took place in storage properties. Six (6) building fires in Essex County occurred in special properties such as outbuildings, bus stop shelters and toll booths. Two (2) fires happened in industrial facilities; and six fires occurred in unclassified properties in Essex County in 2018.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Down in 2018**

There were 1,010 reported residential building fires in Essex County in 2018. These 1,010 fires are a decrease of 73, or 7%, from the 1,083 residential building fires reported in 2017.

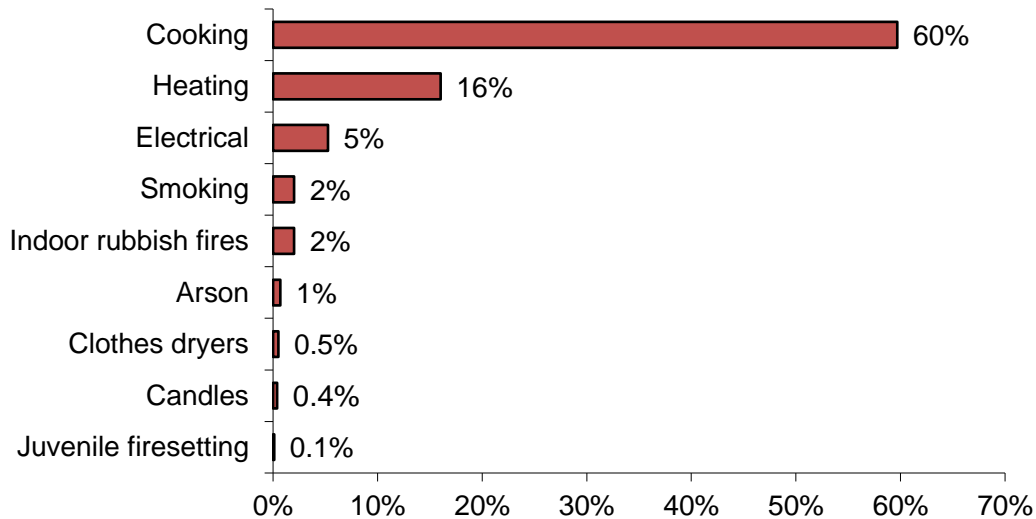
### **1- or 2-Family Homes Accounted for 47% of Residential Building Fires**

The peak fixed property uses for residential building fires were 1- or 2-family homes accounting for almost half, or 47%; apartments had 43%, of the building fires in Essex County; 2% occurred in dormitories; 2% happened in rooming houses; 1% happened in hotels or motels; and 1% took place in residential board and care facilities. Fifty (50), or 4% 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 60% of these fires. Heating was the second leading cause, accounting for 16% of these fires. Electrical problems caused 5%. Smoking and indoor rubbish fires each caused 2%. Arsons caused 1% of these fires. Clothes dryers, candles and juvenile-set fires each caused less than 1% of the fires in people's homes in Essex County in 2018.

## 2018 Leading Causes of Fires in Essex County Homes



### 71% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>1</sup>

Seven hundred and thirteen (713), or 71%, of all residential building fires were reported as confined to non-combustible containers in 2018. Five hundred and seventy-three (573), or 57%, of all residential building fires reported in 2018 were cooking fires contained to a non-combustible container. Sixty-one (61), or 6%, were fires confined to a fuel burner or boiler malfunction. Fifty-six (56) of the reported fires were confined to a chimney, accounting for 6% of residential building fires. Twenty-three (23), or 2%, of these fires were rubbish fires contained to a non-combustible container in Essex County's residential fires in 2018.

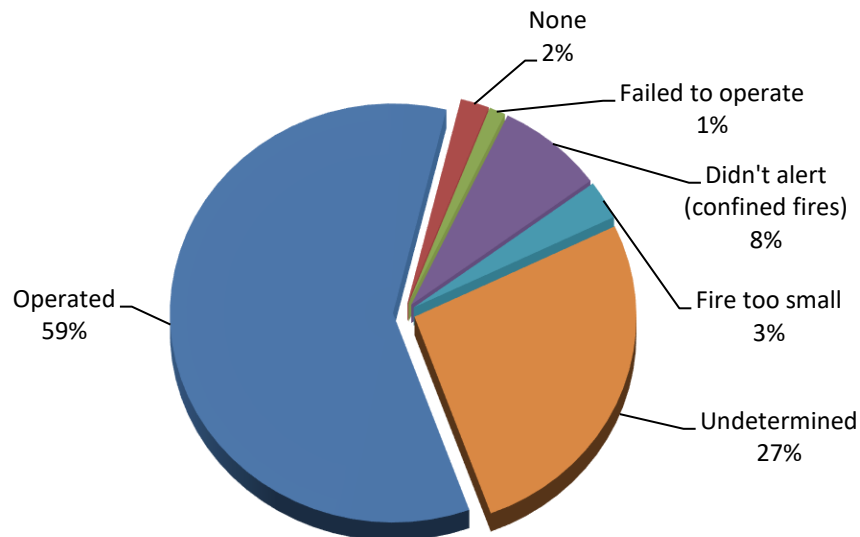
### Detectors Operated in 59% of Fires

Smoke or heat detectors operated and alerted the occupants in 600, or 59%, 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 2% 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 268 incidents, or 27%, of Essex 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 detector did not alert the occupants.

## Detector Status in Essex County's Residential Structure Fires 2018



### 3 Failed Detectors Had Missing or Dead Batteries

Of the 12 fires where smoke detectors were present but failed to operate, three, or 25%, failed because the batteries were either missing or disconnected. Two (2) detectors, or 15%, failed because of a power failure, shutoff or disconnect. It was undetermined or unclassified in seven cases, or 58%, why the detectors failed to operate.

### VACANT BUILDINGS

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

Essex County reported 24 fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the total 1,185 building fires reported to MFIRS in 2018. Seventeen (17) fires occurred in vacant residential properties. Mercantile and business properties, public assembly properties and educational facilities each had two of these fires. Storage facilities accounted for one vacant building fire incident in Essex County in 2018.

Two (2) of the vacant building fires in Essex County in 2018 were determined to be intentionally-set. One (1) fire was in a 1- or 2-family home and the other was in an elementary school.

## JUVENILE-SET FIRES

### 6 Juvenile-set Fires

There were six reported juvenile-set fires in Essex County in 2018. The one structure fire, one brush fire, one special outside fire and three unclassified fires caused \$2,050 in estimated damages.

## ARSONS

### 39 Total Arsons — 11 Structures, 4 Vehicles & 24 Other Arsons

Thirty-nine (39), or 2%, of Essex County's 2,160 fires were considered intentionally-set, or, for purposes of this analysis, arson. The 11 structure arsons, four motor vehicle arsons and 24 outside and other arsons caused 34 fire service injuries and an estimated dollar loss of \$639,963.

### All Arsons Down

The total number of reported arson fires decreased by 29 from the 68 reported in 2017. Reported structure arsons decreased by four from the 15 reported in 2017. Motor vehicle arsons decreased by two from the six reported in 2017. Outside and other arsons decreased by 23 from 47 reported the year before.

## ALL INCIDENTS

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

In 2018, fire departments in Essex County reported 112,984 responses<sup>3</sup> to MFIRS. Of these 112,984 incidents, 110,727 non-fire calls were voluntarily reported.

Of these 110,725 non-fire calls, 62,076, or 55%, of all the reported responses in 2018 were reported rescue and emergency medical services (EMS) calls; 18,644, or 17%, were reported false alarm or false calls; 15,439, or 14%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 8,210, or 7%, were reported good intent calls; 5,436, or 5%, were reported hazardous condition calls with no fire; 487, or 0.4%, were severe weather responses; 321, or 0.3%, were special incident type calls such as citizen complaints; and 114, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

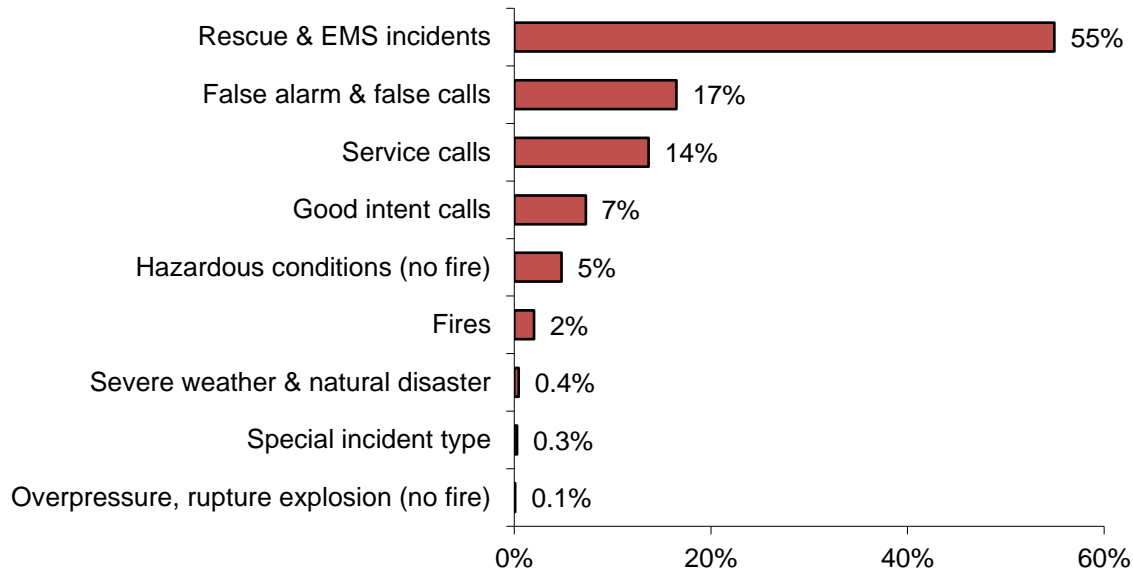
Two thousand two hundred and fifty-seven (2,257), or 2%, of the total incidents submitted by Essex County fire departments were fires.

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



## 2018 Responses by Incident Type



### Essex County Fire Departments Reported Giving Mutual Aid 1,464 Times

In 2018, Essex County fire departments reported coming to the aid of other fire departments 1,464 times. Of these 1,464 responses, 580, or 40%, were for service calls such as cover assignments; 399, or 27%, were for rescue or EMS calls; 203, or 14%, were for good intent calls; 164, or 11%, was for a false alarm or false calls; 90, or 6%, were for fires; 20, or 1%, were for hazardous conditions calls with no fire; four, or 0.3% were for overpressure, rupture explosions with no ensuing fire; and four, or 0.3%, were special incident types.

### Essex County Received Mutual Aid in 973 Incidents

In 2018, Essex County fire departments reported receiving aid from surrounding departments in 973 incidents. Of these 973 incidents, 513, or 53%, were rescue and emergency medical services calls; 149, or 15%, were for fires; 127, or 13%, were hazardous conditions calls with no fire; 118, or 12%, were false alarms or false calls; 27, or 3%, were service calls; 26, or 3%, were good intent calls; nine, or 1 %, were overpressure, rupture explosions with no fire; three, or 0.3%, were for severe weather or natural disasters; and one, or 0.1%, was a special incident type.

**Essex County****Population: 743,159****2.9 Fires/1,000 Population****Total Fires: 2,160 \$22,623,269**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	1,193	55%	\$19,983,236
Vehicle Fires	246	11%	2,158,033
Other Fires	721	33%	482,000

1 Fatal Fire 0.46 Civilian Deaths/1,000 Fires  
 1 Civilian Death 0.01 Civilian Deaths/10,000 Population  
 25 Civilian Injuries 118 Fire Service Injuries

**Building Fires: 1,185****Residential Structure Fires: 1,010****Residential Structure Fires Confined to Non-Combustible Containers: 713****Unconfined Residential Structure Fires: 297**

1 Civilian Death 17 Civilian Injuries 108 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	474	47%	Operated	600	59%
Apartments	431	43%	Didn't operate	12	1%
Rooming houses	25	2%	None	21	2%
Dormitories	17	2%	Fire too small	30	3%
Hotels/motels	7	1%	Didn't alert (confined)	79	8%
Residential board & care	6	1%	Undetermined	268	27%

<b>Area of Origin<sup>4</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>5</sup></b>
Kitchen	62%	Arcing	4%	14%
Heating equipment room	11%	Spark, ember, flame op. eq.	4%	14%
Chimney or flue	6%	Heat from operating equip.	3%	10%
Bedroom	2%	Rad. conduct. heat op. eq.	2%	7%
Wall assembly, concealed space	2%	Hot or smoldering obj., other	2%	7%

<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	58%	Abandoned materials	2%	5%
Flammable/comb. liquid	6%	Mechanical failure, malfunc.	1%	5%
Film, residue (creosote)	6%	Too close to combustibles	1%	4%
Rubbish, trash, waste	3%	Electrical failure, malfunc.	1%	4%
Flam. liquid/gas escap. final cont.	2%	Misuse of materials or prod.	1%	4%

<b>Equipment<sup>8</sup></b>		<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>9</sup></b>
Kitchen & cooking equipment	57%	Unintentional	18%	63%
None	18%	Failure of eq. or heat source	4%	12%
Boiler, furnace, cent. heat. unit	10%	Intentional	1%	2%
Chimney, flue	6%	Undetermined	3%	9%
Electrical wiring, other	1%	Cause under investigation	3%	12%
Clothes dryer	0.5%	Act of Nature	0.3%	1%
Fan	0.4%			

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

Alerted occupants	66%
Didn't alert occupants	11%
Undetermined	23%

<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	143	102	20	21
February	141	97	22	22
March	128	86	16	26
April	196	96	20	80
May	242	92	22	128
June	231	89	24	118
July	234	82	22	130
August	150	74	20	56
September	208	142	26	40
October	138	85	20	33
November	173	130	17	26
December	176	118	17	41

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	328	198	23	107
Monday	276	151	31	94
Tuesday	314	165	39	110
Wednesday	304	152	48	104
Thursday	332	199	31	101
Friday	319	179	39	101
Saturday	287	149	34	104

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	115	61	16	38
04:01 - 08:00	124	60	19	45
08:01 - 12:00	390	218	57	115
12:01 - 16:00	610	279	68	263
16:01 - 20:00	642	392	54	196
20:01 - 00:00	279	183	32	64

### **Motor Vehicle Fires**

Total: 246

Automobiles: 197 (80%)

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

## Arson Fires

**Total Arsons: 39**

**Dollar loss: \$639,963**

### 0.05 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	11	1%	28%	\$614,310
Vehicle Arsons	4	2%	10%	25,100
Other Arsons	24	3%	62%	553

0.01 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.03 Other arsons/1,000 population

34 Fire Service Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	4	36%	00:01 - 04:00	3	75%
16:01 - 20:00	4	36%	08:01 - 12:00	1	25%
08:01 - 12:00	2	18%			
20:01 - 00:00	1	9%			

Other Arsons	#	%
12:01 - 16:00	10	42%
16:01 - 20:00	8	33%
00:01 - 04:00	3	13%
08:01 - 12:00	3	13%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	4	36%
Apartment buildings	3	27%

<b>Amesbury</b>					<b>Population: 16,283</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>
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
2018	36	13	5	18	1	0	0	1

<b>Andover</b>					<b>Population: 33,201</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>
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
2018	117	80	18	19	2	1	0	1

<b>Beverly</b>					<b>Population: 39,502</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>
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
2018	85	53	7	25	3	1	0	2

<b>Boxford</b>					<b>Population: 7,965</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>
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
2018	16	2	7	7	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>
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
2018	86	30	16	40	0	0	0	0

**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>
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
2018	19	12	2	5	0	0	0	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>
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
2018	24	14	5	5	1	1	0	0

**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>
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
2018	74	45	2	27	3	1	0	2

**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>
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
2018	10	4	0	6	2	0	0	2

**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>
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
2018	15	7	0	8	0	0	0	0

**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>
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
2018	161	97	21	43	0	0	0	0

**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>
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
2018	16	8	2	6	1	0	1	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>
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
2018	148	45	40	63	11	4	2	5

**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>
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
2018	323	209	26	88	6	3	0	3

**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>
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
2018	76	56	7	13	0	0	0	0

**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>
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
2018	5	2	3	0	0	0	0	0

**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>
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
2018	40	26	2	12	1	0	0	1

**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>
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
2018	28	10	5	13	2	0	0	2

**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>
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
2018	116	31	18	67	0	0	0	0

**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>
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
2018	21	10	2	9	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>
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
2018	14	10	0	4	0	0	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>
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
2018	18	14	2	2	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>
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
2018	7	3	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>
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
2018	110	81	12	17	2	0	1	1

<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>
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
2018	156	87	18	51	0	0	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>
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
2018	4	3	0	1	0	0	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>
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
2018	39	32	0	7	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>
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
2018	136	61	7	68	0	0	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>
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
2018	28	10	3	15	0	0	0	0

**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>
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
2018	92	41	6	45	2	0	0	2

**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>
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
2018	36	9	2	25	2	0	0	2

**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>
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
2018	93	82	5	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>
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
2018	3	0	0	3	0	0	0	0

**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>
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
2018	8	6	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	4,303	44	3	2,414	185	956	270	430	1	0
09009	Andover	3,466	123	6	1,373	419	404	150	984	2	5
09030	Beverly	5,259	87	17	2,986	312	319	341	1,189	5	3
09038	Boxford	956	16	0	475	65	126	68	187	1	18
09071	Danvers	8,579	86	8	3,843	179	2,925	417	1,024	24	73
09092	Essex	471	28	0	147	42	109	35	107	3	0
09105	Georgetown	1,484	26	1	629	42	517	57	205	7	0
09107	Gloucester	5,464	77	2	3,480	169	552	521	626	14	23
09116	Groveland	537	16	1	321	21	59	38	77	3	1
09119	Hamilton	611	15	0	55	64	149	34	276	13	5
09128	Haverhill	7,613	161	6	4,207	287	932	725	1,275	5	15
09144	Ipswich	1,955	18	1	801	62	285	481	304	0	3
09149	Lawrence	6,683	150	13	3,164	555	491	357	1,938	5	10
09163	Lynn	12,987	335	6	7,755	275	1,281	1,163	2,017	142	13
09164	Lynnfield	2,021	80	8	1,209	113	248	69	289	5	0
09166	Manchester	1,003	8	2	490	70	244	56	130	1	2

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
09168	Marblehead	2,871	41	2	1,237	150	463	488	455	25	10
09180	Merrimac	908	34	3	559	47	75	83	90	16	1
09181	Methuen	8,398	116	2	6,153	333	589	248	915	2	40
09184	Middleton	2,094	25	2	1,033	76	242	213	499	3	1
09196	Nahant	613	15	1	324	33	133	39	63	2	3
09205	Newbury	451	18	0	215	46	41	50	72	9	0
09206	Newburyport	7	7	0	0	0	0	0	0	0	0
09210	North Andover	4,849	112	5	3,061	357	334	214	744	2	20
09229	Peabody	8,133	156	6	5,191	353	419	640	1,352	6	10
09252	Rockport	108	4	0	14	11	20	6	51	1	1
09254	Rowley	718	46	3	312	22	58	151	120	5	1
09258	Salem	7,420	136	6	3,985	443	752	340	1,605	152	1
09259	Salisbury	2,481	28	1	1,346	110	521	213	257	5	0
09262	Saugus	4,892	93	1	2,888	276	443	472	654	15	50
09291	Swampscott	2,194	46	5	1,234	125	280	116	370	6	12
09298	Topsfield	2,459	93	2	694	108	1,277	78	205	2	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
09320	Wenham	489	3	1	231	63	92	39	60	0	0
09324	West Newbury	507	14	0	250	23	103	38	74	5	0
	<b>Essex County</b>	<b>112,984</b>	<b>2,257</b>	<b>114</b>	<b>62,076</b>	<b>5,436</b>	<b>15,439</b>	<b>8,210</b>	<b>18,644</b>	<b>487</b>	<b>321</b>

\* Certified no reportable fires.

\*\*Non reporting department.

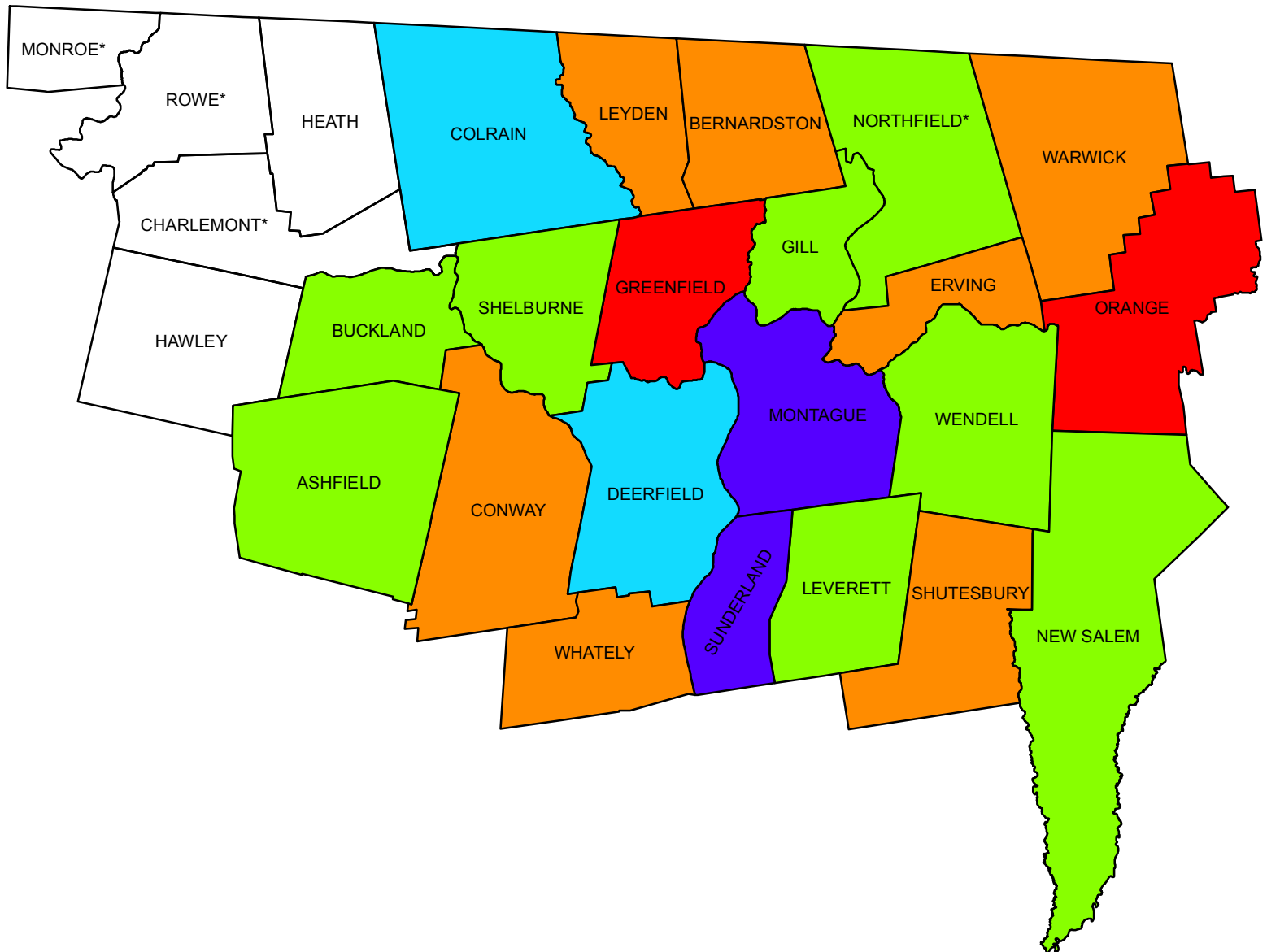
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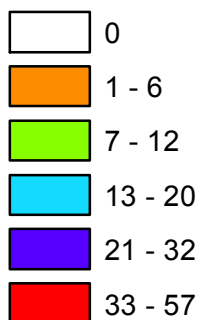
# Franklin County

## 2018 Fire Data Analysis

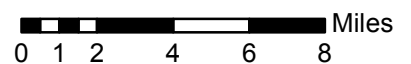
# Franklin County Fires 2018



## 2018 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2018

# Franklin County Fires in 2018

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## **295 Total Fires — 146 Structures, 39 Motor Vehicles & 110 Outside or Other Fires**

Franklin County ranked twelfth out of the fourteen Massachusetts counties in total fires. Franklin County fire departments reported 295 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 146 structure fires, 39 motor vehicle fires, 58 brush, tree or lawn fires, 23 outside rubbish fires, 18 special outside fires, and 11 unclassified fires caused three civilian deaths, eight civilian injuries, five fire service injuries and an estimated dollar loss of \$3.3 million. Franklin County's fires accounted for 1% of the 25,504 Massachusetts fires reported in 2018.

Twenty-six (26) of the 29, or 89.7%, 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 2017.

## **Structure & MV Fires Up**

The total number of reported fire incidents increased by 42, or 24%, from the 253 reported in 2017. Reported structure fires increased by 28 from the 118 reported during the previous year. Motor vehicle fires increased by 17 from the 22 reported in 2017. Outside and other fires decreased by three from the 113 reported the year before.<sup>1</sup> Franklin County was one of only three counties whose number of reported fires increased in 2018.

## **FRANKLIN COUNTY FIRES FROM 2014 TO 2018**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
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
2018	295	146	39	110	11	2	0	9

## **Fire and Fire Death Rates**

Franklin County had 4.1 fires per 1,000 population. That figure ranks Franklin County third in the state and above the state rate of 3.9 fires per 1,000 population. Franklin County had 0.4 fire deaths per 10,000 population ranking it first among Massachusetts counties and above the state rate of 0.07 fire deaths per 10,000 population.

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

Franklin County had three residents die in three fires in 2018.

- On April 30, 2018, at 9:08 p.m., the Orange Fire Department was called to a fatal smoking fire in a single-family home. The fire was determined to have been started by a cigarette in the living room. The victim, a 79-year old physically disabled

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<sup>1</sup> 2018 was another down year for brush fires statewide.

woman, was in the area of origin and her clothing ignited when she attempted to escape. No one else was injured at this fire. Alarms were not present. The building was not sprinklered. Damages from this fire were estimated to be \$52,900.

- On June 11, 2018, at 1:28 p.m., the Leyden Fire Department was called to a fatal fire in a single-family home of undetermined cause. The victim was a 59-year old woman. 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 estimated to be \$328,548.
- On October 19, 2018, at 8:14 a.m., the Orange Fire Department was called to a fatal smoking fire in a single-family home. The fire was determined to have been started by a cigarette in an unclassified function room. The victim was a 45-year old woman who was in the area of origin and involved in ignition. One (1) other civilian was injured at this fire. The home did not have any alarms or fire sprinklers. Damages from this fire were estimated to be \$144,400.

### **New Salem Has Franklin County's Largest Loss Fire**

Franklin County did not report any fires with an estimated loss greater than \$1 million. New Salem had the county's largest loss fire.

- On April 5, 2018, at 9:21 p.m., the New Salem Fire Department was called to a fire in a MA Department of Recreation and Conservation facility of undetermined cause. The most likely cause is either a woodstove or electrical event. No one was injured at this fire. Alarms were present but failed to operate because of the power failure. There were no sprinklers. Damages from this fire were estimated to be \$500,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Up**

The 146 structure fires caused all three civilian deaths, four civilian injuries, five fire service injuries, and an estimated dollar loss of \$3.2 million. These incidents represented 49% of Franklin County's reported fires in 2018. The average estimated dollar loss per structure fire was \$21,687. The total number of reported structure fires increased by 28, or 24%, from the 118 reported in 2017.

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

There were two reported structure arsons in 2018. Arson was indicated as the cause of 1% of the structure fires and 2% of Franklin County's structure fire dollar loss. The two structure arsons accounted for 18% of the Franklin County arson fires reported in 2018. The total number of reported structure arsons decreased by two from the four reported in 2017.

### **2 Structure Arsons Occurred in Residences**

Both of Franklin County's structure arsons in 2018 occurred in residential properties.

**BUILDING FIRES**

There were 145 building fires of different types in Franklin County in 2018. These 145 building fires accounted for 99.3% of the structure fires in Franklin County.

**94% of Franklin Building Fires Occurred in People's Homes**

One hundred and thirty-five (135), or 94%, of Franklin County's 145 building fires occurred in residential occupancies. Storage facilities had four fires. Public assembly properties, educational facilities, institutional facilities, mercantile or business properties and manufacturing facilities each had one fire. There was one fire in Franklin County in 2018 with an unclassified property use.

**RESIDENTIAL FIRES****Residential Building Fires Up**

There were 135 reported residential building fires in Franklin County in 2018. These 135 fires are an increase of 34, or 34%, from the 101 residential building fires reported in 2017.

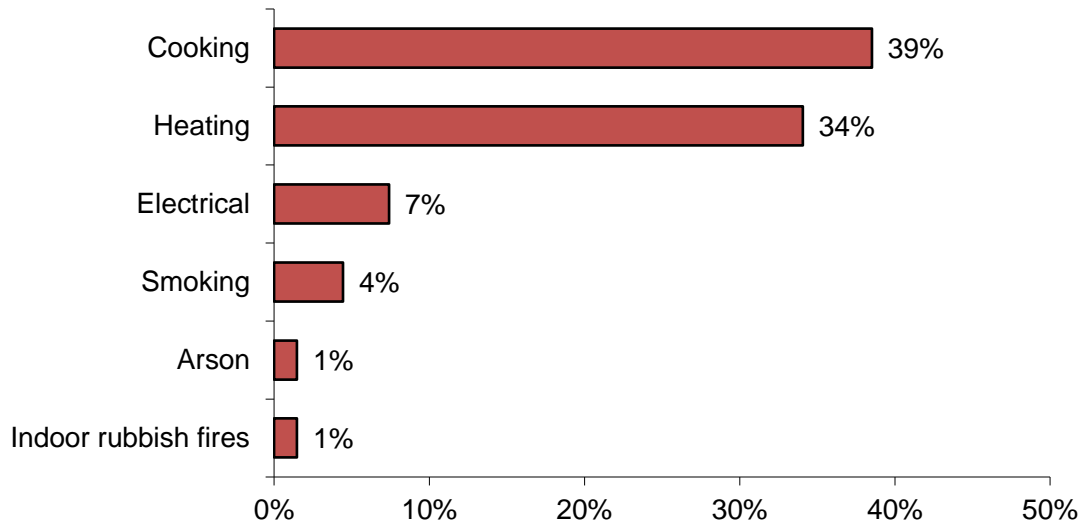
**1- & 2-Family Homes Accounted for Over 2/3 of Residential Building Fires**

The peak fixed property uses for residential building fires were one- & two-family homes, accounting for 67% of the building fires in Franklin County; 27% occurred in apartments; 1% in residential board and care facilities; 1% happened in rooming houses; and 4% happened in unclassified residential properties.

**Cooking Was Leading Cause of Residential Fires**

Cooking was the leading cause of residential fires in Franklin County in 2018. Thirty-nine percent (39%) 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 34% of the fires in people's homes. Electrical problems accounted for 7% of the residential building fires. Smoking caused 4% of these fires. Arsons and indoor rubbish fires each caused 1% of the fires in people's homes in Franklin County in 2018.

## 2018 Leading Causes of Fires in Franklin County Homes



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

Ninety-four (94), or 70%, of these fires were confined to a non-combustible container. Forty-eight (48) of the reported fires were cooking fires contained to a non-combustible container, accounting for 36% of residential building fires. Thirty-seven (37), or 27%, of all residential building fires reported in 2018 were fires confined to a chimney or flue. Seven (7), or 5%, were fires confined to a fuel burner or boiler malfunction. Two (2), or 1%, of these fires were indoor rubbish fires contained to a non-combustible container in Franklin County in 2018.

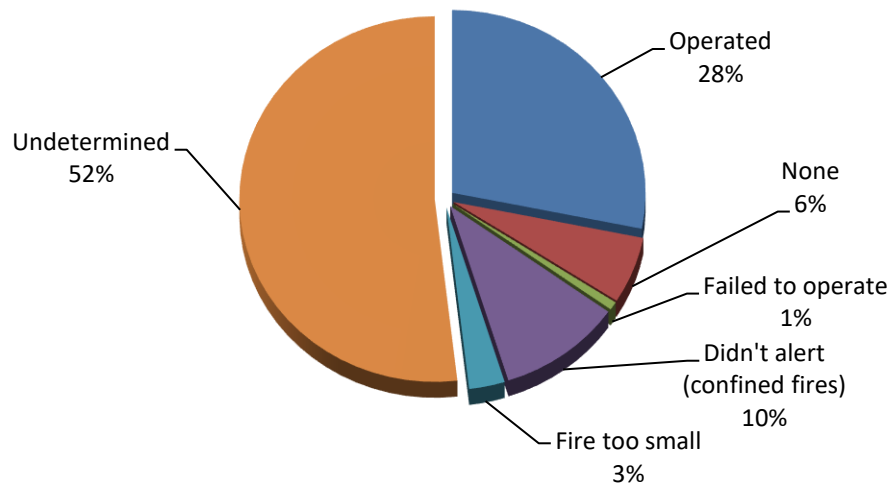
### Detector Operation Undetermined in Over 1/2 of Fires

Smoke or heat detectors operated and alerted the occupants in 38, or 28%, of the residential building fires. In 10% 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 6% 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 70 incidents, or 52%, of Franklin 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 Franklin County's Residential Structure Fires 2018



### VACANT BUILDINGS

#### 1% 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 1% of the total 145 building fires reported to MFIRS in 2018. Both fires occurred at vacant residences.

