

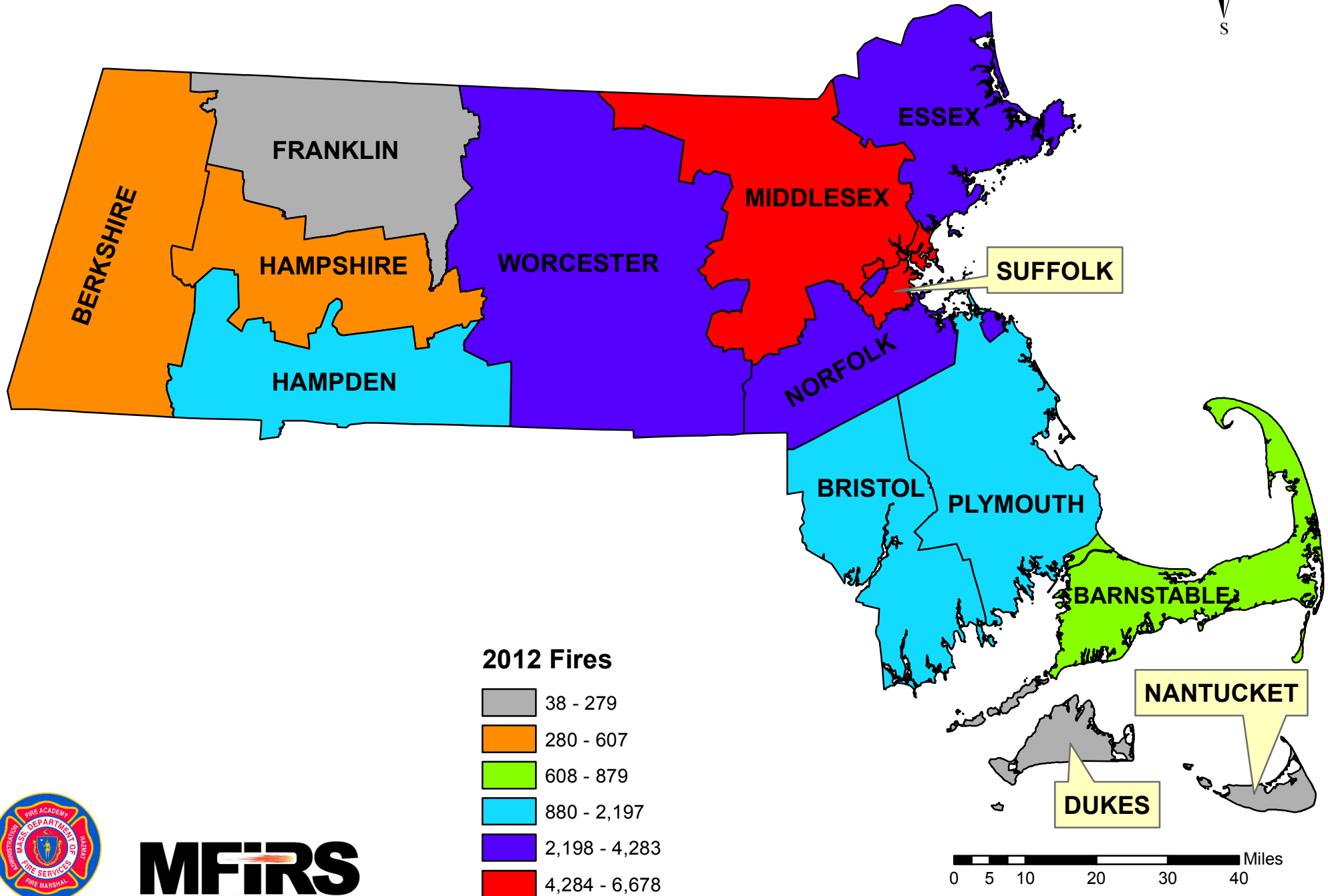


County Profiles

2012 Fire Data Analysis

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

2012 Fires in Massachusetts Counties



MFIRS
Massachusetts Fire Incident Reporting System

0 5 10 20 30 40 Miles
Massachusetts Fire Incident Reporting System 2012

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2012 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	879	348	114	417	4	27	0	12	\$16,370,131
Berkshire	607	346	34	227	1	4	0	19	5,729,236
Bristol	2,197	873	278	1,046	5	42	0	31	35,603,409
Dukes	38	16	6	16	0	0	0	0	57,200
Essex	2,997	1,574	236	1,187	4	31	0	40	13,398,910
Franklin	279	128	29	122	0	3	0	1	8,823,316
Hampden	2,181	1,102	220	859	3	31	0	65	14,529,379
Hampshire	539	208	46	285	1	1	0	1	2,208,787
Middlesex	5,175	3,199	407	1,569	7	44	0	85	38,768,870
Nantucket	39	31	3	5	0	0	0	0	5,000
Norfolk	3,270	1,884	2226	1,160	3	31	0	113	16,806,661
Plymouth	2,067	826	212	1,029	3	46	0	36	13,780,449
Suffolk	6,678	4,826	325	1,527	1	17	0	52	64,522,343
Worcester	4,283	2,175	366	1,742	7	45	0	76	26,491,181
Total	31,229	17,536	2502	11,191	39	322	0	531	\$257,094,872

2012 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	45	9	5	31	2	1	0	3	\$3,520,930
Berkshire	24	5	0	19	0	0	0	1	239,390
Bristol	98	29	10	59	0	2	0	5	1,328,665
Dukes	2	0	1	0	0	0	0	0	0
Essex	105	23	11	71	0	0	0	2	328,559
Franklin	18	6	1	11	0	1	0	0	16,450
Hampden	67	24	10	33	1	4	0	0	633,185
Hampshire	37	4	0	33	1	0	0	0	115,376
Middlesex	136	35	14	87	3	1	0	0	2,648,951
Nantucket	1	0	0	1	0	0	0	0	0
Norfolk	96	10	10	76	3	1	0	0	442,183
Plymouth	134	40	10	84	1	4	0	2	1,170,936
Suffolk	169	33	22	114	0	0	0	3	575,890
Worcester	203	53	20	130	1	2	0	14	2,397,717
Total	1,135	271	114	750	12	16	0	27	\$13,418,232

2012 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	879	4.1	4	4.6	0.19	45	0.2
Berkshire	131,219	607	4.6	1	1.6	0.08	24	0.2
Bristol	548,285	2,197	4.0	5	2.3	0.09	98	0.2
Dukes	16,535	38	2.3	0	0.0	0.00	2	0.1
Essex	743,159	2,997	4.0	4	1.3	0.05	105	0.1
Franklin	71,372	279	3.9	0	0.0	0.00	18	0.3
Hampden	463,490	2,181	4.7	3	1.4	0.06	67	0.1
Hampshire	158,080	539	3.4	1	1.9	0.06	37	0.2
Middlesex	1,503,085	5,175	3.4	7	1.4	0.05	136	0.1
Nantucket	10,172	39	3.8	0	0.0	0.00	1	0.1
Norfolk	670,850	3,270	4.9	3	0.9	0.04	96	0.1
Plymouth	494,919	2,067	4.2	3	1.5	0.06	134	0.3
Suffolk	722,023	6,678	9.2	1	0.1	0.01	169	0.2
Worcester	798,552	4,283	5.4	7	1.6	0.09	203	0.3
Massachusetts	6,547,629	31,229	4.8	39	1.2	0.06	1,135	0.2

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

2012 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 ¹ & Natural Disaster	Special Incident Type
Barnstable	37,974	65	27,420	1,808	2,662	1,390	4,412	54	163
Berkshire	11,565	10	6,783	775	1,485	570	1,854	43	45
Bristol	53,265	86	34,263	2,594	3,637	3,641	8,556	139	349
Dukes	358	2	25	57	14	40	217	2	1
Essex	86,954	104	49,130	3,827	11,743	6,006	15,193	242	664
Franklin	5,079	15	2,636	474	652	531	678	35	58
Hampden	42,466	80	25,083	1,815	3,350	5,308	6,590	48	192
Hampshire	13,145	45	8,439	706	791	770	2,274	13	107
Middlesex	149,834	118	86,532	9,783	14,815	9,130	24,371	599	4,486
Nantucket	2,468	1	1,215	254	117	86	790	5	0
Norfolk	80,802	142	48,879	5,108	7,979	5,274	11,438	207	1,775
Plymouth	74,879	97	49,096	4,239	6,658	5,084	9,066	386	253
Suffolk	88,934	74	50,185	4,718	11,165	7,674	14,664	51	403
Worcester	79,884	106	52,624	3,998	6,275	4,915	10,571	124	1,271
Massachusetts	727,607	945	442,310	40,201	71,343	50,419	110,674	1,948	9,767

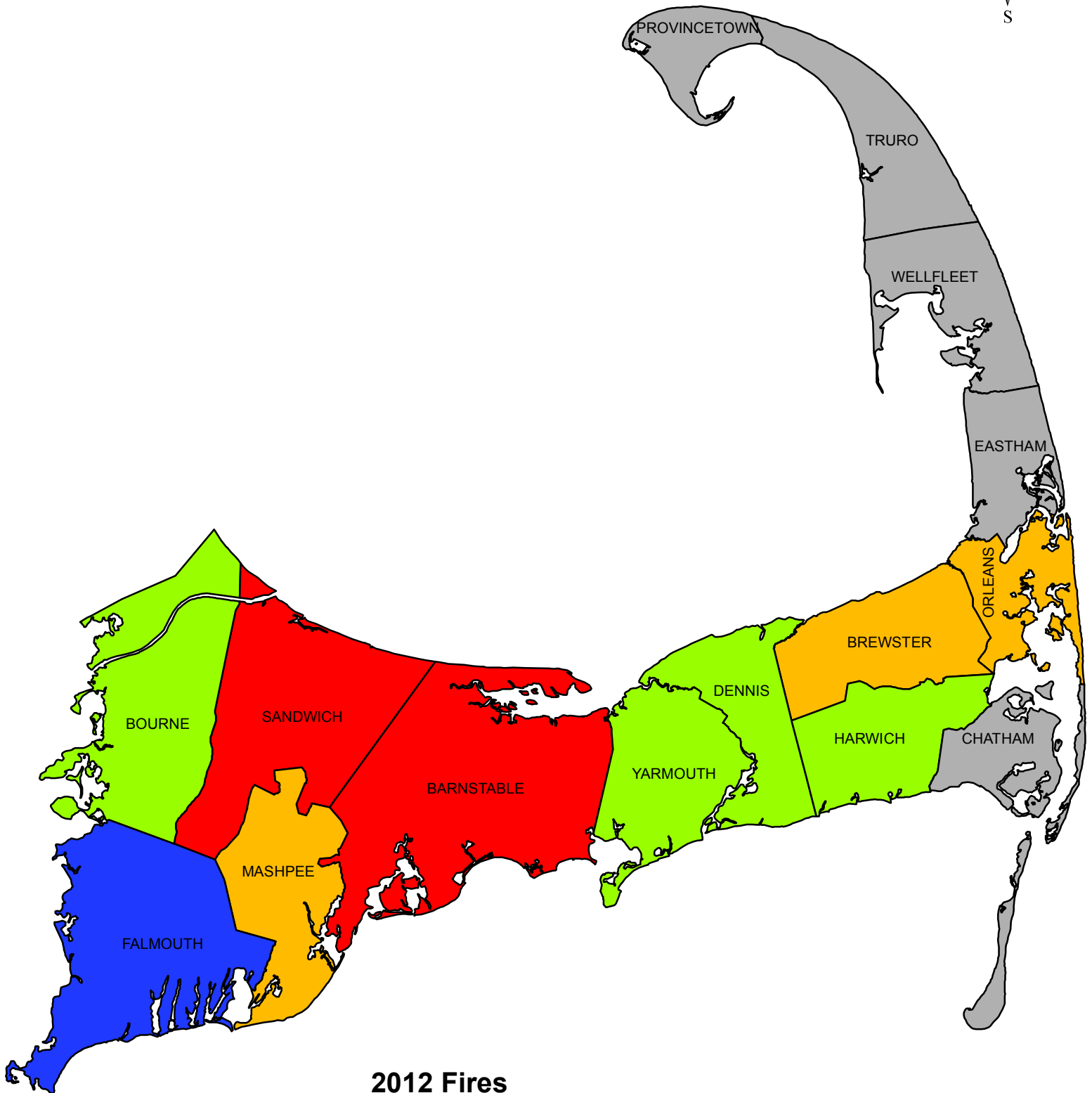
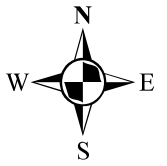
¹ WX is the abbreviation for Weather.



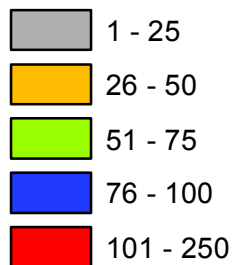
Barnstable County

2012 Fire Data Analysis

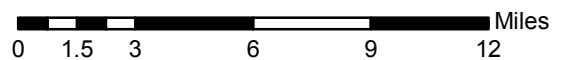
Barnstable County Fires 2012



2012 Fires



MFIRS
Massachusetts Fire Incident Reporting System



Massachusetts Fire Incident Reporting System 2012

Barnstable County Fires in 2012

879 Total Fires — 348 Structures, 114 Vehicles & 417 Other Fires

Barnstable County ranked ninth out of the 14 Massachusetts counties in total reported fires. Barnstable County fire departments reported 879 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 348 structure fires, 114 motor vehicle fires, 250 brush, tree, or lawn fires, 92 outside rubbish fires, 36 special outside fires, three cultivated vegetation or crop fires, and 36 unclassified fires caused four civilian deaths, 27 civilian injuries, 12 fire service injuries and an estimated dollar loss of \$16.4 million. Barnstable County's fires accounted for 3% of the 31,229 Massachusetts fires reported in 2012.

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 2012.

Structure Fires Down

The total number of reported fire incidents decreased by 35 from the 914 reported in 2011. Reported structure fires decreased by 65 from the 413 reported during the previous year. Motor vehicle fires increased by four from the 110 reported during 2011. Outside and other fires increased by 26 from the 391 reported the year before. This increase in outside fires was a statewide trend.

BARNSTABLE COUNTY FIRES FROM 2008 TO 2012

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1,082	480	124	478	93	12	7	74
2009	888	459	140	289	66	16	3	47
2010	960	422	103	435	63	7	6	50
2011	914	413	110	391	56	8	1	47
2012	879	348	114	417	45	9	5	31

Fire and Fire Death Rates

Barnstable County had 4.1 fires per 1,000 population. That figure ranks Barnstable County seventh in the state and below the state rate of 4.8 fires per 1,000 population. Barnstable County also had 0.19 fire deaths per 10,000 population, ranking it fifth and above the state rate of 0.06 fire deaths per 10,000 population.

4 Residents Died in 4 Barnstable County Fires

- On March 18, 2012, at 4:23 p.m., the Eastham Fire Department responded to a fatal arson fire in a single-family home. The victim, a 33-year old woman, ignited the fire herself in a successful attempt at self-immolation. No one else was injured at this fire. Detectors were present and operated. Damages from this fire were estimated at \$355,000.

- On September 9, 2012 at 11:05 a.m., the Falmouth Fire Department was called to a fatal airplane crash with ensuing fire. The single-engine plane, a Cirrus SR22, N221DV, crashed while on approach to Falmouth AirPark. The flight instructor, a 23-year old man, was trapped inside of the plane and died in the fire. The student pilot and a passenger were able to extricate themselves from the plane but both had serious burns and were eventually taken to hospitals in Boston. Damages from this fire were not estimated.
- On September 24, 2012, at 1:07 p.m., the Dennis Fire Department was called to a fatal outside fire in a backyard. The victim, a 67-year old man, was pouring gasoline into his lawnmower when it ignited his clothing. His wife later came home and discovered the fire.
- On October 26, 2012, at 8:17 p.m., the Yarmouth Fire Department was called to a fatal outside fire in a residential driveway. The victim, a 28-year old man, poured gasoline over himself and ignited it in a successful attempt at self-immolation. He was transported via Med Flight to a Boston hospital where he later succumbed to his injuries.

Chatham Has Barnstable County's Largest Loss Fire

In 2012 Barnstable County had five large loss fires over \$1 million in estimated damages. These five fires caused \$8.3 million in combined estimated damages, which was 51% of the county's total dollar loss.

- On July 6, 2012, at 11:50 p.m., the Chatham Fire Department responded to a fire of undetermined cause in a single-family home. The fire started on the roof. No one was injured at this fire. Detectors were present but it was undetermined if they operated. The building was not equipped with sprinklers. Damages were estimated to be \$2.9 million.

STRUCTURE FIRES

Reported Structure Fires Down

The 348 structure fires caused one civilian death, 19 civilian injuries, seven fire service injuries and an estimated dollar loss of \$15.8 million. These incidents represented 40% of Barnstable County's reported fires in 2012. The average estimated dollar loss per structure fire was \$45,396. The total number of reported structure fires decreased by 65, or 16%, from the 413 reported in 2011.

Arson Caused 3% of Structure Fires

The nine structure arsons caused one civilian death, one civilian injury and an estimated dollar loss of \$3.5 million. Arson was indicated as the cause of 3% of the structure fires and 22% of Barnstable County's structure fire dollar loss. The nine structure arsons accounted for 20% of the Barnstable County arson fires reported in 2012. The total number of reported structure arsons increased by one from the eight reported in 2011.

56% of Structure Arsons Occurred in Residences

Fifty-six percent (56%) of Barnstable County's nine structure arsons occurred in residential occupancies; 22% happened in special properties; and 11% each occurred in a mercantile or business property and a public assembly property.

BUILDING FIRES

There were 346 building fires of different types in Barnstable County in 2012. These 346 building fires accounted for 99.4% of all building fires in Barnstable County.

81% of Barnstable Building Fires Occurred in People's Homes

Two hundred and seventy-eight (278), or 81%, of Barnstable County's 346 building fires occurred in residential occupancies. Mercantile and business properties had 23 fires. Nineteen (19) fires took place in public assembly properties, including restaurants and churches. Ten (10) fires took place in storage properties. Special properties had seven fires. Hospitals, prisons, and other institutional buildings experienced four fires. One fire took place in an educational facility. One (1) fire took place in a manufacturing or processing facility; and three fires took place in unclassified properties in Barnstable County in 2012.

RESIDENTIAL FIRES**Residential Building Fires Are Down**

There were 278 reported residential building fires in Barnstable County in 2012. These 278 fires are a decrease of 51, or 16%, from the 329 residential building fires reported in 2011.

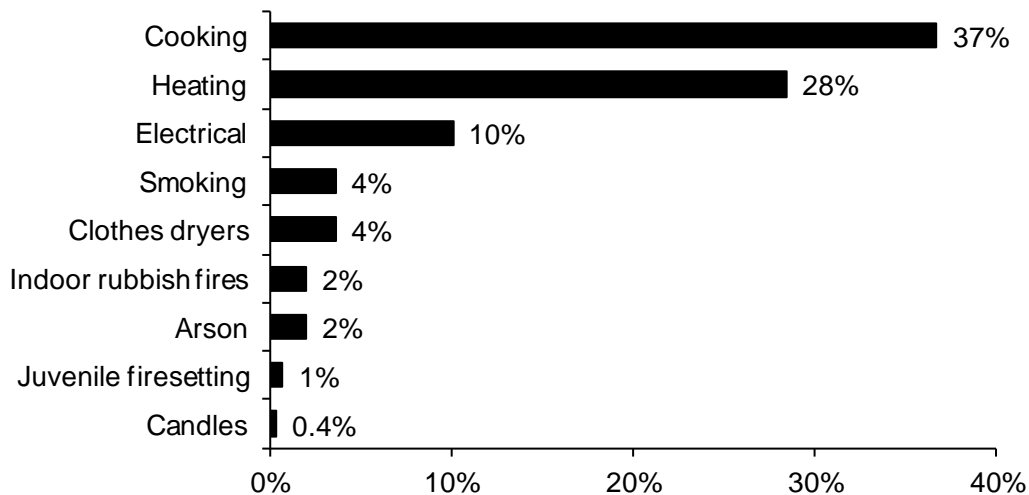
1- & 2-Family Homes Accounted for 82% of Residential Building Fires

The peak fixed property use for residential building fires were one- or two-family homes, accounting for 82% of the building fires in Barnstable County; 10% occurred in apartments; 2% happened in dormitories; 2% happened in hotels or motels; and another 2% occurred in rooming houses. 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 37% of the fires. Heating fires accounted for 28% of the fires in people's homes in 2012; 49% involved a chimney or flue and 41% involved a fuel burner or boiler. Electrical problems caused 10% of fires in residential buildings. Smoking and clothes dryers each caused 4% of these fires. Indoor rubbish fires and arsons each accounted for 2%. Juvenile set fires caused 1% of these fires. Candles caused 0.4% of the fires in residential occupancies in Barnstable County in 2012.