None of the vacant building fires in Franklin County in 2018 were determined to be intentionally-set.

### JUVENILE-SET FIRES

#### 1 Juvenile-set Fire

There was one reported juvenile-set fire in Franklin County in 2018. It was a brush fire.

### ARSONS

#### 11 Total Arsons — 2 Structure & 9 Other Arsons

Eleven (11), or 4%, of Franklin County's 295 fires were intentionally-set, or, for purposes of this analysis, arson. The two structure arsons and nine outside and other arsons caused one fire service injury and \$50,000 in estimated damages.



### All Arson Down Slightly

The number of arsons decreased by seven, or 39%, from the 18 reported in 2017. Structure arsons decreased by two from four in 2017. Motor vehicle arsons remained the same with none reported in both 2017 and 2018. Outside and other arsons decreased by five from the 14 reported in 2017.

### ALL INCIDENTS

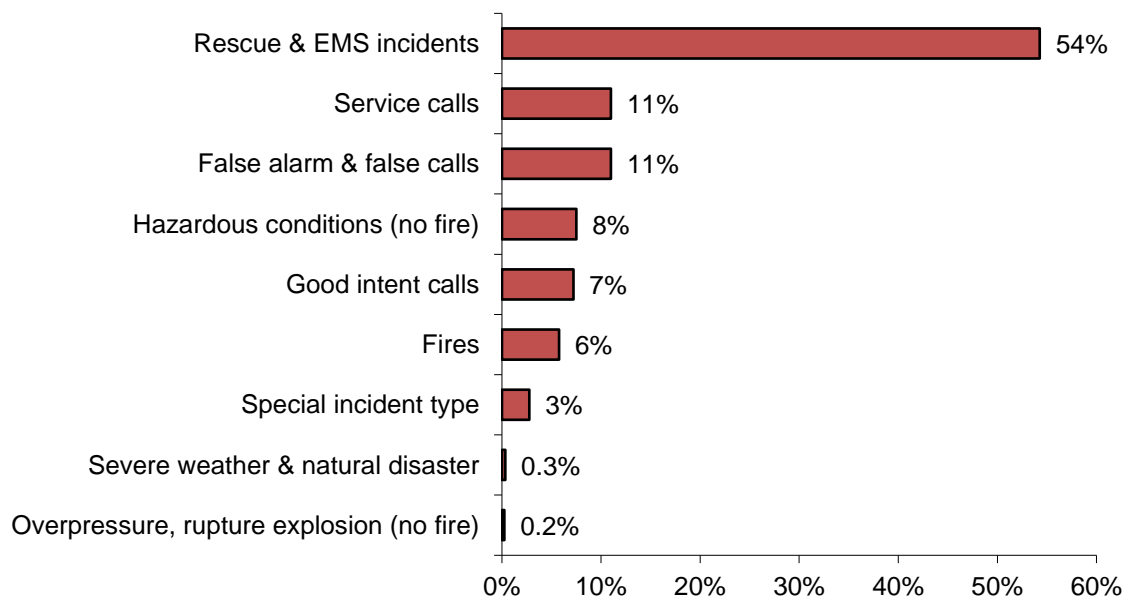
#### Rescue & EMS Calls Are 54% of All Reported Responses

In 2018, Franklin County fire departments reported 8,862 responses<sup>4</sup> to MFIRS. Of these 8,862 incidents, 8,351 non-fire calls were voluntarily reported.

Of these 8,351 non-fire calls, 4,811, or 54%, of all of the responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 986, or 11%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 951, or 11%, were reported false alarm or false calls; 666, or 8%, were reported hazardous condition calls with no fire; 640, or 7%, were reported good intent calls; 245, or 3%, were special incident type calls such as citizen complaints; 30, or 0.3%, were severe weather responses; and 22, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Five hundred and eleven (511), or 6%, of the total incidents submitted by Franklin County fire departments were fires.

### 2018 Responses by Incident Type



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

**Franklin County Fire Departments Gave Mutual Aid 838 Times**

In 2018, Franklin County fire departments reported coming to the aid of other fire departments 838 times. Of these 838 responses, 414, or 49%, were for rescue or EMS calls; 208, or 25%, were for fires; 109, or 13%, were for service calls such as cover assignments; 66, or 8%, were for good intent calls; 31, or 4%, were for hazardous conditions calls with no fire; five, or 1%, were for false alarms or false calls; two, or 0.2%, were for severe weather or natural disaster calls; two, or 0.2%, were overpressure, rupture explosions with no fire calls; and one, or 0.1%, was for a special incident type call.

**Franklin County Received Mutual Aid in 503 Incidents**

In 2018, Franklin County fire departments reported receiving aid from surrounding departments in 503 incidents. Of these 503 incidents, 393, or 78%, were rescue and emergency medical services calls; 73, or 15%, were for fires; 14, or 3%, were hazardous conditions calls with no fire; 11, or 2%, were service calls; seven, or 1%, were false alarm or false calls; four, or 1%, were good intent calls; and one, or 0.2%, was a special incident type call.

**Franklin County****Population: 71,372****4.1 Fires/1,000 Population****Total Fires: 295 \$3,347,277**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	146	49%	\$3,166,251
Vehicle Fires	39	13%	85,052
Other Fires	110	37%	95,974

3 Fatal Fires 10.17 Civilian Deaths/1,000 Fires  
 3 Civilian Deaths 0.42 Civilian Deaths/10,000 Population  
 8 Civilian Injuries 5 Fire Service Injuries

**Building Fires: 145****Residential Structure Fires: 135****Residential Structure Fires Confined to Non-Combustible Containers: 94****Unconfined Residential Structure Fires: 41**

3 Civilian Deaths 4 Civilian Injuries 5 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	90	67%	Operated	38	28%
Apartments	37	26%	Didn't operate	1	1%
Residential board & care	1	1%	None	8	6%
Rooming houses	1	1%	Fire too small	4	3%
Residential, other	6	4%	Didn't Alert (confined)	14	10%
			Undetermined	70	52%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	41%	Radiated heat from oper. eq.	6%	20%
Chimney or flue	27%	Arcing	4%	15%
Heating room or area	5%	Cigarette	3%	10%
Substructure area or space	3%	Hot ember or ash	1%	5%
Exterior balcony, unencl. porch	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	38%	Equipment unattended	17%	56%
Film, residue (creosote)	27%	Failure to clean	7%	22%
Flamm. or combustible liquid	5%	Too close to combustibles	5%	17%
Structural member, framing	3%	Mechanical fail/malfunct.	4%	15%
Structural component, finish	3%	Unspecif. short circuit arc	4%	12%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	37%	Unintentional	13%	41%
Chimney or flue	27%	Failure of eq. or heat source	6%	20%
None	21%	Intentional	1%	5%
Boiler, furnace, cent. heat. unit	5%	Act of nature	1%	2%
		Cause under investigation	4%	15%
		Undetermined	4%	15%

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

Alerted occupants	24%
Didn't alert occupants	15%
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	28	19	2	7
February	25	16	4	5
March	37	17	4	16
April	47	17	3	27
May	23	3	4	16
June	23	10	3	10
July	25	8	7	10
August	13	7	3	3
September	16	10	3	3
October	13	4	2	7
November	19	15	1	3
December	26	20	3	3

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	50	26	3	21
Monday	41	20	5	16
Tuesday	45	24	7	14
Wednesday	37	16	6	15
Thursday	34	18	4	12
Friday	47	25	7	15
Saturday	41	17	7	17

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	13	6	3	4
04:01 - 08:00	17	10	2	5
08:01 - 12:00	73	36	11	26
12:01 - 16:00	67	22	13	32
16:01 - 20:00	79	46	7	26
20:01 - 00:00	46	26	3	17

### **Motor Vehicle Fires**

Total: 39

Automobiles: 30 (77%)

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

## Arson Fires

**Total Arsons: 11**

**Dollar loss: \$50,000**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	2	1%	18%	\$50,000
Vehicle Arsons	0	0%	0%	0
Other Arsons	9	8%	82%	0

0.03 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.13 Other arsons/1,000 population

1 Fire Service Injury

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
00:01 - 04:00	1	50%			
16:01 - 20:00	1	50%			

Other Arsons	#	%
12:01 - 16:00	3	33%
16:01 - 20:00	3	33%
08:01 - 12:00	2	22%

Peak Fixed Property Uses for Structure Arsons	#	%
1 or 2-Family home	1	50%
Residential, other	1	50%



<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>
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
2018	14	5	2	7	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>
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
2018	3	1	1	1	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>
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
2018	11	0	6	5	1	0	0	1

<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>
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
2018	9	4	1	4	0	0	0	0



<b>Erving</b>						<b>Population: 1,800</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>
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
2018	5	3	0	2	0	0	0	0

<b>Gill</b>						<b>Population: 1,500</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>
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
2018	8	4	2	2	0	0	0	0

<b>Greenfield</b>						<b>Population: 18,745</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>
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
2018	57	29	6	22	2	1	0	1

<b>Hawley</b>						<b>Population: 337</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>
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
2018 <sup>11</sup>	0	0	0	0	0	0	0	0

<sup>11</sup> In 2018 Hawley did report 23 total incidents.

**Heath** **Population: 706**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2014	7	4	0	3	0	0	0	0
2015	5	4	0	1	0	0	0	0
2016	5	2	1	2	0	0	0	0
2017	3	2	1	0	0	0	0	0
2018 <sup>12</sup>	0	0	0	0	0	0	0	0

**Leverett** **Population: 1,851**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2014	2	1	1	0	0	0	0	0
2015	12	9	1	2	1	1	0	0
2016	10	6	0	4	2	0	0	2
2017	7	4	1	2	2	1	0	1
2018	12	4	2	6	2	0	0	2

**Leyden** **Population: 711**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2014	3	2	0	1	0	0	0	0
2015	5	2	0	3	1	0	0	1
2016	3	2	0	1	0	0	0	0
2017	Fire Department in Good Standing, Certified No Reportable Fires							
2018	4	3	1	0	0	0	0	0

**Monroe** **Population: 121**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
2014	Non-Reporting Community							
2015	Non-Reporting Community							
2016	Non-Reporting Community							
2017	Non-Reporting Community							
2018	Non-Reporting Community							

<sup>12</sup> IN 2018 Heath did report 20 total incidents.

**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>
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
2018	8	4	0	4	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>
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
2018	20	11	1	8	0	0	0	0

**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>
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
2018	7	3	1	3	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>
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
2018	10	6	0	4	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>
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
2018	46	24	8	14	0	0	0	0

**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>
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							
2018	Non-Reporting Community							

**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>
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							
2018	8	4	2	2	0	0	0	0

***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>
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
2018	3	2	0	1	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>
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
2018	4	3	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>
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
2018	32	20	2	10	1	0	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>
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
2018	1	1	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>
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
2018	7	5	1	1	1	0	0	1

Whately					Population: 1,496			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
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
2018	4	0	1	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
11013	Ashfield	184	10	0	104	38	16	1	14	1	0
11029	Bernardston	290	31	0	173	25	21	16	22	2	0
11047	Buckland	49	8	0	5	17	8	8	3	0	0
11053	Charlemont**	0	0	0	0	0	0	0	0	0	0
11066	Colrain	269	29	0	156	38	20	7	14	3	2
11068	Conway	43	9	0	3	22	3	0	6	0	0
11975	Deerfield	149	15	0	33	9	15	8	69	0	0
11091	Erving	199	23	2	103	14	26	11	19	0	1
11106	Gill	109	12	1	8	11	36	7	27	1	6
11114	Greenfield	2,791	78	7	1,654	222	236	247	339	4	4
11129	Hawley	23	1	0	14	6	0	1	1	0	0
11130	Heath	20	1	0	11	0	4	3	1	0	0
11154	Leverett	185	21	0	110	13	9	14	18	0	0
11156	Leyden	14	5	0	2	2	2	0	1	2	0
11190	Monroe**	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 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
11192	Montague Center	85	12	0	7	12	8	42	3	0	1
11204	New Salem	122	18	0	63	16	7	8	10	0	0
11217	Northfield	164	12	0	25	30	46	4	44	3	0
11223	Orange	2,231	69	3	1,452	56	280	75	72	8	216
11253	Rowe**	0	0	0	0	0	0	0	0	0	0
11990	Shelburne Ctr	8	8	0	0	0	0	0	0	0	0
11989	Shelburne Falls	84	11	2	5	6	13	10	37	0	0
11272	Shutesbury	43	10	0	19	1	9	2	2	0	0
11976	South Deerfield	237	26	3	43	39	13	38	75	0	0
11289	Sunderland	163	38	0	38	19	10	12	45	1	0
11984	Turners Falls	1,302	43	4	738	64	194	124	117	3	15
11312	Warwick	1	1	0	0	0	0	0	0	0	0
11319	Wendell	60	12	0	34	5	3	0	6	0	0
11337	Whately	37	8	0	11	1	7	2	6	2	0
<b>Total</b>	<b>Franklin County</b>	<b>8,862</b>	<b>511</b>	<b>22</b>	<b>4,811</b>	<b>666</b>	<b>986</b>	<b>640</b>	<b>951</b>	<b>30</b>	<b>245</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

## 2018 Fire Data Analysis



# Hampden County Fires in 2018

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## **1,547 Total Fires — 913 Structures, 217 Vehicles & 417 Other Fires**

Hampden County ranked eighth out of the fourteen Massachusetts counties in total reported fires. Hampden County fire departments reported 1,547 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 913 structure fires, 217 motor vehicle fires, 183 brush, tree or lawn fires, 105 outside rubbish fires, 52 special outside fires, four cultivated vegetation or crop fires, and 73 other fires caused eight civilian fire deaths, 22 civilian injuries, 5362 fire service injuries and an estimated dollar loss of \$13 million. Hampden County's 1,547 fires accounted for 6% of the 25,504 fire incidents reported to MFIRS in 2018.

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 2018.

## **All Fires Down**

The total number of reported fire incidents decreased by 105 from the 1,652 reported in 2017. Reported structure fires decreased by 34 from the 947 reported during the previous year. Motor vehicle fires decreased by seven from the 224 reported during 2017. Outside and other fires decreased by 64 from the 481 reported the year before.<sup>1</sup>

## **HAMPDEN COUNTY FIRES FROM 2014 TO 2018**

<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>
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	1,652	947	224	481	60	18	11	31
2018	1,547	913	217	417	78	28	13	37

## **Fire and Fire Death Rates**

Hampden County had 3.3 fires per 1,000 population. That figure ranks Hampden County tied for sixth in the state and just below the state rate of 3.9 fires per 1,000 population. Hampden County also had 0.17 fire deaths per 10,000 population ranking it second among Massachusetts counties and above the state rate of 0.07 fire deaths per 10,000 population.

## **8 People Died in 5 Hampden County Fires**

In 2018, Hampden County had five fatal fires that killed eight people.

- On March 18, 2018, at 7:24 a.m., the Springfield Fire Department was dispatched to a fatal fire in a 20-unit apartment building. The victims, a 33-year old man and his two sons, ages one and two-years old, were trapped. The fire began in the second floor

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<sup>1</sup> 2018 was another down year for brush fires throughout the state.

apartment where the victims lived. Investigators determined that another sibling using matches started the fire. Two (2) firefighters were injured at this fire. Alarms were present and operated. The building did not have any sprinklers. Damages from this fire were estimated to be \$60,000.

- On March 22, 2018, at 1:59 a.m., the Three Rivers Fire Department in Palmer was called to a fatal smoking fire in a 6-unit apartment building. The fire was started by a cigarette igniting an upholstered chair that the victim had set up on his rear porch. The victim was a 66-year old man who was in his apartment when the fire started. Smoke alarms were present and operated. There were no sprinklers. Damages from this fire were estimated to be \$246,700.
- On May 2, 2018, at 6:13 a.m., the Chicopee Fire Department was called to a fatal electrical fire in a single-family home. The fire began in the living room when a lamp cord was buried underneath material. Resistance heating over time started the fire. The victim, a 70-year old woman, was overcome while she attempted to escape. This was hampered due to the excessive clutter throughout the home. 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 \$95,000.
- On September 29, 2018, at 6:22 a.m., the Southwick Fire Department was dispatched to a fire in a single-family home of undetermined cause. The most likely cause was an electrical problem in the basement. The victims, a 29-year old man and a 25-year old woman were asleep at the time of the fire and were overcome while trying to escape. There were no other injuries associated with 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 \$475,000.
- On October 19, 2018, at 10:11 p.m., the Chicopee Fire Department was called to a fatal smoking fire in a 4-unit apartment building. The fire was started by a cigarette in the living room. The victim, 69-year old woman, was intimately involved with the ignition of the fire. She was transported to a local hospital and then transferred to a Boston hospital where she succumbed to her injuries. There were no other injuries at this fire. Firefighters had difficulty effecting the rescue because of excessive clutter. It was undetermined if alarms were present. The home did not have sprinklers. Damages from this fire were estimated to be \$100,000.

### **Westfield Had Largest Loss Fire in Hampden County**

There were two reported large loss fires in Hampden County in 2018 with a dollar greater than \$1 million. These two fires accounted for a combined dollar loss of \$3 million and 23% of the county's total dollar loss for 2018.

- On April 22, 2018, at 1:49 p.m., the Westfield Fire Department was dispatched to a smoking fire in a 22-unit apartment building. The fire began on the exterior of the building. No one was injured at this fire. Alarms were present and alerted the occupants. The building did not have sprinklers. Damages from this fire were estimated to be \$2 million.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 913 structure fires caused all eight of the civilian deaths, 15 civilian injuries, 35 fire service injuries and an estimated dollar loss of \$11 million. These incidents represented 59% of Hampden County's reported fires in 2018. The average estimated dollar loss per structure fire was \$12,058. The total number of reported structure fires decreased by 34, or 4%, from the 947 reported in 2017.

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

The 28 structure arsons caused one civilian injury, one fire service injury and an estimated dollar loss of \$174,500. Arson was indicated as the cause of 3% of the structure fires and 2% of Hampden County's structure fire dollar loss. The 28 structure arsons accounted for 36% of the Hampden County arson fires reported in 2018. The total number of reported structure arsons increased by 10, or 56%, from the 18 reported in 2017.

### **89% of Structure Arsons Occurred in Residences**

Eighty-nine percent (89%) of Hampden County's 28 structure arsons occurred in residential occupancies. Seven percent (7%) occurred in special properties. Four percent (4%) occurred in storage facilities.

## **BUILDING FIRES**

There were 908 building fires of different types in Hampden County in 2018. These 908 building fires accounted for 99.5% of all structure fires in Hampden County.

### **83% of Hampden Building Fires Occurred in People's Homes**

Seven hundred and fifty-one (751), or 83%, of Hampden County's 908 building fires occurred in residential occupancies. Mercantile and business properties experienced 38 fires. Thirty-one (31) fires took place in public assembly properties, including restaurants and churches. Special properties had 23 fires. Hospitals, prisons, and other institutional buildings experienced 22 fires. Seventeen (17) fires took place in storage properties. Twelve (12) fires took place in manufacturing and processing facilities. Nine (9) building fires took place in educational properties; and five fires happened at industrial facilities.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Down**

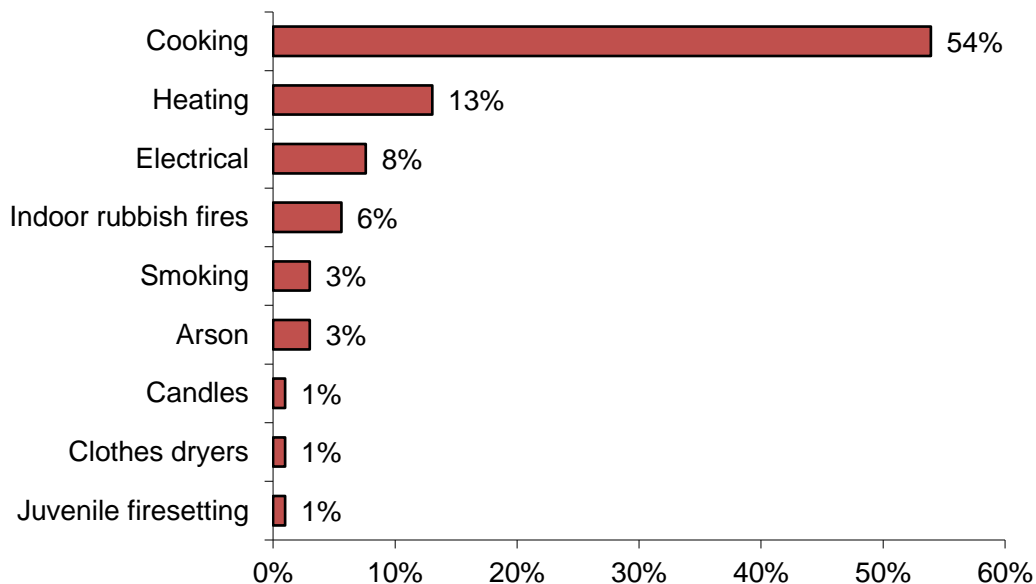
There were 751 reported residential building fires in Hampden County in 2018. These 751 fires are a decrease of 36, or 5%, from the 787 residential building fires reported in 2017.

**1 & 2-Family Homes Accounted for 56% of Residential Building Fires**

The peak fixed property uses for residential building fires were 1- & 2-family homes, accounting for 56%, of the building fires in Hampden County; 37% occurred in apartments; 1% happened in residential board and care facilities; 1% happened in dormitories; 1% occurred in rooming houses; and 1% happened in hotels or motels. Sixteen (16), or 2%, of the residential building fires in Hampden County occurred in unclassified residential buildings.

**Cooking Causes 54% of Residential Fires**

The leading cause of residential building fires in Hampden County was unattended cooking and other unsafe cooking practices, accounting for 54% of these fires. Heating was the second leading cause of fires in people's homes, accounting for 13% of these fires. Electrical problems caused 8%. Indoor rubbish fires caused 6%. Smoking and arson each started 3% of these fires. Candles, clothes dryers and juvenile-set fires each caused 1% of residential fires in Hampden County in 2018.

**2018 Leading Causes of Fires  
in Hampden County Homes**

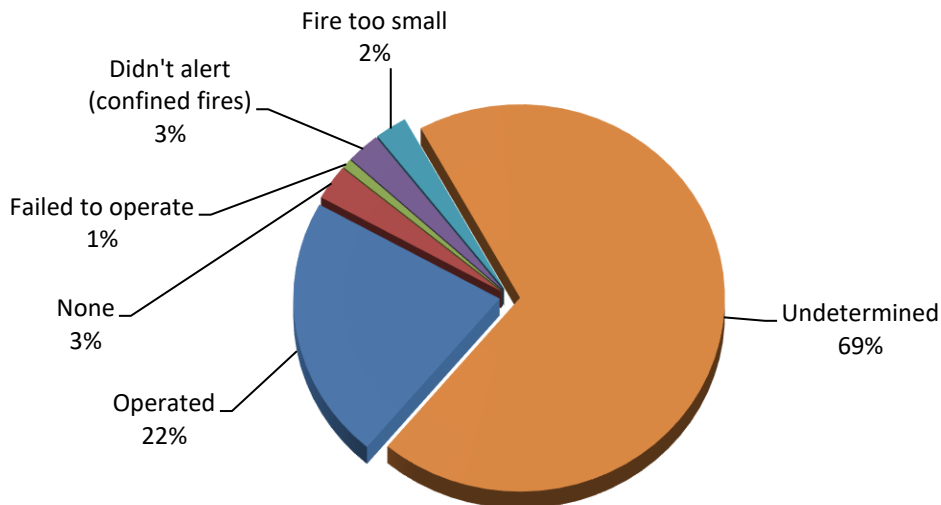
### 72% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

Five hundred and eleven (511), or 74% of all residential building fires, were reported as confined to non-combustible containers in 2018. Three hundred and seventy-eight (378) of the reported fires were cooking fires contained to a non-combustible container, accounting for 50% of residential building fires. Forty-seven (47), or 6%, of all residential building fires reported in 2018 were fires confined to a chimney. Forty-three (43), or 6%, were fires confined to a fuel burner or boiler malfunction. Forty-two (42), or 6%, of these fires were contained rubbish fires; and one, or less than 1%, was a confined incinerator fire.

### Detector Operation Undetermined in Over 2/3 of Fires

Smoke or heat detectors operated and alerted the occupants in 165, or 22%, 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 3% 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 519 incidents, or 69%, of Hampden County's residential building fires.

### Detector Status in Hampden County's Residential Structure Fires 2018



<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.

**1 Failed Detector Had Dead Batteries**

Of the six fires where smoke detectors were present but failed to operate, one, or 17%, failed because of dead batteries. In another fire, or 17%, the detector failed because of a power failure, shut off or disconnect. Four (4), or 67%, of the detectors failed for unclassified or undetermined reasons.

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

Hampden County reported 21 fires that occurred in buildings that were vacant, under construction or demolition. This represents 2% of the total 908 building fires reported to MFIRS in 2018. Fourteen (14) fires occurred in vacant residential properties. Two (2) fires were in manufacturing or processing facilities. Public assembly properties, institutional facilities, mercantile and business properties, storage facilities, and special properties each accounted for one vacant building fire.

None of the vacant building fires in Hampden County in 2018 were determined to be intentionally-set.

**JUVENILE-SET FIRES****9 Juvenile-set Fires**

There were nine reported juvenile-set fires in Hampden County in 2018. The four structure fires, one brush fire, two outside rubbish fires, and two unclassified fires caused three civilian deaths, one civilian injury and three fire service injuries.

**ARSONS****78 Total Arsons — 28 Structures, 13 Vehicles & 37 Other Arsons**

Seventy-eight (78), or 5%, of Hampden County's 1,547 fires were considered intentionally-set, or, for purposes of this analysis, arson. The 28 structure arsons, 13 motor vehicle arsons and 37 outside and other arsons caused one civilian injury, one fire service injury and an estimated dollar loss of \$221,100.

**All Arson Up**

The total number of reported arson fires increased by 18 from the 60 reported in 2017. Structure arsons increased by 10 from the 18 reported in 2017. Motor vehicle arsons increased by two from the 11 reported in 2017. Outside and other fires increased by six from the 31 reported in 2017.



## ALL INCIDENTS

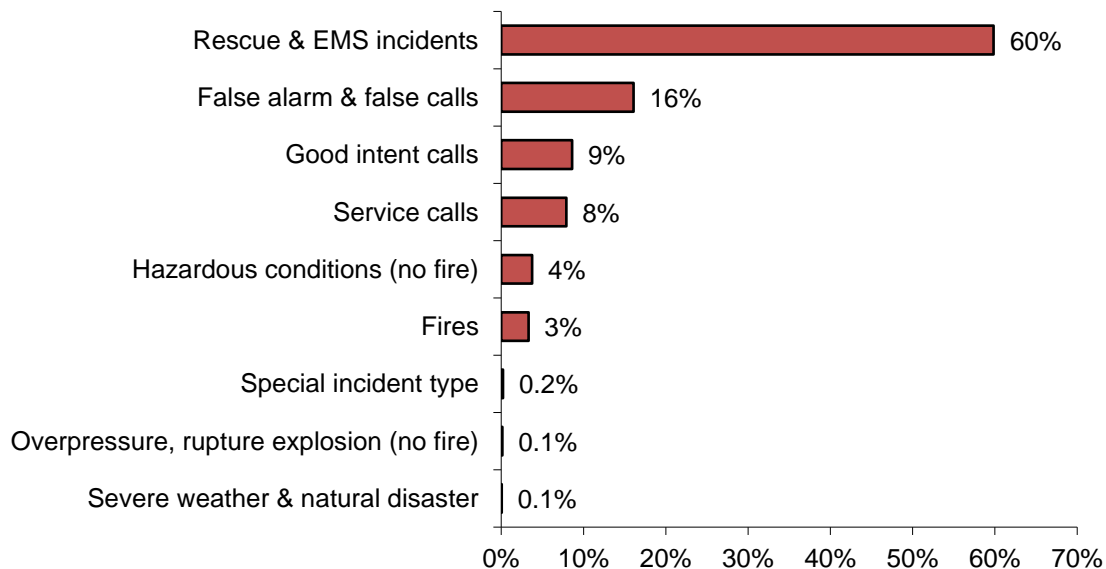
### Rescue & EMS Calls Are 60% of All Reported Responses

In 2018, fire departments in Hampden County reported 50,221 responses<sup>4</sup> to MFIRS. Of these 50,221 incidents, 48,556 non-fire calls were voluntarily reported.

Of these 48,556 non-fire calls, 30,053, or 60% of all reported responses in 2018 were reported rescue and emergency medical services (EMS) calls; 8,050, or 16%, were reported false alarm or false calls; 4,326, or 9%, were reported good intent calls; 3,984, or 8%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 1,894, or 4%, were reported hazardous condition calls with no fire; 118, or 0.2%, were special incident type calls such as citizen complaints; 74, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 27, or 0.1%, were severe weather responses.

One thousand six hundred and sixty-five (1,665), or 3%, of the total responses submitted by Hampden County fire departments were fires.

### 2018 Responses by Incident Type



### Hampden County Fire Departments Gave Mutual Aid 626 Times

In 2018, Hampden County fire departments reported coming to the aid of other fire departments 626 times. Of these 626 responses, 316, or 50%, were for rescue or EMS calls; 118, or 19%, were for fires; 103, or 16%, were for service calls such as cover assignments; 49, or 8%, were for good intent calls; 22, or 4%, were for false alarms or

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

false calls; 12, or 2%, were for hazardous conditions calls with no fire; three, or 0.5%, were special incident types; and three, or 0.5% were overpressure, rupture explosions with no fire calls.

**Hampden County Received Mutual Aid in 392 Incidents**

In 2018, Hampden County fire departments reported receiving aid from surrounding departments in 392 incidents. Of these 392 incidents, 284, or 72%, were rescue and emergency medical services calls; 68, or 17%, were for fires; 18, or 5%, were false alarms or false calls; 10, or 3%, were hazardous conditions calls with no fire; seven, or 2%, were good intent calls; four, or 1%, were service calls; and one, or 0.3%, was an overpressure, rupture explosion with no fire call.

**Hampden County****Population: 463,490****3.3 Fires/1,000 Population**

**Total Fires: 1,547 \$12,991,890**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	913	59%	\$11,009,180
Vehicle Fires	217	14%	1,540,560
Other Fires	417	27%	442,150

5 Fatal Fires 5.17 Civilian Deaths/1,000 Fires  
 8 Civilian Deaths 0.17 Civilian Deaths/10,000 Population  
 22 Civilian Injuries 36 Fire Service Injuries

**Building Fires: 908****Residential Structure Fires: 751****Residential Structure Fires Confined to Non-Combustible Containers: 511****Unconfined Residential Structure Fires: 240**

8 Civilian Deaths 14 Civilian Injuries 30 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	424	56%	Operated	165	22%
Apartments	278	37%	Didn't operate	126	1%
Hotels or motels	11	1%	None	22	3%
Rooming houses	9	1%	Fire too small	19	2%
Residential board & care	8	1%	Didn't alert (confined)	20	3%
Dormitories	5	1%	Undetermined	519	69%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	58%	Rad., cond. heat/oper. eq.	3%	10%
Heating room or area	6%	Arcing	3%	10%
Chimney, flue	6%	Heat from operating equip.	2%	6%
Bedroom	3%	Hot ember or ash	2%	5%
Substructure area, crawl space	2%	Cigarette	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	52%	Equipment unattended	10%	32%
Flammable or combust. liquid	6%	Misuse of mat./prod. other	6%	19%
Film, residue (creosote)	6%	Abandoned materials	4%	14%
Rubbish, trash, waste	6%	Electrical fail/malf., other	4%	11%
Structural member, framing	2%	Failure to clean	3%	10%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	54%	Unintentional	12%	49%
None	23%	Failure of eq./heat source	4%	15%
Boiler, furnace, cent. heat unit	6%	Intentional	1%	4%
Chimney or flue	6%	Act of Nature	1%	2%
Fan	1%	Undetermined	2%	10%
		Cause under investigation	5%	20%

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

Alerted occupants	10%
Didn't alert occupants	4%
Undetermined	86%

<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	151	110	24	17
February	94	69	15	10
March	145	92	21	32
April	165	88	20	57
May	157	75	17	65
June	158	62	18	78
July	155	72	26	57
August	106	51	23	32
September	109	70	15	24
October	89	63	11	15
November	120	89	14	17
December	90	72	13	13

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	213	128	25	60
Monday	243	142	41	60
Tuesday	215	119	36	60
Wednesday	222	128	32	62
Thursday	208	129	24	55
Friday	204	123	35	46
Saturday	242	144	24	74

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 – 04:00	115	63	30	22
04:01 – 08:00	113	70	17	26
08:01 – 12:00	231	154	25	52
12:01 – 16:00	412	208	62	142
16:01 – 20:00	456	286	46	124
20:01 – 00:00	220	132	37	51

### **Motor Vehicle Fires**

Total: 217

Automobiles: 179 (82%)

13, or (7%), of the automobile fires considered intentionally-set.

## Arson Fires

**Total Arsons: 78**

**Dollar loss: \$221,100**

### 0.13 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	28	3%	36%	\$174,500
Vehicle Arsons	13	6%	17%	46,500
Other Arsons	37	9%	47%	100

0.06 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	#	%
16:01 - 20:00	8	29%	00:01 - 04:00	8	62%
12:01 - 16:00	7	25%	20:01 - 00:00	3	23%
08:01 - 12:00	5	18%			

Other Arsons	#	%
16:00 - 20:00	18	49%
12:01 - 16:00	6	16%
20:01 - 00:00	5	14%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartment buildings	14	50%
1- and 2-Family homes	10	36%

**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>
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
2018	66	33	12	21	0	0	0	0

**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>
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
2018	12	6	4	2	1	0	0	1

**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>
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
2018	12	6	3	3	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>
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
2018	5	4	1	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>
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
2018	160	80	25	55	3	1	2	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>
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
2018	28	19	1	8	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>
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
2018	10	8	2	0	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>
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
2018	40	28	0	12	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>
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
2018	11	9	2	0	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>
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
2018	301	211	25	65	15	5	3	7

**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>
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
2018	32	12	8	12	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>
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
2018	57	29	12	16	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>
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
2018	26	14	3	9	2	0	0	2

**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>
2014	Non-Reporting Community							
2015	Non-Reporting Community							
2016	Non-Reporting Community							
2017	1	1	0	0	0	0	0	0
2018	2	2	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>
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
2018	4	3	0	1	0	0	0	0

**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>
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
2018	35	16	8	11	0	0	0	0

**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>
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
2018	11	5	4	2	0	0	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>
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
2018	6	2	1	3	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>
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
2018	31	18	2	11	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>
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	76	113	20	8	7	5
2018	483	296	72	115	42	20	5	17

**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>
2014	Fire Department in Good Standing, Certified No Reportable Fires							
2015	Non-Reporting Community							
2016	Non-Reporting Community							
2017	Non-Reporting Community							
2018	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>
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
2018	3	2	0	1	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>
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
2018	93	44	14	35	7	1	3	3

**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>
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
2018	72	39	10	23	3	0	0	3

<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>
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
2018	47	27	8	12	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
13005	Agawam	2,514	67	2	1,624	52	352	122	274	1	20
13033	Blandford	103	14	0	63	12	3	6	4	0	1
13987	Bondsville	75	15	1	5	7	10	5	31	0	1
13043	Brimfield	416	26	1	292	12	23	18	43	1	0
13059	Chester	75	6	0	51	11	3	1	3	0	0
13061	Chicopee	6,413	160	2	3,436	141	832	841	967	1	33
13085	East Longmeadow	2,169	28	0	1,473	103	134	91	337	1	2
13112	Granville	196	16	0	118	23	9	9	21	0	0
13120	Hampden	544	43	1	398	12	19	13	56	0	2
13135	Holland	205	14	0	137	13	12	9	20	0	0
13137	Holyoke	4,150	305	4	1,635	171	236	669	1,117	1	12
13159	Longmeadow	2,752	38	3	1,838	97	299	124	351	2	0
13161	Ludlow	964	60	1	410	47	99	103	241	0	3
13191	Monson	202	32	0	42	27	40	19	39	0	3
13194	Montgomery	67	5	0	48	11	0	0	3	0	0
13986	Palmer #1	436	47	6	40	64	91	59	128	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	70	14	0	24	7	5	4	16	0	0
13279	Southwick	294	38	0	37	42	46	36	86	8	1
13281	Springfield	14,629	483	41	8,542	714	864	1,342	2,624	6	13
13988	Three Rivers	162	18	1	18	8	41	22	52	1	1
13297	Tolland**	0	0	0	0	0	0	0	0	0	0
13306	Wales	194	6	0	131	7	26	0	24	0	0
13325	West Springfield	7,482	96	5	6,175	141	300	224	520	3	18
13329	Westfield	3,180	79	4	1,477	115	306	419	771	2	7
13339	Wilbraham	2,929	55	2	2,039	57	234	190	352	0	0
<b>Hampden County</b>		<b>50,221</b>	<b>1,665</b>	<b>74</b>	<b>30,053</b>	<b>1,894</b>	<b>3,984</b>	<b>4,326</b>	<b>8,080</b>	<b>27</b>	<b>118</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.

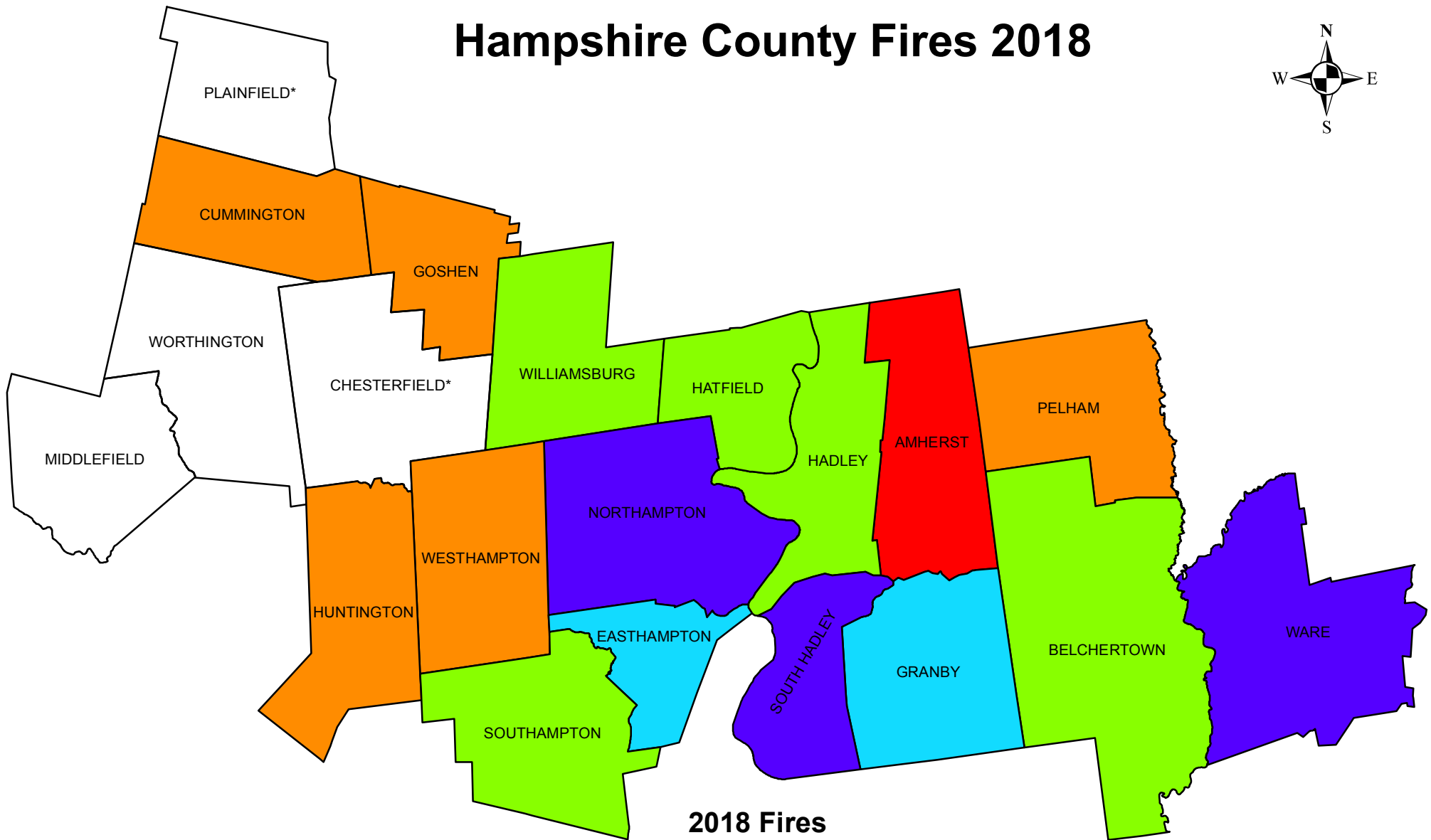


# Hampshire County

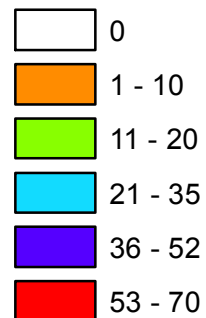
## 2018 Fire Data Analysis



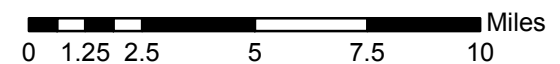
# Hampshire County Fires 2018



## 2018 Fires



\*Non-reporting Department



Massachusetts Fire Incident Reporting System 2018



**MFIRS**  
Massachusetts Fire Incident Reporting System

# Hampshire County Fires in 2018

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## **351 Total Fires — 180 Structures, 52 Vehicles & 119 Other Fires**

Hampshire County ranked eleventh out of the fourteen Massachusetts counties in total reported fires. Hampshire County fire departments reported 351 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 180 structure fires, 52 motor vehicle fires, 55 brush, tree or lawn fires, 26 outside rubbish fires, 18 special outside fires, one cultivated vegetation or crop; and 19 other fires caused two civilian deaths, five civilian injuries, three fire service injuries and an estimated dollar loss of \$2.1 million. Hampshire County's 351 total reported fires accounted for 1% of the 25,504 fires reported to MFIRS in 2018.

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 2018.

## **Motor Vehicle Fires Up**

The total number of reported fire incidents decreased by 49 from the 400 reported in 2017. Reported structure fires decreased by 24 from the 204 reported during the previous year. Motor vehicle fires increased by 11 from 41 the year before. The number of outside and other fires decreased by 36 from 155 in 2017.<sup>1</sup>

## **HAMPSHIRE COUNTY FIRES FROM 2014 TO 2018**

	<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>Year</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>
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	400	204	41	155	26	6	1	19
2018	351	180	52	119	23	2	1	20

## **Fire and Fire Death Rates**

Hampshire County had 2.2 fires per 1,000 population. That figure ranks Hampshire County thirteenth in the state and below the state rate of 3.9 fires per 1,000 population. Hampshire County also had 0.13 fire deaths per 10,000 population, ranking it fourth among Massachusetts counties and below the state rate of 0.07 fire deaths per 10,000 population.

## **Hampshire County Has 2 Fire Deaths in 2018**

There were two fatal fires reported in Hampshire County in 2018. These two fatal fires caused two deaths.

- On March 10, 2018, at 9:17 p.m., the Hatfield Fire Department was called to a fatal outside fire in a corn field. The victim was the only thing burning. The fire is believed to be a homicide. The victim, a 44-year old man, had been shot, doused in an

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

ignitable liquid and-set on fire and was still alive while he was transported from Northampton to the corn field in Hatfield. Multiple people have been arrested and charged in connection to this case.

- On November 8, 2018, at 3:40 p.m., the Amherst Fire Department was called to a fatal smoking fire in an 80-unit apartment building. The fire was started by a cigarette in the living room. The victim was a 57-year old woman who was intimately involved in the ignition of the fire. No one else was 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 \$120,000.

### **Cummington Has County's Largest Loss Fire**

There were no reported fires in Hampshire County with a dollar loss greater than \$1 million in 2018. The largest loss fire was reported by Cummington.

- On December 26, 2018, at 10:18 p.m., the Cummington Fire Department was dispatched to a fire of undetermined cause in a single-family home under construction. No one was injured at this fire. It was undetermined if alarms were present. The building was not sprinklered. Damages from this fire were estimated to be \$390,000.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 180 structure fires caused one civilian death, five civilian injuries, three fire service injuries and an estimated dollar loss of \$1.8 million. These incidents represent 51% of Hampshire County's reported fires in 2018. The average estimated dollar loss per structure fire was \$10,127. The total number of reported structure fires decreased by 24, or 12%, from the 204 reported in 2017.

### **2 Structure Arsons**

There were two structure arsons reported in 2018. Arson was indicated as the cause of 1% of the structure fires and none of Hampshire County's structure fire dollar loss. The two structure arsons accounted for 9% of the Hampshire County arson fires reported in 2018. The total number of reported structure arsons decreased by four, or 67%, from six reported in 2017.

## **BUILDING FIRES**

There were 180 building fires of different types in Hampshire County in 2018. These 180 building fires accounted for 100% of the structure fires in Hampshire County.

### **83% of Hampshire Building Fires Occurred in People's Homes**

One hundred and forty-nine (149), or 83%, of Hampshire County's 180 building fires occurred in residential occupancies. Storage facilities and educational properties each experienced six fires. Five (5) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties also had five fires. Industrial

facilities had four fires. Manufacturing and processing facilities and special properties each experienced two fires. Institutional facilities had one fire in Hampshire County in 2018.

## RESIDENTIAL FIRES

### Residential Building Drop

There were 149 reported residential building fires in Hampshire County in 2018. This is a decrease of 19, or 11%, from the 168 reported in 2017.

### 1- & 2-Family Homes Accounted for 53% of Residential Building Fires

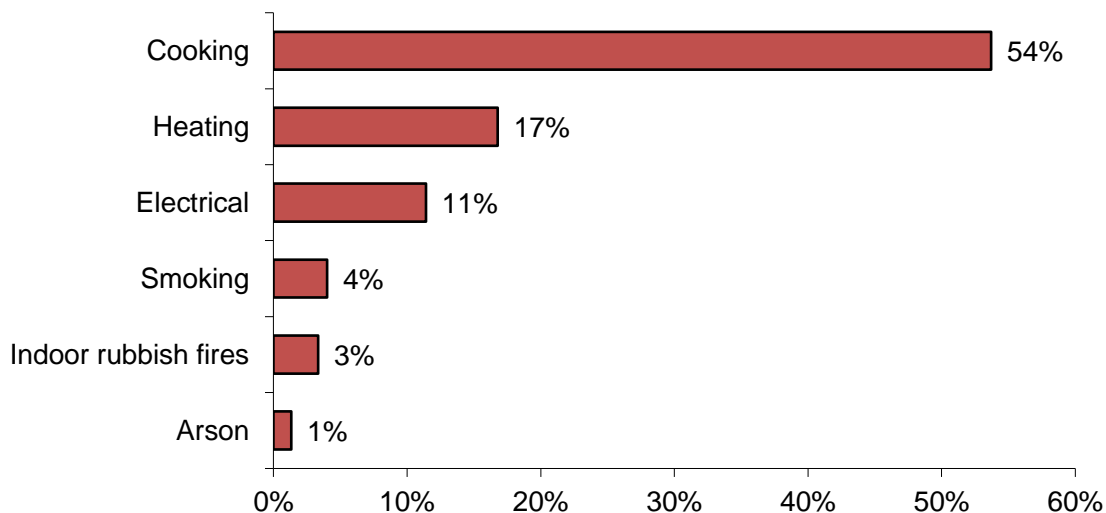
The peak fixed property use for residential building fires were 1- & 2-family homes, accounting for 53% of the residential building fires in Hampshire County; 30% occurred in apartments; and 13% occurred in dormitories. Two percent (2%) occurred in residential board and care facilities, and 1% happened in rooming houses. 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. Nineteen (19), or 13%, 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 149 residential building fires in Hampshire County, accounting for 54% of these fires. Heating equipment fires accounted for 17% of home fires. Electrical problems caused 11% of the residential fires. Smoking fires were responsible for 4% of these fires. Indoor rubbish fires accounted for 3%; and arson accounted for 1% of the residential fires in Hampshire County in 2018.

## 2018 Leading Causes of Fires in Hampshire County Homes



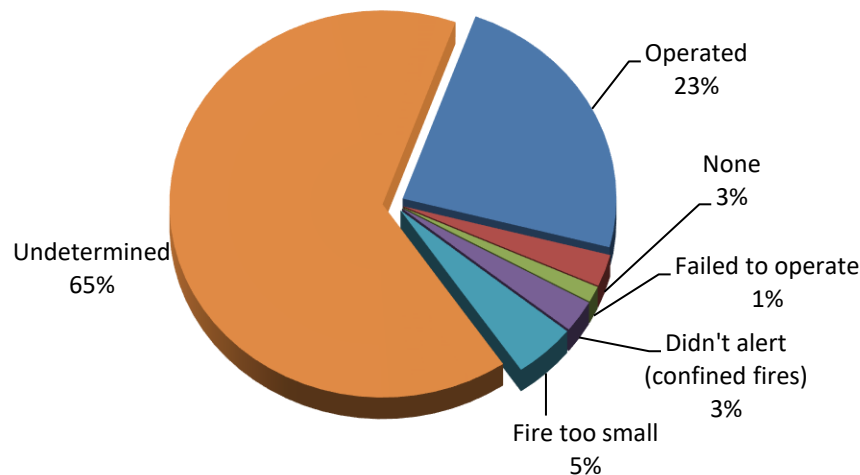
### 2/3 of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

One hundred (100), or 67%, of all residential building fires were reported as confined to non-combustible containers in 2018. Seventy-one (71) of the reported fires were cooking fires contained to a non-combustible container, accounting for 48% of residential building fires. Twenty (20), or 13%, of all residential building fires reported in 2018 were fires confined to a chimney. Four (4), or 3%, were fires confined to a fuel burner or boiler malfunction. Five (5), or 3%, of these fires were indoor rubbish fires contained to a non-combustible container in Hampshire County in 2018.

### Detectors Operated in Only 23% of Fires

Smoke or heat detectors operated and alerted the occupants in 35, or 23%, 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 3% 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 97 incidents, or 65%, of Hampshire County's residential building fires.

### Detector Status in Hampshire County's Residential Structure Fires 2018



### 2 Detectors Failed from Missing Batteries

Two (2) detectors failed in Hampshire County in 2018 because of missing batteries.

<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**

### **4 Building Fires Occurred in Vacant Buildings**

Hampshire County reported four fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the 180 building fires reported to MFIRS in 2018. Three (3) residential properties and a business had a reported fire in a vacant building.

None of the vacant building fires in Hampshire County in 2018 were determined to be intentionally-set.

## **JUVENILE-SET FIRES**

### **2 Juvenile-set Fires**

There were two reported juvenile-set fires in Hampshire County in 2018. Both of these were brush fires.

## **ARSONS**

### **23 Total Arsons — 2 Structures, 1 Motor Vehicle & 20 Other Arsons**

Twenty-three (23), or 7%, of Hampshire County's 351 fires were intentionally-set, or, for purposes of this analysis, arson. The two structure arsons, one motor vehicle arson, nine brush arsons, four outside rubbish arsons, five special outside arsons, one cultivated vegetation or crop arson; and one unclassified arsons caused one civilian death and an estimated dollar loss of \$1,000.

### **All Arsons Decreases Slightly**

The total number of reported arson fires decreased by three from the 26 reported in 2017. Structure arsons decreased by four from six reported the previous year. Motor vehicle arsons remained the same with one reported in both 2017 and 2018. Reported outside and other arsons increased by one from the 19 reported in 2017.

## **ALL INCIDENTS**

### **Rescue & EMS Calls Are 66% of All Reported Responses**

In 2018, Hampshire County fire departments reported 18,614 responses<sup>4</sup> to MFIRS. Of these 18,614 incidents, 18,177 non-fire calls were voluntarily reported.

Of these 18,177 non-fire calls, 12,279, or 66%, of all the responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 3,046, or 16%, were reported false alarm or false calls; 1,014, or 5%, were reported good intent calls; 951, or 5%, were reported service calls such as lock-outs, water or smoke problems,

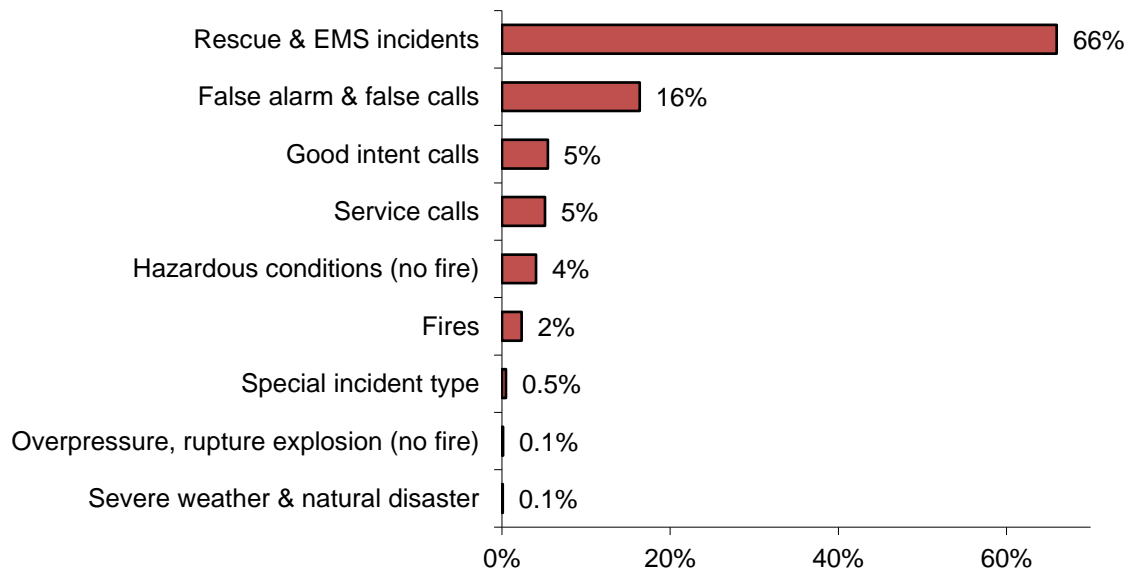
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<sup>4</sup> These figures include responses in which Hampshire County fire departments gave mutual aid to other fire departments.

unauthorized burning or public service assistance; 753, or 4%, were reported hazardous condition calls with no fire; 89, or 0.5%, were special incident type calls such as citizen complaints; 27, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 18, or 0.1%, were severe weather responses.

Four hundred and thirty-seven (437), or 2%, of the total responses submitted by Hampshire County fire departments were fires.

### 2018 Responses by Incident Type



### Hampshire County Fire Departments Gave Mutual Aid 596 Times

In 2018, Hampshire County fire departments reported coming to the aid of other fire departments 596 times. Of these 596 responses, 380, or 64%, were for rescue or EMS calls; 80, or 13%, were for fires; 69, or 12%, were for good intent calls; 48, or 8%, were for service calls such as cover assignments; nine, or 2%, were hazardous conditions calls with no fire; seven, or 3%, were for false alarms or false calls; and three calls, or 1%, were for special incident types.

### Hampshire County Received Mutual Aid in 308 Incidents

In 2018, Hampshire County fire departments received aid from surrounding departments in 308 incidents. Of these 308 incidents, 225, or 73%, were rescue and emergency medical services calls; 41, or 13%, were for fires; 14, or 5%, was a hazardous conditions calls with no fire; 10, or 3%, were false alarm or false calls; eight were good intent calls accounting for 3%; seven, or 2%, were service calls; two, or 1%, were special incident types; and one, or less than 1%, was an overpressure, rupture explosion call with no ensuing fire in Hampshire County in 2018.

**Hampshire County****Population: 158,080****2.2 Fires/1,000 Population****Total Fires: 351 \$2,126,237**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	180	51%	\$1,822,895
Vehicle Fires	52	15%	267,750
Other Fires	119	34%	35,592

2 Fatal Fires 5.70 Civilian Deaths/1,000 Fires  
 2 Civilian Deaths 0.13 Civilian Deaths/10,000 Population  
 5 Civilian Injuries 3 Fire Service Injuries

**Building Fires: 180****Residential Structure Fires: 149****Residential Structure Fires Confined to Non-Combustible Containers: 100****Unconfined Residential Structure Fires: 49**

1 Civilian Death 4 Civilian Injuries 3 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	79	53%	Operated	35	23%
Apartments	44	30%	Didn't operate	2	1%
Dormitories	19	13%	None	4	3%
Residential board & care	3	2%	Fire too small	7	5%
Rooming houses	2	1%	Didn't alert (confined)	4	3%
			Undetermined	97	65%

<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	7%	20%
Chimney or flue	13%	Heat from operating equip.	4%	12%
Living room	3%	Radiated, con. heat op. eq.	3%	10%
Heating room or area	3%	Hot embers or ash	3%	8%
Attic	3%	Cigarette	2%	6%
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>
Food, cooking materials	52%	Failure to clean	7%	22%
Film, residue (creosote)	13%	Misuse of mat. or prod. other	5%	16%
Structural member, framing	7%	Electrical failure, malfunc.	5%	16%
Organic materials, other	3%	Operational deficiency, other	5%	16%
Rubbish, trash, waste	3%	Equipment unattended	5%	11%
Electrical wiring, other	3%	Abandoned materials	4%	12%
Flamm. or combustible liquid	3%			

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>% Unconfined<sup>10</sup></b>
Cooking equipment	54%	Unintentional	19%	57%
None	16%	Failure of eq. or heat source	7%	22%
Chimney or flue	13%	Intentional	0%	0%
Electrical wiring, other	3%	Cause under investigation	2%	6%
Boiler, furnace, cent. heat unit	3%	Undetermined	3%	8%
		Act of nature	1%	4%

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

Alerted occupants	8%
Didn't alert occupants	4%
Undetermined	88%

<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	31	20	7	4
February	24	15	3	6
March	37	21	4	12
April	35	16	1	18
May	40	11	5	24
June	29	6	8	15
July	29	11	6	12
August	24	10	5	9
September	36	24	7	5
October	15	11	2	2
November	30	18	3	2
December	21	17	1	3

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	53	17	7	29
Monday	42	26	3	13
Tuesday	48	27	8	13
Wednesday	57	27	9	21
Thursday	53	33	5	15
Friday	41	23	9	9
Saturday	57	27	11	19

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	27	16	3	8
04:01 - 08:00	18	10	2	6
08:01 - 12:00	43	20	8	15
12:01 - 16:00	97	37	17	43
16:01 - 20:00	105	66	13	26
20:01 - 00:00	61	31	9	21

### **Motor Vehicle Fires**

Total: 52

Automobiles: 42 (81%)

1, or (2%), of the automobile fires were considered intentionally-set.

## Arson Fires

**Total Arsons: 23**

**Dollar loss: \$1,000**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	2	1%	9%	\$0
Vehicle Arsons	1	2%	4%	1,000
Other Arsons	20	17%	87%	0

0.01 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.13 Other arsons/1,000 population

No Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 - 20:00	1	50%	16:01 – 20:00	1	100%
20:01 - 00:00	1	50%			

Other Arsons	#	%
20:01 - 16:00	8	35%
16:01 - 20:00	7	30%
12:01 - 16:00	4	17%

Peak Fixed Property Uses for Structure Arsons	#	%
1- or 2-Family home	2	100%

**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>
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
2018	67	39	7	21	1	0	0	1

**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>
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
2018	18	9	1	8	1	0	0	1

**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>
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							
2018	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>
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
2018	1	1	0	0	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>
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
2018	31	17	4	10	0	0	0	0

**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>
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
2018	4	1	2	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>
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
2018	22	9	8	5	3	0	1	2

**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>
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
2018	16	6	5	5	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>
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
2018	13	1	2	10	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>
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
2018	7	3	1	3	1	0	0	1

**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>
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							
2018	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>
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
2018	52	29	9	14	0	0	0	0

<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>
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							
2018	2	1	1	0	0	0	0	0

**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>
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
2018	Non-reporting Department							

**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>
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
2018	28	14	2	12	2	0	0	2

***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>
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
2018	23	19	1	3	1	0	0	1

<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>
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
2018	18	9	3	6	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>
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
2018	41	19	3	19	10	2	0	8

<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>
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
2018	3	0	2	1	1	0	0	1

<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>
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
2018	11	5	2	4	0	0	0	0



Worthington							Population: 1,156	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
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							
2018	Fire Department in Good Standing, Certified No Reportable Fires							

## 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	1,599	76	2	321	67	83	116	928	1	5
15024	Belchertown	344	19	3	6	96	45	27	147	1	0
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	3,010	37	0	2,429	54	80	128	262	0	20
15108	Goshen	100	6	0	73	3	6	6	5	1	0
15111	Granby	232	24	1	23	66	25	28	63	0	2
15117	Hadley	775	19	6	547	23	25	25	124	5	1
15127	Hatfield	143	15	0	17	30	15	18	47	0	1
15143	Huntington	236	12	0	158	23	9	7	22	1	4
15183	Middlefield*	0	0	0	0	0	0	0	0	0	0
15214	Northampton	7,241	55	8	5,348	226	252	442	902	2	6
15230	Pelham	3	2	0	1	0	0	0	0	0	0
15237	Plainfield**	0	0	0	0	0	0	0	0	0	0
15978	South Hadley #1	486	36	1	25	38	89	61	221	2	13

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
15979	South Hadley #2	782	51	2	410	19	140	45	105	4	6
15276	Southampton	669	18	1	497	32	28	34	59	0	0
15309	Ware	2,402	47	2	2,093	34	61	61	90	1	13
15331	Westhampton	228	7	0	105	22	59	9	24	0	2
15340	Williamsburg	363	12	1	226	20	34	7	47	0	16
15349	Worthington*	0	0	0	0	0	0	0	0	0	0
Total	Hampshire County	18,614	437	27	12,279	753	951	1,014	3,046	18	89

\* Certified no reportable fires.

\*\*Non reporting department.

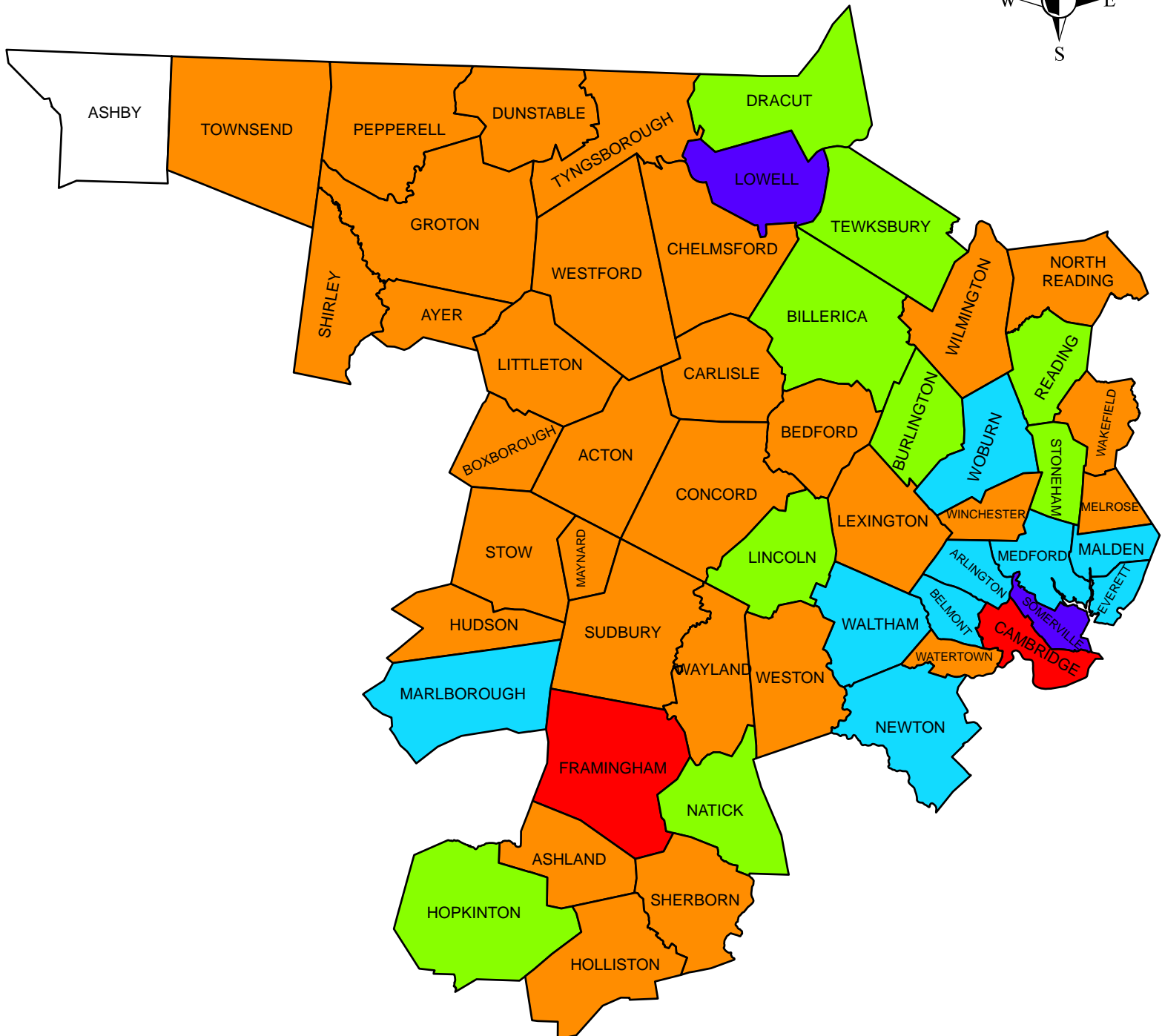
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



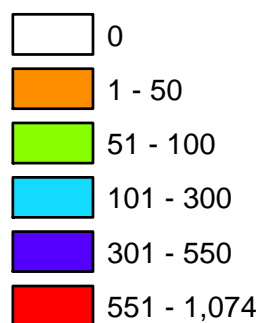
# Middlesex County

## 2018 Fire Data Analysis

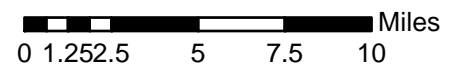
# Middlesex County Fires 2018



## 2018 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

# Middlesex County Fires in 2018

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## **5,432 Total Fires — 3,674 Structures, 397 Vehicles & 1,361 Other Fires**

Middlesex County ranked first out of the fourteen Massachusetts counties in total reported fires. Middlesex County fire departments reported 5,432 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 3,674 structure fires, 397 motor vehicle fires, 671 brush fires, 420 outside rubbish fires, 132 special outside fires, two cultivated vegetation or crop fires, and 136 unclassified fires caused seven civilian deaths, 35 civilian injuries, 110 fire service injuries and an estimated dollar loss of \$39.2 million. Middlesex County's fires accounted for 21% of the 25,504 Massachusetts fires reported in 2018.