2012 Leading Causes of Fires in Barnstable County Homes



58% of Residential Building Fires Are Confined to Non-Combustible Containers¹

One hundred and sixty-two (162), or 58%, of all residential building fires were reported as confined to non-combustible containers in 2012. Ninety-one (91), or 33%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Thirty-eight (38) of the reported fires were confined to a chimney, accounting for 14% of residential building fires. Twenty-eight (28), or 10%, were fires confined to a fuel burner or boiler malfunction. Five (5), or 2%, of these fires were rubbish fires contained to a non-combustible container in Barnstable County in 2012.

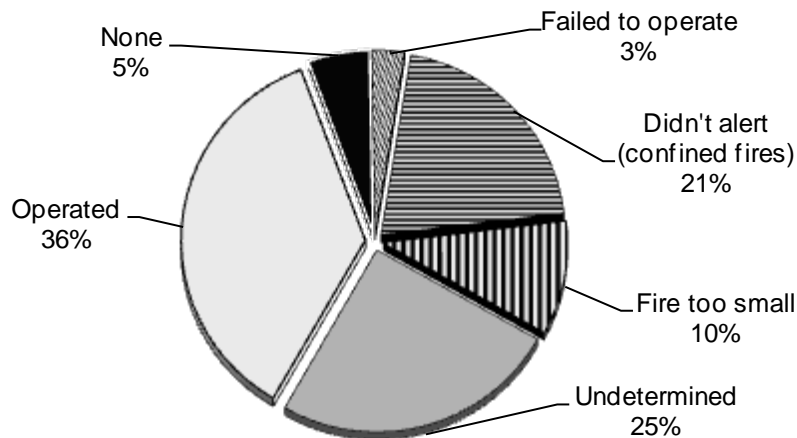
Detectors Alerted Occupants in Only 36% of Fires

Smoke or heat detectors operated and alerted the occupants in 100, or 36%, of the residential building fires. In 21% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 3% of these incidents. In 5% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 10% of the residential fires. Smoke detector performance was undetermined in 70 incidents, or 25%, of Barnstable County's residential building fires.

¹ 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.

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

Detector Status in Barnstable County's Residential Structure Fires 2012



Undetermined Why 3/4 of Detectors Failed

Of the eight fires where smoke detectors were present but failed to operate, one, or 13%, failed because of missing or disconnected batteries and another failed because the power was shut-off or disconnected. It was undetermined in six cases, or 75%, why the detector failed.

VACANT BUILDINGS

6% of Building Fires Occurred in Vacant Buildings

Barnstable County reported 19 fires that occurred in buildings that were vacant, under construction or demolition. This represented 6% of the total 346 building fires reported to MFIRS in 2012. Seven (7) one- or two-family homes, two hotels or motels, two specialty shops, two unclassified storage facilities, two outbuildings or sheds, two protective shelters, an adult classroom and an unclassified garage were reported as vacant building fire incidents.

Three (3), or 16%, of the vacant building fires in Barnstable County in 2012 were determined to be intentionally set. One of these fires occurred in a one- or two-family home, one in a hotel or motel and the other was in a protective shelter.

JUVENILE-SET FIRES

5 Juvenile-set Fires

There were five reported juvenile-set fires in Barnstable County in 2012. There were two structure fires and three brush fires.

ARSONS

45 Total Arsons — 9 Structures, 5 Vehicle & 31 Other Arsons

Forty-five (45), or 5%, of Barnstable County's 879 fires were considered intentionally set, or, for purposes of this analysis, arson. The nine structure arsons, five motor vehicle arsons and 31 outside and other arsons caused two civilian deaths, one civilian injury and an estimated dollar loss of \$3.5 million.

All Arson Down in 2012

The total number of reported arson fires decreased by 11, or 20%, from the 56 reported in 2011. Reported structure arsons increased by one from the eight reported in 2011. Motor vehicle arsons increased by four from the one reported in 2011. Reported outside and other arsons decreased by 16 from the 47 reported in 2011.

ALL INCIDENTS

Rescue & EMS Calls Are 70% of All Reported Incidents

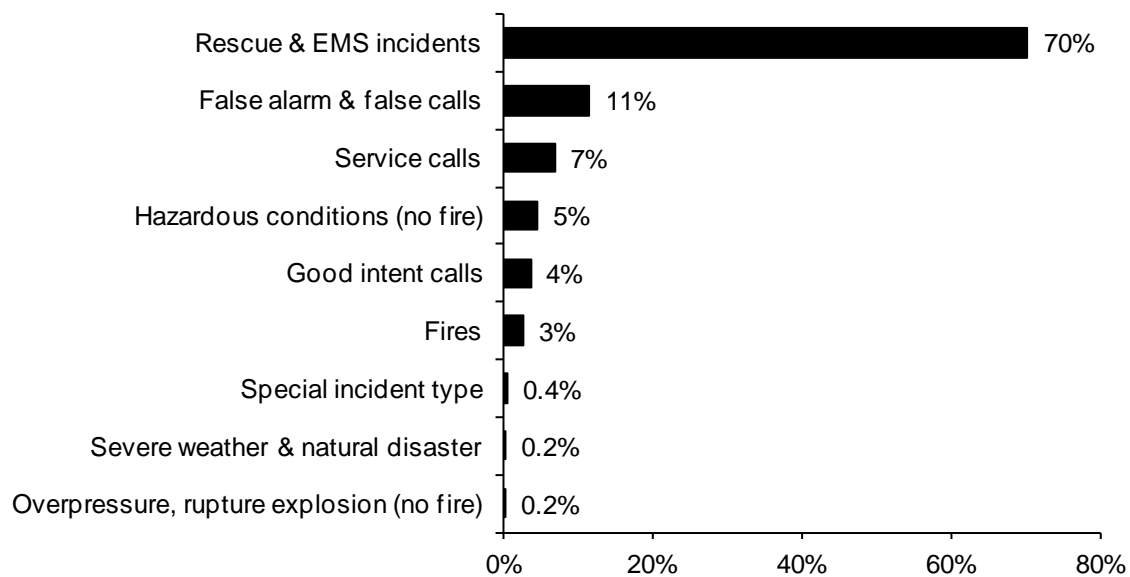
In 2012, Barnstable County fire departments reported 40,950 responses³ to MFIRS. Of these 40,950 incidents, 39,861 non-fire calls were voluntarily reported.

Of these 36,861 non-fire calls, 28,696, or 70% of all of the responses reported in 2012 were reported rescue and emergency medical services (EMS) calls; 4,671, or 11%, were reported false alarm or false calls; 2,830, or 7%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 1,881, or 5%, were reported hazardous condition calls with no fire; 1,482, or 4%, reported good intent calls; 164, or 0.4%, were special incident type calls such as citizen complaints; 72, or 0.2%, were severe weather responses; and 65, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire.

One thousand and eighty-nine (1,089), or 3%, of the total responses submitted by Barnstable County fire departments were fires.

³ These figures include responses in which Barnstable County fire departments gave mutual aid to other fire departments.

2012 Responses by Incident Type



Barnstable County Departments Gave Aid 1,436 Times

In 2012, Barnstable County fire departments reported coming to the aid of other fire departments 1,436 times. Of these 1,436 responses, 801, or 56%, were for rescue or EMS incidents; 191, or 13%, were for service calls such as cover assignments; 188, or 13%, were for fires; 174, or 12%, were for good intent calls; 39, or 3%, were for hazardous conditions calls with no fire; 30, or 2%, were for false alarms or false calls; six, or 0.4%, were special incident types; six, or 0.4%, were overpressure, rupture explosions with no ensuing; and one, or 0.1%, was a severe weather call.

Barnstable County Received Mutual Aid in 966 Incidents

In 2012, Barnstable County fire departments received aid from surrounding departments in 966 incidents. Of these 966 incidents, 717, or 74%, were rescue and emergency medical services calls; 125, or 13%, were for fires; 39, or 4%, were false alarms or false calls; 37, or 4%, were hazardous conditions calls with no fire; 24, or 2%, were good intent calls; 16, or 2%, were service calls; five, or 0.5%, were severe weather or natural disaster calls; and three, or 0.3%, were overpressure, rupture, explosion or overheat calls with no fire.

Barnstable County**Population: 215,888****4.1 Fires/1,000 Population****Total Fires: 879 \$16,370,131**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	348	40%	\$15,797,753
Vehicle Fires	114	13%	390,689
Other Fires	417	47%	181,689

4 Fatal Fires 4.55 Civilian Deaths/1,000 Fires
 4 Civilian Deaths 0.19 Civilian Deaths/10,000 Population
 27 Civilian Injuries 13 Fire Service Injuries

Building Fires: 346**Residential Structure Fires: 278****Residential Structure Fires Confined to Non-Combustible Containers: 162****Unconfined Residential Structure Fires: 116**

1 Civilian Death 14 Civilian Injuries 4 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	227	82%	Operated	100	36%
Apartments	27	10%	Didn't operate	8	3%
Dormitories	13	3%	None	15	5%
Hotels or motels	6	2%	Fire too small	28	10%
Rooming houses	6	2%	Didn't Alert (confined)	57	21%
			Undetermined	70	25%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	38%	Heat from operating eq.	8%	19%
Chimney or flue	14%	Arcing	6%	15%
Heating room or area	12%	Radiated heat/oper. eq.	5%	12%
Bedroom	4%	Hot or smoldering object	3%	8%
Laundry room	3%	Hot ember or ash	2%	5%
Function room, other	3%	Cigarette	2%	4%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignit.	%	%Unconfined⁷
Food, cooking materials	34%	Electrical failure, malfunct.	4%	9%
Film, residue (creosote)	14%	Abandoned materials	3%	8%
Flammable or comb. liquid	10%	Too close to combustibles	3%	7%
Electrical wire, cable insulation	7%	Storm	2%	4%
Rubbish, trash, waste	3%	Mechanical failure, malfunct.	1%	3%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	37%	Unintentional	21%	50%
None	22%	Failure of eq. or heat source	8%	20%
Chimney or flue	14%	Intentional	2%	5%
Boiler, furnace, cent. heat unit	10%	Act of nature	2%	5%
Clothes dryer	4%	Undetermined	3%	8%
		Cause Under Investigation	5%	11%

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

Alerted Occupants	40%
Didn't Alert Occupants	35%
Undetermined	25%

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

⁷ 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.

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

⁹ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	58	26	11	21
February	59	29	10	20
March	66	29	4	33
April	131	29	9	93
May	71	28	13	30
June	76	34	12	30
July	106	29	9	68
August	62	25	13	54
September	80	24	17	39
October	58	28	8	22
November	63	38	3	22
December	49	29	5	15

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	123	49	18	56
Monday	136	54	10	72
Tuesday	125	40	17	68
Wednesday	133	60	19	54
Thursday	109	45	12	52
Friday	118	39	28	51
Saturday	135	61	10	64

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	43	17	9	17
04:01 - 08:00	62	24	13	25
08:01 - 12:00	147	67	26	54
12:01 - 16:00	257	72	26	159
16:01 - 20:00	229	101	21	107
20:01 - 24:00	141	67	19	55

Motor Vehicle Fires

Total: 114

Automobiles: 90 (79%)

4 (4%), of the automobile fires were considered intentionally set.

Arson Fires

Total Arsons: 45

Dollar loss: \$3,520,930

0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	9	3%	20%	\$3,510,730
Vehicle Arsons	5	4%	11%	9,000
Other Arsons	31	7%	69%	1,200

0.04 Structure arsons/1,000 population

0.02 Vehicle arsons/1,000 population

0.14 Other arsons/1,000 population

2 Civilian Deaths

1 Civilian Injury

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 - 20:00	5	56%	00:01 - 04:00	4	80%
00:01 - 04:00	2	22%	20:01 - 00:00	2	20%

Other Arsons	#	%
12:01 - 16:00	11	35%
16:01 - 20:00	8	26%
20:01 - 00:00	5	16%

Peak Fixed Property Uses for Structure Arsons	#	%
1- & 2-Family homes	2	22%

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

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
2008	16	7	3	6	1	0	0	1
2009	19	3	9	7	0	0	0	0
2010	35	12	4	19	8	2	0	6
2011	26	10	5	11	0	0	0	0
2012	29	9	1	19	2	0	0	2

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

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
	Fires	Fires	Fires	Fires	Arsons	Arsons	Arsons	Arsons
2008	80	30	12	38	7	0	0	7
2009	69	39	10	20	3	0	0	3
2010	85	49	12	24	9	2	1	5
2011	59	29	4	26	2	0	1	1
2012	60	33	8	19	2	1	1	0

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

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
	Fires	Fires	Fires	Fires	Arsons	Arsons	Arsons	Arsons
2008	3	1	2	0	0	0	0	0
2009	1	1	0	0	0	0	0	0
2010	Non-reporting department							
2011	3	3	0	0	0	0	0	0
2012	3	1	0	2	0	0	0	0

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

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
	Fires	Fires	Fires	Fires	Arsons	Arsons	Arsons	Arsons
2008	158	57	18	83	8	2	1	5
2009	118	55	14	49	19	6	1	12
2010	125	42	14	69	1	0	0	1
2011	128	54	19	55	7	1	0	6
2012	125	47	14	64	5	3	1	1

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

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	18	8	2	8	1	0	0	1
2009	12	8	3	1	0	0	0	0
2010	14	10	0	4	1	0	0	1
2011	19	9	0	10	1	0	0	1
2012	31	8	6	17	2	1	0	1

Bourne**Population: 19,754**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	88	40	14	34	5	0	1	4
2009	104	43	21	40	17	2	0	15
2010	104	33	16	55	14	0	0	14
2011	68	29	9	30	4	0	0	4
2012	75	27	17	31	7	0	3	4

Brewster**Population: 9,820**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	51	32	7	12	0	0	0	0
2009	53	32	2	19	5	0	1	4
2010	60	23	6	31	4	0	0	4
2011	43	21	2	20	1	0	0	1
2012	28	14	4	10	2	1	0	1

Chatham**Population: 6,125**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	31	13	8	10	1	0	1	0
2009	22	11	4	7	1	0	0	1
2010	23	12	2	12	0	0	0	0
2011	23	12	3	8	1	0	0	1
2012	21	8	2	11	0	0	0	0

Dennis **Population: 14,207**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	66	28	2	36	2	1	0	1
2009	56	24	7	25	1	0	0	1
2010	62	19	5	38	1	0	0	1
2011	79	17	14	48	5	0	0	5
2012	74	14	6	54	9	0	0	9

Eastham **Population: 4,956**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	23	13	0	10	0	0	0	0
2009	21	14	0	7	0	0	0	0
2010	25	11	1	13	0	0	0	0
2011	26	13	3	10	4	0	0	4
2012	16	5	0	11	1	1	0	0

Falmouth **Population: 31,531**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	162	44	15	103	48	8	1	39
2009	52	20	14	18	2	2	0	0
2010	69	38	8	23	7	0	1	6
2011	74	29	17	28	10	2	0	8
2012	83	27	22	34	4	0	0	4

Harwich **Population: 12,243**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	42	25	3	14	4	0	0	4
2009	44	25	5	14	1	1	0	0
2010	58	26	7	25	1	1	0	0
2011	45	19	7	19	3	1	0	2
2012	54	21	6	27	1	1	0	0

MA Military Reservation **Population: 0**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008 ¹⁰	0	0	0	0	0	0	0	0
2009	7	1	2	4	2	0	0	2
2010	12	3	1	8	4	0	0	4
2011	9	4	0	5	1	0	0	1
2012	6	1	3	2	0	0	0	0

Mashpee **Population: 14,006**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	64	27	7	30	3	0	1	2
2009	42	23	7	12	0	0	0	0
2010	68	25	9	34	5	0	2	3
2011	60	24	6	30	3	0	0	3
2012	34	17	4	13	2	0	0	2

Orleans **Population: 5,890**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	32	15	4	13	2	0	0	2
2009	29	14	5	10	1	0	0	1
2010	48	16	1	31	0	0	0	0
2011	35	8	2	25	5	0	0	5
2012	40	15	4	21	1	0	0	1

Provincetown **Population: 2,942**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	26	16	0	10	0	0	0	0
2009	28	21	3	4	0	0	0	0
2010	39	25	2	12	0	0	0	0
2011	21	15	1	5	0	0	0	0
2012	21	12	2	7	0	0	0	0

¹⁰ The MA Military Reservation (MMR) Fire Department became a state fire department in October of 2008. Prior to that it was the Otis Air Force Base Fire Department – a federal fire department and reported all its incidents to the Department of Defense. In 2008, MMR reported 179 total incidents (0 fires) to MFIRS from October through December.