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 2018.

## **Structure & MV Fires Up**

The total number of reported fire incidents increased by 137 from the 5,295 reported in 2017. Reported structure fires increased by 171 from 3,503 in the previous year. Motor vehicle fires increased by 18 from the 379 reported during 2017. Reported outside and other fires decreased by 52 from 1,413 the year before.<sup>1</sup>

## **MIDDLESEX COUNTY FIRES FROM 2014 TO 2018**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
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	5,295	3,503	379	1,413	43	11	4	28
2018	5,432	3,674	397	1,361	49	18	5	26

## **Fire and Fire Death Rates**

Middlesex County had 3.6 fires per 1,000 population. That figure ranks Middlesex County fifth in the state and below the state rate of 3.9 fires per 1,000 population. Middlesex County also had 0.05 fire deaths per 10,000 population ranking it tied for ninth among Massachusetts counties and below the state rate of 0.07 fire deaths per 10,000 population.

## **7 Fatal Fires Killed 7 Middlesex County Residents**

In 2018, seven fatal fires killed seven people in Middlesex County.

- On January 1, 2018, at 5:14 a.m., the Littleton Fire Department was called to a fatal smoking fire in a single-family home. The victim, a 76-year old woman fell asleep

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<sup>1</sup> 2018 was a down year for brush fires across the state.

while smoking in the living room. The cigarette ignited the furniture. No one else was injured at this fire. Alarms were present but it was undetermined if they operated. Sprinklers were not present. Damages were estimated to be \$400,000.

- On January 16, 2018, at 1:46 a.m., the Lowell Fire Department was called to a fatal self-immolation fire in a three-story apartment building. The victim, a 31-year old man, set fire to a couch in the garage after barricading himself in there. No one else was injured at this fire. Alarms were present but it was undetermined why they failed to operate. The building was not sprinklered. Damages from this fire were estimated to be \$22,000.
- On March 23, 2018, at 5:22 p.m., the Ayer Fire Department responded to a fatal fire at a manufacturing plant. The victim was a 59-year old male worker. First arriving firefighters discovered the victim's body and transported him to a local hospital. He was then transferred to another hospital where he succumbed to his injuries. The cause of the fire was due to a failure during the building of an industrial kiln. One (1) other civilian was injured at this fire. It was undetermined if the building had smoke alarms. The sprinkler system operated and actively suppressed the fire. Damages from this fire were estimated to be \$2.2 million.
- On June 6, 2018, at 6:35 p.m., the Waltham Fire Department was dispatched to a fire in a 3-unit apartment building of undetermined cause. The most likely cause was careless disposal of smoking materials but a candle near the area of origin could also be the cause. The victim was a 54-year old man. Two (2) firefighters were also 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 \$150,000.
- On July 31, 2018, at 7:00 a.m., the Weston Fire Department was called to a fatal electrical fire in a single-family home. The fire was started by an extension cord in a bedroom. The victim was an 88-year old woman. No one else was injured at this fire. Alarms were present and operated. There were no sprinklers. The fire caused an estimated \$136,500 worth of damage.
- On September 29, 2018, at 9:19 p.m., the Arlington Fire Department was called to a fatal smoking fire in a single-family home. The fire was started by a cigarette igniting the victim's bedding while she was asleep. The victim was a 76-year old woman. 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 \$55,000.
- On October 19, 2018, at 5:28 p.m., the Weston Fire Department was dispatched to a motor vehicle fire in a parking lot. It is believed that the driver, a 47-year old man and only occupant of the vehicle set the car on fire. He died by suicide. No one else was injured in this fire. Damages from this fire were not estimated.

**Largest Loss Fire in 2018**

In 2018, 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 \$8.1 million, or 21%, of the county's total dollar loss.

- On March 5, 2018, at 8:32 p.m., the Cambridge Fire Department was called to an electrical fire at a 75-unit apartment building. The fire started on the fifth floor office. Seven (7) firefighters were injured at this fire. Alarms were present and alerted the occupants of the building. The building did not have any sprinklers. Damages from this fire were estimated to be \$2.2 million.

**STRUCTURE FIRES****Reported Structure Fires Increased**

The 3,674 structure fires caused six civilian deaths, 26 civilian injuries, 100 fire service injuries and an estimated dollar loss of \$34.6 million. These incidents represented 68% of Middlesex County's reported fires in 2018. The average estimated dollar loss per structure fire was \$9,404. The total number of reported structure fires increased by 171, or 5%, from the 3,503 reported in 2017.

**Arson Caused Less Than 1% of Structure Fires**

The 18 structure arsons caused an estimated dollar loss of \$261,425. Arson was indicated as the cause of less than 1% of the structure fires and 1% of Middlesex County's structure fire dollar loss. The 18 structure arsons accounted for 37% of the Middlesex County arson fires reported in 2018. The total number of reported structure arsons increased by seven, or 64%, from 11 in 2017.

**88% of Structure Arsons Occurred in Residences**

Eighty-eight percent (88%) of Middlesex County's 18 structure arsons occurred in residential occupancies. Educational facilities, institutional facilities and business properties each accounted for 16% of the structure arsons in Middlesex County in 2018.

**BUILDING FIRES**

There were 3,649 building fires of different types in Middlesex County in 2018. These 3,649 building fires accounted for 99.3% of all structure fires in Middlesex County.

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

Three thousand and sixteen (3,016), or 88%, of Middlesex County's 3,649 building fires occurred in residential occupancies. Two hundred and two (202) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 160 fires. Hospitals, prisons, and other institutional buildings experienced 90 fires. Sixty-three (63) building fires took place in educational facilities. Forty-six (46) building fires in Middlesex County occurred in special properties such as outbuildings, bus stop shelters and tollbooths. Thirty-four (34) fires took place in storage properties. Twenty (20) fires in Middlesex County in 2018 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 six fires.

## RESIDENTIAL FIRES

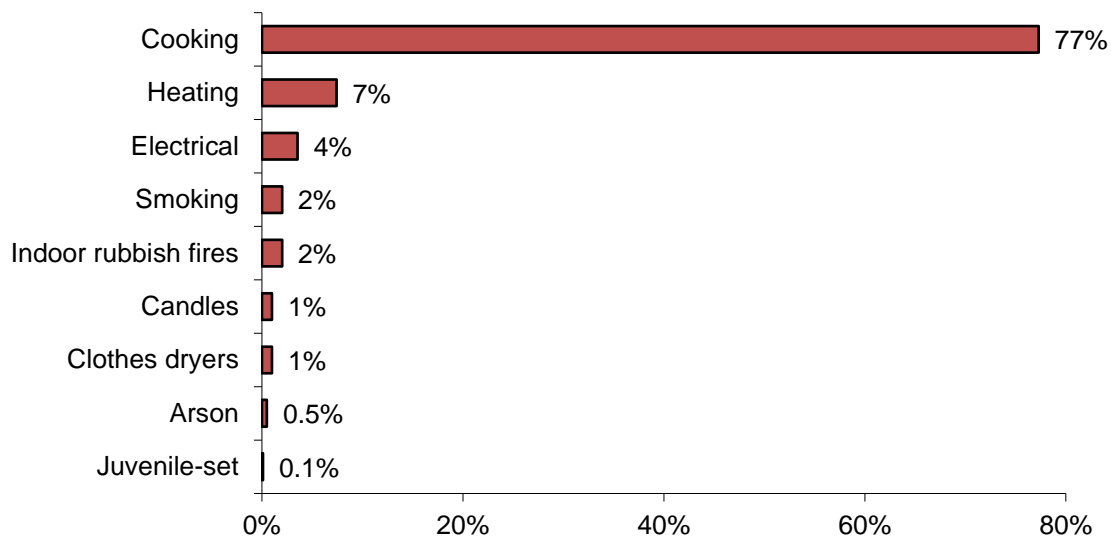
### Residential Building Fires Increased

There were 3,016 reported residential building fires in Middlesex County in 2018. These 3,016 fires are an increase of 199, or 7%, from the 2,817 residential building fires reported in 2017.

### Unsafe Cooking Caused 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 7% of fires in people’s homes. Electrical problems caused 4%. Smoking and indoor rubbish fires each accounted for 2% of these fires. Candles and clothes dryers each caused 1%; and arson and juvenile-set fires each caused less than 1% of the residential fires in Middlesex County in 2018.

### 2018 Leading Causes of Fires in Middlesex County Homes



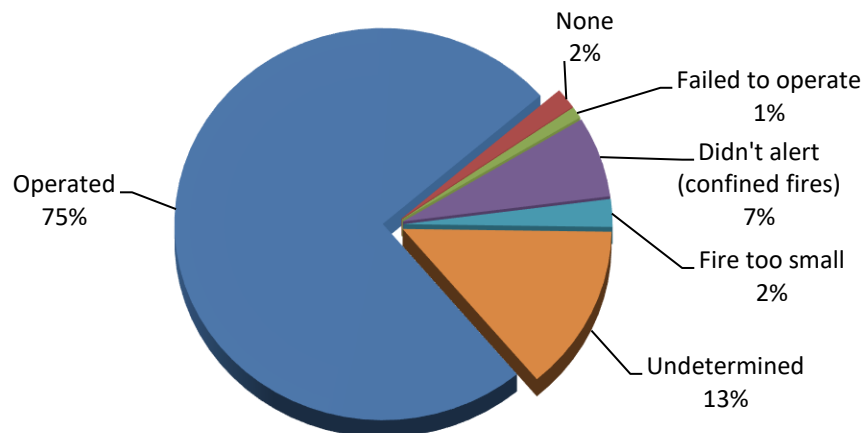
### 83% of Residential Building Fires Were Confined to Non-Combustible Containers<sup>2</sup>

Two thousand four hundred and ninety-five (2,495), or 83%, of all residential building fires were reported as confined to non-combustible containers in 2018. Two thousand two hundred and fifty-three (2,253) of the reported fires were cooking fires contained to a non-combustible container, accounting for 75% of residential building fires. One hundred and thirty-two (132), or 4%, were fires confined to a fuel burner or boiler malfunction. Fifty-three (53), or 2%, of all residential building fires reported in 2018 were fires confined to a chimney. Fifty-one (51), or 2%, of these fires were rubbish fires contained to a non-combustible container. Three (3) commercial compactor fires and three incinerator overloads or malfunctions each accounted for less than 1% of the residential fires in Middlesex County in 2018.

### Alarms Alerted Occupants in 3/4 of Fires

Smoke or heat alarms operated and alerted the occupants in 2,254, or 75%, of the residential building fires. In 7% of these fires<sup>3</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 residential fires. Smoke alarm performance was undetermined in 412 incidents, or 13%, of Middlesex County's residential building fires.

### Detector Status in Middlesex County's Residential Structure Fires 2018



<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.

**28% of Failed Alarms Had Missing or Dead Batteries**

Of the 29 fires where smoke alarms were present but failed to operate, seven, or 24%, failed because the batteries were either missing or disconnected. In one, or 3%, of these cases the batteries were dead. Three (3), or 10%, failed from a power failure, shutoff or disconnect. One (1), or 3%, failed from a lack of maintenance. One (1), or 3%, didn't work because of improper installation or placement; and another one, or 3%, failed because it was defective. It was undetermined or unclassified in 15 cases, or 52%, 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 3,649 building fires reported to MFIRS in 2018. Thirty (30) fires occurred in vacant residential properties. Three (3) vacant building fires occurred in special properties. Storage facilities had two of these fires. Industrial facilities had two vacant fires. Public assembly facilities had one of these fires. One (1) occurred in an educational facility and another one in mercantile or business property in Middlesex County in 2018. Another vacant fire occurred in an unclassified property.

Four (4), or 10%, of the vacant building fires in Middlesex County in 2018 were determined to be intentionally-set. All four of these were in 1- or 2-family homes.

**JUVENILE-SET FIRES****37 Juvenile-set Fires**

There were 37 reported juvenile-set fires in Middlesex County in 2018. There were three structure fires, 34 brush fires, and one unclassified fire.

**ARSONS****49 Total Arsons — 18 Structures, 5 Vehicles & 26 Other Arsons**

Forty-nine (49), or 1%, of Middlesex County's 5,432 fires were considered intentionally-set, or, for purposes of this analysis, arson. The 18 structure arsons, five motor vehicle arsons and 26 outside and other arsons caused two civilian deaths, two civilian injuries and an estimated dollar loss of \$289,272.

**All Arson Up Slightly**

The total number of reported arson fires increased by six from the 43 reported in 2017. Reported structure arsons increased by seven from the 11 reported in the previous year. Motor vehicle arsons increased by one from the four reported in both 2017. Reported outside and other arsons decreased by two from 28 the year before.

## ALL INCIDENTS

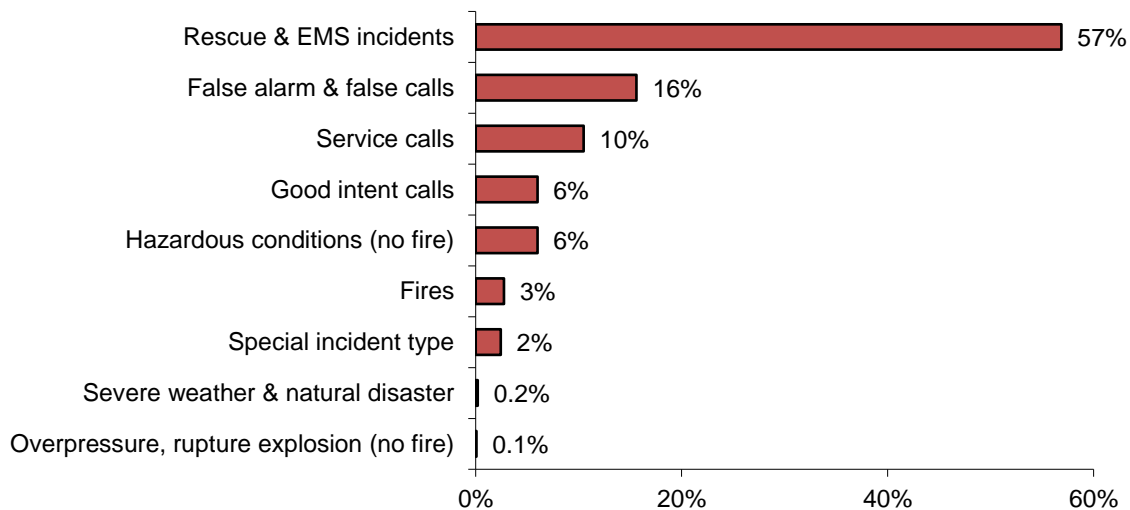
### Rescue & EMS Calls Are 57% of All Reported Responses

In 2018, fire departments in Middlesex County reported 207,431 responses<sup>4</sup> to MFIRS. This is a 3% increase from the 200,477 responses reported in 2017. Of these 207,431 incidents, 201,731 non-fire calls were voluntarily reported.

Of these 201,731 non-fire calls, 117,945, or 57%, of all the responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 32,392, or 16%, were reported false alarm or false calls; 21,765, or 10%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 12,261, or 6%, were reported good intent calls; 11,720, or 6%, were reported hazardous condition calls with no fire; 5,082, or 2%, were special incident type calls such as citizen complaints; 420, or 0.2%, were severe weather responses; and 146, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Five thousand seven hundred (5,700), or 3%, of the total responses submitted by Middlesex County fire departments were fires.

### 2018 Responses by Incident Type



### Middlesex County Fire Departments Gave Mutual Aid 3,927 Times

In 2018, Middlesex County fire departments reported coming to the aid of other fire departments 3,927 times. Of these 3,927 responses, 1,818, or 46%, were for rescue or EMS calls; 786, or 20%, were for good intent calls; 765, or 19%, were for service calls such as cover assignments; 262, or 7%, were for fires; 200, or 5%, were for false alarms or false calls; 70, or 2%, were for hazardous conditions calls with no fire; 18, or 0.5%,

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

were special incident types; six, or 0.2%, were for reported overpressure, rupture, explosion or overheat calls with no fire; and two, or 0.1%, were severe weather or natural disaster calls.

**Middlesex County Received Mutual Aid in 1,861 Incidents**

In 2018, Middlesex County fire departments reported receiving aid from surrounding departments in 1,861 incidents. Of these 1,861 incidents, 1,295, or 70%, were rescue and emergency medical services calls; 207, or 11%, were for fires; 206, or 11%, were false alarms or false calls; 55, or 3%, were hazardous conditions calls with no fire; 47, or 3%, were service calls; 42, or 2%, were good intent calls; four, or 0.2%, were for reported overpressure, rupture, explosion or overheat calls with no fire; another four, or 0.2%, was for a severe weather or natural disaster call; and one, or 0.1%, was a special incident type.

**Middlesex County****Population: 1,503,085****3.6 Fires/1,000 Population****Total Fires: 5,432 \$39,202,987**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	3,674	68%	\$34,551,845
Vehicle Fires	397	7%	3,954,153
Other Fires	1,361	25%	696,989

7 Fatal Fires 1.29 Civilian Deaths/1,000 Fires  
 7 Civilian Deaths 0.05 Civilian Deaths/10,000 Population  
 35 Civilian Injuries 110 Fire Service Injuries

**Building Fires: 3,649****Residential Building Fires: 3,016****Residential Building Fires Confined to Non-Combustible Containers: 2,495****Unconfined Residential Building Fires: 521**

5 Civilian Deaths 22 Civilian Injuries 85 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	1,459	48%	Operated	2,251	75%
1- & 2-Family homes	959	32%	Didn't operate	29	1%
Dormitories	252	7%	None	51	2%
Rooming houses	106	3%	Fire too small	69	2%
Residential board & care	43	1%	Didn't alert (confined)	201	7%
Hotels or motels	21	1%	Undetermined	412	13%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	79%	Heat from operating eq.	3%	16%
Heating equipment room	5%	Arcing	2%	12%
Chimney or flue	2%	Radiated heat/oper. eq.	2%	10%
Bedroom	2%	Cigarette	1%	8%
Living room	1%	Candle	1%	4%
		Hot or smoldering obj. other	1%	4%

<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	76%	Abandoned materials	1%	8%
Flammable, combustible liquid	4%	Too close to combustibles	1%	8%
Rubbish, trash, waste	3%	Electrical failure or malf.	1%	6%
Film, residue (creosote)	2%	Equipment unattended	1%	4%
Electrical wire, cable insulation	2%	Misuse of mater. or prod.	1%	4%
		Failure to clean	0.5%	3%

<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	10%	60%
None	10%	Failure of eq. or heat source	2%	14%
Boiler, furnace, cent. heat unit	5%	Intentional	0.4%	2%
Chimney or flue	2%	Act of nature	0.5%	3%
Stove, heating	1%	Undetermined	2%	10%
Clothes dryer	0.4%	Cause under investigation	1%	7%
Electrical wiring, other	0.3%			

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

Alerted occupants	80%
Didn't alert occupants	8%
Undetermined	12%

<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	475	402	36	37
February	390	315	29	46
March	438	345	36	57
April	505	306	29	170
May	605	323	39	243
June	545	281	31	233
July	502	258	39	205
August	360	210	39	111
September	436	309	26	101
October	373	290	32	51
November	397	322	28	47
December	406	313	33	60

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	807	566	49	192
Monday	736	499	61	176
Tuesday	818	532	65	221
Wednesday	766	527	45	194
Thursday	801	517	69	215
Friday	742	503	57	182
Saturday	762	530	51	181

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	281	203	25	53
04:01 - 08:00	343	205	40	98
08:01 - 12:00	965	683	77	205
12:01 - 16:00	1,399	811	111	477
16:01 - 20:00	1,608	1,137	88	383
20:01 - 00:00	836	635	56	145

### **Motor Vehicle Fires**

Total: 397

Automobiles: 300 (76%)

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



## Arson Fires

**Total Arsons: 49**

**Dollar loss: \$289,272**

### 0.03 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	18	0.5%	37%	\$261,425
Vehicle Arsons	5	1%	10%	15,000
Other Arsons	26	2%	53%	12,847

0.01 Structure arsons/1,000 population

0.003 Vehicle arsons/1,000 population

0.02 Other arsons/1,000 population

2 Civilian Deaths

2 Civilian Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	7	39%	20:01 - 00:00	2	40%
00:01 - 04:00	5	28%	00:01 - 04:00	1	20%
04:01 - 08:00	3	17%	12:01 - 16:00	1	20%
20:01 - 00:00	2	17%	16:00 - 20:00	1	20%

Other Arsons	#	%
16:01 - 20:00	8	31%
20:01 - 00:00	6	23%
08:01 - 12:00	5	19%
12:01 - 16:00	5	19%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartment buildings	7	39%
1- & 2-Family homes	5	28%

**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>
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
2018	43	22	4	17	3	0	0	3

**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>
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
2018	111	68	10	33	1	0	0	1

**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>
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							
2018	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>
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
2018	38	15	4	19	0	0	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>
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
2018	27	17	4	6	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>
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
2018	22	13	1	8	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>
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
2018	102	76	5	21	0	0	0	0

<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>
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
2018	95	30	24	41	3	0	0	3

**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>
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
2018	14	3	3	8	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>
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
2018	72	27	14	31	1	0	0	1

**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>
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
2018	1,074	948	15	111	1	1	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>
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
2018	1	1	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>
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
2018	39	23	11	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>
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
2018	37	13	5	19	2	1	0	1

**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>
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
2018	4	2	0	2	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>
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
2018	51	24	9	18	1	1	0	0

**Dunstable****Population: 3,179**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	16	12	0	4	2	2	0	0

**Everett****Population: 41,667**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	101	58	8	35	3	0	1	2

**Framingham****Population: 68,318**

	<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>
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
2018	655	529	23	103	1	1	0	0

**Groton****Population: 10,646**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	8	7	0	1	0	0	0	0

**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>
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
2018	5	5	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>
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
2018	58	20	16	22	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>
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
2018	41	17	5	19	2	0	1	1

**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>
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
2018	46	23	8	15	1	1	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>
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
2018	96	94	0	2	1	0	0	1

**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>
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
2018	31	15	12	4	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>
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
2018	383	247	29	107	7	4	1	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>
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
2018	143	61	11	71	0	0	0	0



**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>
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
2018	122	37	14	71	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>
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
2018	24	10	1	13	1	0	0	1

**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>
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
2018	215	131	25	59	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>
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
2018	16	13	1	2	0	0	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>
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
2018	67	19	6	42	0	0	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>
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
2018	280	222	8	50	1	1	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>
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
2018	34	18	6	10	2	0	0	2

**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>
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
2018	24	12	4	8	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>
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
2018	75	54	5	16	1	1	0	0

**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>
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
2018	15	7	0	8	1	1	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>
2014 <sup>11</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
2018	14	9	2	3	0	0	0	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>
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
2018	434	353	16	65	1	1	0	0

<sup>11</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>
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
2018	80	56	7	17	1	1	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>
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
2018	12	2	1	9	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>
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
2018	21	15	1	5	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>
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
2018	87	30	6	51	1	0	1	0

<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>
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
2018	17	8	4	5	0	0	0	0

<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>
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
2018	26	11	4	11	0	0	0	0

<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>
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
2018	39	34	3	2	1	1	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>
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
2018	142	62	14	66	1	1	0	0

**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>
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
2018	29	16	2	11	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>
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
2018	25	9	1	15	1	0	0	1

**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>
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
2018	43	21	2	20	1	0	0	1

**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>
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
2018	29	13	7	9	1	0	1	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>
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
2018	35	10	11	14	3	0	0	3

**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>
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
2018	20	8	2	10	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>
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
2018	199	126	24	49	2	0	0	2

## 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	5,357	43	0	1,808	244	621	126	417	1	2,097
17010	Arlington	5,542	123	2	3,344	631	532	155	732	16	7
17012	Ashby*	0	0	0	0	0	0	0	0	0	0
17014	Ashland	2,288	46	0	1,525	99	138	123	345	3	9
17019	Ayer	737	33	0	96	68	295	58	179	1	7
17023	Bedford	2,513	28	1	1,263	109	193	89	410	0	420
17026	Belmont	2,946	104	2	1,480	180	401	232	532	10	5
17031	Billerica	5,205	95	8	3,166	395	708	125	692	9	7
17037	Boxborough	549	20	0	213	22	100	19	171	1	3
17048	Burlington	4,505	72	2	2,750	135	743	166	633	3	1
17049	Cambridge	15,381	1,075	12	6,911	843	884	2,248	3,398	1	9
17051	Carlisle	1	1	0	0	0	0	0	0	0	0
17056	Chelmsford	45	39	0	0	5	1	0	0	0	0
17067	Concord	3,535	43	7	1,824	220	363	238	832	2	6
17919	Devens	715	13	0	226	20	257	17	180	0	2



## 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
17079	Dracut	3,937	51	1	2,352	178	462	177	711	4	1
17081	Dunstable	323	18	0	142	32	65	9	50	5	2
17093	Everett	5,552	117	6	3,453	242	387	448	875	14	10
17100	Framingham	11,894	659	2	7,624	277	1,179	752	1,395	5	1
17115	Groton	615	15	2	152	79	49	34	276	4	4
17136	Holliston	5	5	0	0	0	0	0	0	0	0
17139	Hopkinton	2,281	74	1	1,359	159	206	146	327	3	6
17141	Hudson	1,929	48	5	1,223	94	166	86	292	1	14
17155	Lexington	53	46	0	0	6	1	0	0	0	0
17157	Lincoln	998	104	1	510	71	52	85	166	7	2
17158	Littleton	2,003	33	1	1,258	75	128	187	317	1	3
17160	Lowell	16,430	390	23	10,108	793	1,362	752	2,763	158	81
17165	Malden	9,015	143	3	6,304	225	779	430	1,125	0	6
17170	Marlborough	7,793	125	3	4,971	424	620	423	1,145	2	80
17174	Maynard	1,491	27	0	884	73	168	119	216	3	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 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
17176	Medford	9,776	224	5	6,604	587	790	331	1,205	4	26
17178	Melrose	19	19	0	0	0	0	0	0	0	0
17198	Natick	5,676	70	3	3,251	448	623	387	886	2	6
17207	Newton	7,697	281	4	3,904	464	800	323	1,918	2	1
17213	North Reading	2,626	38	4	1,366	213	360	229	367	40	9
17232	Pepperell	1,270	24	4	899	48	59	65	168	2	1
17246	Reading	160	75	0	3	55	6	11	7	3	0
17269	Sherborn	576	19	0	320	69	56	34	73	3	2
17270	Shirley	847	27	0	542	39	95	43	101	0	0
17274	Somerville	14,176	472	8	6,622	1,155	2,077	741	2,555	2	544
17284	Stoneham	4,964	96	5	2,844	154	302	478	380	20	685
17286	Stow	963	15	2	630	49	83	41	118	17	8
17288	Sudbury	1,864	21	3	1,126	146	129	86	334	1	18
17295	Tewksbury	4,859	88	1	2,896	146	878	333	500	5	12
17299	Townsend	1,363	21	2	951	29	110	139	108	2	1

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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	1,482	27	0	953	44	140	64	250	3	1
17305	Wakefield	107	39	0	0	7	0	0	61	0	0
17308	Waltham	9,003	155	5	5,320	811	732	424	1,522	0	34
17314	Watertown	5,541	30	4	2,850	275	1,473	167	684	36	22
17315	Wayland	3,336	31	1	1,171	405	575	94	199	0	860
17330	Westford	3,146	45	0	1,903	141	320	168	550	5	14
17333	Weston	2,470	34	3	1,271	208	238	121	594	1	0
17342	Wilmington	3,176	35	0	2,061	95	324	207	432	1	21
17344	Winchester	2,393	25	3	1,273	282	201	153	440	13	3
17347	Woburn	6,303	199	7	4,239	151	534	378	761	4	30
<b>Middlesex County</b>		<b>207,431</b>	<b>5,700</b>	<b>146</b>	<b>117,945</b>	<b>11,720</b>	<b>21,765</b>	<b>12,261</b>	<b>32,392</b>	<b>420</b>	<b>5,082</b>

\* Certified no reportable fires.

\*\*Non reporting department.

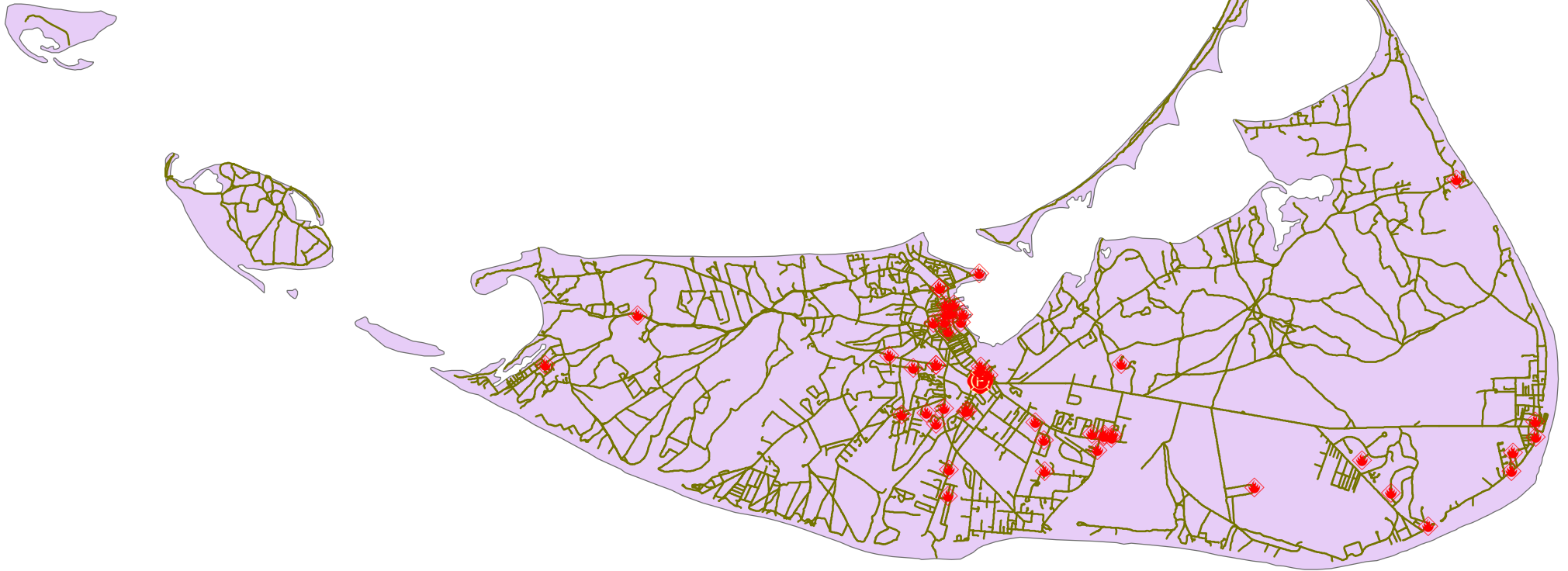
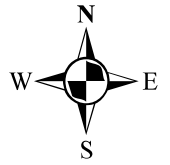
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# Nantucket County

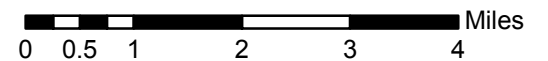
## 2018 Fire Data Analysis

# Nantucket County Fires 2018



## 2018 Nantucket Fires

-  2018 Nantucket Fires
-  Fire Stations



Massachusetts Fire Incident Reporting System 2018

# Nantucket County Fires in 2018

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## **49 Total Fires — 37 Structures, 5 Vehicles & 7 Outside and Other Fires**

Nantucket County ranked thirteenth out of the fourteen Massachusetts counties in total reported fires. The Nantucket Fire Department reported 49 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 37 structure fires, five motor vehicle fires, one brush fire, four outside rubbish fires, and two special outside fires caused an estimated dollar loss of \$160,700. Nantucket County's fires accounted for 0.2% of the 25,504 Massachusetts fires reported in 2018.