Sandwich**Population: 20,675**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	104	71	10	23	1	0	1	0
2009	110	81	17	12	4	3	0	1
2010	100	59	11	30	5	2	2	1
2011	102	76	11	15	2	1	0	1
2012	108	71	10	27	2	1	0	1

Truro**Population: 2,003**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	4	2	1	1	0	0	0	0
2010	3	2	1	0	0	0	0	0
2011	1	1	0	0	0	0	0	0
2012	2	2	0	0	0	0	0	0

Wellfleet**Population: 2,750**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	27	16	2	9	0	0	0	0
2009	11	5	1	5	0	0	0	0
2010	20	11	2	7	0	0	0	0
2011	30	15	2	13	1	0	0	1
2012	25	10	4	11	1	0	0	1

Yarmouth**Population: 23,793**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	89	37	15	37	10	1	1	8
2009	81	32	15	34	10	2	1	7
2010	3	2	1	0	1	0	1	0
2011	62	22	4	36	9	3	0	6
2012	64	17	4	43	6	0	0	6

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
01919	Barnstable	1,029	37	2	594	46	83	50	173	3	41
01036	Bourne	4,003	87	20	3,059	119	174	112	406	4	22
01041	Brewster	2,368	39	5	1,893	69	89	65	196	8	4
01920	C.O.M.M.	3,829	80	4	2,716	177	201	104	523	22	2
01055	Chatham	2,170	24	1	1,497	88	198	109	245	1	7
01921	Cotuit	3	3	0	0	0	0	0	0	0	0
01075	Dennis	4,426	100	6	3,101	226	388	136	436	5	28
01086	Eastham	1,626	30	1	1,214	47	100	65	162	1	6
01096	Falmouth	167	83	0	0	23	16	2	42	1	0
01126	Harwich	3,575	78	4	2,422	189	353	186	341	0	2
01922	Hyannis	1,150	128	11	47	197	137	92	528	1	9
01936	Ma Military Res.	810	14	0	114	212	226	10	234	0	0
01172	Mashpee	2,957	43	2	1,973	110	276	160	372	18	3
01224	Orleans	2,187	59	3	1,714	79	68	55	194	3	12
01242	Provincetown	145	23	1	11	21	11	15	62	1	0
01261	Sandwich	3,472	117	0	2,487	131	261	170	289	0	17
01300	Truro	2	2	0	0	0	0	0	0	0	0
01318	Wellfleet	906	28	0	659	15	86	36	82	0	0
01923	West Barnstable	573	42	1	377	22	45	19	62	4	1
01351	Yarmouth	5,552	72	4	4,818	110	118	96	324	0	10
Total	Barnstable County	40,950	1,089	65	28,696	1,881	2,830	1,482	4,671	72	164

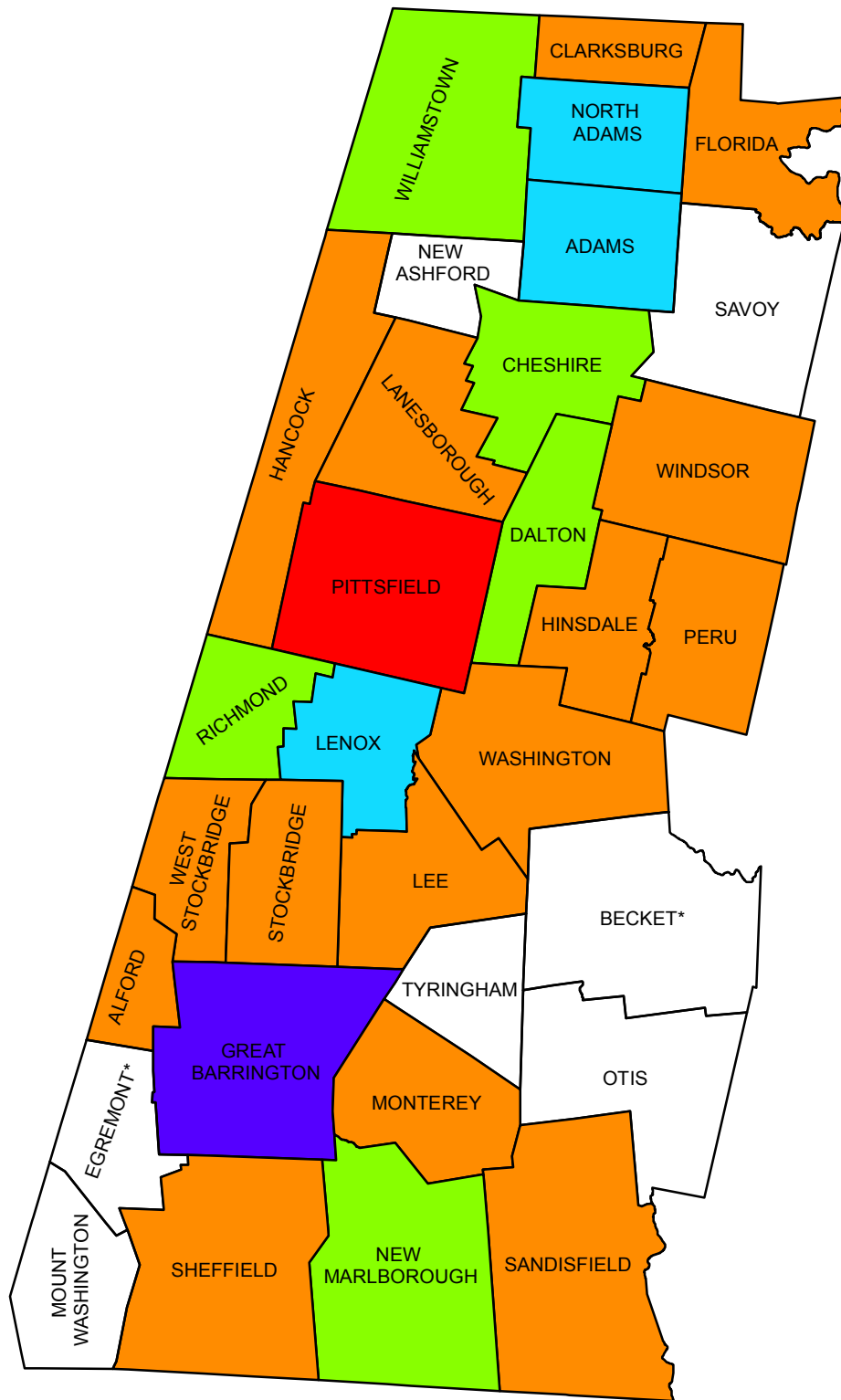
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



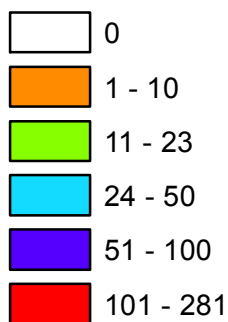
Berkshire County

2012 Fire Data Analysis

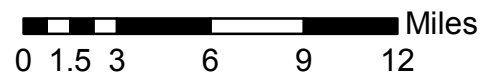
Berkshire County Fires 2012



2012 Fires



*Non-reporting Department



MFIRS
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2012

Berkshire County Fires in 2012

607 Total Fires — 346 Structures, 34 Vehicles & 227 Outside and Other Fires

Berkshire County ranked tenth out of the fourteen Massachusetts counties in total reported fires. Berkshire County fire departments reported 607 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 346 structure fires, 34 motor vehicle fires, 103 brush, tree or lawn fires, 67 outside rubbish fires, 26 special outside fires, three cultivated vegetation or crop fires and 28 other fires caused one civilian death, four civilian injuries, 19 fire service injuries and an estimated dollar loss of \$5.7 million. Berkshire County's fires accounted for 2% of the 31,229 Massachusetts fires reported in 2012.

Twenty-nine (29) 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 2012.

Structure & Outside & Other Fires Up

The total number of reported fire incidents increased by 56 from the 551 reported in 2011. Reported structure fires increased by six from the 340 reported during the previous year. Motor vehicle fires decreased by 13 from the 47 reported in 2011. Outside and other fires increased by 63 from the 164 reported in 2011. This increase in outside fires was a statewide trend in 2012.

BERKSHIRE COUNTY FIRES FROM 2008 TO 2012

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	714	431	46	237	42	8	1	33
2009	668	412	60	196	44	18	6	20
2010	609	355	47	207	42	8	4	30
2011	551	340	47	164	26	11	3	12
2012	607	346	34	227	24	5	0	19

Fire and Fire Death Rates

Berkshire County had 4.6 fires per 1,000 population. That figure ranks Berkshire County fifth in the state and below the state rate of 4.8 fires per 1,000 population. Berkshire County also had 0.08 fire deaths per 10,000 populations ranking it fourth among Massachusetts counties and just above the state rate of 0.06 fire deaths per 10,000 population.

1 Berkshire County Resident Died in 1 Fire

There was one fatal fire in Berkshire County in 2012.

- On April 1, 2012, at 4:14 a.m., the Pittsfield Fire Department was called to a fatal smoking fire in a three-unit apartment building. The 59-year old physically disabled female victim fell asleep and her cigarette started the fire. There were no other injuries at this fire. Detectors were present and alerted the other occupants of the

building. There were no sprinklers. Damages from this fire were estimated to be \$180,000.

Great Barrington Had Berkshire County's Largest Loss Fire

- On October 20, 2012, at 6:30 a.m., the Great Barrington Fire Department was called to a fire of undetermined cause at a four-unit apartment building. The fire started inside a first floor entranceway. One (1) firefighter was injured at this fire. Detectors were present and operated. The building was not sprinklered. Damages from this fire were estimated to be \$500,000.

STRUCTURE FIRES

Reported Structure Fires Up Slightly

The 346 structure fires caused one civilian death, three civilian injuries, 16 fire service injuries and an estimated dollar loss of \$4.9 million. These incidents represented 57% of Berkshire County's reported fires in 2012. The average estimated dollar loss per structure fire was \$14,151. The total number of reported structure fires increased by six, or 2%, from the 340 reported in 2011.

Arson Caused 1% of Structure Fires

The five structure arsons caused one civilian injury, one fire service injury and an estimated dollar loss of \$237,370. Arson was indicated as the cause of 1% of the structure fires and 5% of Berkshire County's structure fire dollar loss. The five structure arsons accounted for 21% of the Berkshire County arson fires reported in 2012. The total number of reported structure arsons decreased by six from the 11 reported in 2011.

60% of Structure Arsons Occurred in Residences

Three (3), or 60%, of Berkshire County's eight structure arsons occurred in residential occupancies. Two (2) arsons occurred in storage facilities in 2012.

BUILDING FIRES

There were 344 building fires of different types in Berkshire County in 2012. These 344 building fires accounted for 99.4% of all structure fires in Berkshire County.

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

Two hundred and ninety-two (292), or 85%, of Berkshire County's 344 building fires occurred in residential occupancies. Fifteen (15) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 11 fires. Nine (9) fires occurred at educational facilities. Storage facilities also had nine fires. Hospitals, prisons, and other institutional buildings experienced two fires. Two (2) other fires occurred at manufacturing facilities in Berkshire County in 2012. Industrial facilities and special properties, such as outbuildings or sheds, each had one fire. There was also a fire at an unclassified building in Berkshire County in 2012.

RESIDENTIAL FIRES

Residential Building Fires Up

There were 292 reported residential building fires in Berkshire County in 2012. These 292 fires are an increase of 23, or 9%, from the 269 residential building fires reported in 2011.

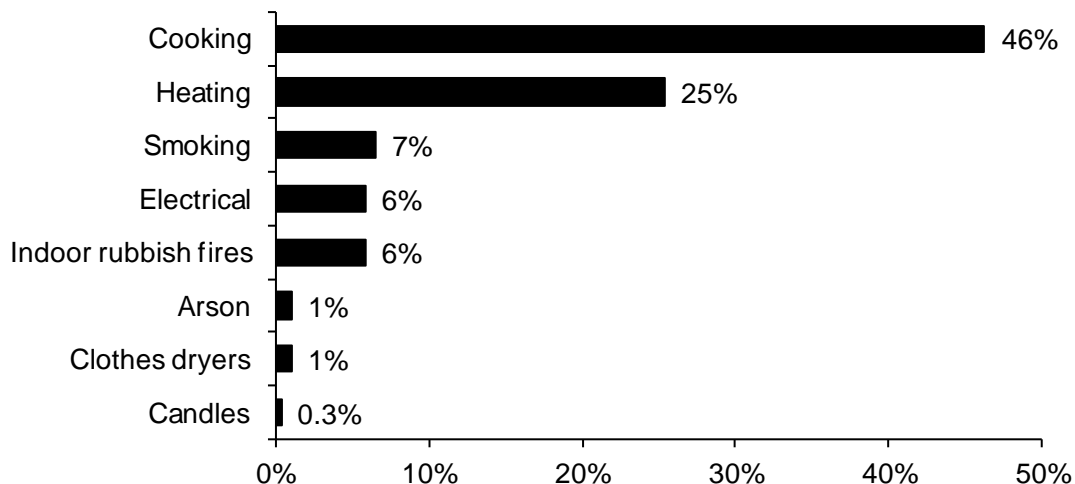
1- & 2-Family Homes Accounted for 62% of Residential Building Fires

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; 27% occurred in apartments; 4% happened in hotels or motels; 2% occurred in residential board and care facilities; and 1% each occurred in rooming houses and dormitories. Nine (9), or 3%, of the building fires in Berkshire County occurred in unclassified residential buildings.

Unattended Cooking Causes 46% of Residential Fires

The leading cause of residential building fires in Berkshire County was unattended cooking and other unsafe cooking practices, accounting for 46% of the fires. Heating caused 25% of the residential building fires; of which 47, or 64%, were caused by chimney, fireplace or flue fires. Smoking caused 7% of the fires. Electrical problems and indoor rubbish fires each caused 6%. Arsons and clothes dryers each caused 1%; and candles were responsible for 0.3% of Berkshire County's residential building fires in 2012.

2012 Leading Causes of Fires in Berkshire County Homes



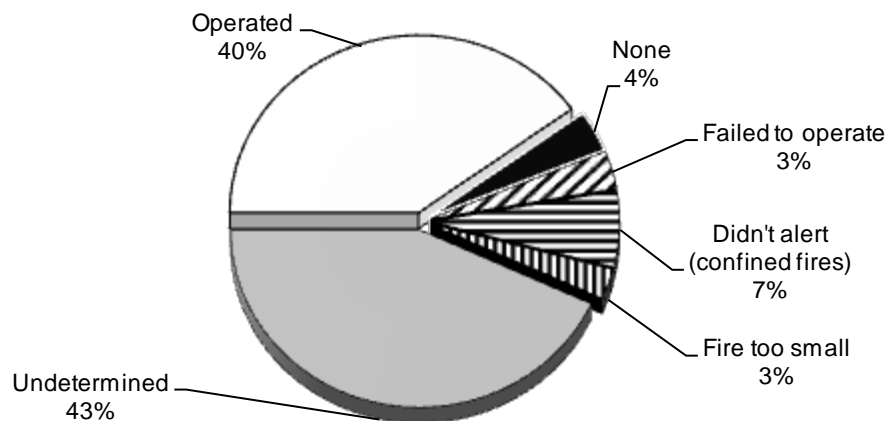
69% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Two hundred and two (202), or 69%, of these fires were confined to a non-combustible container. One hundred and twenty-one (121), or 41%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Thirty-nine (39) of the reported fires were confined to a chimney accounting for 13% of residential building fires. Fires confined to a fuel burner or boiler malfunction accounted for 24, or 8% of these fires. Seventeen (17), or 6%, of these fires in Berkshire County in 2012 were indoor rubbish fires; and there was one fire confined to an incinerator accounting for less than 1% of these fires.

Detectors Undetermined in 43% of Fires

Smoke or heat detectors operated and alerted the occupants in 117, or 40%, of the residential building fires. In 7% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 3% of these incidents. In 4% 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 126 incidents, or 43%, of Berkshire County's residential building fires.

Detector Status in Berkshire County's Residential Structure Fires 2012



¹ 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.

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

40% of Failed Detector Had Missing or Dead Batteries

Of the 10 fires where smoke detectors were present but failed to operate, three, or 30%, failed because the battery was either missing or disconnected. One (1) detector failed because of a dead battery, causing 10% of the failed detectors in Berkshire County in 2012. Another three detectors, or 30%, failed because they were defective. It was undetermined why the other three detectors, or 30%, failed to operate.

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

Berkshire County reported eight fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the total 344 building fires reported to MFIRS in 2012. Three (3) outbuildings or sheds, two one- or two-family homes, one unclassified residence, one detached residential garage, and one grocery store were reported as vacant building fire incidents.

Two (2), or 25%, of the vacant building fires in Berkshire County in 2012 were determined to be intentionally set. One (1) of these fires was in an unclassified residence and the other was in an outbuilding or shed.

JUVENILE-SET FIRES**3 Juvenile-set Fires**

There were three reported juvenile-set fires in Berkshire County in 2012. There was one brush fire and two outside rubbish fires.

ARSONS**24 Total Arsons — 5 Structure, 0 Vehicle & 19 Other Arsons**

Twenty-four (24), or 4%, of Berkshire County's 607 fires were intentionally set, or, for purposes of this analysis, arson. The five structure arsons and 19 outside and other arsons caused one civilian injury, one fire service injury and an estimated dollar loss of \$239,390.

Structure & MV Arsons Down

The total number of reported arson fires decreased by two from the 26 reported in 2011. Reported structure arsons decreased by six from 11 in 2011. Motor vehicle arsons decreased by three from the three reported the previous year. Reported outside and other arsons increased by seven from the 12 reported in 2011.

ALL INCIDENTS

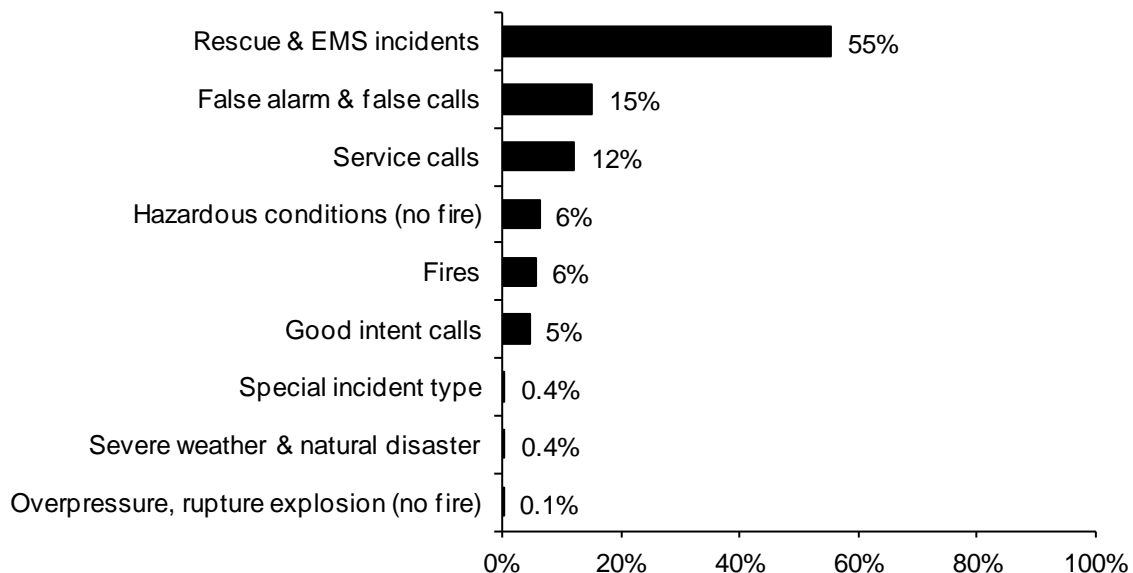
Rescue & EMS Calls Are Over 1/2 of All Reported Responses

In 2012, Berkshire County fire departments reported 12,270 responses³ to MFIRS. Of these 12,270 incidents, 11,565 non-fire incidents were voluntarily reported.

Of these 11,565 non-fire responses, 6,783, or 55%, of all the responses reported in 2012 were reported rescue and emergency medical services (EMS) calls; 1,854, or 15%, were reported false alarm or false calls; 1,485, or 12%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 775, or 6%, were reported hazardous condition calls with no fire; 570, or 5%, were reported good intent calls; 45, or 0.4%, were special incident type calls such as citizen complaints; 43, or 0.4%, were severe weather responses; and 10, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Seven hundred and five (705), or 6%, of the total responses submitted by Berkshire County fire departments were fires.

2012 Responses by Incident Type



³ These figures include responses in which Berkshire County fire departments gave mutual aid to other fire departments.

Berkshire County Departments Reported Giving Mutual Aid 265 Times

In 2012, Berkshire County fire departments reported coming to the aid of other fire departments 265 times. Of these 265 responses, 99, or 37%, were for fires; 81, or 31%, were for rescue or EMS calls; 46 or 17%, were for service calls such as cover assignments; 19, or 7%, were for false alarms; 11, or 4%, were good intent calls; eight, or 3%, 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 489 Incidents

In 2012, Berkshire County fire departments reported receiving aid from surrounding departments in 489 incidents. Of these 489 incidents, 411, or 84%, were rescue and emergency medical services calls; 43, or 9%, were for fires; 15, or 3%, were false alarms or false calls; 11, or 2%, were hazardous conditions calls with no fire; five, or 1%, were service calls; three, or 1%, were good intent calls; and one call, or 0.2%, was an special incident type call.

Berkshire County**Population: 131,219****4.6 Fires/1,000 Population****Total Fires: 607 \$5,729,236**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	346	57%	\$4,896,106
Vehicle Fires	34	6%	291,900
Other Fires	227	37%	541,230

1 Fatal Fire 1.65 Civilian Deaths/1,000 Fires
 1 Civilian Death 0.08 Civilian Deaths/10,000 Population
 4 Civilian Injuries 19 Fire Service Injuries

Building Fires: 344**Residential Structure Fires: 292****Residential Structure Fires Confined to Non-Combustible Containers: 202****Unconfined Residential Structure Fires: 90**

1 Civilian Death 3 Civilian Injuries 13 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	180	62%	Operated	117	40%
Apartments	80	27%	Didn't operate	10	3%
Hotels or motels	13	4%	None	11	4%
Residential board & care	5	2%	Fire too small	8	3%
Rooming houses	3	1%	Didn't alert (confined)	20	7%
Dormitories	2	1%	Undetermined	126	43%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	48%	Radiated heat from op. eq.	5%	16%
Chimney or flue	13%	Heat from operating equip.	3%	11%
Heating equipment room	9%	Cigarette	3%	10%
Living room	3%	Arcing	3%	9%
Wall surface, exterior	3%	Spark/ember/flame fr. op. eq.	2%	7%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignit.	%	%Unconfined⁷
Food, cooking materials	44%	Too close to combustibles	3%	9%
Film, residue (creosote)	13%	Electrical failure/malfunc.	2%	7%
Flammable, combustible liquid	8%	Misuse of mater. or product	2%	6%
Rubbish, trash, waste	7%	Abandoned materials	1%	3%
Structural member, framing	5%			

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	45%	Unintentional	15%	49%
None	14%	Failure of eq. or heat source	6%	19%
Chimney or flue	13%	Intentional	1%	4%
Boiler, furnace, cent. heat unit	8%	Act of Nature	1%	2%
Electrical wire, other	2%	Undetermined	4%	13%
		Cause under investigation	3%	9%

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

Alerted occupants	40%
Didn't alert occupants	10%
Undetermined	50%

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

⁷ 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.

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

⁹ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	48	34	4	10
February	43	28	2	13
March	70	38	0	32
April	98	39	2	57
May	38	24	4	10
June	46	26	4	16
July	60	25	5	30
August	48	29	5	14
September	38	19	2	17
October	49	32	3	14
November	37	25	2	10
December	32	27	1	4

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	82	48	6	28
Monday	73	37	3	33
Tuesday	99	59	5	35
Wednesday	71	45	3	23
Thursday	74	40	5	29
Friday	103	55	5	43
Saturday	105	62	7	36

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	39	25	3	11
04:01 - 08:00	37	30	2	6
08:01 - 12:00	75	42	6	28
12:01 - 16:00	138	67	9	63
16:01 - 20:00	192	105	11	76
20:01 - 00:00	126	77	4	43

Motor Vehicle Fires

Total: 47

Automobiles: 23 (68%)

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

Arson Fires

Total Arsons: 24

Dollar loss: \$239,390

0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	\$ Loss
Structure Arsons	5	1%	21%	\$237,370
Vehicle Arsons	0	0%	0%	0
Other Arsons	19	8%	79%	2,020

0.04 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.14 Other arsons/1,000 population

1 Civilian Injury

1 Fire Service Injury

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	2	40%			
00:01 - 04:00	1	20%			
16:01 - 20:00	1	20%			
20:01 - 00:00	1	20%			

Other Arsons	#	%
16:01 - 20:00	7	37%
12:01 - 16:00	5	26%
20:01 - 00:00	5	26%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	2	40%
Outbuilding or shed	2	40%
Residential, other	1	20%

Adams **Population: 8,405**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	40	31	3	6	3	0	0	3
2009	44	35	1	8	4	2	0	2
2010	36	22	6	8	3	0	1	2
2011	19	16	1	2	0	0	0	0
2012	39	23	3	13	1	0	0	1

Alford **Population: 494**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	1	1	0	0	0	0	0	0
2010	1	1	0	0	0	0	0	0
2011	1	0	0	1	0	0	0	0
2012	1	1	0	0	0	0	0	0

Becket **Population: 1,779**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	2	1	1	0	1	0	1	0
2010	Non-Reporting Community							
2011	Non-Reporting Community							
2012	Non-Reporting Community							

Cheshire **Population: 3,235**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	8	3	2	3	0	0	0	0
2009	3	0	1	2	1	0	0	1
2010	12	5	2	5	0	0	0	0
2011	10	6	0	4	0	0	0	0
2012	14	5	2	7	1	0	0	1

Clarksburg **Population: 1,702**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	3	1	1	1	0	0	0	0
2009	5	4	1	0	0	0	0	0
2010	4	4	0	0	0	0	0	0
2011 ¹⁰	Fire Department in Good Standing, Certified No Reportable Fires							
2012	1	1	0	0	0	0	0	0

Dalton **Population: 6,756**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	26	19	1	6	1	1	0	0
2009	25	23	2	0	0	0	0	0
2010	20	17	0	3	1	0	0	1
2011	16	15	1	0	1	1	0	0
2012	23	17	2	4	0	0	0	0

Egremont **Population: 1,225**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Non-Reporting Community							
2009	1	1	0	0	0	0	0	0
2010	Fire Department in Good Standing, Certified No Reportable Fires							
2011	Non-Reporting Community							
2012	Non-Reporting Community							

Florida **Population: 752**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2	2	0	0	0	0	0	0
2009	10	5	1	4	0	0	0	0
2010	3	1	1	1	0	0	0	0
2011	2	2	0	0	0	0	0	0
2012	2	2	0	0	0	0	0	0

¹⁰ In 2011 Clarksburg reported 5 fire calls, all these were mutual aid calls to other fire departments.

Great Barrington**Population: 7,104**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	92	73	3	16	1	1	0	0
2009	87	74	3	10	2	1	1	0
2010	80	62	3	15	0	0	0	0
2011	71	56	0	15	3	3	0	0
2012	92	72	0	20	1	1	0	0

Hancock**Population: 717**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2	2	0	0	0	0	0	0
2009	3	2	1	0	0	0	0	0
2010	2	2	0	0	0	0	0	0
2011	Fire Department in Good Standing, Certified No Reportable Fires							
2012	3	3	0	0	0	0	0	0

Hinsdale**Population: 2,032**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	4	4	0	0	0	0	0	0
2009	2	2	0	0	0	0	0	0
2010	3	2	1	0	0	0	0	0
2011	2	2	0	0	0	0	0	0
2012	1	1	0	0	0	0	0	0

Lanesborough**Population: 3,091**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	14	5	0	9	3	0	0	3
2009	9	3	1	5	0	0	0	0
2010	9	4	0	5	0	0	0	0
2011	6	2	2	2	1	0	1	0
2012	5	2	2	1	0	0	0	0

New Marlborough**Population: 1,509**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	6	3	2	1	0	0	0	0
2009	16	5	3	8	0	0	0	0
2010	6	2	0	4	0	0	0	0
2011	14	9	0	5	0	0	0	0
2012	15	9	0	6	0	0	0	0

North Adams**Population: 13,708**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	84	47	8	29	6	1	0	5
2009	52	20	9	23	6	0	2	4
2010	48	18	12	18	8	2	1	5
2011	39	22	7	10	3	0	0	3
2012	42	20	4	18	2	0	0	2

Otis**Population: 1,612**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	9	8	0	1	0	0	0	0
2010	Fire Department in Good Standing, Certified No Reportable Fires							
2011	1	1	0	0	0	0	0	0
2012	Fire Department in Good Standing, Certified No Reportable Fires							

Peru**Population: 847**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	6	2	1	3	1	0	0	1
2009	2	0	0	2	1	0	0	1
2010	4	2	0	2	1	0	0	1
2011 ¹¹	Fire Department in Good Standing, Certified No Reportable Fires							
2012	7	2	1	4	0	0	0	0

¹¹ In 2011, Peru reported 45 total calls. Four (4) of these calls were mutual aid fire calls.

Pittsfield **Population: 44,737**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	312	166	19	127	26	5	1	20
2009	275	157	23	95	25	14	2	9
2010	307	170	19	118	25	5	2	18
2011	285	164	20	101	16	6	2	8
2012	281	142	14	125	16	3	0	13

Richmond **Population: 1,475**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	17	7	0	10	1	0	0	1
2009	16	8	0	8	0	0	0	0
2010	8	4	0	4	2	0	0	2
2011	7	3	1	3	0	0	0	0
2012	13	4	2	7	0	0	0	0

Sandisfield **Population: 915**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	13	6	1	6	0	0	0	0
2009	15	10	1	4	0	0	0	0
2010	9	3	1	5	1	0	0	1
2011	5	4	0	1	0	0	0	0
2012	6	2	0	4	1	0	0	1

Savoy **Population: 692**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2	2	0	0	0	0	0	0
2009	2	2	0	0	0	0	0	0
2010	2	2	0	0	0	0	0	0
2011	3	2	1	0	0	0	0	0

2012 Fire Department in Good Standing, Certified No Reportable Fires

Sheffield **Population: 3,257**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	3	1	0	2	0	0	0	0
2009	2	1	0	1	1	1	0	0
2010	2	0	0	2	0	0	0	0
2011	Fire Department in Good Standing, Certified No Reportable Fires							
2012	2	0	0	2	0	0	0	0

Stockbridge **Population: 1,947**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	1	1	0	0	0	0	0	0
2010	Fire Department in Good Standing, Certified No Reportable Fires							
2011	1	0	1	0	0	0	0	0
2012	2	2	0	0	0	0	0	0

Tyringham **Population: 327**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	1	1	0	0	0	0	0	0
2010	Fire Department in Good Standing, Certified No Reportable Fires							
2011	Fire Department in Good Standing, Certified No Reportable Fires							
2012	Fire Department in Good Standing, Certified No Reportable Fires							

West Stockbridge **Population: 1,306**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	5	1	0	4	0	0	0	0
2009	4	2	0	2	1	0	0	1
2010	1	1	0	0	0	0	0	0
2011	5	1	3	1	0	0	0	0
2012	2	1	1	0	0	0	0	0

Williamstown **Population: 7,754**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	16	11	2	3	0	0	0	0
2009	16	10	5	1	1	0	0	1
2010	Non-Reporting Community							
2011	15	7	4	4	1	1	0	0
2012	11	7	0	4	0	0	0	0

Windsor **Population: 899**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	2	0	0	2	0	0	0	0
2010	1	1	0	0	0	0	0	0
2011	4	0	1	3	0	0	0	0
2012	1	1	0	0	0	0	0	0

12

¹² The Town of Washington has no fire department only a fire chief. They did have 1 structure fire in town in 2012.

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	269	46	2	59	32	13	24	92	1	0
03006	Alford	1	1	0	0	0	0	0	0	0	0
03058	Cheshire	363	16	0	272	22	18	3	27	1	4
03063	Clarksburg	3	3	0	0	0	0	0	0	0	0
03070	Dalton	841	29	0	647	25	27	38	70	0	5
03098	Florida	81	8	0	47	6	11	3	3	2	1
03113	Great Barrington	565	103	1	182	47	46	4	176	3	3
03121	Hancock	3	3	0	0	0	0	0	0	0	0
03132	Hinsdale	1	1	0	0	0	0	0	0	0	0
03148	Lanesborough	327	10	0	238	19	14	9	37	0	0
03150	Lee	2	2	0	0	0	0	0	0	0	0
03152	Lenox	464	48	1	82	40	55	24	199	14	1
03193	Monterey	3	3	0	0	0	0	0	0	0	0

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

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
03203	New Marlborough	192	30	0	104	12	3	12	31	0	0
03209	North Adams	1,074	45	2	186	142	305	116	271	1	6
03233	Peru	65	11	0	45	4	0	1	4	0	0
03236	Pittsfield	7,415	283	4	4,742	336	931	277	797	20	25
03249	Richmond	106	23	0	11	27	20	4	21	0	0
03260	Sandisfield	184	10	0	112	15	30	7	10	0	0
03267	Sheffield	2	2	0	0	0	0	0	0	0	0
03283	Stockbridge	2	2	0	0	0	0	0	0	0	0
03313	Washington	1	1	0	0	0	0	0	0	0	0
03326	West Stockbridge	80	9	0	51	1	4	0	15	0	0
03341	Williamstown	225	15	0	5	47	8	48	101	1	0
03345	Windsor	1	1	0	0	0	0	0	0	0	0
Total	Berkshire County	12,270	705	10	6,783	775	1,485	570	1,854	43	45

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.

Pittsfield Fires in 2012

281 Total Fires — 142 Structures, 14 Vehicles & 125 Other Fires

The Pittsfield Fire Department reported 281 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 142 structure fires, 14 motor vehicle fires, 44 brush fires, 49 outside rubbish fires, 19 special outside fires; one cultivated crop or vegetation fire; and 12 unclassified fires caused one civilian death, 13 firefighter injuries and an estimated dollar loss of \$1.5 million.

1 Person Killed in 1 Pittsfield Fire

- On April 1, 2012, at 4:14 a.m., the Pittsfield Fire Department was called to a fatal smoking fire in a three-unit apartment building. The 59-year old physically disabled female victim fell asleep and her cigarette started the fire. There were no other injuries at this fire. Detectors were present and alerted the other occupants of the building. There were no sprinklers. Damages from this fire were estimated to be \$180,000.

Structure & MV Fires Down Slightly

Total fires decreased by four from the 285 incidents reported in 2011. Reported structure fires decreased by 22 from the 164 reported during the previous year. Motor vehicle fires decreased by six from 20 the year before. Outside and other fires increased by 24 from the 101 reported in 2011.

PITTSFIELD FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	312	166	19	127	26	5	1	20
2009	275	157	23	95	25	14	2	9
2010	307	169	19	119	25	5	2	18
2011	285	164	20	101	16	6	2	8
2012	281	142	14	125	16	3	0	13

BUILDING FIRES

There were 141 building fires of different types in Pittsfield in 2012. These 141 building fires accounted for 99.3% of all structure fires in Pittsfield.

89% of Building Fires in Homes

The 141 building fires that occurred in Pittsfield in 2012 can be broken down by fixed property use as follows: 125, or 89%, of all building fires were in residential properties; six fires happened in storage facilities; five happened in mercantile or business properties; two fires happened at manufacturing or processing facilities; and one fire each occurred in a public assembly property, an educational facility, and an institutional facility.

RESIDENTIAL FIRES

Residential Building Fires Down Slightly

There were 125 reported residential building fires in Pittsfield in 2012. These 125 fires are a decrease of 13 from the 138 reported residential building fires reported in 2011.

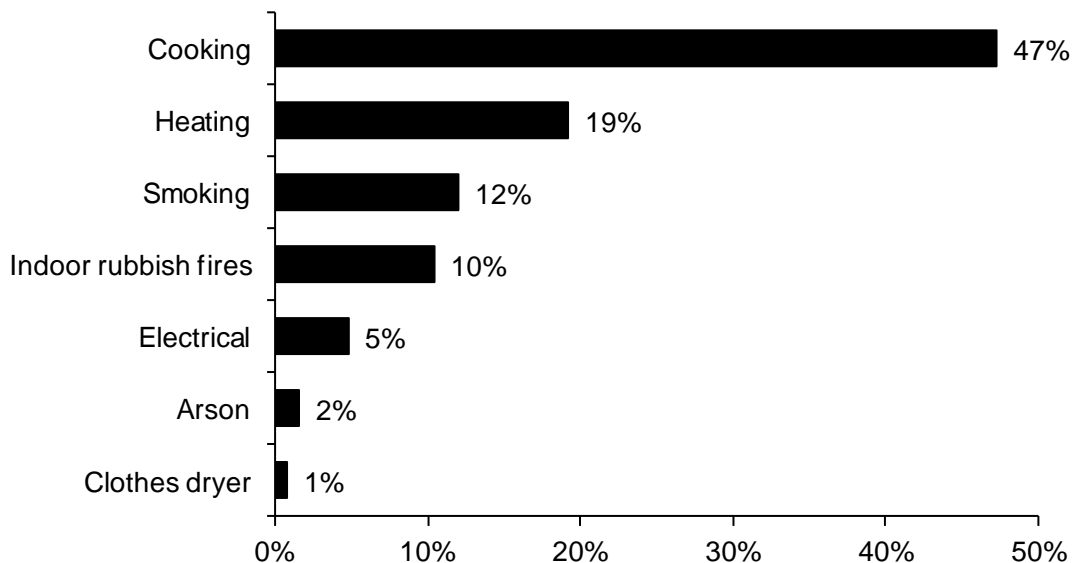
1- or 2-Family Homes Accounted for 2/3 of Residential Building Fires

The peak fixed property uses for residential building fires were 1- or 2-family homes, accounting for 66% of the building fires in Pittsfield; 30% occurred in apartments; 2% occurred in hotels or motels; and 1% each happened in rooming houses and residential board and care facilities.

Unattended Cooking Leading Cause of Residential Fires

The leading cause of residential building fires in Pittsfield was unattended cooking and other unsafe cooking practices, accounting for 47% of these fires. Heating fires caused 19% of these fires. Smoking caused 12% of these fires. Indoor rubbish fires were the cause of 10% of the fires. Electrical problems caused 5%. Arsons caused 2% and clothes dryers caused 1% of the fires in Pittsfield's residential occupancies in 2012.

2012 Leading Causes of Fires in Pittsfield's Homes



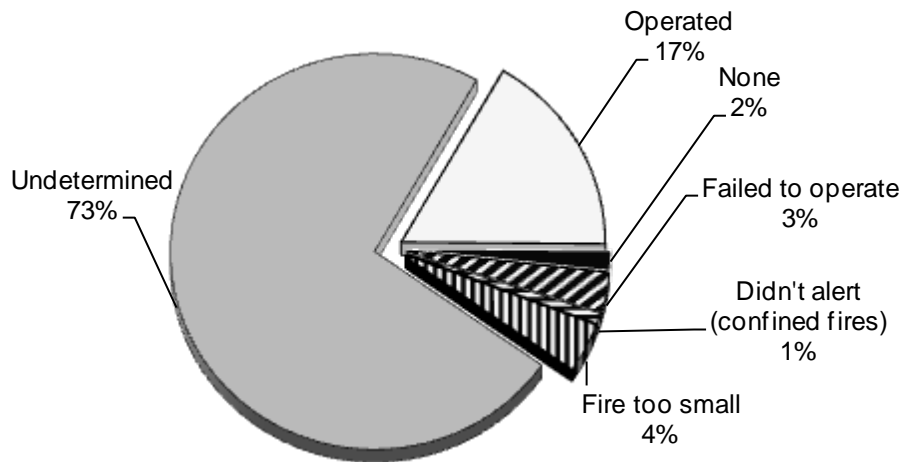
70% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Eighty-eight (88), or 70% of all residential building fires were confined to non-combustible containers in 2012. Fifty-four (54), or 43%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Fourteen (14), or 11%, were fires confined to a fuel burner or boiler malfunction. Thirteen (13), or 10%, of these fires, were indoor rubbish fires contained to a non-combustible container. Six (6) fires, or 5%, were reported to have been contained to a chimney or flue; and one, or 1%, was confined to an incinerator.

Detectors Worked in Only 17% of Fires

Smoke or heat detectors operated and alerted the occupants in 21, or 17%, of the residential building fires. In 1% of these fires², the detectors did not alert the occupants. There were no detectors in 2% of these fires. Detectors were present but did not operate in 3% of these incidents. The fire was too small to trigger the detector in 4% of these fires. Smoke detector performance was undetermined in 92 incidents, or 73% of Pittsfield's residential building fires.

Detector Status in Pittsfield's Residential Fires 2012



The lack of data on smoke detector performance in confined fires does not present a true picture of functioning smoke alarms in Pittsfield. Improved collection of data on whether

¹ 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.

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

or not the smoke alarms alerted the occupants to the fire would provide a better understanding of this issue.

2 of 4 Detectors Failed From a Missing Battery

Of the four fires where smoke detectors were present but failed to operate, two, or 50%, failed because of missing batteries. Another detector, or 33%, failed because it was defective and it was undetermined why the fourth detector failed.

VACANT BUILDINGS

3% of Building Fires Occurred in Vacant Buildings

Pittsfield reported four fires that occurred in buildings that were vacant, under construction or under demolition. This represented 3% of the total 141 building fires reported to MFIRS in 2012. Two (2) sheds, a single-family home, and a detached residential garage were reported as vacant building fire incidents.

JUVENILE-SET FIRES

1 Juvenile-set Fire

There was one reported juvenile-set fire in Pittsfield in 2012. This fire was an outside rubbish fire.

ARSONS

16 Arsons - 6 Structure, 2 Motor Vehicle and 8 Outside & Other

Sixteen (16), or 6%, of Pittsfield's 281 fires were considered intentionally set, or, for purposes of this analysis, arson. There were three structure arsons and 13 outside and other arsons.

All Arsons Remain the Same

The total number of arsons remained the same with 16 reported in both 2011 and 2012. Reported structure arsons decreased by three from the six reported in 2011. Reported motor vehicle arsons decreased by two from two reported last year. Outside and other arsons increased by five from the eight reported the year before.

91 Fires Reported as Undetermined or Still Under Investigation

In 2012, Pittsfield reported 91 fires under investigation or cause undetermined after investigation. Eighty-four (84), or 92%, of these fires were reported to be undetermined after investigation. The other seven, or 8%, were still under investigation.

Thirty-five (35), or 38%, of these 91 fires were structure fires. Six (6), or 7% were motor vehicle fires; and 50, or 55%, were outside or other fires. Because so many fires or under investigation or undetermined after investigation, the true arson number might be actually higher in Pittsfield in 2012.