## **Structure Fires Up**

The total number of reported fire incidents decreased by five from the 54 fires reported in 2017. Structure fires increased by 18 from the 19 reported in 2017. Motor vehicle fires decreased by eight from 13 reported the previous year. Reported outside and other fires decreased by 15 from the 22 reported in 2017.<sup>1</sup>

Nantucket is an island community with a small year round population. During the summer months, the population increases immensely. Consequently, 51% of Nantucket's fires occurred between the months of May and September.

## **NANTUCKET FIRES FROM 2014 TO 2018**

<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>
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
2018	49	37	5	7	0	0	0	0

## **Fire and Fire Death Rates**

Nantucket County had 3.9 fires per 1,000 population. That figure ranks Nantucket County fourth in the state and tied with the state rate of 3.9 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 0.07 fire deaths per 10,000 population.

## **0 Reported Fire Deaths in Nantucket County**

There were no fatal fires and fire deaths in 2018 in Nantucket County

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<sup>1</sup> 2018 was another down year across the state for brush fires.

**1-Family Home Fire Largest Dollar Loss in 2018**

In 2018, Nantucket did not have a fire with a dollar loss greater than \$1 million. The largest loss fire caused \$106,000 in estimated damages and was responsible for 66% of the total dollar loss for Nantucket in 2018.

- On May 9, 2018, at 7:26 a.m., the Nantucket Fire Department was called to an electrical fire in a three-unit apartment building. The fire started in a second floor bedroom. No one was injured at this fire. Alarms were not present and the building did not have any sprinklers. Damages to the building were estimated to be \$106,000.

**STRUCTURE FIRES****Reported Structure Fires Up**

There were 37 structure fires in Nantucket in 2018. These incidents represented 76% of Nantucket County's reported fires in 2018. These 37 fires caused \$160,700 in estimated losses in 2018. The total number of reported structure fires increased by 18 from the 19 reported in 2017.

**No Reported Structure Arsons**

There were no reported structure arson in Nantucket in 2018. The total number of reported structure arsons decreased by two, or 100%, from the two reported in 2017.

**BUILDING FIRES**

There were 37 building fires of different types in Nantucket County in 2018. These 37 building fires accounted for all of the structure fires in Nantucket County.

**76% of Nantucket Building Fires Occurred in People's Homes**

Twenty-eight (28), or 76%, of Nantucket County's 37 building fires occurred in residential occupancies. Six (6) happened in public assembly properties, two at mercantile or business properties and one occurred at an institutional facility.

**RESIDENTIAL FIRES****Residential Building Fires Up**

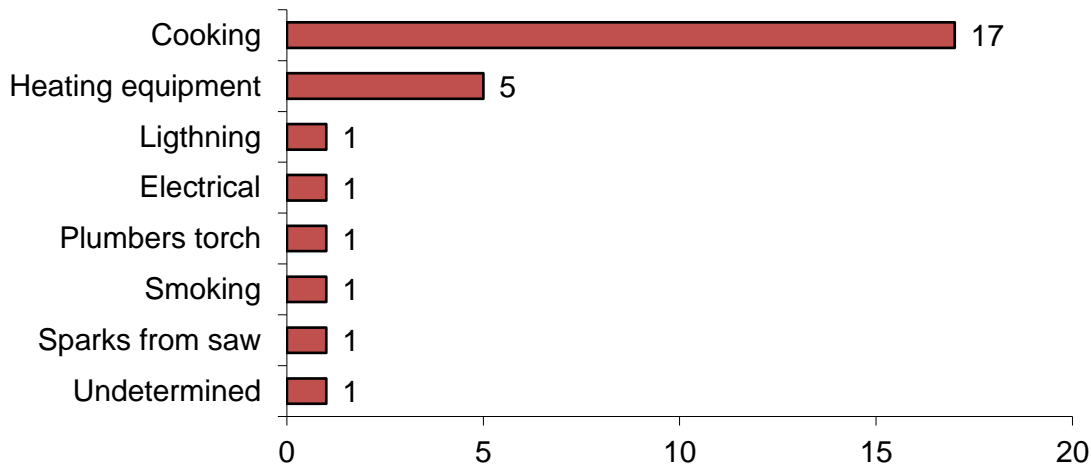
There were 28 reported residential building fires in Nantucket County in 2018. These 28 fires are an increase of 14, or 100%, over the 14 reported in 2017. Twenty-one (21), or 75%, occurred in one- or two-family homes; three, or 11%, occurred in apartments; two, or 7%, happened in hotels or motels; one, or 4%, occurred in a dormitory; and one, or 7%, occurred in an unclassified residence.

**Cooking Fires Caused 61% of Residential Fires**

The leading cause of residential building fires in Nantucket County was unattended cooking and other unsafe cooking practices, accounting for 17, or 61%, of these fires. Heating equipment caused five, or 18%, of these fires. A lightning strike, an electrical problem, smoking, a plumber's torch and sparks from a saw were each the cause of one,

or 4%, of Nantucket's 2018 residential fires. The cause was not determined for one of the residential fires.

### 2018 Leading Causes of Fires in Nantucket Homes



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

Twenty (20), or 71%, of all residential building fires were reported as confined to non-combustible containers in 2018. Sixteen (16) of the reported fires were cooking fires contained to a non-combustible container accounting for 57% of the residential fires. Two (2), or 7%, were confined to a chimney or flue and two, or 7%, of Nantucket's residential fires were fuel burner or boiler malfunctions.

### Detectors Operated Occupants in 57% of Fires

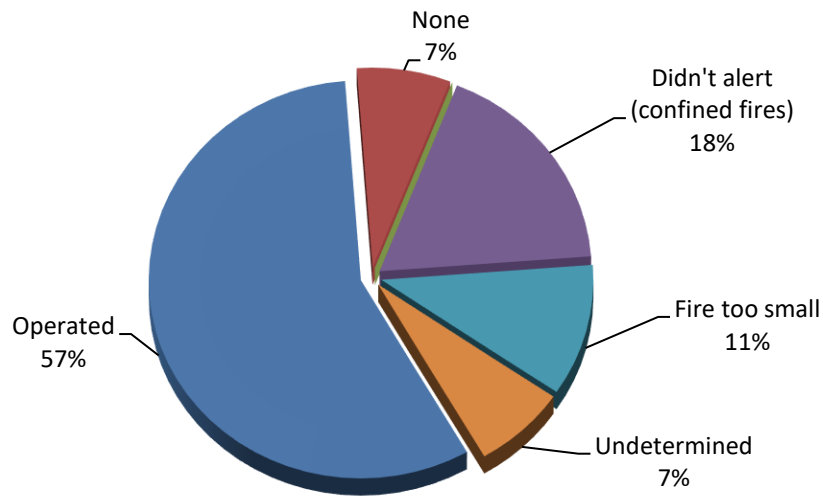
Smoke or heat detectors operated in 16, or 57%, of the residential building fires. In five, or 18%, of these fires<sup>3</sup>, detectors did not alert the occupants. There were no fires where the detector failed to operate. There were two reported fires where there were no detectors, accounting for 7% of these fires. The fire was too small to activate the detector in three, or 11%, of these fires. Detector performance was undetermined in two, 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 2018



### 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.

### JUVENILE-SET FIRES

#### 0 Juvenile-set Fire

Nantucket County did not report any juvenile-set fires in 2018.

### ARSONS

#### 0 Total Arsons<sup>4</sup> — 0 Structures, 0 Vehicles & 0 Other Arsons

In 2018, Nantucket did not report any arsons.

#### All Arson Down

The total number of arsons decreased by four from four in 2017. Reported structure arsons decreased by two from the two reported in 2017. Motor vehicle arsons and outside and other arson each decreased by one from one reported in 2017.

<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 INCIDENTS

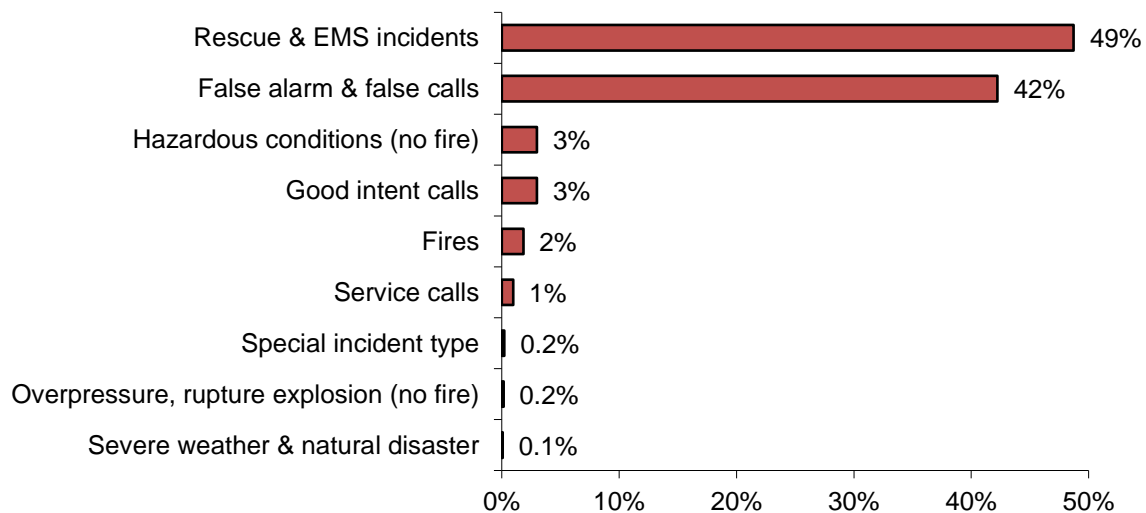
### Rescue & EMS Calls Are 49% of All Reported Incidents

In 2018, Nantucket County reported 2,660 responses to MFIRS. Of these 2,660 incidents, 2,611 non-fire calls were voluntarily reported.

Of these 2,611 non-fire calls, 1,296, or 49%, of the total responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 1,123, or 42%, were reported false alarm or false calls; 83, or 3%, were reported hazardous condition calls with no fire; 71, or 3%, were reported good intent calls; 26, or 1%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; six, or 0.2%, were special incident types; four, or 0.2%, were overpressure, rupture or explosion calls with no fire; and two, or 0.1% were severe weather incidents.

Forty-nine (49), or 2%, of the total responses submitted by the Nantucket Fire Department were fires.

### 2018 Incidents by Incident Type



### Nantucket Giving Aid in 2 Calls

In 2018, Nantucket reported giving mutual aid for two calls. These calls were false alarm or false calls.

**Nantucket County****Population: 10,172****4.8 Fires/1,000 Population****Total Fires: 49 \$160,700**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	37	35%	\$160,700
Vehicle Fires	5	24%	0
Other Fires	7	41%	0

0 Fatal Fires

0.00 Civilian Deaths/1,000 Fires

0 Civilian Deaths

0.0 Civilian Deaths/10,000 Population

No Injuries

**Building Fires: 37****Residential Structure Fires: 28****Residential Structure Fires Confined to Non-Combustible Containers: 20****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	21	75%	Operated	16	57%
Apartments	3	11%	Didn't operate	0	0%
Hotels or motels	2	7%	None	2	7%
Dormitories	1	4%	Fire too small	3	11%
			Didn't alert (confined)	5	18%
			Undetermined	2	7%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>% Unconfined<sup>6</sup></b>
Kitchen	61%	Rad, cond. heat from op. eq	7%	25%
Heating room or area	7%	Lightning discharge	4%	13%
Chimney or flue	7%	Hot ember or ash (cigarette)	4%	13%
		Heat, spark from friction	4%	13%
		Heat from operating equip.	4%	13%
		Heat open flame/smok. mat.	4%	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>
Cooking materials	57%	Abandoned materials	4%	13%
Film, residue (creosote)	7%	Cut/weld. too close to comb.	4%	13%
Flammable or combustible liquid	7%	Improper container/storage	4%	13%
		Electrical fail./malfunction	4%	13%
		Installation deficiency	4%	13%
		Equipment unattended	4%	13%
		Short circuit arc, worn insul.	4%	13%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	57%	Unintentional	21%	75%
None	18%	Act of nature	4%	13%
Chimney or flue	7%	Failure of eq. or heat source	4%	13%
Boiler, furnace, cent. heat. unit	7%	Cause under investigation	0%	0%
		Undetermined	0%	0%
		Intentional	0%	0%

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

Alerted Occupants	65%
Didn't Alert Occupants	25%
Undetermined	10%

<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	1	1	0	0
February	4	4	0	0
March	3	2	0	1
April	8	6	0	2
May	8	8	0	0
June	3	3	0	0
July	5	3	1	1
August	6	5	1	0
September	3	2	0	1
October	4	0	2	2
November	2	1	1	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	11	7	2	2
Monday	5	3	1	1
Tuesday	9	9	0	0
Wednesday	8	6	1	1
Thursday	8	7	0	1
Friday	1	1	0	0
Saturday	7	4	1	2

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	4	4	0	0
04:01 - 08:00	5	3	1	1
08:01 - 12:00	9	7	1	1
12:01 - 16:00	6	5	0	1
16:01 - 20:00	18	14	3	1
20:01 - 00:00	7	4	0	3

### Motor Vehicle Fires

Total: 5

Automobiles: 4 (80%)

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

**Arson Fires****Total Arsons: 0****Dollar loss: \$0****0.0 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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## 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	49	1	4	3	8	8	3	5	6	3	4	2	2
Overpressure, rupture explosion (no fire)	4	0	1	0	0	0	1	0	0	1	0	1	0
Rescue & EMS incidents	1,296	96	78	93	77	114	109	178	177	119	110	74	71
Hazardous conditions (no fire)	83	9	7	6	5	7	9	16	5	8	2	3	6
Service calls	26	8	0	1	1	0	2	0	1	5	1	2	5
Good intent calls	71	5	6	2	4	1	1	9	6	9	12	8	8
False alarm & false calls	1,123	92	72	79	53	83	113	146	137	104	116	72	56
Severe weather & natural disaster	2	2	0	0	0	0	0	0	0	0	0	0	0
Special incident type	6	1	0	0	0	1	0	1	2	1	0	0	0
<b>Total</b>	<b>2,660</b>	<b>214</b>	<b>168</b>	<b>184</b>	<b>148</b>	<b>214</b>	<b>238</b>	<b>355</b>	<b>334</b>	<b>250</b>	<b>245</b>	<b>162</b>	<b>148</b>

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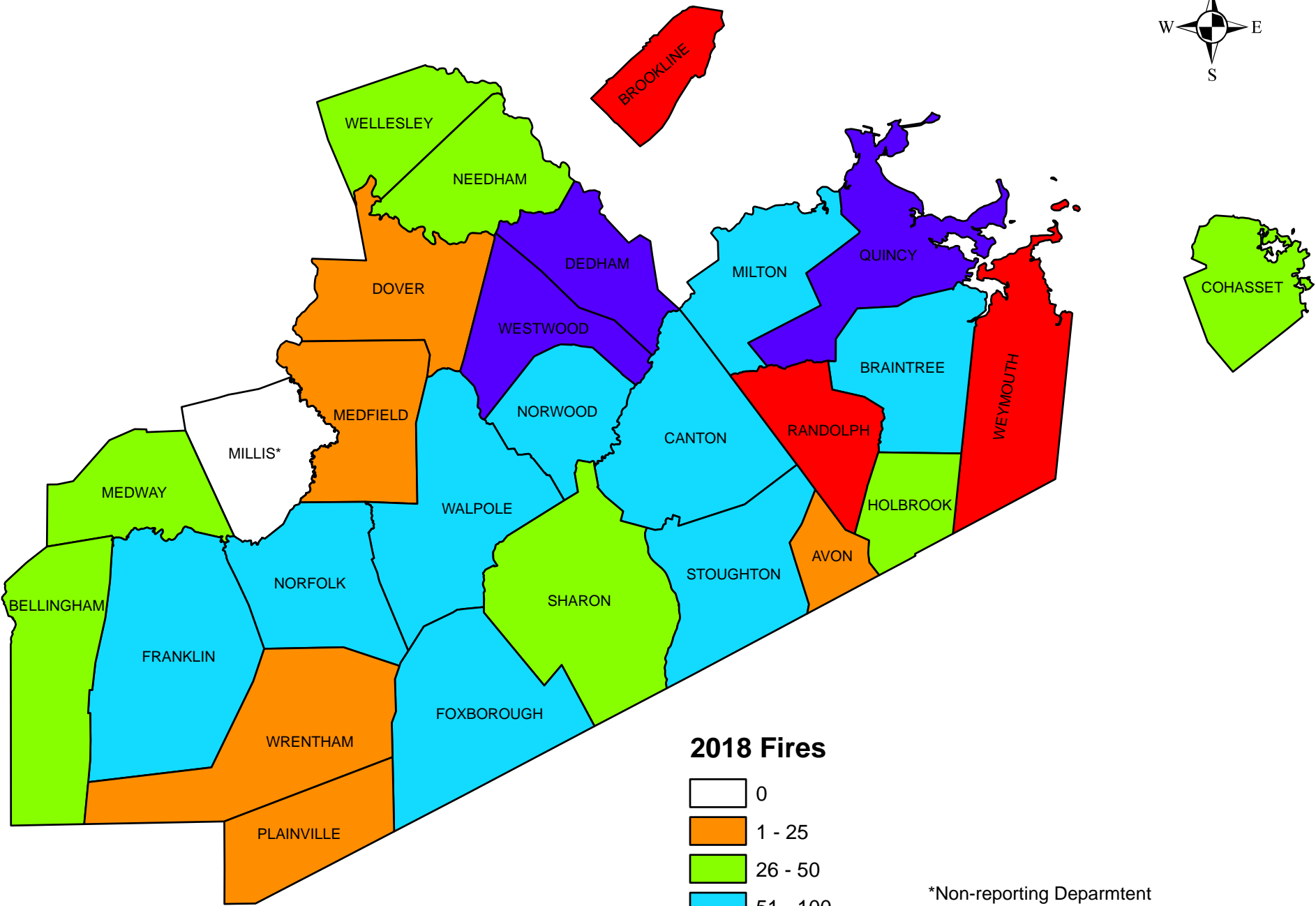


# Norfolk County

## 2018 Fire Data Analysis



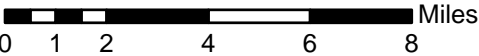
# Norfolk County Fires 2018



## 2018 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

# Norfolk County Fires in 2018

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## **2,134 Total Fires — 1,310 Structures, 225 Vehicles & 599 Other Fires**

Norfolk County ranked fifth out of the fourteen Massachusetts counties in total reported fires. Norfolk County fire departments reported 2,134 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 1,310 structure fires, 225 motor vehicle fires, 342 brush, tree or lawn fires, 98 outside rubbish fires, 80 special outside fires, 17 cultivated vegetation or crop fires, and 62 other fires caused four civilian deaths, 21 civilian injuries, 20 fire service injuries and an estimated dollar loss of \$12.2 million. Norfolk County's fires accounted for 8% of the 25,504 Massachusetts fires reported in 2018<sup>1</sup>.

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 2018. This represents 96.4% of all Norfolk County fire departments.

## **All Fires Down**

The total number of reported fire incidents decreased by 856 from the 2,990 reported in 2017. Reported structure fires decreased by 501 from the 1,811 reported during the previous year. Motor vehicle fires increased by five from the 220 reported the year before. Reported outside and other fires decreased 360 from the 959 reported a year earlier.<sup>2</sup>

## **NORFOLK COUNTY FIRES FROM 2014 TO 2018**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
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	1,811	220	959	68	16	1	51
2018	2,134	1,310	225	599	40	7	3	30

## **Fire and Fire Death Rates**

Norfolk County had 3.2 fires per 1,000 population. That figure ranks Norfolk County ninth in the state and below the state rate of 3.9 fires per 1,000 population. Norfolk County also had 0.06 fire deaths per 10,000 population ranking it tied for sixth among Massachusetts counties and just below the state rate of 0.07 fire deaths per 10,000 population.

## **3 Norfolk Fires Kill 4 People**

In 2018, three fires killed four people in Norfolk County.

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<sup>1</sup> Quincy originally only reported the first 3 months of their runs for 2018. After the database was closed for analysis they reported the remainder of the year. This figure reflects the entire year's worth of runs.

<sup>2</sup> 2018 was another down year for brush fires.

- On January 10, 2018, at 5:21 p.m., the Westwood Fire Department responded to a fatal heating fire at a single-family home. The fire was started by a woodstove in the living room. The victim was a 47-year old man. One (1) firefighter was injured at this fire. Alarms were present and operated. The home did not have any sprinklers. Damages from this fire were estimated to be \$450,000.
- On March 25, 2018, at 12:24 a.m., the Quincy Fire Department was called to a fatal fire in a two-family home of undetermined cause. The fire originated in the first floor living room. The two most likely causes were electrical or improper disposal of smoking materials. The victim was a 54-year old woman who was in the area of origin. She was transported to a local hospital where she succumbed to her injuries. No one else was injured at this fire. Alarms were present and alerted the occupants. The building was not sprinklered. Damages from the blaze were estimated to be 150,000.
- On Christmas Day, December 25, 2018, at 9:01 p.m., the Avon Fire Department was called to a fatal fire in a single-family home of undetermined cause. The fire started in the kitchen. The victims were a 70-year old physically disabled man and his 28-year old son. The son went back into the building to rescue his father. Five (5) other civilians were injured at this fire. Alarms were not present. The building was not sprinklered. Damages from the blaze were estimated to be \$123,400.

### **Bellingham Has Norfolk County's Largest Loss Fire in 2018**

There were no reported fires in Norfolk County that caused over \$1 million in estimated damages. There were 35 fires with a dollar loss greater than \$100,000 and less than \$999,999. These 35 fires accounted for \$8.9 million in estimated damages and 73% of the total dollar loss for the county.

- The Bellingham Fire Department was dispatched to a fire of undetermined cause in a single-family home at 5:35 p.m. on August 3, 2018. One (1) firefighter was injured at this fire. It was undetermined if alarms were present. Sprinklers were not present in the home. Damages from this fire were estimated to be \$880,000. The fire also spread to the home next door.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 1,310 structure fires caused all four civilian deaths, 19 civilian injuries, 20 fire service injuries and an estimated dollar loss of \$9.9 million. These incidents represented 61% of Norfolk County's reported fires in 2018. The average estimated dollar loss per structure fire was \$7,589. The total number of reported structure fires decreased by 501, or 28%, from the 1,811 reported in 2017.

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

The seven structure arsons caused two civilian injuries and an estimated dollar loss of \$78,330. Arson was indicated as the cause of 1% of the structure fires and 1% of Norfolk County's structure fire dollar loss. The seven structure arsons accounted for 18% of the

Norfolk County arson fires reported in 2018. The total number of reported structure arsons decreased by nine, or 56%, from 16 in 2017.

### **71% of Structure Arsons Occurred in Residential Properties**

Five (5), or 71%, of Norfolk County's seven structure arsons occurred in residential occupancies. One (1) fire, or 14%, took place in an assembly property and one, or 14%, happened at a manufacturing facility.

## **BUILDING FIRES**

There were 1,305 building fires of different types in Norfolk County in 2018. These 1,305 building fires accounted for 99.6% of all structure fires in Norfolk County.

### **87% of Norfolk Building Fires Occurred in People's Homes**

One thousand one hundred and thirty-eight (1,138), or 87%, of Norfolk County's 1,305 building fires occurred in residential occupancies. Sixty (60) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 39 fires. Hospitals, prisons, and other institutional buildings experienced 23 fires. Nineteen (19) building fires took place in educational properties. Fourteen (14) fires took place in storage properties. Six (6) fires took place in manufacturing and processing facilities. Three (3) fires occurred in industrial buildings. Two (2) building fires in Norfolk County occurred in special properties such as outbuildings, bus stop shelters and telephone booths and one fire occurred in an unclassified building in Norfolk County in 2018.

## **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 48% of the residential building fires in Norfolk County; 41% occurred in 1- or 2-family homes; 3% happened in rooming houses; 2% occurred in dormitories; 1% occurred in residential board and care facilities; and 1% happened in hotels or motels. Fifty-two (52), or 5%, of the residential building fires in Norfolk County occurred in unclassified residential buildings.

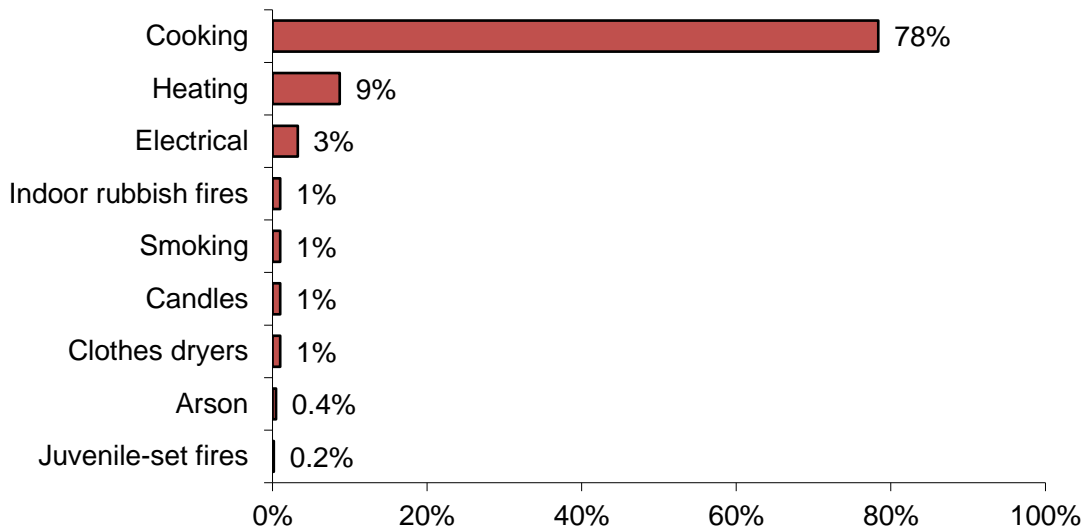
### **Residential Building Fires Drop**

There were 1,138 reported residential building fires in Norfolk County in 2018. These 1,138 fires are a decrease of 413, or 27%, from the 1,551 residential building fires reported in 2017.

### **Cooking Caused 78% of Residential Fires**

The leading cause of residential building fires in Norfolk County was unattended cooking and other unsafe cooking practices, accounting for 78% of the fires. Heating caused 9% of fires in people's homes. Electrical problems caused 3%. Indoor rubbish fires, smoking, candles, and clothes dryers each caused 1% of these fires. Arson and juvenile-set fires each caused less than 1% of the residential building fires in Norfolk County in 2018.

## 2018 Leading Causes of Fires in Norfolk County Homes



### 86% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>3</sup>

Nine hundred and seventy-six (976), or 86%, of all residential building fires were reported as confined to non-combustible containers in 2018. Eight hundred and seventy-one (871) of the reported fires were cooking fires contained to a non-combustible container, accounting for 77% of residential building fires. Forty-nine (49), or 4%, were fires confined to a fuel burner or boiler malfunction. Forty-two (42), or 4%, of all residential building fires reported in 2018 were fires confined to a chimney. Fourteen (14), or 1% of Norfolk County's residential fires in 2018 were contained rubbish fires.

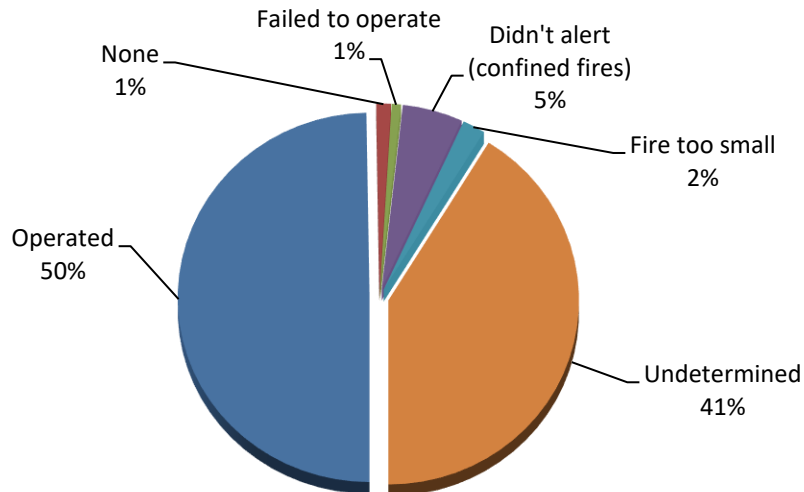
### Detectors Alerted Occupants in 1/2 of Fires

Smoke or heat detectors operated and alerted the occupants in 566, or 50%, of the residential building fires. In 5% of these fires<sup>4</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 residential fires. Smoke detector performance was undetermined in 469 incidents, or 41%, of Norfolk County's residential building fires.

<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.

## Detector Status in Norfolk County's Residential Structure Fires 2018



### 3 Detectors Failed from Missing Batteries

Of the nine fires where smoke detectors were present but failed to operate, three, or 33%, failed because of missing or disconnected batteries. In another case, or 11%, the detector failed because of a lack of maintenance. It was undetermined or unclassified in five cases, or 56%, why the detectors failed to operate.

### VACANT BUILDINGS

#### 1% of Building Fires Occurred in Vacant Buildings

Norfolk County reported 14 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 2018. Ten (10) fires occurred in vacant residential properties. Public assembly properties, educational facilities, institutional facilities, and storage facilities; each had one fire in a vacant building.

None, of the vacant building fires in Norfolk County in 2018 were determined to be intentionally-set.

### JUVENILE-SET FIRES

#### 2 Juvenile-set Fires

There were two reported juvenile-set fires in Norfolk County in 2018. The two structure fires caused one civilian injury and \$11,050 in estimated damages.

## ARSONS

### **40 Total Arsons - 7 Structures, 3 Vehicle & 30 Other Arsons**

Forty (40), or 2%, of Norfolk County's 2,134 fires were intentionally-set, or, for purposes of this analysis, arson. The seven structure arsons, three motor vehicle arson and 30 outside and other arsons caused two civilian injuries and an estimated loss of \$89,030.

### **All Arsons Down**

The total number of reported arson fires decreased by 28 from the 68 reported in 2017. Reported structure arsons decreased by nine from the 16 reported the previous year. Motor vehicle arsons increased by two from the one reported in 2017. Reported outside and other arsons decreased by 21 from 51 the year before.

## ALL INCIDENTS

### **Rescue & EMS Calls Are 60% of All Reported Incidents**

In 2018, fire departments in Norfolk County reported 97,416 responses<sup>5</sup> to MFIRS. Of these 97,416 incidents, 95,129 non-fire calls were voluntarily reported.

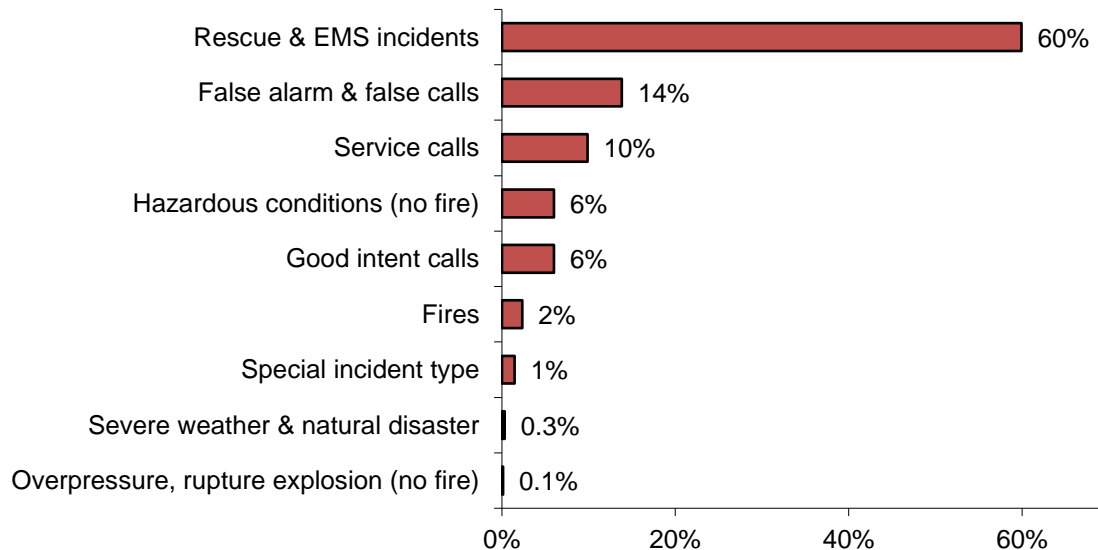
Of these 95,129 non-fire incidents, 58,371, or 60%, of all the incidents reported in 2018 were reported rescue and emergency medical services (EMS) calls; 13,475, or 14%, were reported false alarm or false calls; 9,611, or 10%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 6,227, or 6%, were reported hazardous condition calls with no fire; 5,586, or 6%, were reported good intent calls; 1,438, 1%, were special incident type calls such as citizen complaints; 301, or 0.3%, were severe weather responses; and 120, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Two thousand two hundred and eighty-seven (2,287), or 2%, of the total responses submitted by Norfolk County fire departments were fires.