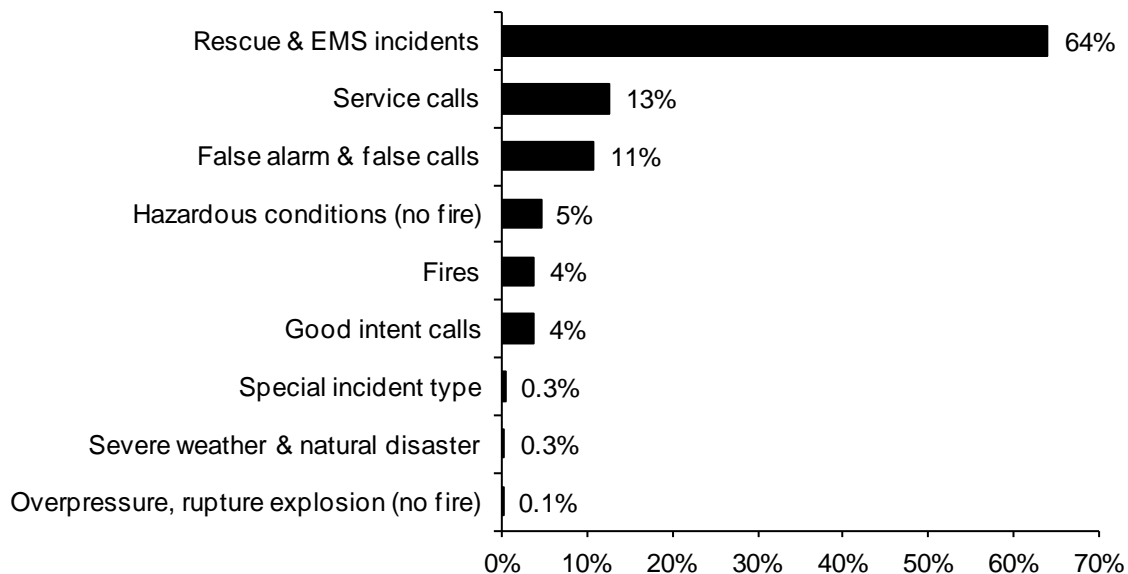
Rescue & EMS Calls Are 64% of All Reported Incidents

In 2012, Pittsfield voluntarily reported 7,415 incidents to MFIRS. Of these 7,415 incidents, 7,132, or 96%, were non-fire incidents.

Of these 7,132 non-fire incidents 4,742, or 64% of all reported incidents in 2012, were reported rescue and emergency medical services (EMS) calls; 931, or 13%, were reported service calls such as lock-outs, water or smoke problem, unauthorized burning or public service assistance; 797, or 11%, were reported false alarm or false calls; 336, or 5%, were reported hazardous condition calls with no fire; 277, or 4%, were reported good intent calls; 25, or 0.3%, were special type incidents; 20, or 0.3%, were severe weather calls; and four, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

In 2012, Pittsfield reported 283³ fires, accounting for 4% of all reported incidents.

2012 Incidents by Incident Type



Pittsfield Gave Mutual Aid in 5 Incidents

In 2012, Pittsfield reported giving mutual aid to other surrounding fire departments in five incidents. Two (2) were for fires; one was for a hazardous condition with no fire; another was for a rescue or EMS call; and the last one was a good intent call.

Pittsfield Received Mutual Aid in 2 Incidents

In 2012, surrounding fire departments gave aid to Pittsfield twice. One (1) was for a fire; and the second was a special incident type.

³ This includes fires that Pittsfield gave mutual aid to another fire department.

Pittsfield**Population: 44,737****6.3 Fires/1,000 Population****Total Fires: 281 \$1,519,800**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	142	51%	\$1,424,390
Vehicle Fires	14	5%	78,300
Other Fires	125	44%	17,110

1 Civilian Death 3.56 Civilian Deaths/1,000 Fires
 1 Fatal Fire 0.22 Civilian Deaths/10,000 Population
 13 Fire Service Injuries

Building Fires: 141**Residential Structure Fires: 125****Residential Structure Fires Confined to Non-Combustible Containers: 88****Unconfined Residential Structure Fires: 37**

1 Civilian Death 11 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	83	66%	Operated	21	17%
Apartments	37	30%	Didn't operate	4	3%
Hotel/motel	3	2%	None	2	2%
Boarding houses	1	1%	Fire too small	5	4%
Residential board & care	1	1%	Didn't Alert (confined)	1	1%
			Undetermined	92	73%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	50%	Cigarette	5%	16%
Heating room or area	12%	Heat from operating equip.	5%	16%
Chimney or flue	5%	Spark/ember/flame fr. op. eq.	3%	11%
Living room	4%	Arcing	2%	8%
		Radiated heat from op. eq.	2%	8%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignition	%	%Unconfined⁷
Cooking materials	46%	Elec. failure/malfunction	2%	5%
Flammable or combustible liq.	11%	Misuse of material/product	1%	3%
Rubbish, trash, waste	11%	Abandoned materials	1%	3%
Film, residue (creosote)	6%	Improper container/storage	1%	3%
Structural member, framing	5%	Installation deficiency	1%	3%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	46%	Unintentional	15%	51%
Boiler, furnace, cent. heat. unit	11%	Intentional	2%	5%
None	10%	Failure of eq./heat source	4%	14%
Chimney or flue	5%	Cause Under Investigation	2%	8%
Electrical wiring, other	3%	Undetermined	6%	19%

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

Alerted Occupants	10%
Didn't Alert Occupants	1%
Undetermined	89%

All Reported Incidents	# of Incidents	% of Incidents
Rescue & EMS incidents	4,752	64%
Service calls	931	13%
False alarms & false calls	797	11%
Hazardous conditions (no fire)	336	5%
Fires ¹⁰	283	4%
Good intent calls	277	4%
Special Incident Types	25	0.3%
Severe weather & natural disaster	20	0.3%
Overpressure rupture, explosion or overheat calls (no fire)	4	0.1%

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

⁷ 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.

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

⁹ 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.

¹⁰ This includes the fires that Pittsfield responded to outside of their jurisdiction as mutual aid given.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	15	9	2	4
February	18	12	1	5
March	34	18	0	16
April	49	20	1	28
May	21	13	0	8
June	27	16	1	10
July	35	13	2	20
August	21	7	2	12
September	20	9	2	9
October	20	11	2	7
November	11	6	1	4
December	10	8	0	2

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	27	15	0	12
Monday	28	14	1	13
Tuesday	42	22	2	18
Wednesday	36	16	2	18
Thursday	35	17	1	17
Friday	57	32	2	23
Saturday	56	26	6	24

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	18	9	1	8
04:01 - 08:00	11	7	1	3
08:01 - 12:00	32	14	3	15
12:01 - 16:00	69	36	2	31
16:01 - 20:00	88	40	5	43
20:01 - 24:00	63	36	2	25

Motor Vehicle Fires

Total: 14

Automobiles: 9 (64%)

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

Arson Fires

Total Arsons: 16

Dollar loss: \$2,020

0.4 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	3	2%	9%	\$20
Vehicle Arsons	0	0%	0%	0
Other Arsons	13	10%	81%	2,000

0.07 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.29 Other arsons/1,000 population

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	1	33%			
16:01 - 20:00	1	33%			
20:01 - 00:00	1	33%			

Other Arsons	#	%
16:01 - 20:00	5	38%
12:01 - 16:00	3	23%
20:01 - 00:00	3	23%

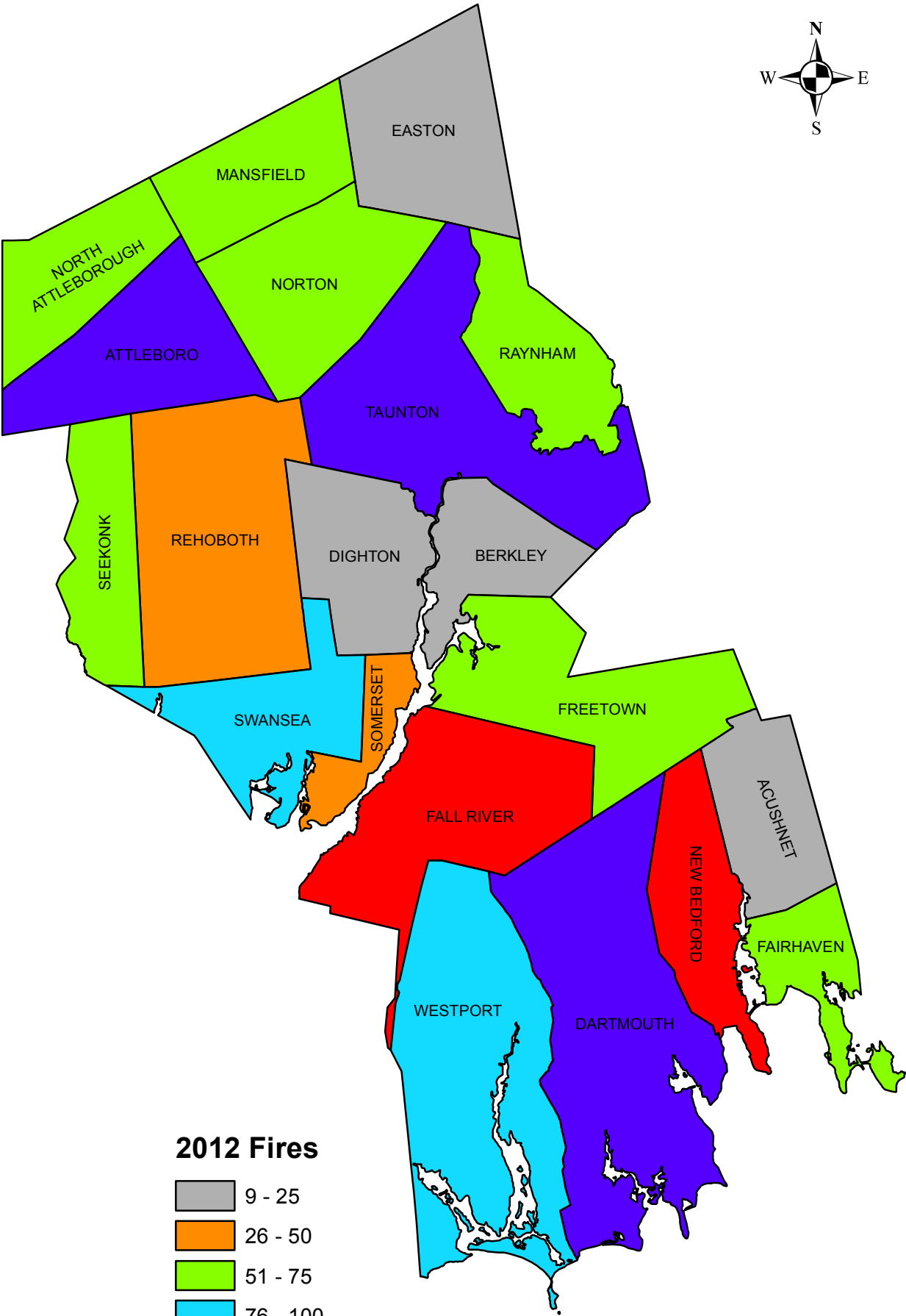
Peak Fixed Property Uses for Structure Arsons	#	%
1- or 2-Family homes	2	67%
Outside or special property, other	1	33%



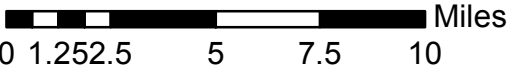
Bristol County

2012 Fire Data Analysis

Bristol County Fires 2012



2012 Fires



MFIRS
Massachusetts Fire Incident Reporting System

Bristol County Fires in 2012

2,197 Total Fires — 873 Structures, 278 Vehicles & 1,046 Other Fires

Bristol County ranked sixth out of the fourteen Massachusetts counties in total reported fires. The county reported 2,197 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 873 structure fires, 278 motor vehicle fires, 531 brush, tree or lawn fires, 294 outside rubbish fires, 69 special outside fires, one cultivated vegetation or crop fire, and 151 other fires caused five civilian deaths, 42 civilian injuries, 31 fire service injuries and an estimated dollar loss of \$35.6 million. Bristol County's fires accounted for 7% of the 31,229 Massachusetts fires reported in 2012.

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

Structure & Outside Fires Up

The total number of reported fire incidents increased by 319 from the 1,878 reported in 2011. Reported structure fires increased by 46 from the 827 reported during the previous year. The total number of reported motor vehicle fires decreased by 38 from the 316 incidents reported during 2011. Reported outside and other fires increased by 311 from the 735 reported the year before.

Outside Fires Up

Bristol County had a large increase in brush fires in 2012. Brush fires increased by 199, or 60%, from the 332 reported in 2011. This was a statewide trend.

BRISTOL COUNTY FIRES FROM 2008 TO 2012

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
Year	Fires	Fires	Fires	Fires	Arsons	Arsons	Arsons	Arsons
2008	2,311	822	311	1,178	129	31	22	76
2009	1,794	789	309	696	140	55	19	66
2010	2,025	844	302	879	114	42	13	59
2011	1,878	827	316	735	95	29	14	52
2012	2,197	873	278	1,046	98	29	10	59

Fire and Fire Death Rates

Bristol County had 4.0 fires per 1,000 population. That figure ranks Bristol County tied for eighth in the state and below the state rate of 4.8 fires per 1,000 population. Bristol County also had 0.09 fire deaths per 10,000 populations ranking it tied for second among Massachusetts counties and above the state rate of 0.06 fire deaths per 10,000 population.

5 Fires Kill 5 Bristol County Residents

- On January 23, 2012, at 12:10 a.m., the North Attleboro Fire Department was called to a fatal smoking fire in an eight-unit apartment building. The victim, a 58-year old man, was sleeping in the living room at the time of the fire. An undetermined

smoking material ignited a piece of furniture in the living room. Another occupant of the same apartment was transported to a local hospital. Detectors were present but it was undetermined if they operated. Sprinklers were not present. Damages were estimated to be \$350,000.

- On May 12, 2012, at 4:43 a.m., the New Bedford Fire Department was dispatched to a fire in a four-unit apartment building of undetermined cause. The most likely cause was an electrical event, but smoking could not be ruled out either. The victim, a 39-year old man, possibly impaired by drugs, was overcome by the heat and smoke as he attempted to escape. There were four other injuries associated with this fire. Detectors were present and alerted the other occupants of the building. The building was not sprinklered. The fire also caused an exposure fire to the building next door. Combined damages from these fires were estimated to be \$115,000.
- On September 9, 2012, at 12:46 a.m., the Attleboro Fire Department was called to a fatal fire in a single-family of undetermined cause. The victim, a 34-year old man, was overcome by the heat and smoke. No one else was injured at this fire. Detectors were present and operated. The building was not sprinklered. Damages from the blaze were estimated to be \$130,000.
- On October 14, 2012, at 9:46 a.m., the Rehoboth Fire Department was called to a fatal electrical fire at a single-family home. The fire was caused by an electrical arcing in an electrical circuit. The victim, a 66-year old woman was overcome by the heat and smoke. No one else was injured at this fire. There were no detectors in the home. Sprinklers were not present. Damages were estimated to be \$100,000.
- On November 8, 2012, at 10:22 a.m., the Fairhaven Fire Department was called to a fatal cooking fire in a two-family home. It is believed that the fire started in the electric stove. The victim, an 84-year old woman, was attempting to escape when she was overcome by smoke near the rear door. No one else was injured at this fire. Smoke detectors were present but it was undetermined if they operated. The building was not sprinklered. Damages from this fire were estimated to be \$40,000.

Dighton Has Bristol County's Largest Loss Fire

- On January 13, 2012, at 11:24 p.m., the Dighton Fire Department responded to a fire of undetermined cause in a single-family home. No one was injured at this fire. Detectors were present but failed to operate because of missing batteries. The home was not sprinklered. Damages were estimated to be \$16 million.

STRUCTURE FIRES

Reported Structure Fires Up

The 873 structure fires caused five civilian deaths, 30 civilian injuries, 28 fire service injuries and an estimated dollar loss of \$33.3 million. These incidents represented 40% of Bristol County's reported fires in 2012. The average estimated dollar loss per structure

fire was \$37,931. The total number of reported structure fires increased by 46, or 6%, from the 827 reported in 2011.

Structure Arsons Remain the Same

The 29 structure arsons caused two civilian injuries, five fire service injuries and an estimated dollar loss of \$1.3 million. Arson was indicated as the cause of 3% of the structure fires and 4% of Bristol County's structure fire dollar loss. The 29 structure arsons accounted for 30% of the Bristol County arson fires reported in 2012. The total number of reported structure arsons remained the same with 29 reported in both 2011 and 2012.

59% of Structure Arsons Occurred in Residences

Fifty-nine percent (59%) of Bristol County's 29 structure arsons occurred in residential occupancies. Storage facilities and public assembly properties each accounted for 10%; educational properties and special properties each had 7% of these fires. Mercantile or business properties and institutional properties each had 3% of these fires.

BUILDING FIRES

There were 868 building fires of different types in Bristol County in 2012. These 868 building fires accounted for 99.3% of all building fires in Bristol County.

81% of Bristol Building Fires Occurred in People's Homes

Six hundred and ninety-eight (698), or 81%, of Bristol County's 868 building fires occurred in residential occupancies. Mercantile and business properties had 45 fires. Thirty-six (36) fires took place in public assembly properties, including restaurants and churches. Twenty-eight (28) fires took place in storage properties. Educational facilities had 19 fires. Hospitals, prisons, and other institutional buildings experienced 17 fires. Fourteen (14) fires took place in manufacturing and processing facilities. Special properties had eight fires. Two (2) fires occurred in industrial, utility, defense, agricultural or mining facilities in Bristol County in 2012.

RESIDENTIAL FIRES

Residential Building Fires Up Slightly

There were 698 reported residential building fires in Bristol County in 2012. These 698 fires are an increase of 25, or 4%, from the 673 residential building fires reported in 2011.

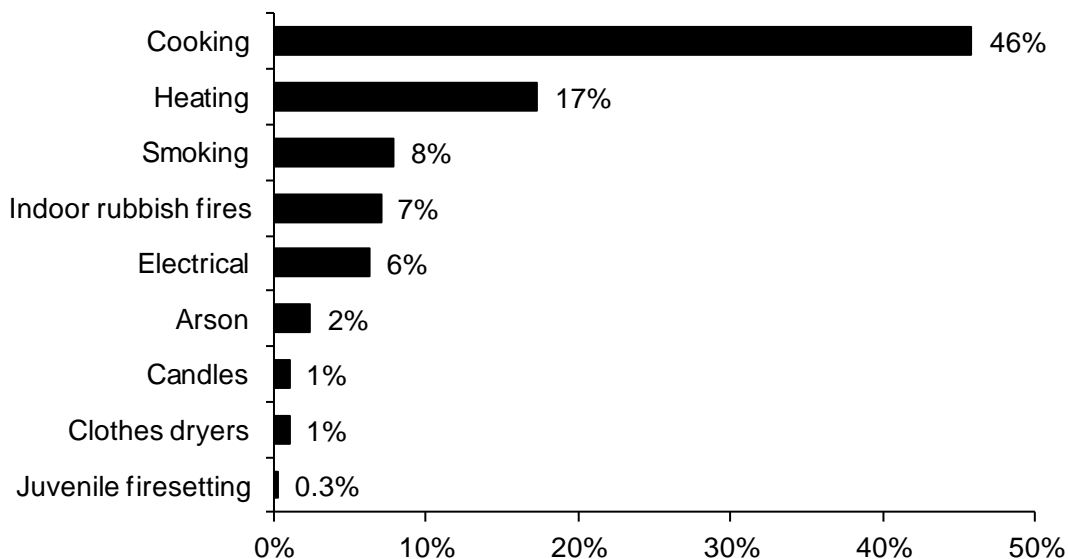
1- & 2-Family Homes Accounted for 1/2 of Residential Building Fires

The peak fixed property uses for residential building fires were 1- & 2-family homes, accounting for 50% of the building fires in Bristol County; 46% occurred in apartments; 2% happened in rooming houses; 1% occurred in residential board and care facilities; 1% happened in hotels or motels; and less than 1% occurred in dormitories. Two (2), or less than 1%, of the residential building fires in Bristol County occurred in unclassified residential buildings.

Unsafe Cooking Leading Cause of Residential Fires

The leading cause of residential building fires in Bristol County was unattended cooking and other unsafe cooking practices, accounting for 46% of these fires. The second leading cause of residential building fires was heating equipment, accounting for 17%. Smoking caused 8%; indoor rubbish fires were responsible for 7%, and electrical problems caused 6% of the fires in people's homes. Arson was responsible for 2% of these fires. Candles and clothes dryers each accounted for 1%, and juvenile-set fires accounted for less than 1% of Bristol County's residential building fires in 2012.

2012 Leading Causes to Fires in Bristol County Homes



62% of Residential Building Fires Are Confined to Non-Combustible Containers¹

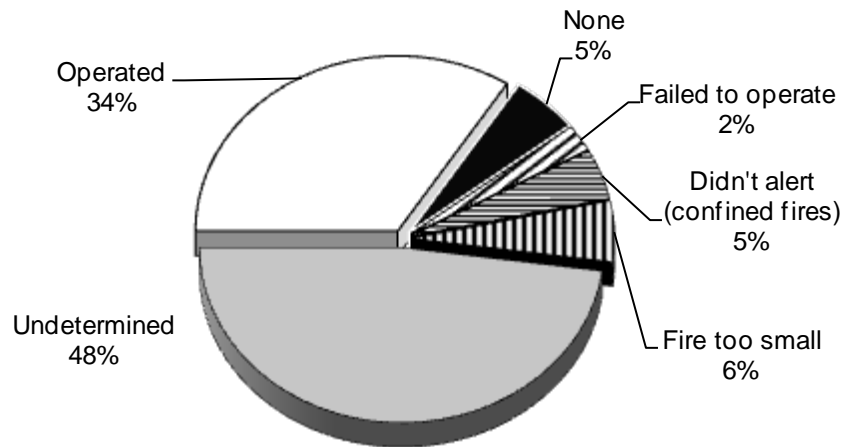
Four hundred and thirty-one (431), or 61%, of all residential building fires were reported as confined to non-combustible containers in 2012. Two hundred and eighty-eight (288), or 41%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Fifty-five (55) of the reported fires were confined to a chimney, accounting for 8% of residential building fires. Forty-eight (48), or 7%, of these fires were rubbish fires. Forty (40), or 6%, were fires confined to a fuel burner or boiler malfunction in Bristol County in 2012.

¹ 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.

Detectors Alerted Occupants in Only 34% of Fires

Smoke or heat detectors operated and alerted the occupants in 238, or 34%, of the residential building fires. In 5% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 5% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 6% of the residential fires. Smoke detector performance was undetermined in 334 incidents, or 48%, of Bristol County's residential building fires.

Detector Status in Bristol County's Residential Structure Fires 2012



35% of Failed Detectors Had Dead or Missing Batteries

Of the 17 fires where smoke detectors were present but failed to operate, four, or 24%, failed because the batteries were either missing or disconnected and two, or 12%, failed because of dead batteries. Another two, or 13%, failed from a lack of maintenance. Four (4), or 24%, failed because of a power failure, shutoff or disconnect. The improper installation or placement and a lack of maintenance each caused one, or 6%, of the detectors that failed to operate. It was undetermined or unclassified in five cases, or 29%, why the detectors failed to operate.

VACANT BUILDINGS

4% of Building Fires Occurred in Vacant Buildings

Bristol County reported 34 fires that occurred in buildings that were vacant, under construction or demolition. This represented 4% of the total 868 building fires reported to MFIRS in 2012. Eighteen (18) fires occurred in vacant residential properties. Nine (9) vacant building fires occurred in storage facilities. Four (4) of these fires happened in

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

public assembly properties. Vacant manufacturing and processing facilities had two vacant building fire incidents in Bristol County in 2012. Mercantile and business properties also had one of these fires.

Seven (7), or 21%, of the vacant building fires in Bristol County in 2012 were determined to be intentionally set. Three occurred in one- or two-family homes. One (1) each occurred in an apartment building, a restaurant, a bar or nightclub, and an unclassified storage building.

JUVENILE-SET FIRES

13 Juvenile-set Fires

There were 13 reported juvenile-set fires in Bristol County in 2012. The five structure fires, three brush fires, two outside rubbish fires, one special outside fire, and two unclassified fires caused one civilian injury and \$340,100 in estimated damages.

ARSONS

98 Total Arsons — 29 Structures, 10 Vehicles & 59 Other Arsons

Bristol County fire departments reported that 9, or 4%, of Bristol County's 2,197 fires were considered intentionally set, or, for purposes of this analysis, arson. The 29 structure arsons, 10 motor vehicle arsons and 59 outside and other arsons caused two civilian injuries, five fire service injuries and an estimated dollar loss of \$1.3 million.

All Arsons Down Slightly

The total number of reported arson fires decreased by one from the 99 reported in 2011. Structure arsons remained the same with 29 reported in both 2011 and 2012. Motor vehicle arsons decreased by four from the 14 reported last year. Outside and other arsons rose by seven from the 52 reported in 2011.

ALL INCIDENTS

Rescue & EMS Calls Are 62% of All Reported Responses

In 2012, fire departments in Bristol County reported 55,565 responses³ to MFIRS. Of these 55,565 incidents, 53,275 non-fire calls were voluntarily reported.

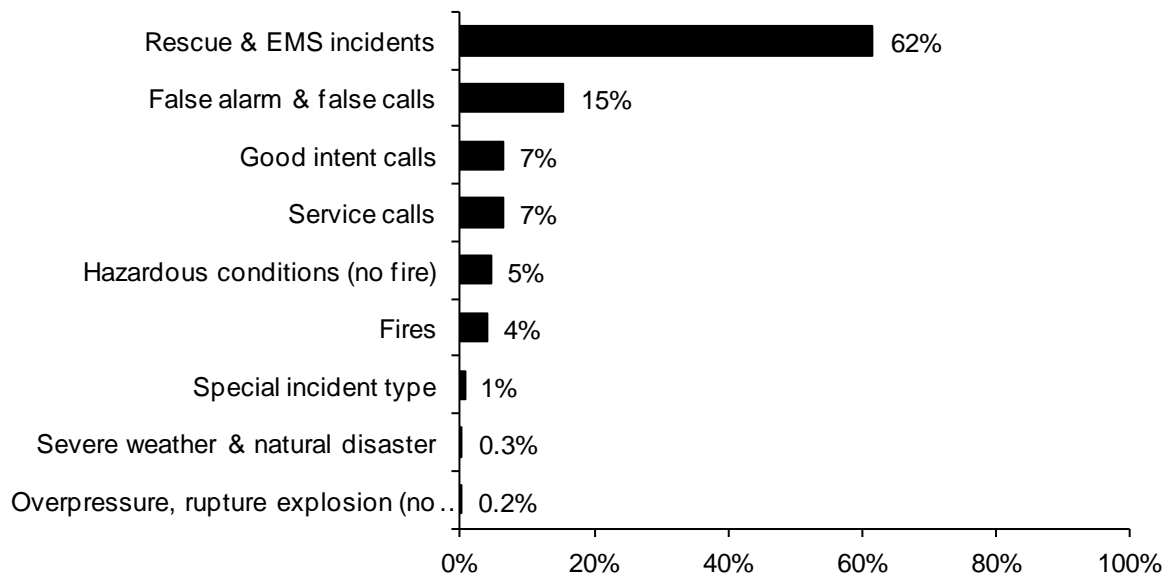
Of these 53,275 non-fire calls, 34,265, or 62% of all the reported responses, were reported rescue and emergency medical services (EMS) calls; 8,559, or 15%, were reported false alarm or false calls; 3,642, or 7%, were reported good intent calls; 3,639, or 7%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 2,595, or 5%, were reported hazardous

³ These figures include responses in which Bristol County fire departments gave mutual aid to other fire departments.

condition calls with no fire; 349, or 1%, were special incident type calls such as citizen complaints; 140, or 0.3%, were severe weather responses; and 86, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Two thousand two hundred and ninety (2,290), or 4%, of the total responses submitted by Bristol County fire departments were fires.

2012 Responses by Incident Type



Bristol County Fire Departments Gave Mutual Aid 1,618 Times

In 2012, Bristol County fire departments reported coming to the aid of other fire departments 1,618 times. Of these 1,618 responses, 1,079, or 67%, were for rescue or EMS calls; 281, or 17%, were for good intent calls; 143, or 9%, were for service calls such as cover assignments; 91, or 6%, were for fires; 14, or 1%, were for false alarms or false calls; 9, or 1%, were for hazardous conditions calls with no fire; and one, or less than 1%, was for a severe weather call.

Bristol County Received Mutual Aid in 1,073 Incidents

In 2012, Bristol County fire departments reported receiving aid from surrounding departments in 1,073 incidents. Of these 1,073 incidents, 885, or 82%, were rescue and emergency medical services calls; 103, or 10%, were for fires; 34, or 3%, were false alarms or false calls; 25, or 2%, were good intent calls; 17, or 2%, were hazardous conditions calls with no fire; and nine, or 1%, of the mutual aid received calls, were service calls.

Bristol County**Population: 548,285****4.0 Fires/1,000 Population****Total Fires: 2,197 \$35,603,409**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	873	40%	\$33,113,330
Vehicle Fires	278	13%	2,015,991
Other Fires	1,046	48%	474,088

5 Fatal Fires 2.28 Civilian Deaths/1,000 Fires
 5 Civilian Deaths 0.09 Civilian Deaths/10,000 Population
 42 Civilian Injuries 31 Fire Service Injuries

Building Fires: 868**Residential Structure Fires: 698****Residential Structure Fires Confined to Non-Combustible Containers: 431****Unconfined Residential Structure Fires: 267**

5 Civilian Deaths 29 Civilian Injuries 17 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	352	50%	Operated	238	34%
Apartments	323	46%	Didn't operate	17	2%
Rooming houses	11	2%	None	38	5%
Residential board & care	4	1%	Fire too small	39	6%
Hotels or motels	4	1%	Didn't alert (confined)	32	5%
Dormitories	2	0.3%	Undetermined	334	48%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	47%	Cigarettes	5%	13%
Chimney or flue	8%	Rad., cond. heat from op eq.	5%	12%
Heating room or area	6%	Arcing	5%	12%
Living room	4%	Heat from operating eq.	4%	10%
Bedroom	4%	Hot ember or ash	2%	6%
Exterior balcony/unencl. porch	4%			

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignit.	%	%Unconfined⁷
Food, cooking materials	44%	Abandoned materials	3%	9%
Film or residue (creosote)	8%	Too close to combustibles	2%	4%
Rubbish, trash, waste	8%	Failure to clean	1%	3%
Flammable or combust. liquid	6%	Misuse of mater. or product	1%	3%
Electrical wire, cable insulation	3%	Equipment unattended	1%	3%
Structural member, framing	3%	Electrical failure, malfunc.	1%	3%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	44%	Unintentional	23%	58%
None	22%	Failure of eq. or heat source	7%	18%
Chimney or flue	8%	Intentional	2%	4%
Boiler, furnace, cent. heat unit	6%	Cause under investigation	5%	12%
Electrical wiring, other	1%	Undetermined	2%	6%
Clothes dryer	1%	Act of Nature	0.4%	1%

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

Alerted Occupants	27%
Didn't Alert Occupants	7%
Undetermined	65%

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

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

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⁹ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	146	81	29	36
February	153	74	16	63
March	224	83	19	122
April	411	98	26	287
May	148	59	20	69
June	174	66	23	125
July	230	76	29	125
August	134	49	32	53
September	149	63	22	64
October	136	51	25	60
November	153	84	19	50
December	139	89	20	30

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	308	120	35	153
Monday	344	133	35	176
Tuesday	317	120	37	160
Wednesday	312	143	33	136
Thursday	291	120	52	119
Friday	307	126	48	133
Saturday	318	111	38	169

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	159	66	33	60
04:01 - 08:00	135	61	22	52
08:01 - 12:00	296	129	46	121
12:01 - 16:00	659	219	71	369
16:01 - 20:00	645	268	62	315
20:01 - 24:00	303	130	44	129

Motor Vehicle Fires

Total: 278

Automobiles: 230 (83%)

10, or 4%, of the automobile fires considered intentionally set.

Arson Fires

Total Arsons: 98

Dollar loss: \$1,328,665

0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	29	3%	30%	\$1,268,951
Vehicle Arsons	10	4%	10%	54,500
Other Arsons	59	6%	60%	5,214

0.05 Structure arsons/1,000 population

0.02 Vehicle arsons/1,000 population

0.11 Other arsons/1,000 population

2 Civilian Injuries

5 Fire Service Injuries

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	8	28%	00:01 - 04:00	2	20%
00:01 - 04:00	7	24%	04:01 - 08:00	2	20%
16:01 - 20:00	5	17%	16:01 - 20:00	2	20%
			20:01 - 00:00	2	20%

Other Arsons	#	%
12:01 - 16:00	20	33%
16:01 - 20:00	16	26%
20:01 - 00:00	16	26%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	13	45%
Apartments	4	14%
Storage, other	4	14%
High/junior high/middle school	2	7%

Acushnet **Population: 10,303**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	37	17	5	15	2	1	0	1
2009	21	10	4	7	1	1	0	0
2010	28	17	5	6	0	0	0	0
2011	18	10	3	5	1	0	0	1
2012	19	10	1	8	2	1	0	1

Attleboro **Population: 43,593**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	168	66	26	76	12	3	0	11
2009	130	61	19	50	9	2	0	7
2010	134	56	27	51	6	3	0	3
2011	101	35	15	50	5	1	0	4
2012	128	41	22	65	5	2	0	3

Berkley **Population: 6,411**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	29	16	3	10	1	0	0	1
2009	27	17	1	9	0	0	0	0
2010	21	9	4	8	0	0	0	0
2011	19	7	4	8	0	0	0	0
2012	15	10	3	2	0	0	0	0

Dartmouth Fire Districts¹⁰ **Population: 34,032****Dartmouth District # 1***Est. Pop. Protected: 13,272*

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	37	11	3	23	0	0	0	0
2009	30	11	4	15	6	1	0	5
2010	21	13	0	8	2	0	0	2
2011	24	13	2	9	3	0	0	3
2012	40	18	2	20	4	2	0	2

¹⁰ 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*

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	3	0	1	2	0	0	0	0
2009	6	2	3	1	0	0	0	0
2010 ¹¹	Fire Department in Good Standing							
2011	4	3	1	0	0	0	0	0
2012	10	3	0	7	0	0	0	0

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

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	118	7	13	98	8	0	0	8
2009	49	8	7	34	5	2	2	1
2010	104	22	10	72	13	5	0	8
2011	59	22	12	25	4	2	0	2
2012	97	24	12	61	3	1	0	2

Dighton**Population: 7,086**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	32	4	8	20	1	0	0	1
2009	21	14	3	4	1	1	0	0
2010	20	7	4	9	1	0	0	1
2011	18	6	3	9	1	0	0	1
2012	14	4	5	5	0	0	0	0

Easton**Population: 23,112**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	15	10	3	2	0	0	0	0
2009	19	11	4	4	1	1	0	0
2010	1	1	0	0	0	0	0	0
2011	20	14	4	2	0	0	0	0
2012	9	6	3	0	0	0	0	0

¹¹ In 2010, Dartmouth District #2 reported 1 service call.

Fairhaven**Population: 15,873**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	70	15	16	39	4	0	0	4
2009	48	24	11	13	7	2	2	3
2010	46	17	4	25	1	0	0	1
2011	62	30	13	19	3	3	0	0
2012	53	21	8	24	2	0	0	2

Fall River**Population: 88,857**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	472	232	65	175	20	7	3	10
2009	369	206	54	109	29	16	1	12
2010	508	273	59	176	35	17	2	16
2011	500	274	71	155	16	4	4	8
2012	519	282	34	203	18	8	1	9

Freetown**Population: 8,870**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	52	26	9	17	3	0	1	2
2009	64	37	14	13	13	5	2	6
2010	56	27	16	13	4	2	1	1
2011	57	27	12	18	7	3	1	3
2012	64	27	10	27	6	2	1	3

Mansfield**Population: 23,184**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	73	24	12	37	2	0	0	2
2009	56	20	11	25	2	0	0	2
2010	49	14	10	25	1	0	0	1
2011	47	22	8	17	2	1	1	0
2012	61	11	13	37	2	0	0	2

New Bedford **Population: 95,072**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	453	165	65	223	47	16	14	17
2009	343	172	65	106	32	14	9	9
2010	386	156	76	154	27	11	9	7
2011	327	136	64	127	20	7	6	7
2012	434	194	64	176	15	6	5	4

North Attleboro **Population: 28,712**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	70	28	7	35	1	0	0	1
2009	56	20	16	20	3	0	1	2
2010	56	16	12	28	1	0	0	1
2011	73	36	12	25	3	1	0	2
2012	68	22	17	29	1	1	0	0

Norton **Population: 19,031**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	73	20	10	43	1	0	1	0
2009	37	14	4	19	0	0	0	0
2010	53	16	13	24	1	0	0	1
2011	45	20	6	19	1	1	0	0
2012	64	18	8	38	3	1	0	2

Raynham **Population: 13,383**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	97	30	11	56	1	0	0	1
2009	70	23	15	32	1	0	0	1
2010	59	25	8	26	0	0	0	0
2011	49	15	9	25	0	0	0	0
2012	72	34	8	30	0	0	0	0

Rehoboth**Population: 11,608**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	73	36	8	29	2	0	1	1
2009	55	23	6	26	2	1	1	0
2010	50	37	2	11	0	0	0	0
2011	33	21	4	8	0	0	0	0
2012	46	24	3	19	2	0	0	2

Seekonk**Population: 13,722**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	80	25	6	49	4	0	0	4
2009	59	28	9	22	2	2	0	0
2010	71	27	12	32	5	3	0	2
2011	89	23	22	44	9	2	0	7
2012	63	27	8	28	4	1	1	2

Somerset**Population: 18,165**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	38	18	6	14	1	1	0	0
2009	32	14	2	16	3	1	0	2
2010	43	17	4	22	0	0	0	0
2011	38	11	12	15	1	0	0	1
2012	26	5	4	17	0	0	0	0

Swansea**Population: 15,865**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	85	35	5	45	4	2	0	2
2009	87	34	20	33	3	2	0	1
2010	86	32	11	43	3	1	0	2
2011	87	41	8	38	1	1	0	0
2012	89	45	7	37	3	1	0	2

Taunton**Population: 55,874**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	161	28	21	112	11	2	2	7
2009	143	32	25	86	11	2	0	9
2010	166	34	15	117	13	1	1	11
2011	151	39	19	93	16	3	2	11
2012	230	32	30	168	21	1	2	18

Westport**Population: 15,532**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	75	9	8	58	3	0	0	3
2009	52	15	9	28	5	0	0	5
2010	55	21	9	25	3	0	0	3
2011	57	21	12	24	2	0	0	2
2012	77	15	16	46	7	2	0	5

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
05003	Acushnet	374	21	1	109	72	88	15	55	0	13
05016	Attleboro	6,348	140	4	4,560	132	346	522	623	3	18
05027	Berkley	518	27	0	389	16	14	26	45	1	0
05972	Dartmouth #1	368	41	1	18	44	40	31	168	25	0
05973	Dartmouth #2	106	12	0	3	11	8	15	19	38	0
05974	Dartmouth #3	754	102	3	72	117	100	88	266	2	4
05076	Dighton	913	16	6	488	24	296	5	75	3	0
05088	Easton	11	9	0	0	2	0	0	0	0	0
05094	Fairhaven	2,532	53	3	1,851	165	129	73	249	1	8
05095	Fall River	5,011	519	7	1,481	488	254	438	1,778	20	26
05102	Freetown	1,235	65	3	773	59	135	94	94	1	11
05167	Mansfield	2,826	62	3	1,852	101	236	149	383	7	33
05201	New Bedford	13,428	436	15	9,397	410	376	943	1,828	3	20
05211	North Attleboro	3,658	76	7	2,478	155	250	167	513	4	8
05218	Norton	2,442	66	4	1,513	140	275	27	335	0	82

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
05245	Raynham	786	89	6	102	71	75	74	351	5	13
05247	Rehoboth	455	49	2	83	94	88	43	89	3	4
05265	Seekonk	2,546	63	4	1,669	90	122	260	322	4	12
05273	Somerset	2,646	31	1	2,057	60	209	117	153	1	17
05292	Swansea	443	97	4	34	85	53	41	122	5	2
05293	Taunton	7,619	232	8	5,279	187	443	447	943	13	67
05334	Westport	546	84	4	57	72	102	67	148	1	11
	Bristol County	55,565	2,290	86	34,265	2,595	3,639	3,642	8,559	140	349

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.