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<sup>5</sup> These figures include responses in which Norfolk County fire departments gave mutual aid to other fire departments.

## 2018 Responses by Incident Type



### Norfolk County Fire Departments Gave Mutual Aid 3,383 Times

In 2018, Norfolk County fire departments reported coming to the aid of other fire departments 3,383 times. Of these 3,383 responses, 2,104, or 62%, were for rescue or EMS calls; 488 or 14%, were for good intent calls; 387, or 11%, were for service calls such as cover assignments; 160, or 5%, were for false alarms or false calls; 152, or 4%, were for fires; 51, or 2%, were special incident types; 39, or 1%, were for hazardous conditions calls with no fire; 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 1,680 Incidents

In 2018, Norfolk County fire departments reported receiving aid from surrounding departments in 1,680 incidents. Of these 1,680 incidents, 1,289, or 77%, were rescue and emergency medical services calls; 142, or 8%, were false alarms or false calls; 138, or 8%, were for fires; 46, or 3%, were good intent calls; 37, or 2%, were hazardous conditions calls with no fire; 26 or 2%, were service calls; and two, or 0.1%, were overpressure, rupture explosions with no fire.



**Norfolk County****Population: 670,850****3.2 Fires/1,000 Population****Total Fires: 2,134 \$12,218,339**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	1,310	61%	\$9,940,985
Vehicle Fires	225	11%	1,848,317
Other Fires	599	28%	429,037

3 Fatal Fires 1.87 Civilian Deaths/1,000 Fires  
 4 Civilian Deaths 0.06 Civilian Deaths/10,000 Population  
 21 Civilian Injuries 20 Fire Service Injuries

**Building Fires: 1,305****Residential Structure Fires: 1,138****Residential Structure Fires Confined to Non-Combustible Containers: 976****Unconfined Residential Structure Fires: 162**

4 Civilian Deaths 17 Civilian Injuries 19 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	545	48%	Operated	566	50%
1- & 2-Family homes	466	41%	Didn't operate	9	1%
Rooming houses	31	2%	None	14	1%
Dormitories	21	2%	Fire too small	22	2%
Residential board & care	13	1%	Didn't alert (confined)	58	5%
Hotels or motels	10	1%	Undetermined	469	41%

<b>Area of Origin<sup>6</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>7</sup></b>
Kitchen	80%	Arcing	2%	17%
Heating equipment room	5%	Heat from operating equip.	2%	11%
Chimney or flue	4%	Radiated heat from oper. eq.	1%	10%
Bedroom	1%	Hot or smoldering object	1%	9%
Living room	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	77%	Misuse of mater. or prod.	4%	27%
Flammable/comb. liquid	4%	Equipment unattended	3%	23%
Film, residue (creosote)	4%	Too close to combustibles	2%	12%
Rubbish, trash, waste	2%	Abandoned materials	1%	9%
Electrical wire, cable insulation	1%	Electrical failure, malfunc.	1%	5%
		Mechan. failure, malfunc.	1%	5%

<b>Equipment<sup>10</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>11</sup></b>
Kitchen & cooking equipment	78%	Unintentional	8%	56%
None	9%	Failure of eq. or heat source	2%	15%
Boiler, furnace, cent. heat. unit	4%	Intentional	0.4%	3%
Chimney, flue	4%	Act of nature	1%	5%
Clothes dryer	1%	Cause under investigation	1%	9%
Stove, heating	0.4%	Undetermined	2%	12%

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

Alerted occupants	48%
Didn't alert occupants	6%
Undetermined	46%

<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	256	204	31	21
February	133	101	17	15
March	197	148	20	29
April	190	107	18	65
May	224	94	21	109
June	212	75	18	119
July	183	68	24	91
August	159	85	18	56
September	150	98	13	39
October	141	105	17	19
November	136	104	18	14
December	153	121	10	22

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	319	203	34	82
Monday	296	182	33	81
Tuesday	345	188	34	123
Wednesday	276	171	34	71
Thursday	324	189	32	103
Friday	272	174	28	70
Saturday	302	203	30	69

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	107	72	17	18
04:01 - 08:00	141	86	25	30
08:01 - 12:00	371	234	53	84
12:01 - 16:00	567	269	58	240
16:01 - 20:00	666	452	41	173
20:01 - 00:00	282	197	31	54

### **Motor Vehicle Fires**

Total: 225

Automobiles: 179 (80%)

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

## Arson Fires

**Total Arsons: 40**

**Dollar loss: \$89,030**

### 0.06 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	7	1%	18%	\$78,330
Vehicle Arsons	3	1%	8%	5,500
Other Arsons	30	5%	75%	5,200

0.01 Structure arsons/1,000 population

0.004 Vehicle arsons/1,000 population

0.04 Other arsons/1,000 population

2 Civilian Injuries

### Peak Times of Day for

Structure Arsons	#	%	Vehicle Arsons	#	%
08:01 - 12:00	2	28%	00:01 - 04:00	1	33%
16:01 - 20:00	2	29%	08:01 - 12:00	1	33%
20:01 - 00:00	2	29%	12:01 - 16:00	1	33%

Other Arsons	#	%
16:01 - 20:00	16	40%
12:01 - 16:00	12	37%
20:01 - 00:00	3	10%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	3	43%
1- and 2-Family homes	2	29%

<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>
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
2018	24	7	9	8	2	0	0	2

<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>
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
2018	36	16	9	11	2	1	0	1

<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>
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
2018	70	15	20	35	1	0	0	1

<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>
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
2018	385	350	7	28	3	1	0	2

<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>
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
2018	77	32	13	32	2	2	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>
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
2018	45	26	1	18	5	0	0	5

<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>
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
2018	144	80	11	53	3	0	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>
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
2018	19	8	1	10	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>
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
2018	60	19	21	20	2	0	1	1

**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>
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
2018	58	24	14	20	1	0	0	1

**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>
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
2018	45	27	6	12	0	0	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>
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
2018	17	9	1	7	3	0	0	3

**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>
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
2018	33	23	2	8	0	0	0	0

**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>
2014	Non-Reporting Community							
2015	Non-Reporting Community							
2016	Non-Reporting Community							
2017	Non-Reporting Community							
2018	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>
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
2018	69	48	8	13	0	0	0	0

**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>
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
2018	35	7	2	26	0	0	0	0



<b>Norfolk</b>					<b>Population: 11,227</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>
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
2018	52	39	3	10	0	0	0	0

<b>Norwood</b>					<b>Population: 28,602</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>
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
2018	82	32	7	43	1	0	1	0

<b>Plainville</b>					<b>Population: 8,264</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>
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
2018	16	6	2	8	0	0	0	0

<b>Quincy</b>					<b>Population: 92,271</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>
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
2018 <sup>12</sup>	512	337	30	145	8	1	0	7

<sup>12</sup> Quincy only reported the first 3 months of 2018 runs to MFIRS before the database was closed for analysis. QFD reported 106 total fires, 89 structure fires, 7 motor vehicle fires and 10 outside & other fires. They did not report any arsons during the first 3 months. The above numbers are their actual totals for 2018. Only the 106 fires were included in the analysis of this report.

**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>
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
2018	192	133	18	41	9	1	0	8

**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>
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
2018	40	23	9	8	1	0	0	1

**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>
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
2018	83	37	8	38	2	1	1	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>
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
2018	70	43	5	22	0	0	0	0

**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>
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
2018	32	14	7	11	0	0	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>
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
2018	114	73	6	35	0	0	0	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>
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
2018	219	126	23	70	3	1	0	2

**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>
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
2018	11	4	5	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
21018	Avon	1,368	31	1	802	93	153	150	138	0	0
21025	Bellingham	2,505	36	1	1,777	72	216	176	218	1	8
21040	Braintree	6,569	72	59	4,051	258	856	422	822	19	10
21046	Brookline	7,018	395	8	3,749	485	744	290	1,326	18	3
21050	Canton	4,394	83	1	2,576	186	558	252	717	11	10
21065	Cohasset	1,959	50	0	920	253	240	119	323	33	21
21073	Dedham	5,106	149	5	3,188	533	311	223	684	4	9
21078	Dover	304	19	0	34	31	12	23	183	2	0
21099	Foxborough	3,487	75	2	2,231	241	338	160	427	7	6
21101	Franklin	4,628	64	4	3,271	183	232	220	641	11	2
21133	Holbrook	2,804	46	2	1,556	175	514	267	232	3	9
21175	Medfield	1,447	19	2	692	181	250	73	211	9	10
21177	Medway	1,945	33	8	1,171	238	139	91	237	27	1
21187	Millis**	0	0	0	0	0	0	0	0	0	0
21189	Milton	2,446	73	1	1,502	64	204	16	300	18	268
21199	Needham	3,723	35	0	1,922	197	609	252	690	9	9

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	2,001	77	0	1,176	416	28	7	297	0	0
21220	Norwood	4,723	86	3	3,304	291	391	140	493	5	10
21238	Plainville	3,180	18	2	1,408	85	218	113	248	64	1,024
21243	Quincy <sup>13</sup>	9,542	513	10	5,664	655	783	538	1,364	9	6
21244	Randolph	5,813	196	3	3,846	355	626	236	548	2	1
21266	Sharon	2,556	55	3	1,417	211	284	220	338	18	10
21285	Stoughton	5,633	95	3	3,538	161	530	247	1,047	7	5
21307	Walpole	3,502	74	2	2,266	179	274	243	452	12	0
21317	Wellesley	4,305	32	1	2,116	279	419	299	1,158	1	0
21335	Westwood	3,471	136	2	1,999	259	337	177	549	2	10
21336	Weymouth	8,493	219	3	5,390	470	634	944	811	12	10
21350	Wrentham	2,153	13	1	1,415	134	286	124	178	1	1
<b>Norfolk County</b>		<b>105,075</b>	<b>2,694</b>	<b>127</b>	<b>62,981</b>	<b>6,685</b>	<b>10,186</b>	<b>6,022</b>	<b>14,632</b>	<b>305</b>	<b>1,443</b>

\* Certified no reportable fires.

\*\*Non reporting department.

<sup>13</sup> Quincy originally only reported the first 3 months of their runs for 2018. After the database was closed for analysis they reported the remainder of the year. This figure reflects the entire year's worth of runs.

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.



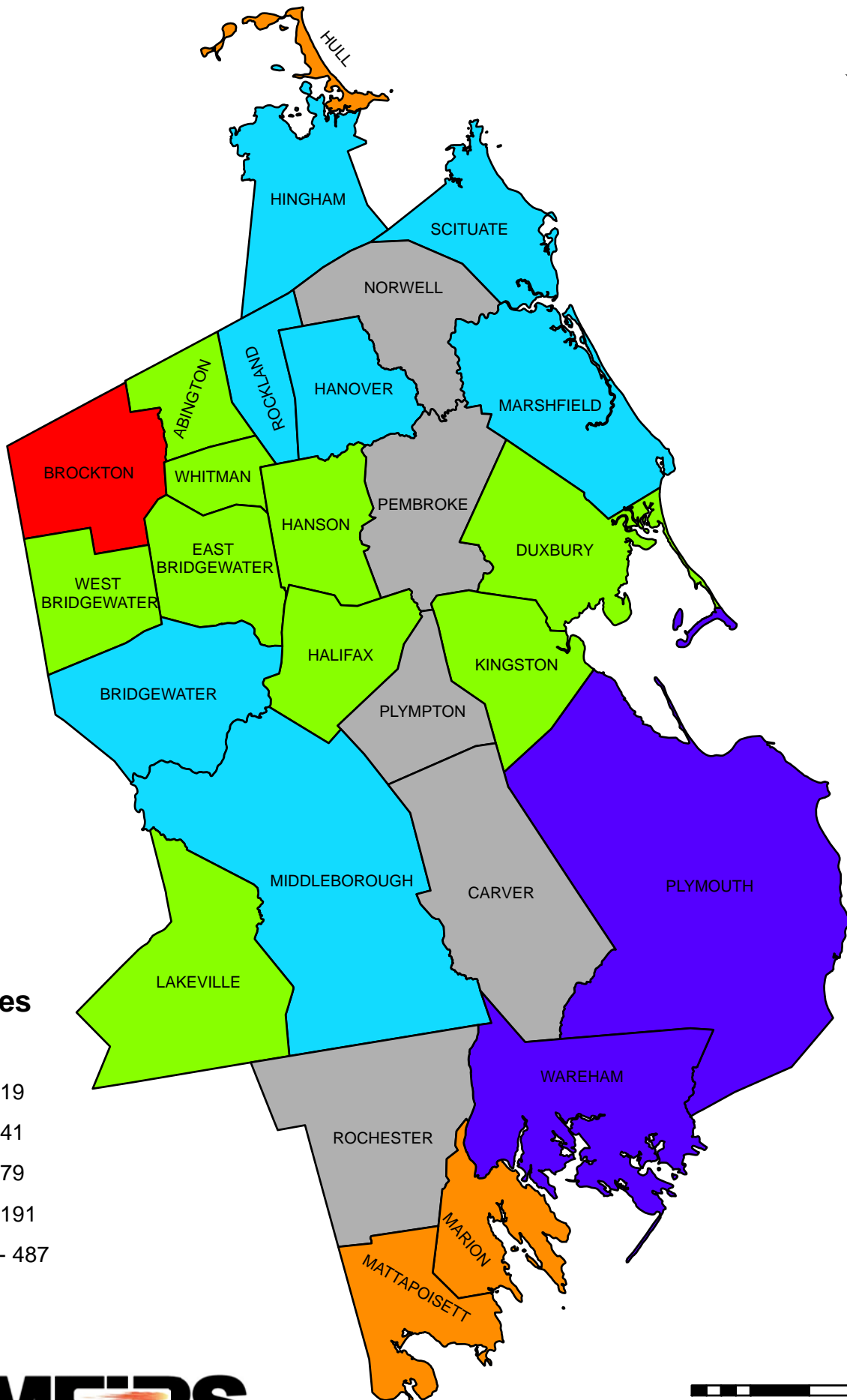
# Plymouth County

## 2018 Fire Data Analysis

# Plymouth County Fires 2018



## 2018 Fires



**MFIRS**  
Massachusetts Fire Incident Reporting System

0 1 2 4 6 8 Miles

Massachusetts Fire Incident Reporting System 2018

# Plymouth County Fires in 2018

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## **1,626 Total Fires — 820 Structures, 219 Vehicles & 587 Other Fires**

Plymouth County ranked seventh out of the fourteen Massachusetts counties in total reported fires. Plymouth County fire departments reported 1,626 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 820 structure fires, 219 motor vehicle fires, 358 brush, tree or lawn fires, 107 outside rubbish fires, 90 special outside fires, two cultivated vegetation or crop fires and 30 other fires caused three civilian deaths, 38 civilian injuries, 16 fire service injuries and an estimated dollar loss of \$18.5 million. Plymouth County's fires accounted for 6% of the 25,504 Massachusetts fires reported in 2018.

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 2018.

## **All Fires Down**

The total number of reported fire incidents decreased by 131, or 7%, from the 1,757 reported in 2018. Reported structure fires decreased by eight from 828 the year before. Motor vehicle fires increased by 20 from 199 the previous year. Reported outside and other fires decreased by 143 from 730 in 2017.<sup>1</sup>

## **PLYMOUTH COUNTY FIRES FROM 2014 TO 2018**

	<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>Year</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>
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	1,757	828	199	730	39	12	4	23
2018	1,626	820	219	587	38	11	4	23

## **Fire and Fire Death Rates**

Plymouth County had 3.3 fires per 1,000 population. That figure ranks Plymouth County tied for sixth in the state and below the state rate of 3.9 fires per 1,000 population. Plymouth County also had 0.06 fire deaths per 10,000 population ranking it tied for sixth among Massachusetts counties and below the state rate of 0.07 fire deaths per 10,000 population.

## **3 Plymouth County Fatal Fires Killed 3 Civilians in 2018**

Three (3) people died in three fatal fires in Plymouth County in 2018.

- On February 5, 2018, at 1:14 a.m., the Plymouth Fire Department was dispatched to a fire in a single-family home of undetermined cause. The victim, a 71-year old man, was asleep at the time of the fire but was overcome as he tried to escape. One (1)

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<sup>1</sup> 2018 was another down year statewide for brush fires.



firefighter was also injured at this fire. It was undetermined if alarms were present. The building was not sprinklered. Damages from this fire were estimated to be \$415,000.

- On May 20, 2018, at 9:06 a.m., the Rochester Fire Department was dispatched to a fire in a residential home of undetermined cause. The fire started in a first floor living room. The victim, a 62-year old man, reentered the building to rescue his dog. The victim's sister was also injured at this fire. Smoke alarms were not present. The building was not sprinklered. Damages from this fire were not estimated.
- On November 29 2018, at 3:00 a.m., the Wareham Fire Department was called to a fatal motor vehicle crash with ensuing fire. The victim, a 60-year old man, was trapped in the vehicle and died in the fire. No one else was injured at this fire. Damages from this fire were not estimated.

### **Plymouth Has Plymouth County's Largest Loss Fire in 2018**

In 2018, there were no large loss fires in Plymouth County with a dollar loss greater than \$1 million. Plymouth had the largest loss fire in the county in 2018.

- On September 13, 2018, at 8:38 p.m., the Plymouth Fire Department responded to a fire of undetermined cause, in a single-family home under construction. No one was injured at this fire. Alarms were present and operated. The building did not have any sprinklers. Total damages were estimated to be \$900,000.

## **STRUCTURE FIRES**

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

The 820 structure fires caused two civilian deaths, 34 civilian injuries, 15 fire service injuries and an estimated dollar loss of \$14.6 million. These incidents represented 50% of Plymouth County's reported fires in 2018. The average estimated dollar loss per structure fire was \$17,840. The total number of reported structure fires decreased by eight, or 1%, from the 828 reported in 2017.

### **Structure Arsons Down Slightly**

The 11 structure arsons caused three civilian injuries and an estimated dollar loss of \$59,200. 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 11 structure arsons accounted for 29% of the Plymouth County arson fires reported in 2018. The total number of reported structure arsons decreased by one, or 8%, from 12 in 2017.

### **64% of Structure Arsons Occurred in Residences**

Sixty-four percent (64%) of Plymouth County's 11 structure arsons occurred in residential occupancies; 18% occurred in storage facilities and 9% each happened in institutional facilities and mercantile or business properties.

## **BUILDING FIRES**

There were 814 building fires of different types in Plymouth County in 2018. These 814 building fires accounted for 99.3% of all structure fires in Plymouth County.

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

Six hundred and seventy-eight (678), or 84%, of Plymouth County's 814 building fires occurred in residential occupancies. Mercantile and business properties had 38 fires. Thirty-eight (38) fires also took place in public assembly properties, including restaurants and churches. Twenty-five (25) fires took place in storage facilities. Hospitals, prisons, and other institutional buildings experienced 15 fires. Seven (7) fires took place in manufacturing and processing facilities. Six (6) building fires took place in educational facilities. Four (4) fires occurred in industrial, utility, defense, agricultural or mining facilities. There were three fires where the property use was not reported or undetermined in Plymouth County in 2018.

## **RESIDENTIAL FIRES**

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

There were 678 reported residential building fires in Plymouth County in 2018. These 678 fires are a decrease of nine, or 1%, from the 687 residential building fires reported in 2017.

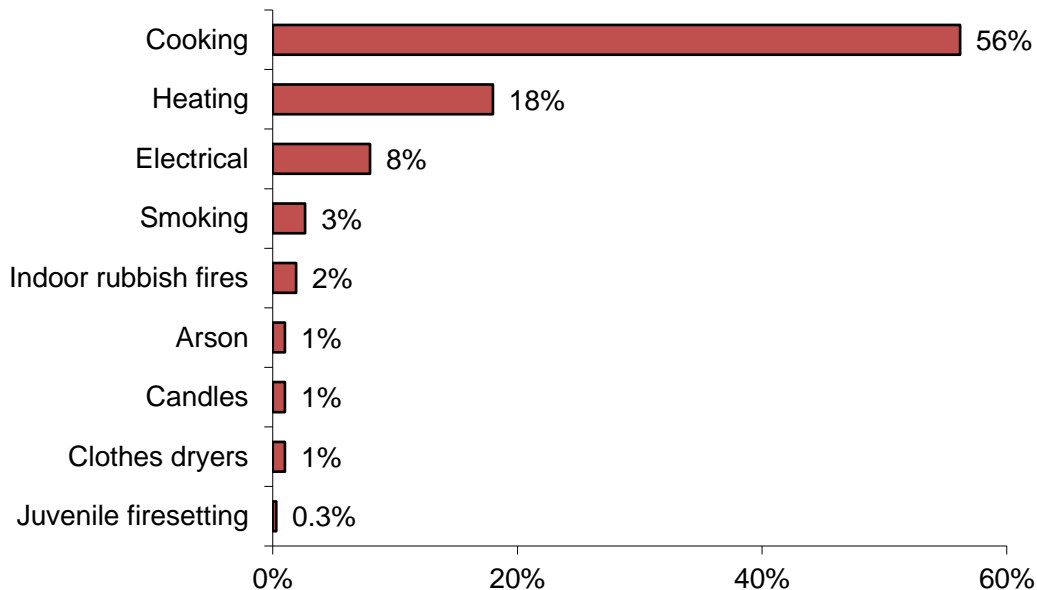
### **1- & 2-Family Homes Accounted for 55% of Residential Building Fires**

The peak fixed property uses for residential building fires were 1- & 2-family homes, accounting for 55% of the residential building fires in Plymouth County; 39% occurred in apartments. Rooming houses had 2% of these fires. Residential board and care facilities, and dormitories each had 1% of these fires. Hotels or motels had less than 1% of these fires. Fourteen (14), 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 678 residential building fires in Plymouth County was unattended cooking and other unsafe cooking practices, accounting for 56% of these fires. Heating problems caused 18% of the fires in people's homes. Electrical problems caused 8% and smoking caused 3% 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 2018.

## 2018 Leading Causes of Fires in Plymouth County Homes



### 71% of Residential Building Fires Were Confined to Non-Combustible Containers<sup>2</sup>

Four hundred and seventy-nine (479), or 71%, of all residential building fires were reported as confined to non-combustible containers in 2018. Three hundred and fifty-six (356) of the reported fires were cooking fires contained to a non-combustible container, accounting for 53% of residential building fires. Seventy-six (76), or 11%, were fires confined to a fuel burner or boiler malfunction. Thirty-three (33), or 5%, of all residential building fires reported in 2018 were fires confined to a chimney. Thirteen (13), or 2%, of these fires were contained rubbish fires; and one, or 0.1%, was an incinerator overload fire.

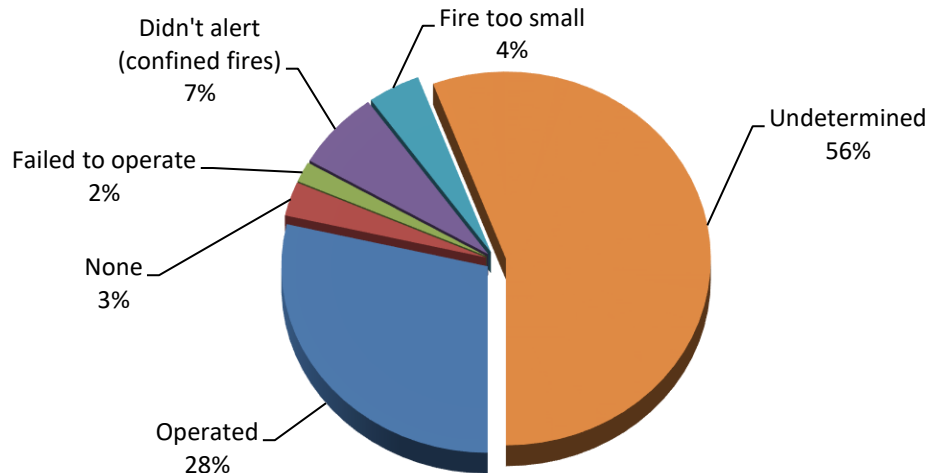
### Detectors Alerted Occupants in Only 28% of Fires

Smoke or heat detectors operated and alerted the occupants in 194, or 28%, 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 3% 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 378 incidents, or 56%, 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 2018



### 3 Detectors Failed Because of a Power Shutoff or Disconnect

Of the 12 fires where smoke detectors were present but failed to operate, three, or 25%, failed from a power shutoff or disconnect. Two (2), or 17%, failed because the batteries were either missing or disconnected. It was undetermined or unclassified in seven cases, or 58%, why the detectors failed to operate.

### VACANT BUILDINGS

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

Plymouth County reported 18 fires that occurred in buildings that were vacant, under construction or demolition<sup>4</sup>. This represented 2% of the total 814 building fires reported to MFIRS in 2018. Twelve (12) fires occurred in vacant residential properties. Three (3) fires occurred in storage facilities; and one each happened in a public assembly property, a business and a manufacturing plant in Plymouth County.

None of the vacant building fires in Plymouth County in 2018 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

### 3 Juvenile-set Fires

There were three reported juvenile-set fires in Plymouth County in 2018. The two structure fires and one special outside fire caused one civilian injury and \$30,000 in estimated damages.

## ARSONS

### 38 Total Arsons — 11 Structures, 4 Vehicles & 23 Other Arsons

Thirty-eight (38), or 2%, of Plymouth County's 1,626 fires were considered intentionally-set, or, for purposes of this analysis, arson. The 11 structure arsons, four motor vehicle arsons and 23 outside and other arsons caused three civilian injuries and an estimated dollar loss of \$88,760.

### Structure Arsons Down Slightly

The total number of reported arson fires decreased by one from the 39 reported in 2018. Reported structure arsons decreased by one from the 12 reported in 2017. Motor vehicle arsons remained the same with four reported in both 2018 and 2017. Reported outside and other arsons also remained the same with 23 reported both this year and the year before.

## ALL INCIDENTS

### Rescue & EMS Calls Are 64% of All Reported Responses

In 2018, Plymouth County fire departments reported 94,387 responses<sup>5</sup> to MFIRS. Of these 94,387 incidents, 92,661 non-fire calls were voluntarily reported.

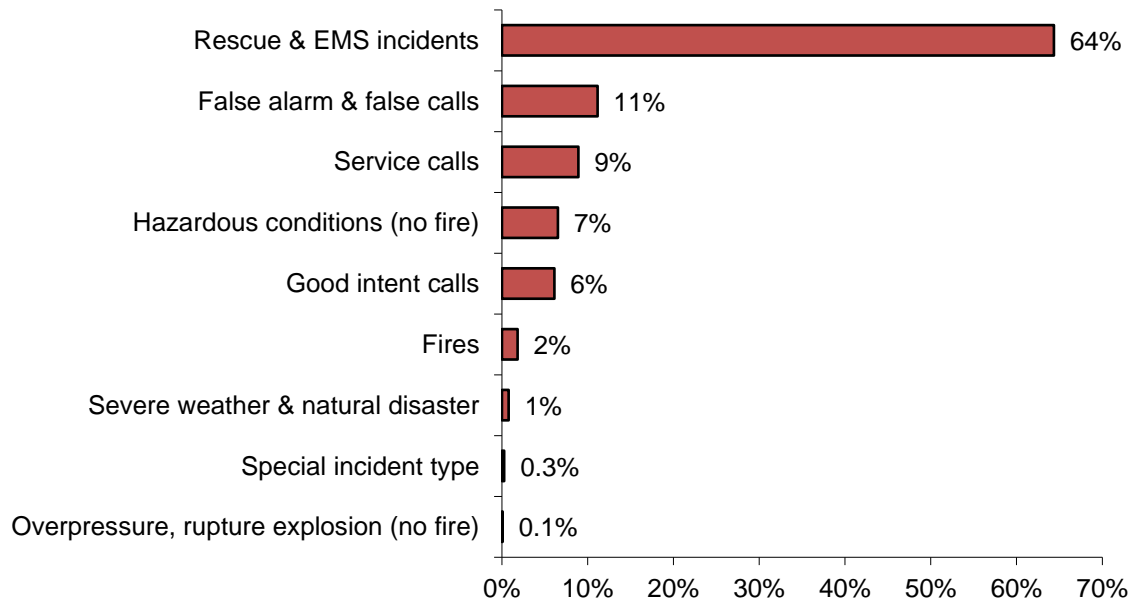
Of these 92,661 non-fire calls, 60,740, or 64%, of the total responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 10,527 or 11%, were reported false alarm or false calls; 8,411, or 9%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 6,152, or 7%, were reported hazardous condition calls with no fire; 5,757, or 6%, were reported good intent calls; 746, or 1%, were severe weather responses; 247, or 0.3%, were special incident type calls such as citizen complaints; and 81, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

One thousand seven hundred and twenty-six (1,726), 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.

## 2018 Responses by Incident Type



### Plymouth County Fire Departments Gave Mutual Aid 1,929 Times

In 2018, Plymouth County fire departments reported coming to the aid of other fire departments 1,929 times. Of these 1,929 responses, 1,178, or 61%, were for rescue or EMS calls; 351, or 18%, were for good intent calls; 206, or 11%, were for service calls such as cover assignments; 100, or 5%, were for fires; 67, or 3%, were for hazardous conditions calls with no fire; 20, or 1%, were for false alarms or false calls; four, or 0.2%, were severe weather or natural disaster calls; two, or 0.1%, were for special incident type calls; and one, or 0.1%, was an overpressure rupture explosions call.

### Plymouth County Received Mutual Aid in 1,243 Incidents

In 2018, Plymouth County fire departments received aid from surrounding departments in 1,243 incidents. Of these 1,243 incidents, 1,024, or 82%, were rescue and emergency medical services calls; 97, or 8%, were for fires; 35, or 3%, were good intent calls; 30, or 2%, were service calls; 30, or 2%, were hazardous conditions calls with no fire; 26, or 2%, were false alarms or false calls; and one, or 0.1%, was a reported overpressure, rupture, explosion or overheat call with no fire.