Fall River Fires in 2012

519 Total Fires — 282 Structures, 34 Vehicles & 203 Other Fires

The Fall River Fire Department reported 519 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 282 structure fires, 34 motor vehicle fires, 82 outside trash fires, 82 brush fires, five special outside fires, one cultivated crop or orchard fire, and 33 unclassified fires caused 20 civilian injuries, 17 fire service injuries and an estimated dollar loss of \$6.3 million. There were no civilian fire deaths in Fall River in 2012.

MV Fires Down

Total fires increased by 19, or 4%, from the 500 fires reported in 2011. Reported structure fires increased by eight from the 274 reported during the previous year. Motor vehicle fires decreased by 37 from 71 the year before. Outside and other fires increased by 48 from 155 the year before.

FALL RIVER FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	472	232	65	175	20	7	3	10
2009	389	199	57	133	33	18	2	13
2010	508	273	59	176	34	16	2	16
2011	500	274	71	155	20	4	4	12
2012	519	282	34	203	18	8	1	9

BUILDING FIRES

There were 282 building fires of different types in Fall River in 2012. These 282 building fires accounted for all structure fires in Fall River.

85% of Building Fires in Homes

The 282 building fires that occurred in Fall River in 2012 can be broken down by fixed property use as follows: 243, or 86% of all structure fires, were in residential properties; 14 occurred in mercantile or business properties; eight occurred in institutional facilities; six happened at public assembly properties; three fires happened in educational facilities; three fires occurred in manufacturing or processing facilities; three fires happened in storage facilities; one fire occurred in an industrial facility; and one fire took place in a special property.

RESIDENTIAL FIRES

Residential Building Fires Are Up Slightly

There were 243 reported residential building fires in Fall River in 2012. These 243 residential building fires are an increase of 10, or 7%, from the 233 reported in 2011.

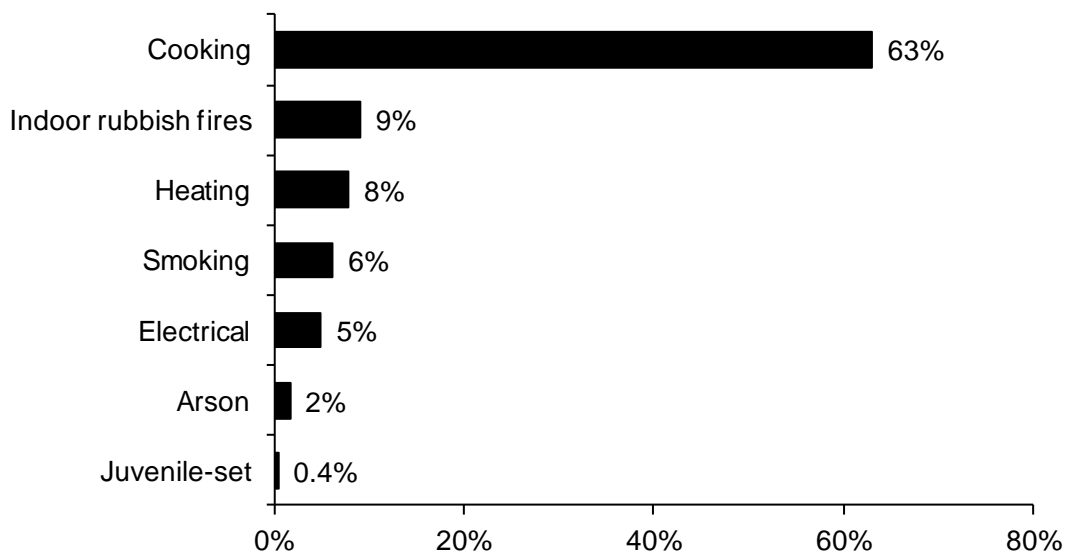
Apartments Accounted for 70% of Residential Building Fires

The peak fixed property uses for residential building fires in Fall River were apartments, accounting for 70% of the residential building fires. Twenty-four percent (24%) occurred in one- or two-family homes; 3% occurred in rooming houses; 2% happened in residential board and care facilities; and less than 1% occurred in hotels or motels.

Unattended Cooking Caused Almost 3/4 of Residential Fires

The leading cause of residential building fires in Fall River was unattended cooking and other unsafe cooking practices, accounting for 63% of these fires. Indoor rubbish fires accounted for 9% of residential fires. Heating equipment caused 8% of these fires. Smoking caused 6%; and electrical problems accounted for 5% of fires in residential occupancies. Arsons caused 2%, and juvenile-set fires accounted for less than 1% of the fires in people's homes in Fall River in 2012.

2012 Leading Causes of Fires in Fall River Homes



68% of Residential Building Fires Are Confined to Non-Combustible Containers¹

One hundred and sixty-five (165), or 68% of all residential building fires were confined to non-combustible containers in 2012. One hundred and thirty-seven (137), or 56%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Twenty-two (22), or 9%, of these fires were rubbish fires

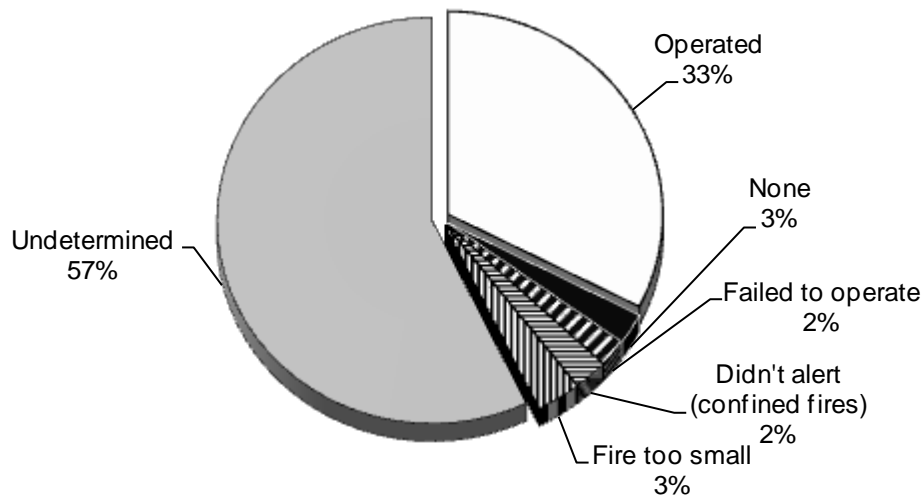
¹ In MFIRS v5 a fire in a building contained to a non-combustible container (Incident Type = 113-118) does not have to have a Fire Module completed. Therefore the following data fields do not need to be completed: Area of Origin, Detector Status, Item First Ignited, Heat Source, Factors Contributing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

contained to a non-combustible container. Five (5), or 2%, of these fires were reported to have been contained to a chimney or flue. One (1), or less than 1%, was confined to a fuel burner or boiler malfunction.

Detectors Operation Undetermined in 57% of Fires

Smoke or heat detectors operated and alerted the occupants in 79, or 33%, of the residential building fires. In 2% of these fires², 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 3% of the residential fires. Smoke detector performance was undetermined in 139 incidents, or 57% of Fall River's residential building fires.

Detector Status in Fall River's Residential Fires 2012



The lack of data on smoke detector performance in confined fires does not present a true picture of functioning smoke alarms in Fall River. Improved collection of data determining whether or not the smoke alarms alerted the occupants to the fire would provide a better understanding of this issue.

5 Detectors Failed

Three (3) detectors failed because of a power failure, shut-off or disconnect. One (1) of these detectors failed because the battery was dead. It was undetermined why the other detector was reported to have failed.

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

VACANT BUILDING FIRES

4% of Building Fires Occurred in Vacant Buildings

Fall River reported 10 fires that occurred in buildings that were vacant, under construction or under demolition. This represented 4% of the total 282 building fires reported to MFIRS in 2012. Four (4) apartment buildings, three one- or two-family homes, one business office, one bar, and one manufacturing or processing facility were reported as vacant building fire incidents.

JUVENILE-SET FIRES

There were two reported juvenile-set fires in Fall River in 2012. One (1) was a building fire and the other was a brush fire.

ARSONS

18 Total Arsons — 8 Structures, 1 Motor Vehicle, & 9 Other

Eighteen (18), or 3%, of Fall River's 519 fires were considered intentionally set, or, for purposes of this analysis, arson. The eight structure arsons, one motor vehicle arson and nine outside and other arsons caused two civilian injuries, four fire service injuries and an estimated dollar loss of \$778,500.

Structure Arsons Up Slightly

The total number of arsons decreased by two from 20 in 2011. Reported structure arsons increased by four from the four reported the year before. Motor vehicle arsons decreased by three from the four reported in 2011. Outside and other arsons decreased by three from the 12 reported in 2011.

ALL INCIDENTS

False Alarm & False Calls Are 35% of All Reported Incidents

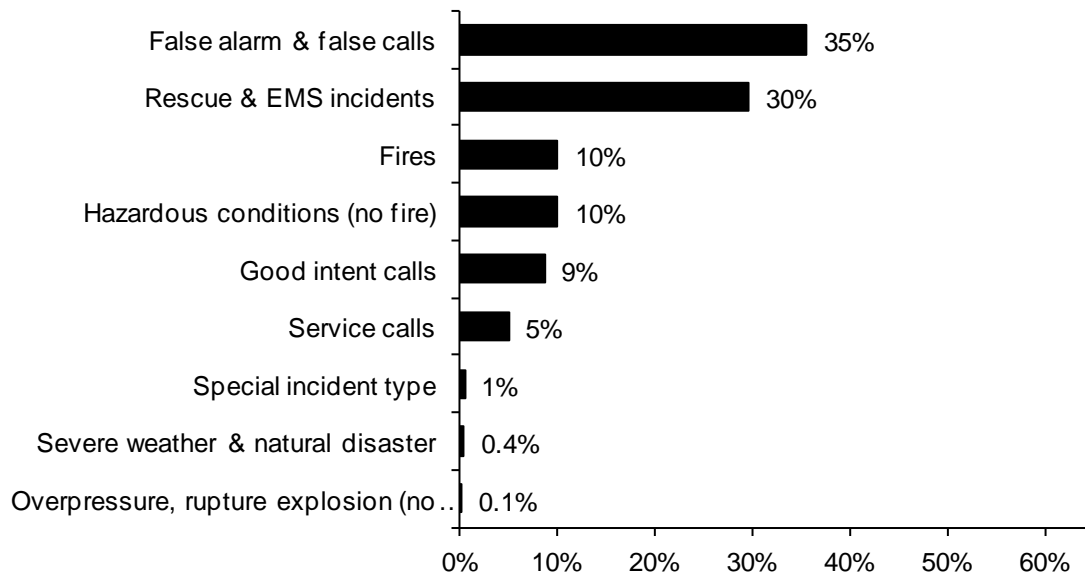
In 2012, Fall River voluntarily reported 5,011 incidents to MFIRS. Of these 5,011 incidents, 4,492, or 90%, were non-fire incidents.

Of these 4,492 non-fire incidents 1,778, or 35% of all reported incidents in 2012, were reported false alarm or false calls; 1,481, or 30%, were reported rescue and emergency medical services (EMS) calls; 488, or 10%, were reported hazardous condition calls with no fire; 438, or 9%, were reported good intent calls; 254, or 5%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 26, or 1%, were special incident type calls; 20, or 0.4% were severe weather or natural disaster calls; and seven, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

In 2012, Fall River reported 519 fires³, accounting for 10% of all reported incidents.

³ This figure includes the fires that Fall River responded to outside of their jurisdiction.

2012 Incidents by Incident Type



Fall River Gave Mutual Aid in 11 Reported Incidents

In 2012, Fall River reported coming to the aid of other fire departments 11 times. Nine (9) were for cover assignments; one was for a good intent call and the other was for a rescue or EMS call.

Fall River Received Mutual Aid 18 Times

In 2012, Fall River reported receiving mutual aid from surrounding fire departments 18 times. Twelve (12) were for fires. Four (4) were for medical assists; one was for a service call, and the other was for a good intent call.

Fall River**Population: 88,857****5.8 Fires/1,000 Population****Total Fires: 519 \$6,279,251**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	282	54%	\$5,939,441
Vehicle Fires	34	7%	291,975
Other Fires	203	39%	47,835

20 Civilian Injuries 17 Fire Service Injuries

Building Fires: 282**Residential Structure Fires: 243****Residential Structure Fires Confined to Non-Combustible Containers: 165****Unconfined Residential Structure Fires: 78**

16 Civilian Injuries 11 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	171	70%	Operated	79	33%
1- & 2-Family homes	59	24%	Didn't operate	5	2%
Rooming houses	8	3%	None	6	3%
Residential board & care	4	1%	Fire too small	8	3%
			Didn't Alert (confined)	6	2%
			Undetermined	139	57%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	62%	Cigarette	5%	17%
Living room	5%	Heat from operating eq.	5%	17%
Bedroom	3%	Radiated heat from op. eq.	5%	15%
Attic	3%	Arcing	3%	9%

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

⁵ 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. This field does not need to be completed for confined fires, but is sometimes voluntarily reported.

Item First Ignited⁶	%	Factor Contrib. to Ignition	%	%Unconfined⁷
Cooking materials	61%	Abandoned materials	2%	4%
Rubbish, trash, waste	9%	Electrical failure, malfunc.	2%	3%
Structural comp./finish, other	2%	Accident. turned on, not off	1%	2%
Electrical wire, cable insulation	2%	Equipment unattended.	1%	1%
Wearing apparel not on a person	2%			
Film, residue (creosote)	2%			

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking Equipment	61%	Unintentional	22%	69%
None	16%	Intentional	2%	6%
Electrical wiring, other	2%	Failure of eq. or heat source	2%	5%
		Undetermined	2%	6%
		Cause under investigation	4%	13%

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

Alerted Occupants	18%
Didn't Alert Occupants	4%
Undetermined	78%

All Reported Incidents	# of Incidents	% of Incidents
False alarms & false calls	1,778	35%
Rescue & EMS incidents	1,481	30%
Fires ¹⁰	519	10%
Hazardous conditions (no fire)	488	10%
Good intent calls	438	9%
Service calls	254	5%
Special incident type	26	1%
Severe weather & natural disaster	20	0.4%
Overpressure rupture, explosion or overheat calls (no fire)	7	0.1%

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

⁷ 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.

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

⁹ 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.

¹⁰ This figure includes the 4 fires that Fall River responded to outside of their jurisdiction.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	29	21	3	5
February	38	24	2	12
March	54	29	2	23
April	80	33	3	44
May	36	12	2	22
June	30	16	2	12
July	68	26	5	37
August	26	18	0	8
September	49	25	6	18
October	28	15	6	7
November	48	35	2	11
December	33	28	1	4

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	74	41	2	31
Monday	73	37	4	32
Tuesday	81	37	8	36
Wednesday	66	42	4	20
Thursday	78	42	3	33
Friday	71	48	6	17
Saturday	76	35	7	34

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	32	21	4	7
04:01 - 08:00	37	21	2	14
08:01 - 12:00	61	42	4	15
12:01 - 16:00	138	71	11	56
16:01 - 20:00	166	86	6	74
20:01 - 24:00	85	41	7	37

Motor Vehicle Fires

Total: 34

Automobiles: 30 (88%)

1 (3%) of the automobile fires considered intentionally set.

Arson Fires

Total Arsons: 18

Dollar loss: \$778,500

0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	8	3%	44%	\$774,000
Vehicle Arsons	1	1%	6%	4,500
Other Arsons	9	4%	50%	0

0.09 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.10 Other arsons/1,000 population

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	3	38%	00:01 - 04:00	1	100%
00:01 - 04:00	2	25%			
16:01 - 20:00	2	25%			

Other Arsons	#	%
20:01 - 00:00	5	56%
12:01 - 16:00	2	11%

Peak Fixed Property Uses for Structure Arsons	#	%
Multi-family dwellings	3	38%
1 & 2 - Family homes	1	13%
High/junior high/middle school	1	13%
Bar or nightclub	1	13%
Storage, other	1	13%
Assembly, other	1	13%

New Bedford Fires in 2012

434 Total Fires —194 Structures, 64 Vehicles & 176 Other Fires

The New Bedford Fire Department reported 434 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 194 structure fires, 64 motor vehicle fires, 76 outside trash fires, 58 brush fires, 20 special outside fires, and 22 unclassified fires caused one civilian death, eight civilian injuries, two fire service injuries, and an estimated dollar loss of \$4.2 million.

1 New Bedford Resident Killed in 1 Fire

- On May 12, 2012, at 4:43 a.m., the New Bedford Fire Department was dispatched to a fire in a four-unit apartment building of undetermined cause. The most likely cause was an electrical event, but smoking could not be ruled out either. The victim, a 39-year old man, possibly impaired by drugs, was overcome by the heat and smoke as he attempted to escape. There were four other injuries associated with this fire. Detectors were present and alerted the other occupants of the building. The building was not sprinklered. The fire also caused an exposure fire to the building next door. Combined damages from these fires were estimated to be \$115,000.

All Fires Up

Total fires increased by 107 from the 327 reported in 2011. Reported structure fires increased by 58 from the 136 reported during the previous year. Motor vehicle fires remained the same with 64 fires reported in 2011 and 2012. Outside and other fires increased by 49 from 127 the previous year.

NEW BEDFORD FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	453	165	65	223	47	16	14	17
2009	343	172	65	106	32	14	9	9
2010	386	156	76	154	27	11	9	7
2011	327	136	64	127	20	7	6	7
2012	434	194	64	176	15	6	5	4

BUILDING FIRES

There were 192 building fires of different types in New Bedford in 2012. These 192 building fires accounted for 99% of all structure fires in New Bedford.

79% of Building Fires in Homes

The 192 building fires that occurred in New Bedford in 2012 can be broken down by fixed property use as follows: 152, or 79% of all building fires, were in residential properties; 13 fires took place in mercantile or business properties; nine fires occurred in public assembly properties; six fires happened in manufacturing and processing facilities;

four fires happened in educational facilities in 2012; four fires occurred in storage facilities; two fires happened in institutional facilities; one fire occurred in an industrial facility and another fire happened in a special property.

RESIDENTIAL FIRES

Apartments Accounted for 57% of Residential Building Fires

The peak fixed property uses for residential building fires were apartments, accounting for 57% of the building fires in New Bedford; 42% occurred in 1- or 2-family homes, and 1% happened in rooming houses.

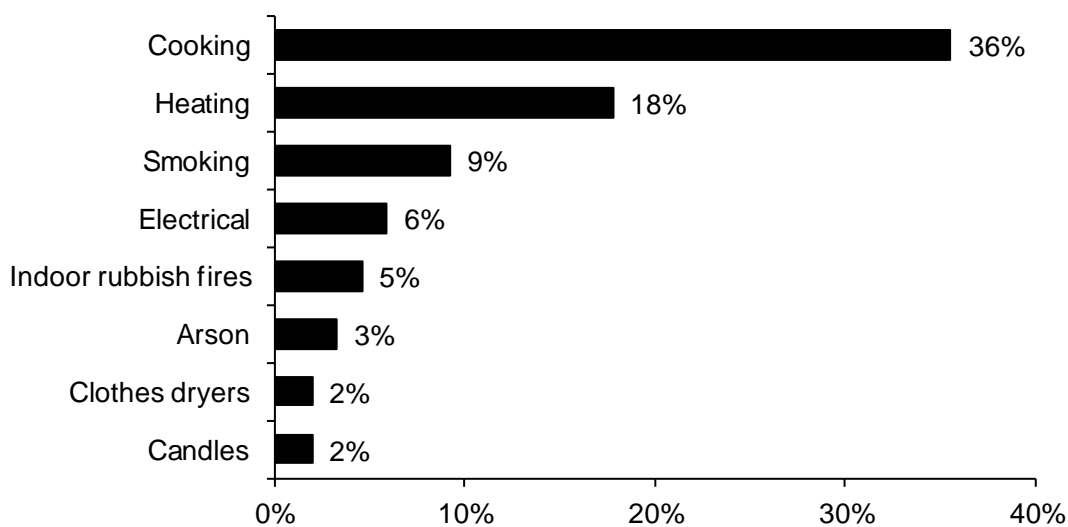
Residential Building Fires Are Up

There were 152 reported residential building fires in New Bedford in 2012. These 152 fires are an increase of 35, or 30%, from the 117 residential building fires reported in 2011.