**Plymouth County****Population: 494,919****3.3 Fires/1,000 Population****Total Fires: 1,626 \$18,482,417**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	820	50%	\$14,628,850
Vehicle Fires	219	14%	3,200,386
Other Fires	587	36%	653,181

3 Fatal Fires 1.85 Civilian Deaths/1,000 Fires  
 3 Civilian Deaths 0.06 Civilian Deaths/10,000 Population  
 38 Civilian Injuries 16 Fire Service Injuries

**Building Fires: 814****Residential Building Fires: 678****Residential Building Fires Confined to Non-Combustible Containers: 479****Unconfined Residential Building Fires: 199**

2 Civilian Deaths 33 Civilian Injuries 14 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
1- & 2-Family homes	375	55%	Operated	194	29%
Apartments	263	39%	Didn't operate	12	2%
Rooming houses	12	2%	None	20	3%
Residential board & care	6	1%	Fire too small	28	4%
Dormitories	5	1%	Didn't Alert (confined)	46	7%
Hotels or motels	3	0.4%	Undetermined	378	56%

<b>Area of Origin<sup>6</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>7</sup></b>
Kitchen	59%	Arcing	5%	17%
Heating room or area	12%	Heat from operating eq.	4%	15%
Chimney or flue	5%	Radiated, cond./heat op. eq.	4%	13%
Bedroom	3%	Hot ember or ash	1%	5%
Living room	2%	Cigarettes	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	55%	Electrical failure, malfunc.	2%	7%
Flammable or combust. liquid	11%	Too close to combustibles	2%	7%
Film, residue (creosote)	5%	Abandoned materials	1%	5%
Electrical wire, cable insulation	4%	Unspecified short circuit arc	1%	5%
Rubbish, trash, waste	3%	Mechanical failure, malfunc.	1%	4%
Structural member, framing	2%	Misuse of mater. or product	1%	3%

<b>Equipment<sup>10</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>11</sup></b>
Cooking equipment	56%	Unintentional	17%	56%
None	17%	Failure of eq. or heat source	4%	15%
Boiler, furnace, cent. heat. unit	12%	Intentional	1%	2%
Chimney or flue	5%	Act of Nature	1%	2%
Outlet, receptacle	1%	Cause under investigation	2%	7%
		Undetermined	4%	15%

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

Alerted Occupants	23%
Didn't Alert Occupants	10%
Undetermined	67%

<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	132	89	22	21
February	91	62	14	15
March	146	106	18	22
April	146	72	14	60
May	182	62	20	100
June	193	53	23	117
July	210	78	23	109
August	125	63	17	45
September	103	54	11	38
October	91	54	23	14
November	117	75	17	25
December	90	52	17	21

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	259	157	23	79
Monday	193	100	35	58
Tuesday	213	98	21	94
Wednesday	223	91	33	99
Thursday	268	121	38	109
Friday	223	108	33	82
Saturday	247	145	36	66

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 - 04:00	83	46	15	22
04:01 - 08:00	122	69	20	33
08:01 - 12:00	274	142	46	86
12:01 - 16:00	501	206	56	239
16:01 - 20:00	443	246	50	147
20:01 - 00:00	203	111	32	60

### **Motor Vehicle Fires**

Total: 219

Automobiles: 176 (80%)

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

## Arson Fires

**Total Arsons: 38**

**Dollar loss: \$88,760**

### 0.08 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	11	1%	29%	\$59,200
Vehicle Arsons	4	2%	11%	22,000
Other Arsons	23	4%	61%	7,560

0.02 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.05 Other arsons/1,000 population

3 Civilian Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 – 20:00	3	27%	00:01 – 04:00	2	50%
04:01 – 08:00	2	18%	12:01 – 16:00	2	50%
08:01 – 12:00	2	18%			
12:01 – 16:00	2	18%			

Other Arsons	#	%
12:01 – 16:00	11	48%
16:01 – 20:00	5	22%
08:01 – 12:00	4	17%

Peak Fixed Property Uses for Structure Arsons	#	%
1- or 2-family homes	4	36%
Apartments	2	18%

<b>Abington</b>					<b>Population: 15,985</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>
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
2018	41	18	10	13	0	0	0	0

<b>Bridgewater</b>					<b>Population: 26,563</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>
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
2018	79	45	9	25	1	1	0	0

<b>Brockton</b>					<b>Population: 93,810</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>
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
2018	487	310	50	127	6	3	1	2

<b>Carver</b>					<b>Population: 11,509</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>
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
2018	3	2	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>
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
2018	27	5	9	13	0	0	0	0

**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>
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
2018	25	10	4	11	1	1	0	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>
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
2018	29	13	1	15	0	0	0	0

**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>
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
2018	53	29	7	17	2	1	0	1

<b>Hanson</b>					<b>Population: 10,209</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>
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
2018	26	10	2	14	4	0	1	3

<b>Hingham</b>					<b>Population: 22,157</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>
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
2018	65	26	7	32	0	0	0	0

<b>Hull</b>					<b>Population: 10,293</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>
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
2018	19	10	3	6	0	0	0	0

<b>Kingston</b>					<b>Population: 12,629</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>
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
2018	36	15	6	15	1	0	0	1

**Lakeville****Population: 10,602**

	<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>
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
2018	35	9	5	21	2	0	0	2

**Marion****Population: 4,907**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	19	6	3	10	5	1	0	4

**Marshfield****Population: 25,132**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	78	34	7	37	1	0	0	1

**Mattapoisett****Population: 6,045**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	18	10	2	6	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>
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
2018	67	21	16	30	1	0	0	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>
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
2018	8	7	1	0	0	0	0	0

**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>
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
2018	5	4	0	1	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>
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
2018	191	79	32	80	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>
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
2018	9	5	2	2	1	1	0	0

<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>
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
2018	4	4	0	0	0	0	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>
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
2018	69	35	5	29	1	1	0	0

<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>
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
2018	53	31	4	18	6	0	1	5



**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>
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
2018	47	33	4	10	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>
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
2018	76	30	15	31	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>
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
2018	31	6	9	16	2	0	0	2

**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>
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
2018	26	13	5	8	2	1	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
23001	Abington	3,208	41	7	2,103	186	257	211	394	0	9
23042	Bridgewater	4,578	82	4	2,901	235	379	241	662	10	64
23044	Brockton	26,128	488	6	19,897	683	1,538	904	2,535	61	16
23052	Carver	3	3	0	0	0	0	0	0	0	0
23082	Duxbury	3,016	32	9	1,706	436	278	113	404	31	7
23083	East Bridgewater	2,502	30	1	1,779	145	145	100	217	70	15
23118	Halifax	1,801	30	1	1,170	157	211	60	126	41	5
23122	Hanover	3,146	70	11	1,772	416	412	149	273	34	9
23123	Hanson	2,133	31	0	1,305	250	281	54	170	31	11
23131	Hingham	4,692	69	3	2,884	270	420	404	545	89	8
23142	Hull	2,669	19	1	1,594	232	385	109	306	16	7
23145	Kingston	2,862	36	1	2,012	240	194	78	280	17	4
23146	Lakeville	1,706	39	2	1,057	82	195	111	202	13	5
23169	Marion	1,546	24	1	855	114	214	71	239	23	5
23171	Marshfield	3,481	81	2	2,200	325	314	87	462	10	0
23173	Mattapoisett	676	22	2	51	92	116	41	203	146	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	4,400	72	4	2,168	180	413	1,067	470	6	20
23219	Norwell	731	9	0	281	138	103	59	88	53	0
23993	Onset	1,621	60	0	991	177	139	104	150	0	0
23231	Pembroke	5	5	0	0	0	0	0	0	0	0
23239	Plymouth	9,379	194	10	5,772	370	778	983	1,251	15	6
23240	Plympton	538	9	0	286	120	52	16	53	0	2
23250	Rochester	4	4	0	0	0	0	0	0	0	0
23251	Rockland	3,446	71	5	2,472	200	211	99	372	4	12
23264	Scituate	2,797	61	1	1,500	395	301	179	336	16	8
23992	Wareham	3,004	81	9	1,423	473	303	353	350	7	5
23322	West Bridgewater	2,136	35	0	1,212	89	454	39	233	52	22
23338	Whitman	2,179	28	1	1,349	147	318	125	206	1	4
<b>Total</b>	<b>Plymouth County</b>	<b>94,387</b>	<b>1,726</b>	<b>81</b>	<b>60,740</b>	<b>6,152</b>	<b>8,411</b>	<b>5,757</b>	<b>10,527</b>	<b>746</b>	<b>247</b>

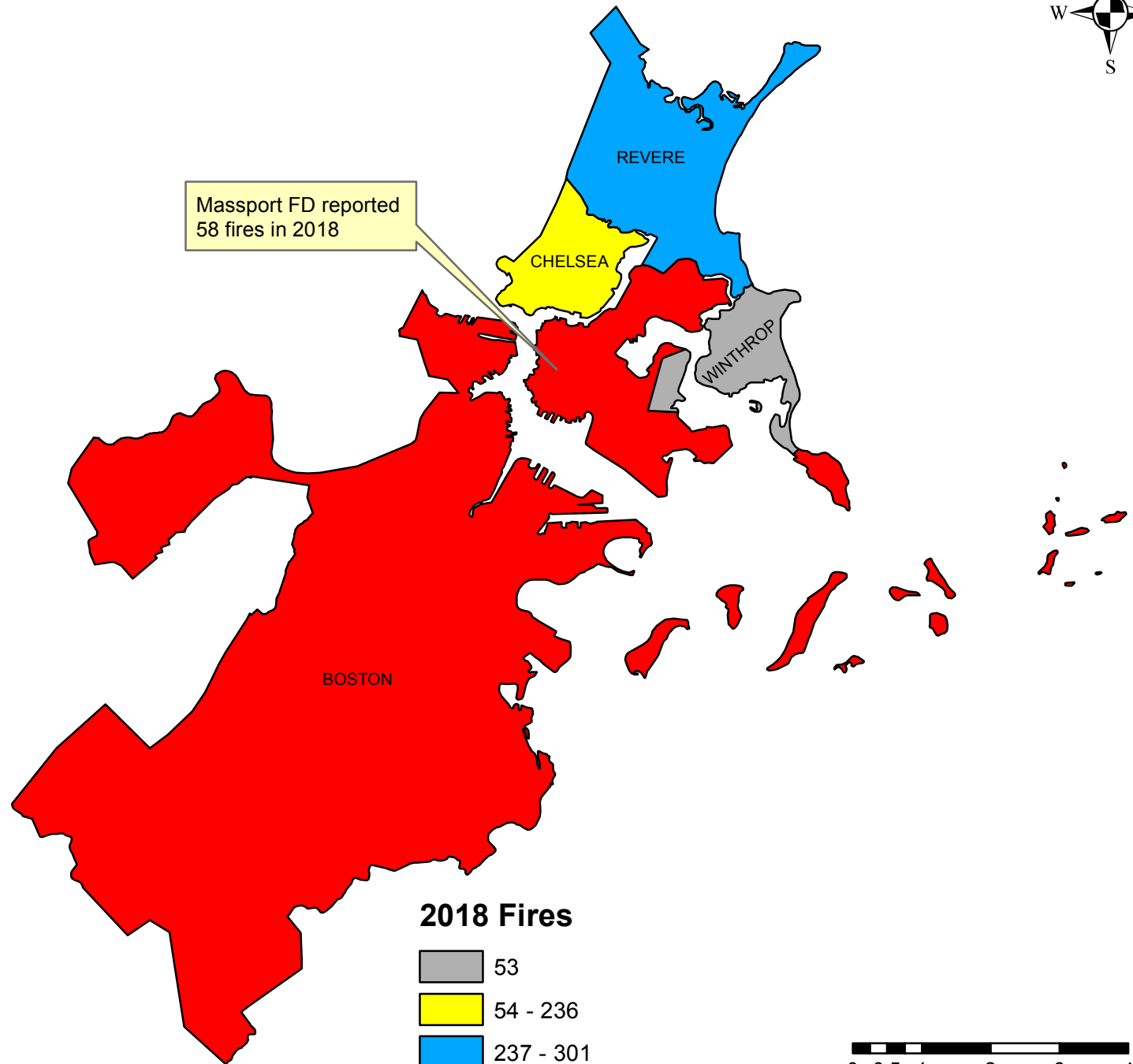
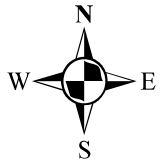
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



# Suffolk County

## 2018 Fire Data Analysis

# Suffolk County Fires 2018



# Suffolk County Fires in 2018

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## **5,431 Total Fires — 4,139 Structures, 277 Vehicles & 1,015 Other Fires**

Suffolk County ranked second out of the fourteen Massachusetts counties in total reported fires. Suffolk County fire departments reported 5,431 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 4,139 structure fires, 277 motor vehicle fires, 363 brush fires, 430 outside rubbish fires, 87 special outside fires, six cultivated vegetation or crop fires, and 129 unclassified fires caused three civilian deaths, seven civilian injuries, 33 fire service injuries and an estimated dollar loss of \$51.7 million. Suffolk County's fires accounted for 21% of the 25,504 Massachusetts fires reported in 2018.

All five fire departments in Suffolk County reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS).

## **All Fires Down**

Total fires decreased by 765, or 12%, from 6,196 incidents in 2017. Reported structure fires decreased by 416, or 9%, from the 4,555 reported during the previous year. Motor vehicle fires increased by 21, or 8%, from the 256 reported in 2017. Outside and other fires decreased by 370, or 27%, from 1,385 the year before.

## **SUFFOLK COUNTY FIRES FROM 2014 TO 2018**

<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>
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
2018	5,431	4,139	277	1,015	88	8	10	70

## **Fire and Fire Death Rates**

Suffolk County had 7.5 fires per 1,000 population. That figure ranks Suffolk County first in the state and above the state rate of 3.9 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 0.07 fire deaths per 10,000 population.

## **3 Residents Died in 3 Suffolk County Fires**

Suffolk County had three residents die in three fires in 2018.

- On January 7, 2018, at 3:39 a.m., the Boston Fire Department was called to a fatal smoking fire in a two-family home. The fire was started by the victim smoking while using home oxygen in his wheelchair. The 72-year-old man, was discovered by the first arriving firefighters on fire in the kitchen. No one else was injured at this fire. Alarms were present and alerted the other occupants of the building. Sprinklers were present and kept the fire to just the victim. Damages from this fire were estimated to be \$1,500.

- On February 15, 2018, at 6:37 a.m., the Chelsea Fire Department was called to a fatal brush fire in a small wood lot between Routes 1 and 16. The victim was a 42-year old homeless man. The most probable cause was improper disposal of smoking materials.
- On December 22, 2018, at 5:00 a.m., the Boston Fire Department was called to a fatal smoking fire in a two-family home. The fire was started by a cigarette in an unclassified function room. The victim was a 59-year old woman. No one else was injured at this fire. The building did have alarms but it was undetermined if they operated. The home did not have any sprinklers. Damages from this fire were estimated to be \$205,000.

### **Revere Has Suffolk County's Largest Loss Fire in 2018**

In 2018, Suffolk County fire departments reported 15 fires with a reported dollar loss of \$1 million or greater. All but two of these fires occurred in Boston. The total dollar loss of these five fires was \$24.7 million, or 48%, of the county's total dollar loss.

- On September 16, 2018, at 2:08 p.m., the Revere Fire Department was called to a fire of undetermined cause at 10 Franklin Ave., a 45-unit apartment building. Four (4) firefighters were injured at this fire. Alarms were present and alerted the occupants. Sprinklers were not present. Damages from this fire were estimated to be \$4.2 million.

## **STRUCTURE FIRES**

### **Reported Structure Fires Down**

The 4,139 structure fires caused two of the three civilian deaths, all seven civilian injuries, 30 fire service injuries and an estimated dollar loss of \$48.7 million. These incidents represented 76% of Suffolk County's reported fires in 2018. The average estimated dollar loss per structure fire was \$11,776. The total number of reported structure fires decreased by 416, or 9%, from the 4,555 reported in 2017.

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

The eight structure arsons caused two fire service injuries and an estimated dollar loss of \$1.7 million. Arson was indicated as the cause of less than 1% of the structure fires and 4% of Suffolk County's structure fire dollar loss. The eight structure arsons accounted for 9% of the Suffolk County arson fires reported in 2018. The total number of reported structure arsons decreased by 25, or 76%, from the 33 reported in 2017.

### **All Structure Arsons Occurred in Residences**

All eight of Suffolk County's structure arsons occurred in residential occupancies; six happened in apartments and two in single- or two family homes.

## **BUILDING FIRES**

There were 4,133 building fires of different types in Suffolk County in 2018. These 4,133 building fires accounted for 99.9% of all structure fires in Suffolk County.

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

Three thousand five hundred and twenty-eight (3,528), or 85%, of Suffolk County's 4,133 building fires occurred in residential occupancies. Mercantile and business properties had 168 fires. One hundred and sixty-seven (167) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 132 fires. Sixty-nine (69) building fires took place in educational properties. Twenty-eight (28) building fires in Suffolk County occurred in special properties such as outbuildings, bus stop shelters and tollbooths. Seventeen (17) fires took place in storage properties. Four (4) fires occurred in industrial, utility, defense, agricultural or mining facilities. Three (3) fires took place in manufacturing and processing facilities. There were 15 fires where the property use was coded as *Other* and two other fires whose property use was unclassified.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Were Down**

There were 3,528 reported residential building fires in Suffolk County in 2018. These 3,528 fires are a decrease of 337, or 9%, from the 3,865 residential building fires reported in 2017.

### **Apartments Accounted for Almost 2/3 of Residential Building Fires**

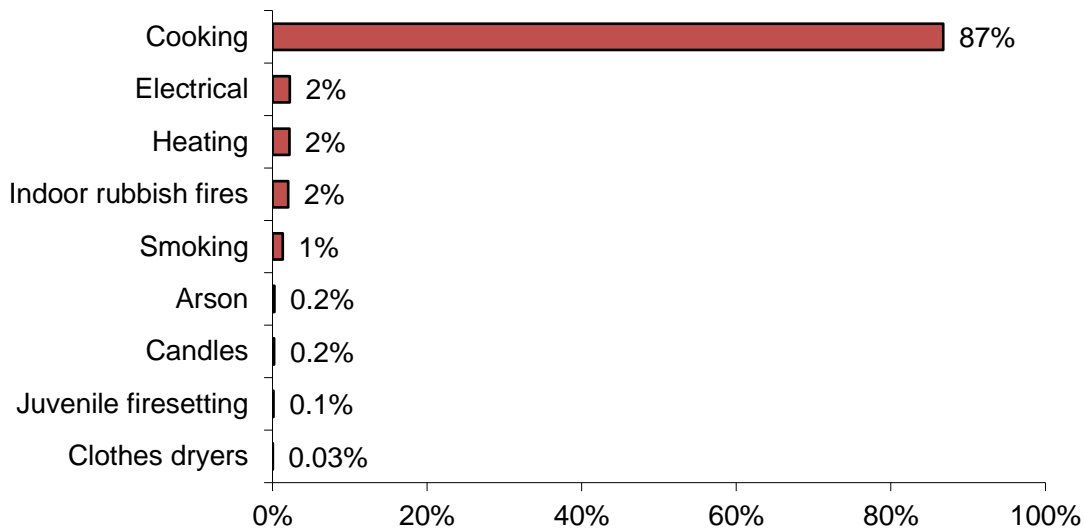
The peak fixed property uses for residential building fires were apartments, accounting for 64% of the residential building fires in Suffolk County; 12% occurred in one- or two-family homes; 5% occurred in dormitories; 5% happened in rooming houses; 1% occurred in residential board and care facilities; 1% happened in hotels or motels. Four hundred and seventy-eight (478), 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. Electrical problems, heating equipment and indoor rubbish fires each caused 2% of these fires. Smoking caused 1% of these fires. Candles, arson, clothes dryers and juvenile-set fires each caused less than 1% of these fires in 2018.



## 2018 Leading Causes of Fires in Suffolk County Homes



### 90% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>1</sup>

Three thousand one hundred and sixty-six (3,166), or 90%, of all residential building fires were reported as confined to non-combustible containers in 2018. Three thousand twenty (3,020) of the reported fires were cooking fires contained to a non-combustible container, accounting for 86% of residential building fires. Sixty-eight (68), or 2%, of the residential building fires in Suffolk County in 2018 were contained rubbish fires. Sixty-four (64), or 2%, were fires confined to a fuel burner or boiler malfunction. Thirteen (13), or less than 1%, of all residential building fires reported in 2018 were confined to a chimney; and one, or less than 1% was confined to a commercial compactor.

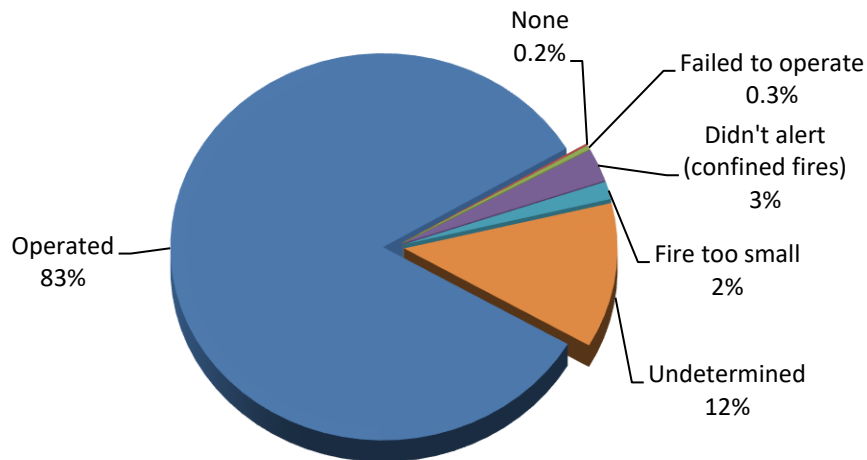
### Alarms Alerted Occupants in 83% of Fires

Smoke or heat alarms operated and alerted the occupants in 2,934, or 83%, 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 0.3% of these incidents. In 0.2% of these fires, no alarms were present at all. The fire was too small to trigger the alarm in 2% of the residential fires. Smoke alarm performance was undetermined in 427 incidents, or 12%, 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 2018



### 25% of Failed Alarms Had Missing or Dead Batteries

Of the 12 fires where smoke alarms were present but failed to operate, two, or 17%, failed because the batteries were either missing or disconnected. One (1), or 8%, failed from a dead battery. Another one, or 8%, failed from an improper installation or placement. It was undetermined or unclassified in eight cases, or 67%, why the alarms failed to operate.

## VACANT BUILDINGS

### 1% of Building Fires Occurred in Vacant Buildings

Suffolk County reported 32 fires that occurred in buildings that were vacant, under construction or demolition. This represented 1% of the total 4,133 building fires reported to MFIRS in 2018. Thirteen (13) fires occurred in vacant residential properties. Public assembly properties had seven of these fires. Two (2) vacant building fires occurred each in storage facilities and mercantile or business properties. One (1) of these fires occurred in a manufacturing facility, and another in an industrial facility.

One (1), or 3%, of the vacant building fires in Suffolk County in 2018 was determined to be intentionally-set. This fire occurred in an apartment building.

## JUVENILE-SET FIRES

### 9 Juvenile-set Fires

There were nine reported juvenile-set fires in Suffolk County in 2018. The five structure fires, three brush fires, and one unclassified fire caused \$67,500 in estimated damages.

## ARSONS

### 88 Total Arsons<sup>3</sup> — 8 Structures, 10 Vehicles & 70 Other Arsons

Eighty-eight (88), or 2%, of Suffolk County's 5,431 fires were considered intentionally-set, or, for purposes of this analysis, arson. The eight structure arsons, 10 motor vehicle arsons and 70 outside and other arsons caused two firefighter injuries and an estimated dollar loss of \$1.8 million. Suffolk County's arson fires accounted for 16% of the state's total arson fires and 33% of the state's total dollar loss from arson.

### All Arson Down

The total number of arsons decreased by 41 from 129 in 2017. Reported structure arsons decreased by 25 from the 33 reported in 2017. Motor vehicle arsons decreased by two from the 12 reported in 2017. Outside and other arsons decreased by 14 from the 84 reported last year.

## ALL INCIDENTS

### Rescue & EMS Calls Are Almost 1/2 of All Reported Responses

In 2018, fire departments in Suffolk County reported 111,897 responses<sup>4</sup> to MFIRS. This is a decrease of 399 runs, or less than 1%, over the 112,296 reported in 2017. Of these 111,897 responses, 106,439 non-fire calls were voluntarily reported.

Of these 106,439 non-fire calls, 52,459, or 47%, of all the responses reported in 2018, were reported rescue and emergency medical services (EMS) calls; 20,507, or 18%, were reported false alarm or false calls; 17,236, or 15%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 10,160, or 9%, were reported good intent calls; 4,843, or 4%, reported hazardous condition calls with no fire; 1,126, or 1%, were special incident type calls such as citizen complaints; 65, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 43, or 0.04%, were severe weather calls.

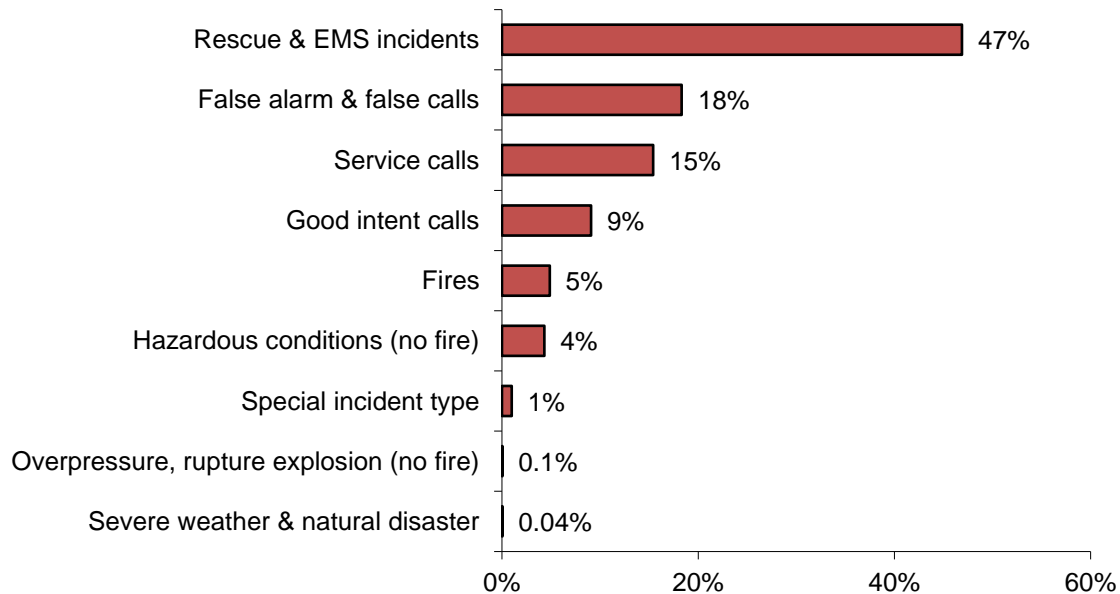
Five thousand four hundred and fifty-eight (5,458), or 5%, of the total responses submitted by Suffolk County fire departments were fires.

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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.

## 2018 Responses by Incident Type



### Suffolk County Fire Departments Reported Giving Mutual Aid 316 Times

In 2018, Suffolk County fire departments reported coming to the aid of other fire departments 316 times. Of these 316 responses, 189, or 60%, were for service calls such as cover assignments; 26, or 8%, were for fires; 25, or 8%, were for rescue or EMS incidents; 24, or 8%, were for hazardous conditions calls with no fire; 21, or 7%, were for good intent calls; 20, or 6%, were for false alarm or false calls; eight, or 3%, were special incident types; two, or 1%, were severe weather calls; and one, or 0.3%, was for an overpressure, rupture explosion with no ensuing fire.

### Suffolk County Fire Departments Received Mutual Aid in 184 Incidents

In 2018, Suffolk County fire departments reported receiving aid from surrounding departments in 184 incidents. Of these 184 incidents, 73 or 40% were rescue and emergency medical services calls; 52, or 28%, were hazardous conditions calls with no fire; 20, or 11%, were for fires; 14, or 8%, were false alarms or false calls; 13, or 7%, were good intent calls; 10, or 5%, were for service calls; one, or 1%, was for an overpressure, rupture explosion with no fire; and another one, or 1%, was a special incident type.

**Suffolk County****Population: 722,023****7.5 Fires/1,000 Population****Total Fires: 5,431 \$51,707,681**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	4,139	76%	\$48,741,363
Vehicle Fires	277	5%	2,635,170
Other Fires	1,015	19%	331,148

3 Fatal Fires 0.55 Civilian Deaths/1,000 Fires  
 3 Civilian Deaths 0.04 Civilian Deaths/10,000 Population  
 7 Civilian Injuries 33 Fire Service Injuries

**Building Fires: 4,133****Residential Structure Fires: 3,528****Residential Structure Fires Confined to Non-Combustible Containers: 3,166****Unconfined Residential Structure Fires: 362**

2 Civilian Deaths 7 Civilian Injuries 28 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	2,249	64%	Operated	2,934	83%
1- & 2-Family homes	410	10%	Didn't operate	12	0.3%
Dormitories	160	4%	None	6	0.2%
Rooming houses	159	4%	Fire too small	52	2%
Residential board & care	49	1%	Didn't Alert (confined)	97	3%
Hotels or motels	23	1%	Undetermined	427	12%

<b>Area of Origin<sup>5</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>6</sup></b>
Kitchen	88%	Radiated heat from oper. eq.	2%	15%
Heating room or area	2%	Arcing	1%	14%
Bedroom	1%	Heat from operating eq.	1%	14%
Exterior balcony/unencl. porch	1%	Cigarette	1%	7%
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	87%	Abandoned materials	1%	10%
Rubbish, trash, waste	2%	Unspec. short circuit arc	1%	8%
Flammable, combustible liquid	2%	Elec. fail., malfunc., other	1%	7%
Electrical wire, cable insulation	1%	Misuse of mater. or prod.	1%	7%
Structural member, framing	1%	Equipment unattended	1%	6%

<b>Equipment<sup>9</sup></b>	<b>%</b>	<b>Cause of Ignition</b>	<b>%</b>	<b>%Unconfined<sup>10</sup></b>
Cooking equipment	86%	Unintentional	6%	58%
None	10%	Failure of eq. or heat source	1%	7%
Boiler, furnace, cent. heat. unit	2%	Intentional	0.3%	2%
Chimney or flue	0.4%	Act of Nature	0.03%	0.3%
Electrical wiring, other	0.1%	Cause under investigation	2%	15%
		Undetermined	1%	7%

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

Alerted Occupants	86%
Didn't Alert Occupants	3%
Undetermined	10%

<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	522	456	30	36
February	451	383	13	55
March	425	357	21	47
April	490	365	15	110
May	516	316	37	163
June	484	299	25	160
July	431	260	22	149
August	405	268	31	106
September	431	324	32	75
October	454	384	27	43
November	372	326	10	36
December	450	401	14	35

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	873	681	31	161
Monday	768	622	29	117
Tuesday	781	580	46	155
Wednesday	735	554	36	145
Thursday	763	570	40	153
Friday	741	558	55	128
Saturday	770	574	40	156

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 – 04:00	358	246	32	80
04:01 – 08:00	335	244	32	59
08:01 – 12:00	932	738	40	154
12:01 – 16:00	1,300	956	62	282
16:01 – 20:00	1,502	1,192	65	245
20:01 – 00:00	1,004	763	46	195

### **Motor Vehicle Fires**

Total: 277

Automobiles: 234 (84%)

8, or (3%), of the automobile fires considered intentionally-set.

## Arson Fires

**Total Arsons: 88 Dollar loss: \$1,824,028**

### 0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	8	0.2%	9%	\$1,735,800
Vehicle Arsons	10	4%	11%	82,100
Other Arsons	70	7%	80%	6,128

0.01 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.10 Other arsons/1,000 population

2 Firefighter Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 – 16:00	3	38%	04:01 – 08:00	4	40%
			20:01 – 00:00	3	30%
			00:01 – 04:00	2	20%

Other Arsons	#	%
20:01 – 00:00	23	33%
16:01 – 20:00	20	29%
12:01 – 16:00	16	23%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	6	75%
1- or 2-Family home	2	25%



**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>
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
2018	4,783	3,709	236	838	84	5	9	70

**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>
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
2018	236	166	9	61	2	2	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>
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
2018	58	5	11	42	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>
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
2018	301	228	18	55	1	0	1	0

**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>
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
2018	53	31	3	19	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
25035	Boston	84,758	4,784	34	34,637	3,852	14,400	8,387	17,611	33	1,020
25057	Chelsea	8,480	249	12	5,724	272	603	652	927	4	37
25935	Massport	4,158	71	12	2,861	420	210	233	343	2	6
25248	Revere	11,118	301	5	7,088	232	1,471	645	1,311	4	61
25346	Winthrop	3,383	53	2	2,149	67	552	243	315	0	2
<b>Total</b>	<b>Suffolk County</b>	<b>111,897</b>	<b>5,458</b>	<b>65</b>	<b>52,459</b>	<b>4,843</b>	<b>17,236</b>	<b>10,160</b>	<b>20,507</b>	<b>43</b>	<b>1,126</b>

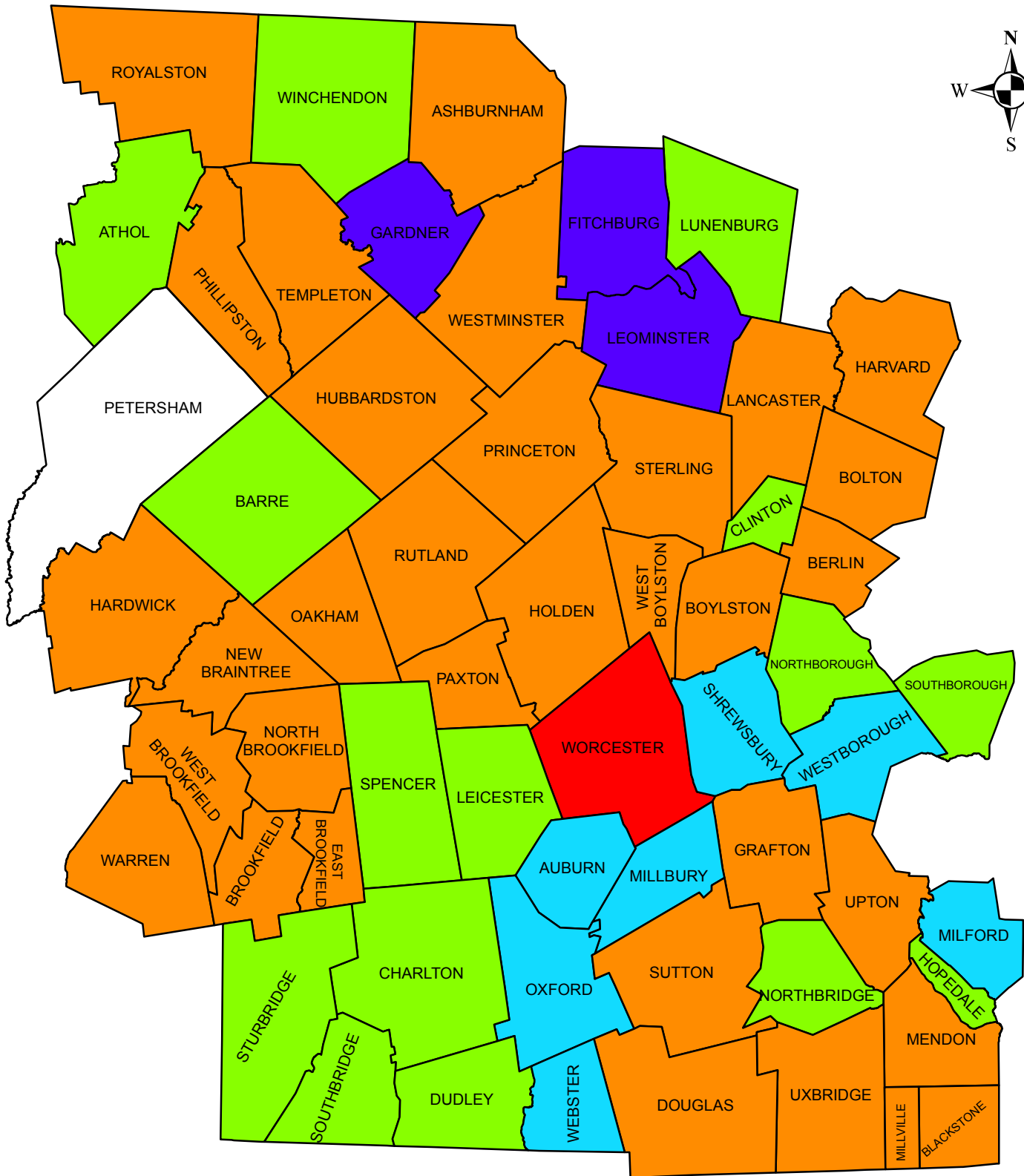
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Division of Fire Safety strongly encourages any department that wants to send in all of their responses to do so.



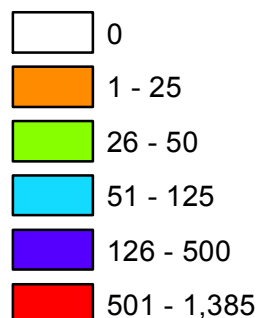
# Worcester County

## 2018 Fire Data Analysis

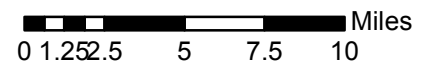
# Worcester County Fires 2018



## 2018 Fires



\*Non-reporting Department



**MFIRS**  
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2018

# Worcester County Fires in 2018

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## **3,671 Total Fires — 2,425 Structures, 364 Vehicles & 882 Other Fires**

Worcester County ranked third out of the fourteen Massachusetts counties in total reported fires. Worcester County fire departments reported 3,671 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2018. The 2,425 structure fires, 364 motor vehicle fires, 335 brush fires, 370 outside rubbish fires, 106 special outside fires, two cultivated vegetation or crop fires, and 69 unclassified fires caused five civilian deaths, one fire service death, 51 civilian injuries, 52 fire service injuries and an estimated dollar loss of \$35.5 million. Worcester County's fires accounted for 14% of the 25,504 Massachusetts fires reported in 2018.

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 2018.

## **Structure Fires Down**

Total fires decreased by 182, or 5%, from 3,853 incidents in 2017. Reported structure fires decreased by 59 from the 2,484 reported during the previous year. Motor vehicle fires increased by 16 from the 348 reported in both 2017. Outside and other fires decreased by 139 from 1,021 the year before<sup>1</sup>.

## **WORCESTER COUNTY FIRES FROM 2014 TO 2018**

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
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	3,853	2,484	348	1,021	80	31	10	39
2018	3,671	2,425	364	882	86	30	13	43

## **Fire and Fire Death Rates**

Worcester County had 4.6 fires per 1,000 population. That figure ranks Worcester County second in the state and above the state rate of 3.9 fires per 1,000 population. Worcester County had 0.06 fire deaths per 10,000 population ranking it tied for sixth among Massachusetts counties and below the state rate of 0.07 fire deaths per 10,000 population.

## **5 Residents Died in 5 Worcester County Fires**

Worcester County had five residents die in five fires in 2018. All but one of the deaths occurred in building fires. The other death occurred outside in a fire pit in a back yard.

- On February 15, 2019, at 10:38 p.m., the Worcester Fire Department was called to a fatal smoking fire in a 5-unit apartment building. The fire was started by

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

undetermined smoking materials in the living room. The victim was a 68-year old man. No one else was injured at this fire. Alarms were present but the fire was too small to activate them. There were no sprinklers. Damages from this fire were estimated to be \$325,000.

- On March 5, 2018, at 6:48 a.m., the Worcester Fire Department was dispatched to a fire in a single-family home. The victim, an 85-year old physically disabled woman was unable to escape. The fire was started by an electronically heated recliner. Two (2) other occupants and one firefighter were injured at this fire. Alarms were present but it was undetermined if they operated. The building did not have any sprinklers. Damages from this fire were estimated to be \$157,469.
- On April 22, 2018, at 4:26 p.m., the Sturbridge Fire Department was called to a fatal cooking fire in a 19-unit apartment building. The fire started inside the microwave in the kitchen and spread to the victim's clothes when she opened the door. The victim was an 86-year old woman. No one else was injured at this fire. Alarms were present but they failed to operate from a lack of cleaning. The building was not sprinklered. Damages from this fire were estimated to be \$2,000.
- On May 26, 2018, at 8:39 p.m., the Worcester Fire Department was called for an unresponsive woman. The victim, a 71-year old woman, had fallen into her fire pit in her backyard sometime during the day. A relative found her inside the fire pit. The fire had burned itself out.
- On December 4, 2018, at 7:19 a.m., the Dudley Fire Department was called to a fatal arson fire in a single-family home. The victim, a 50-year old man, set multiple fires on his property. First arriving firefighters discovered two vehicles in the driveway, a shed in the backyard and the home itself on fire. 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 \$204,200.

### **1 Fire Service Death in 2018 - FF Christopher Roy, Age 36**

In 2018, there was one fire-related fire service death in Worcester County.

- On Sunday, December 9, 2018, at 3:58 a.m., the Worcester Fire Department was called to an intentionally-set fire in an apartment building at 7 Lowell St. FF. Christopher Roy was inside the building performing suppression duties with the rest of his crew when conditions deteriorated rapidly with heavy fire forcing several firefighters to evacuate. Nearby firefighters extricated him from the home and immediately transported him to a local hospital where he succumbed to his medical issues. He was 36-year old.

**Worcester Had Largest Loss Fire in 2018**

In 2018, Worcester County fire departments reported five fires with a reported dollar loss of \$1 million or greater. The dollar loss of these four fires totaled \$5.6 million, or 16%, of the county's total dollar loss.

- On March 20, 2018, at 7:57 p.m., the Worcester Fire Department was called to a fire of undetermined cause at 580 West Boylston St., a two-story residential and business property. The fire began in a closet of one of the second story apartments. No one 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 \$1.65 million.

**STRUCTURE FIRES****Reported Structure Fires Down**

The 2,425 structure fires caused four civilian deaths, one fire service death, 41 civilian injuries, 51 fire service injuries and an estimated dollar loss of \$31.4 million. These incidents represented 66% of Worcester County's reported fires in 2018. The average estimated dollar loss per structure fire was \$12,964. The total number of reported structure fires decreased by 59, or 2%, from the 2,484 reported in 2017.

**Arson Caused 1% of Structure Fires**

The 30 structure arsons caused one civilian death, one fire service death, four fire service injuries and an estimated dollar loss of \$1.7 million. Arson was indicated as the cause of 1% of the structure fires and 5% of Worcester County's structure fire dollar loss. The 30 structure arsons accounted for 35% of the Worcester County arson fires reported in 2018. The total number of reported structure arsons decreased by one, or 3%, from the 31 reported in 2017.

**77% of Structure Arsons Occurred in Residences**

Seventy-seven percent (77%) of Worcester County's 30 structure arsons occurred in residential occupancies; 7% each happened in mercantile and business properties and storage facilities. Three percent (3%) each occurred in public assembly properties, special properties and unclassified properties.

**BUILDING FIRES**

There were 2,419 building fires of different types in Worcester County in 2018. These 2,419 building fires accounted for 99.8% of all structure fires in Worcester County.

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

Two thousand seventy-one (2,071), or 86%, of Worcester County's 2,419 building fires occurred in residential occupancies. Mercantile and business properties had 101 fires. Eighty (80) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 65 fires. Thirty-four (34) building fires took place in educational properties. Thirty-two (32) fires

took place in storage properties. Fourteen (14) fires took place in manufacturing and processing facilities. Another 14 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 2018. Two (2) fires had unclassified property uses and two more were reported to have *None* as their property use.

## **RESIDENTIAL FIRES**

### **Residential Building Fires Were Down**

There were 2,071 reported residential building fires in Worcester County in 2018. These 2,071 fires were a decrease of 68, or 3%, from the 2,139 residential building fires reported in 2017.

### **Apartments Accounted for 45% of Residential Building Fires**

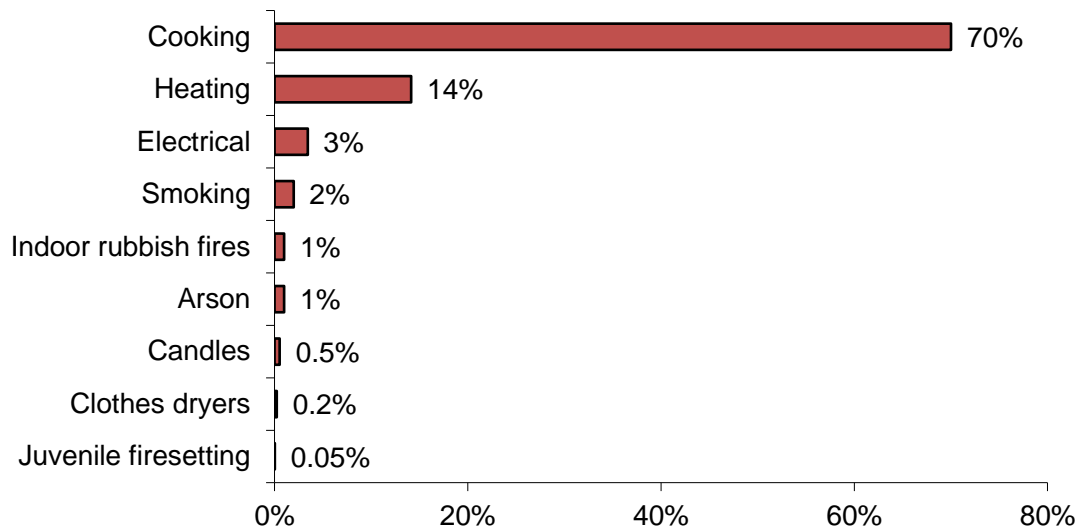
The peak fixed property uses for residential building fires were apartments, accounting for 45% of the residential building fires in Worcester County; 36% occurred in one- or two-family homes; 7% happened in rooming houses; 5% occurred in dormitories; 4% happened in hotels or motels; and 2% occurred in residential board and care facilities. Twenty-eight (28), 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 14% of fires in people's homes. Electrical problems accounted for 3% of these fires; and smoking caused 2%. Indoor rubbish fires and arsons each caused 1%. Candles, clothes dryers and juvenile-set fires each caused less than 1% of the fires in people's homes in Worcester County in 2018.



## 2018 Leading Causes of Fires in Worcester County Homes



### 81% of Residential Building Fires Are Confined to Non-Combustible Containers<sup>2</sup>

One thousand six hundred and seventy-seven (1,677), or 81%, of all residential building fires were reported as confined to non-combustible containers in 2018. One thousand three hundred and eighty-four (1,384) of the reported fires were cooking fires contained to a non-combustible container, accounting for 67% of residential building fires. One hundred and sixty-three (163), or 8%, were fires confined to a fuel burner or boiler malfunction. One hundred (100), or 5%, of all residential building fires reported in 2018 were confined to a chimney. Twenty-nine (29), or 1%, of the residential building fires in Worcester County in 2018 were contained rubbish fires; and one fire, or less than 1%, was an incinerator overload or malfunction.

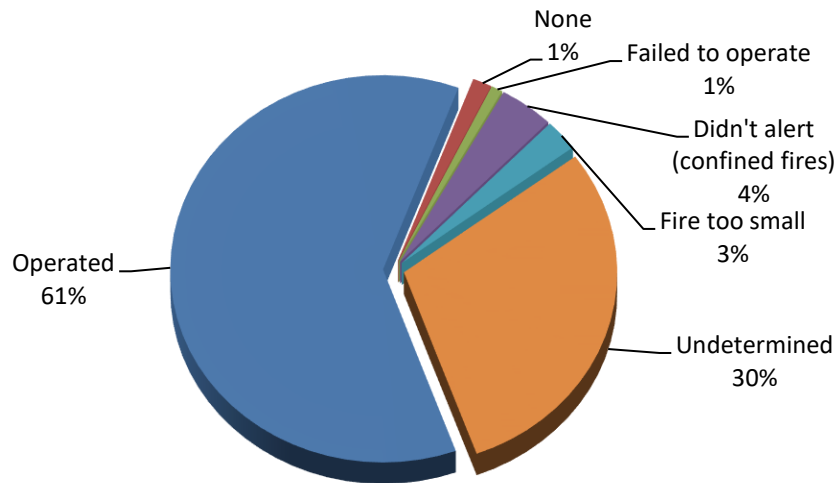
### Alarms Alerted Occupants in 61% of Fires

Smoke or heat alarms operated and alerted the occupants in 1,270, or 61%, 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 1% of these incidents. In 1% 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 613 incidents, or 30%, of Worcester 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 alarm did not alert the occupants.

## Detector Status in Worcester County's Residential Structure Fires 2018



### 39% of Failed Alarms Had Missing or Dead Batteries

Of the 18 fires where smoke alarms were present but failed to operate, five, or 28%, failed because the batteries were either missing or disconnected. Two (2), or 11%, failed because the batteries were dead. Defective detectors caused three, or 17%, of the alarms to fail. Another two, or 11%, failed from a lack of maintenance. One (1), or 6%, failed from a power failure, shutoff or disconnect. It was undetermined or unclassified in five cases, or 28%, 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 2,419 building fires reported to MFIRS in 2018. Seventeen (17) fires occurred in vacant residential properties. Seven (7) of these fires occurred at storage facilities. One (1) vacant building fire occurred each in a mercantile or business property, an educational facility, an institutional facility and a special property in Worcester County in 2018.

Six (6), or 20%, of the vacant building fires in Worcester County in 2018 were determined to be intentionally-set. Two (2) of these vacant arsons occurred in 1- or 2-family homes. One (1) each happened in an apartment building, a mental institution, a livestock or poultry storage facility, and an unclassified building in 2018.

## JUVENILE-SET FIRES

### 6 Juvenile-set Fires

There were six reported juvenile-set fires in Worcester County in 2018. The two structure fires, two brush fires, one special outside fire and one unclassified fire caused \$70,020 in estimated damages.

## ARSONS

### 86 Total Arsons<sup>4</sup> — 30 Structures, 13 Vehicles & 43 Other Arsons

Eighty-six (86), or 2%, of Worcester County's 3,671 fires were considered intentionally-set, or, for purposes of this analysis, arson. The 30 structure arsons, 13 motor vehicle arsons and 43 outside and other arsons caused one civilian death, one fire service death, four fire service injuries and an estimated dollar loss of \$1.8 million. Worcester County's arson fires accounted for 16% of the state's total arson fires and 33% of the state's total dollar losses from arson.

### All Arson Up

The total number of arsons increased by six from 80 in 2017. Reported structure arsons decreased by one from the 31 reported in 2017. Motor vehicle arsons increased by three from the 10 reported in 2017. Outside and other arsons increased by four from the 39 reported last year.

## ALL INCIDENTS

### Rescue & EMS Calls Are 63% of All Reported Responses

In 2018, fire departments in Worcester County reported 108,340 responses<sup>5</sup> to MFIRS. This is an increase of 862 runs, or 1%, over the 107,478 reported in 2017. Of these 108,340 responses, 104,226 non-fire calls were voluntarily reported.

Of these 104,226 non-fire calls, 67,967, or 63%, of all the responses reported in 2018 were reported rescue and emergency medical services (EMS) calls; 13,796, or 13%, were reported false alarm or false calls; 9,854, or 9%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 7,169, or 7%, were reported good intent calls; 4,395, or 4%, reported hazardous condition calls with no fire; 810, or 1%, were special incident type calls such as citizen complaints; 119, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 116, or 0.1%, were severe weather calls.

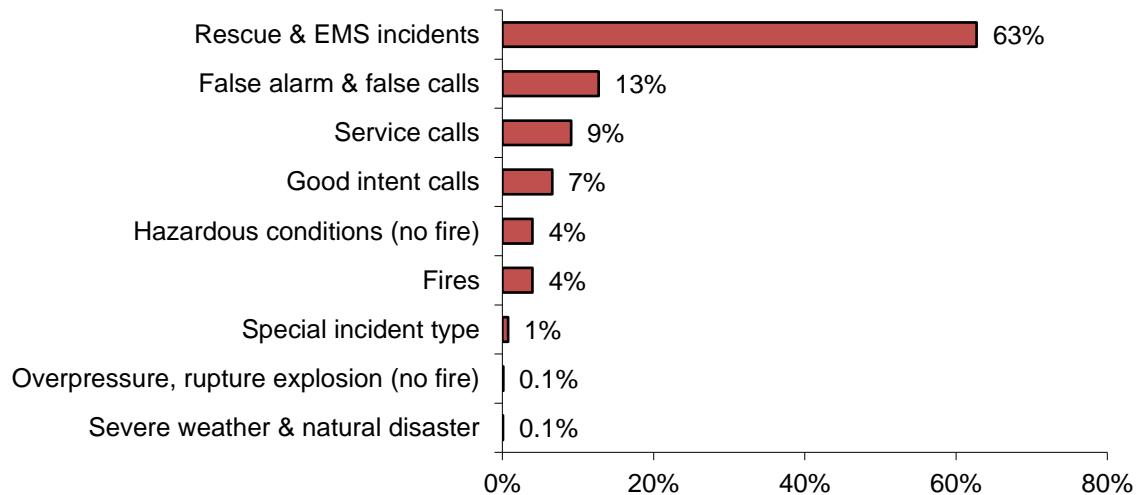
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<sup>4</sup> In MFIRS v5 a fire is considered an arson if the Cause of Ignition = 1 (Intentional) and the Age of Person (Fire Module) is greater than 17 or if the field is blank; or if the Wildland Module is used, the Wildland Fire Cause = 7 (Incendiary) and the Age of the Person (Wildland Module) is greater than 17 or if the field is left blank.

<sup>5</sup> These figures include responses in which Worcester County fire departments gave mutual aid to other fire departments.

Four thousand one hundred and fourteen (4,114), or 4%, of the total responses submitted by Worcester County fire departments were fires.

### 2018 Responses by Incident Type



### Worcester County Fire Departments Reported Giving Mutual Aid 3,143 Times

In 2018, Worcester County fire departments reported coming to the aid of other fire departments 3,143 times. Of these 3,143 responses, 1,724, or 55%, were for rescue or EMS incidents; 476, or 15%, were for service calls such as cover assignments; 434, or 15%, were for fires; 411, or 13%, were for good intent calls; 45, or 1%, were for false alarms or false calls; 43, or 1%, were for hazardous conditions calls with no fire; five, or 0.2%, were special incident types; four, or 0.1%, were for overpressure, rupture explosion calls with no fire; and four, or 0.1%, were for severe weather or natural disasters.

### Worcester County Fire Departments Received Mutual Aid in 1,766 Incidents

In 2018, Worcester County fire departments reported receiving aid from surrounding departments in 1,766 incidents. Of these 1,766 incidents, 1,275 or 72% were rescue and emergency medical services calls; 192, or 11%, were for fires; 97, or 5%, were false alarms or false calls; 90, or 5%, were service calls; 63, or 4%, were good intent calls; 42, or 2%, were hazardous conditions calls with no fire; three, or 0.2%, were for overpressure, rupture explosion calls with no fire; three, or 0.2%, were for severe weather or natural disasters; and one, or 0.1%, was a special incident type.

**Worcester County****Population: 798,552****4.6 Fires/1,000 Population****Total Fires: 3,671 \$34,754,417**

<b>Situation</b>	<b>Fires</b>	<b>% of Fires</b>	<b>Dollar Loss</b>
Structure Fires	2,425	66%	\$31,437,971
Vehicle Fires	364	10%	3,641,580
Other Fires	882	24%	377,444

5 Fatal Fires 1.36 Civilian Deaths/1,000 Fires  
 5 Civilian Deaths 0.06 Civilian Deaths/10,000 Population  
 1 Firefighter Death 51 Civilian Injuries 52 Fire Service Injuries

**Building Fires: 2,425****Residential Structure Fires: 2,071****Residential Structure Fires Confined to Non-Combustible Containers: 1,677****Unconfined Residential Structure Fires: 394**

4 Civilian Deaths 1 Firefighter Death 37 Civilian Injuries 46 Fire Service Injuries

<b>Occupancy</b>	<b>Fires</b>	<b>%</b>	<b>Detector Status</b>	<b>Fires</b>	<b>%</b>
Apartments	937	45%	Operated	1,270	61%
1- & 2-Family homes	743	36%	Didn't operate	18	1%
Rooming houses	139	7%	None	30	1%
Dormitories	109	5%	Fire too small	54	3%
Hotels or motels	78	4%	Didn't Alert (confined)	86	4%
Residential board & care	37	2%	Undetermined	613	30%

<b>Area of Origin<sup>6</sup></b>	<b>%</b>	<b>Heat Source</b>	<b>%</b>	<b>%Unconfined<sup>7</sup></b>
Kitchen	72%	Radiated heat from oper. eq.	3%	16%
Heating room or area	8%	Heat from operating eq.	3%	15%
Chimney or flue	5%	Arcing	2%	11%
Bedroom	2%	Hot ember or ash	1%	6%
Attic	1%	Cigarette	1%	5%
Exterior stairway	1%	Hot or smoldering object	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	69%	Too close to combustibles	2%	9%
Flammable, combustible liquid	8%	Abandoned materials	1%	7%
Film or residue (creosote)	5%	Equipment unattended	1%	7%
Rubbish, trash, waste	2%	Mech. fail., malfunc., other	1%	4%
Structural member, framing	1%	Misuse of mater. or prod.	1%	4%
		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	68%	Unintentional	12%	65%
None	13%	Failure of eq. or heat source	2%	9%
Boiler, furnace, cent. heat. unit	8%	Intentional	1%	5%
Chimney or flue	5%	Act of Nature	0.2%	1%
Stove, heating	1%	Cause under investigation	1%	3%
		Undetermined	3%	15%

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

Alerted Occupants	62%
Didn't Alert Occupants	5%
Undetermined	32%

<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	324	260	38	26
February	255	205	28	22
March	291	230	25	36
April	325	191	29	105
May	408	211	36	161
June	373	187	34	152
July	333	145	42	146
August	228	137	32	59
September	288	194	27	67
October	285	219	27	39
November	270	211	24	35
December	291	235	22	34

<b>Day</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
Sunday	552	370	38	144
Monday	517	364	56	97
Tuesday	541	366	44	131
Wednesday	523	358	52	113
Thursday	476	302	54	120
Friday	519	329	67	123
Saturday	543	336	53	154

<b>Time</b>	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>
00:01 – 04:00	239	154	41	44
04:01 – 08:00	243	190	19	34
08:01 – 12:00	604	410	73	121
12:01 – 16:00	975	565	94	316
16:01 – 20:00	1,081	749	88	244
20:01 – 00:00	529	357	49	123

### **Motor Vehicle Fires**

Total: 364

Automobiles: 289 (79%)

12, or (4%), of the automobile fires considered intentionally-set.

## Arson Fires

**Total Arsons: 86**

**Dollar loss: \$1,782,692**

### 0.1 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	30	1%	35%	\$1,683,161
Vehicle Arsons	13	4%	15%	987180
Other Arsons	43	5%	50%	813

0.04 Structure arsons/1,000 population

0.02 Vehicle arsons/1,000 population

0.05 Other arsons/1,000 population

1 Civilian Death

1 Fire Service Death

4 Fire Service Injuries

### Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 – 20:00	9	30%	00:01 – 04:00	3	23%
00:01 – 04:00	5	17%	04:01 – 08:00	3	23%
04:01 – 08:00	5	17%	20:01 – 00:00	3	23%
12:01 – 16:00	5	17%			
20:01 – 08:00	5	17%			

Other Arsons	#	%
12:01 – 16:00	16	37%
16:01 – 20:00	12	28%
08:01 – 12:00	6	14%
20:01 – 00:00	6	14%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	11	37%
1- or 2-Family homes	11	37%



<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>
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
2018	18	10	3	5	0	0	0	0

<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>
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
2018	42	19	5	18	1	1	0	0

<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>
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
2018	63	25	14	21	4	1	0	6

<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>
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
2018	32	19	4	9	4	2	2	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>
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
2018	23	5	7	11	2	1	0	1

<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>
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
2018	11	5	0	6	1	1	0	0

<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>
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
2018	21	9	7	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>
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
2018	15	9	1	5	3	1	0	2

**Brookfield** **Population: 3,390**

	<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>
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
2018	6	3	0	3	3	1	0	2

**Charlton** **Population: 12,981**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	47	25	13	9	1	0	0	1

**Clinton** **Population: 13,606**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	42	27	2	13	0	0	0	0

**Douglas** **Population: 8,471**

	<b>Total Fires</b>	<b>Structure Fires</b>	<b>Vehicle Fires</b>	<b>Other Fires</b>	<b>Total Arsons</b>	<b>Structure Arsons</b>	<b>Vehicle Arsons</b>	<b>Other Arsons</b>
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
2018	15	6	3	6	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>
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
2018	30	21	3	6	2	1	1	0

**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>
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
2018	14	1	2	11	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>
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
2018	428	359	19	50	4	2	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>
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
2018	147	119	11	17	2	1	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>
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
2018	14	12	2	0	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>
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
2018	5	3	0	2	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>
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
2018	22	9	4	9	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>
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
2018	21	15	1	5	1	0	0	1

<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>
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
2018	28	14	1	13	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>
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
2018	14	8	3	3	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>
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
2018	14	7	3	4	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>
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
2018	27	18	3	6	1	0	0	1

**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>
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
2018	219	154	20	45	2	1	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>
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
2018	28	21	1	6	0	0	0	0

**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>
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
2018	4	0	2	2	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>
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
2018	72	45	8	19	0	0	0	0

**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>
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
2018	54	33	12	9	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>
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
2018	7	4	0	3	1	1	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>
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
2018	1	1	0	0	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>
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
2018	23	14	0	9	0	0	0	0



**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>
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
2018	38	15	4	19	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>
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
2018	29	19	5	5	1	0	0	1

**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>
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
2018	8	6	0	2	2	1	0	1

**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>
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
2018	54	32	7	15	1	1	0	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>
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
2018	14	10	2	2	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>
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
2018	Fire Department in Good Standing, Certified No Reportable Fires							

**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>
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
2018	5	1	3	1	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>
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
2018	8	5	1	2	0	0	0	0

**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>
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
2018	10	3	0	7	3	0	0	3

**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>
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
2018	22	8	1	13	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>
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
2018	116	63	17	36	2	0	0	2

**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>
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
2018	30	18	7	5	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>
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
2018	45	28	6	11	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>
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
2018	28	17	5	6	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>
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
2018	13	5	5	3	0	0	0	0

<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>
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
2018	32	13	10	9	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>
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
2018	24	16	2	6	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>
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
2018	6	2	3	1	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>
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
2018	24	15	4	5	0	0	0	0

<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>
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
2018	22	12	6	4	1	0	0	1

<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>
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
2018	12	8	2	2	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>
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
2018	53	32	11	10	0	0	0	0

<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>
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
2018	17	9	2	6	1	0	0	1

<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>
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
2018	13	5	2	6	4	0	0	4

<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>
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
2018	96	72	4	20	2	1	0	1

<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>
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
2018	25	12	5	8	1	1	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>
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
2018	41	19	10	12	3	1	2	0

<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>
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
2018	1,384	963	87	334	24	11	5	8

## 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	770	19	0	447	19	92	49	141	0	3
27015	Athol	2,598	53	4	2,012	61	134	150	176	3	5
27017	Auburn	3,766	78	3	2,675	139	269	265	330	0	7
27021	Barre	1,067	41	1	755	76	97	24	69	1	3
27028	Berlin	651	29	0	387	18	56	45	107	2	7
27032	Blackstone	452	15	1	187	29	32	52	135	0	1
27034	Bolton	314	21	0	94	35	25	50	89	0	0
27039	Boylston	575	24	1	420	15	38	11	64	2	0
27045	Brookfield	137	17	0	50	17	7	11	35	0	0
27054	Charlton	2,595	61	4	1,957	112	198	114	144	1	4
27064	Clinton	1,865	58	0	1,270	41	120	28	344	0	4
27077	Douglas	306	22	0	100	30	42	27	82	1	2
27080	Dudley	588	53	0	152	50	59	106	158	4	6
27084	East Brookfield	136	22	0	22	23	13	23	25	7	1
27097	Fitchburg	4,872	441	5	2,000	191	560	524	1,146	1	4
27103	Gardner	6,308	156	5	4,060	163	528	258	549	7	582

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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
27110	Grafton	167	14	0	22	16	28	22	64	1	0
27124	Hardwick	72	6	0	15	12	7	10	20	2	0
27125	Harvard	355	23	0	89	32	56	44	109	2	0
27134	Holden	2,126	26	1	1,629	55	74	109	228	3	1
27138	Hopedale	1,727	40	1	1,005	96	360	96	123	6	0
27140	Hubbardston	607	14	1	396	27	78	35	56	0	0
27147	Lancaster	465	14	1	334	9	30	22	44	0	11
27151	Leicester	260	33	1	60	34	34	19	78	0	1
27153	Leominster	7,523	224	2	5,087	228	722	458	755	5	42
27162	Lunenburg	481	36	2	113	74	70	30	151	0	5
27179	Mendon	752	4	1	532	13	61	61	67	3	10
27185	Milford	382	89	2	3,669	159	734	225	499	1	4
27186	Millbury	409	58	3	16	44	68	35	184	1	0
27188	Millville	329	13	0	187	23	37	43	25	1	0
27202	New Braintree	11	1	0	3	6	0	0	1	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
27212	North Brookfield	251	32	0	49	37	30	2	90	11	0
27215	Northborough	2,375	52	2	1,483	96	278	120	339	1	4
27216	Northbridge	1,144	32	0	416	88	137	156	312	3	0
27222	Oakham	214	13	0	123	10	9	37	19	1	2
27226	Oxford	711	54	1	169	58	138	86	198	4	3
27228	Paxton	990	25	0	742	7	106	41	69	0	0
27234	Petersham*	0	0	0	0	0	0	0	0	0	0
27235	Phillipston	77	23	0	13	6	10	7	16	0	2
27241	Princeton	239	8	0	146	6	23	17	39	0	0
27255	Royalston	113	26	0	33	14	13	11	14	2	0
27257	Rutland	1,122	22	3	790	23	107	73	100	0	4
27271	Shrewsbury	4,049	122	1	2,846	200	238	153	478	1	10
27277	Southborough	1,478	43	2	770	61	196	138	261	2	5
27278	Southbridge	769	60	4	225	50	91	85	223	2	29
27280	Spencer	496	45	2	81	116	53	40	146	8	5

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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
27282	Sterling	986	23	1	588	20	156	107	85	6	0
27287	Sturbridge	2,105	36	5	1,337	77	301	109	238	0	2
27290	Sutton	544	53	1	318	31	30	23	88	0	0
27294	Templeton	6	6	0	0	0	0	0	0	0	0
27303	Upton	372	26	2	16	103	77	18	128	2	0
27304	Uxbridge	375	25	4	79	32	56	77	101	0	1
27311	Warren	245	19	1	90	29	33	28	45	0	0
27316	Webster	739	65	2	141	62	93	110	254	6	6
27321	West Boylston	1,319	20	2	907	30	125	85	148	2	0
27323	West Brookfield	133	19	1	19	12	19	7	55	1	0
27328	Westborough	2,998	109	8	1,947	221	199	154	352	1	7
27332	Westminster	1,551	26	1	945	49	198	103	218	0	11
27343	Winchendon	1,663	41	1	1,182	41	151	80	161	3	3
27348	Worcester	33,610	1,384	36	22,767	1,069	2,358	2,356	3,621	6	13
<b>Total</b>	<b>Worcester County</b>	<b>108,340</b>	<b>4,114</b>	<b>119</b>	<b>67,967</b>	<b>4,395</b>	<b>9,854</b>	<b>7,169</b>	<b>13,796</b>	<b>116</b>	<b>810</b>

\* Certified no reportable fires.

\*\*Non reporting department.

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