Unattended Cooking Leading Cause of Residential Fires

The leading cause of residential building fires in New Bedford was unattended cooking and other unsafe cooking practices, accounting for 36% of these fires. Heating equipment accounted for 18% of these fires. Smoking caused 9% and electrical problems accounted for 6% of residential fires. Indoor rubbish fires caused 5% and arson 3% of the fires in New Bedford homes. Clothes dryers and candles each caused 2% of the residential building fires in New Bedford in 2012.

2012 Leading Causes of Fires in New Bedford Homes



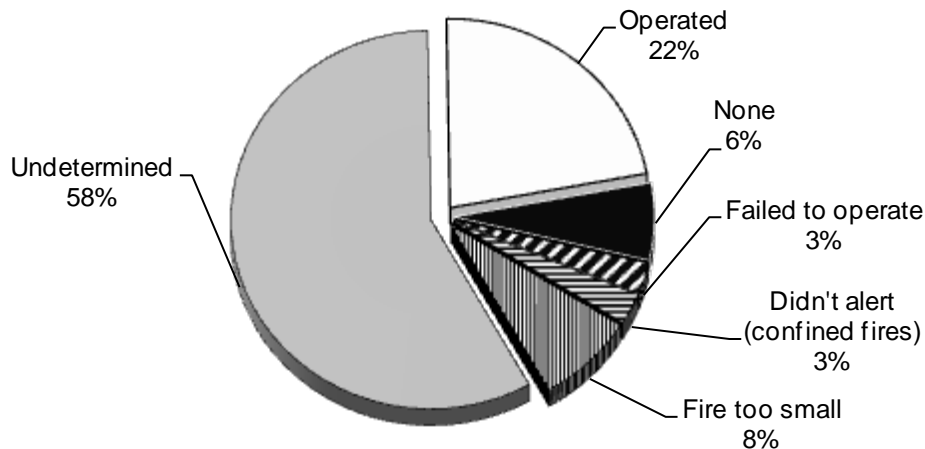
51% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Seventy-eight (78), or 51%, of all residential building fires were confined to non-combustible containers in 2012. Fifty (50), or 33%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Nineteen (19) of the reported fires were fuel burner or boiler malfunctions, accounting for 13% of residential building fires in New Bedford in 2012. Seven (7), or 5%, of these fires were rubbish fires contained to a non-combustible container. Two (2) of the reported fires were confined to a chimney or flue, accounting for 1% of residential building fires in New Bedford in 2012.

Detectors Alerted Occupants in Only 22% of Fires

Smoke or heat detectors operated and alerted the occupants in 34, or 22%, of the residential building fires. In 3% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 3% of these incidents. In 6% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 8% of the residential fires. Smoke detector performance was undetermined in 88 incidents, or 58% of New Bedford's residential building fires.

Detector Status in New Bedford's Residential Fires 2012



4 Detectors Failed

Of the four fires where smoke detectors were present but failed to operate, two, or 50%, of these detectors failed because of missing batteries. A lack of maintenance caused

¹ 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.

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

another detector, or 25%, to fail. It was undetermined in the one case, or 25% of all failed detectors, why the detector failed to operate.

VACANT BUILDINGS

5% of Building Fires Occurred in Vacant Buildings

New Bedford reported 10 fires that occurred in buildings that were vacant, under construction or demolition. This represented 5% of the total 192 building fires reported to MFIRS in 2012. Four (4) fires in one- or two-family homes; two fires in apartment buildings; two fires in parking garages; one in a detached residential parking garage and a funeral parlor were reported as vacant building fire incidents.

JUVENILE-SET FIRES

6 Juvenile-set Fires

There were six reported juvenile-set fires in New Bedford in 2012. Two (2) were building fires, another two were brush fires, one was a special outside fire and another was an unclassified fire. These six fires caused an estimated dollar loss of \$220,100.

ARSONS

15 Total Arsons — 6 Structures, 5 Motor Vehicles & 4 Other

Fifteen (15), or 3%, of New Bedford's 434 fires were intentional, or for purposes of this analysis, arson. The six structure arsons, five motor vehicle arsons and four outside and other arsons caused an estimated dollar loss of \$181,851.

All Arsons Down Slightly

The total number of arsons decreased by five from the 20 reported in 2011. Reported structure arsons decreased by one from seven the year before. Motor vehicle arsons decreased by one from the six reported in 2011. Outside and other arsons decreased by three from the seven reported last year.

ALL INCIDENTS

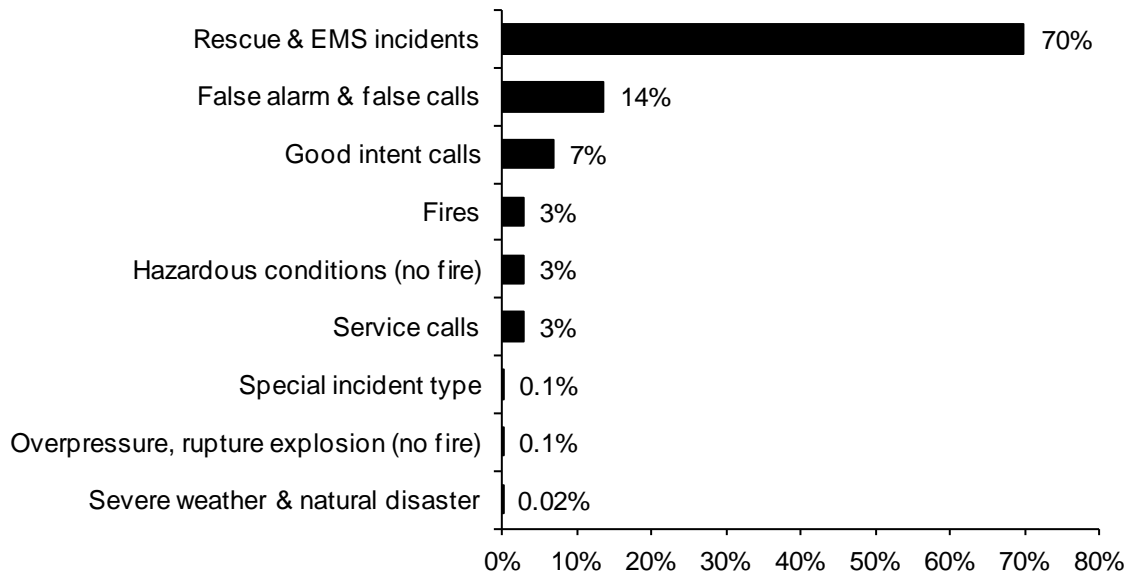
Rescue & EMS Calls Were 70% of All Reported Incidents

In 2012, New Bedford voluntarily reported 13,428 incidents to MFIRS. Of these 13,428 incidents, 12,992, or 97%, were non-fire incidents.

Of these 12,992 non-fire incidents 9,397, or 70% of all reported incidents in 2012, were reported rescue and emergency medical services (EMS) calls; 1,828, or 14%, were reported false alarm or false calls; 943, or 7%, were reported good intent calls; 410, or 3%, were reported hazardous condition calls with no fire; 376, or 3%, were reported service calls such as lock-outs, water or smoke problem, unauthorized burning or public service assistance; 20, or 0.1%, were special incident type calls such as citizen complaints; 15, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and three, or 0.02%, were severe weather calls.

In 2012, New Bedford reported 436 fires³, accounting for 3% of all reported incidents.

2012 Incidents by Incident Type



New Bedford Gave Mutual Aid in 4 Reported Incidents

In 2012, New Bedford reported coming to the aid of other fire departments four times. Two (2), or 50%, were for fires. One (1), or 25%, was for a station coverage call and the other, or 25%, was for a hazardous condition with no ensuing fire.

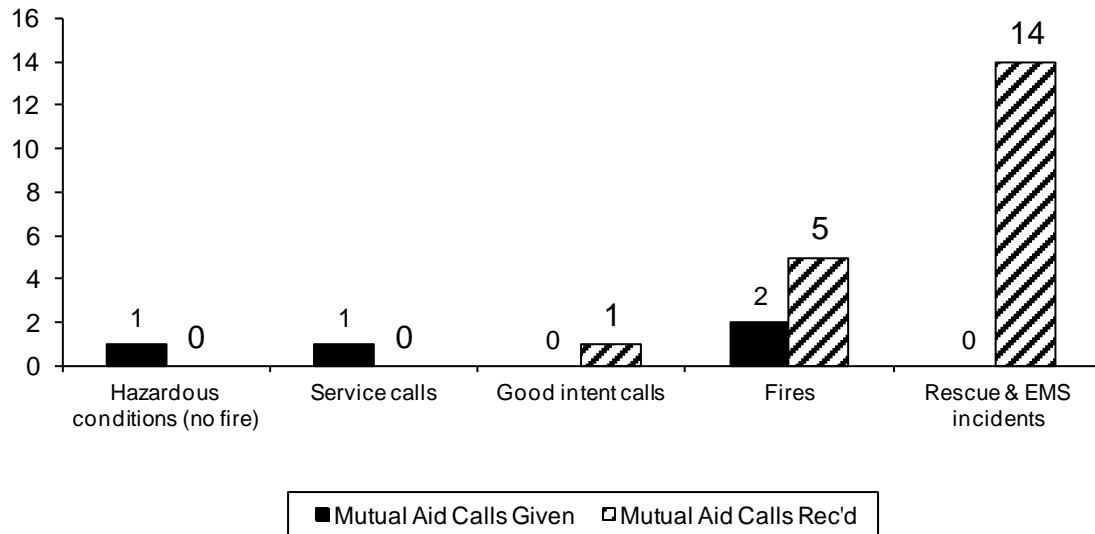
New Bedford Received Mutual Aid in 20 Incidents

In 2012, New Bedford reported receiving aid from surrounding fire departments in 20 incidents. Fourteen (14), or 70%, of these incidents were rescue or EMS calls; five, or 25%, were for fires; and one, or 5%, was a good intent call.

³ This figure includes mutual aid fires that New Bedford responded to outside of their jurisdiction.

The following chart compares the number of calls that the New Bedford Fire Department gave mutual aid to a neighboring community compared to the number of calls that a neighboring community assisted New Bedford. In 2012 New Bedford received aid from other fire departments five times as much as they gave it.

New Bedford's Mutual Aid Calls in 2012



New Bedford**Population: 95,072****4.6 Fires/1,000 Population****Total Fires: 434 \$4,146,736**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	194	45%	\$4,101,323
Vehicle Fires	64	15%	317
Other Fires	176	40%	45,096

1 Civilian Death 2.30 Civilian Deaths/1,000 Fires

1 Fatal Fire 0.11 Civilian Deaths/10,000 Population

8 Civilian Injuries 2 Fire Service Injuries

Building Fires: 192**Residential Building Fires: 152****Residential Building Fires Confined to Non-Combustible Containers: 78****Unconfined Residential Building Fires: 74**

1 Civilian Death 6 Civilian Injuries 1 Fire Service Injury

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	86	68%	Operated	34	22%
1- & 2-Family homes	64	26%	Didn't operate	4	3%
Boarding houses	2	4%	None	10	7%
			Fire too small	12	8%
			Didn't Alert (confined)	4	3%
			Undetermined	88	58%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	38%	Radiated heat from oper. eq.	6%	12%
Heating room or area	13%	Arcing	5%	9%
Exterior balcony, unencl. porch	7%	Cigarette	5%	9%
Bedroom	6%	Heat fr. op. flame/smok. mat.	3%	7%
Living room	5%	Candles	2%	4%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignition	%	%Unconfined⁷
Cooking materials	34%	Too close to combustibles	3%	7%
Flammable or combust. liquid	13%	Misuse of material/products	3%	5%
Rubbish, trash, waste	6%	Abandoned materials	3%	5%
Structural. Component/finish	5%	Equipment unattended	2%	4%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	35%	Unintentional	26%	54%
None	33%	Intentional	3%	5%
Boiler, furnace, cent. heat unit	13%	Failure of eq. or heat source	1%	3%
Clothes dryer	3%	Act of nature	2%	4%
		Undetermined	11%	22%
		Cause under investigation	6%	12%

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

Alerted Occupants	12%
Didn't Alert Occupants	5%
Undetermined	83%

All Reported Incidents	# of Incidents	% of Incidents
Rescue & EMS incidents	9,397	70%
False alarms & false calls	1,828	14%
Good intent calls	943	7%
Fires ¹⁰	436	3%
Hazardous conditions (no fire)	410	3%
Service calls	376	3%
Special incident type	20	0.1%
Overpressure rupture, explosion or overheat calls (no fire)	15	0.1%
Severe weather & natural disaster	3	0.02%

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

⁷ 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.

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

⁹ 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.

¹⁰ This figure includes the 5 mutual aid fires that New Bedford responded to outside of their jurisdiction.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	29	18	5	6
February	28	15	3	10
March	39	17	6	16
April	62	15	9	38
May	26	15	5	6
June	48	21	9	18
July	49	21	6	22
August	33	14	8	11
September	30	17	2	11
October	34	12	4	18
November	34	18	3	13
December	22	11	4	7

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	68	28	8	32
Monday	65	30	9	26
Tuesday	57	27	8	22
Wednesday	65	33	9	23
Thursday	52	25	5	22
Friday	64	21	16	27
Saturday	63	30	9	24

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	51	19	17	15
04:01 - 08:00	29	15	4	10
08:01 - 12:00	53	30	11	12
12:01 - 16:00	114	44	13	57
16:01 - 20:00	125	62	11	52
20:01 - 24:00	62	24	8	30

Motor Vehicle Fires

Total: 64

Automobiles: 52 (81%)

5 (10%) of the automobile fires considered intentional.

Arson Fires

Total Arsons: 15

Dollar loss: \$181,851

0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	6	3%	40%	\$158,351
Vehicle Arsons	5	8%	33%	18,300
Other Arsons	4	2%	27%	5,200

0.06 Structure arsons/1,000 population

0.05 Vehicle arsons/1,000 population

0.04 Other arsons/1,000 population

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
04:01 - 08:00	2	33%	16:01 - 20:00	2	40%
20:01 - 00:00	2	33%	00:01 - 04:00	1	20%
00:01 - 04:00	1	17%	08:01 - 12:00	1	20%
12:01 - 16:00	1	17%	20:01 - 00:00	1	20%

Other Arsons	#	%
12:01 - 16:00	2	50%
16:01 - 20:00	1	25%
20:01 - 00:00	1	25%

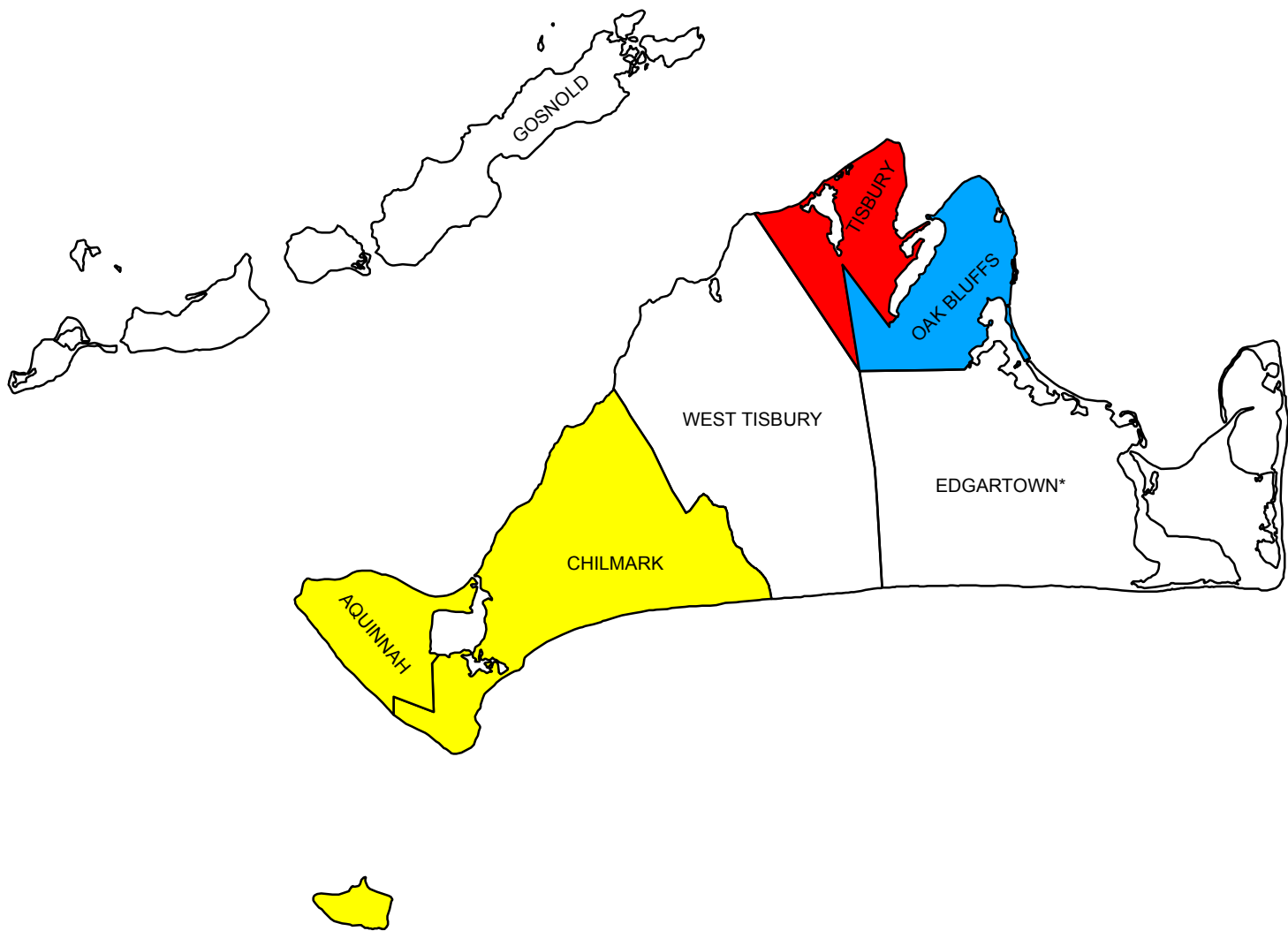
Peak Fixed Property Uses for Structure Arsons	#	%
1- or 2-Family homes	4	67%
Apartments	1	17%
Department or discount store	1	17%



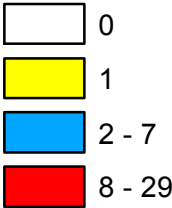
Dukes County

2012 Fire Data Analysis

Dukes County Fires 2012



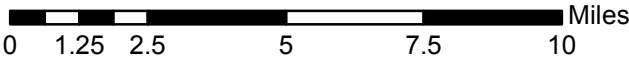
2012 Fires



*Non-reporting department



MFIRS
Massachusetts Fire Incident Reporting System



Massachusetts Fire Incident Reporting System 2012

Dukes County Fires in 2012

38 Total Fires — 16 Structures, 6 Vehicles Fires & 16 Outside & Other Fires

Dukes County ranked last out of the fourteen Massachusetts counties in total fires. Dukes County fire departments reported 38 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2011. The reported 16 structure fires, six motor vehicle fires, five brush fires, five outside rubbish fires, two special outside fires and four unclassified fires caused an estimated dollar loss of \$57,200. Dukes County's fires accounted for 0.1% of the 31,229 Massachusetts fires reported in 2012.

Four (4) out of the seven of the fire departments in Dukes County reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS). Two (2) departments certified that they had no reportable fires in 2012; and one department did not report any incidents or certify that they didn't have any incidents.

All Fires Up

The total number of reported fire incidents increased by 11 from the 27 reported in 2011. Reported structure fires decreased by two from the 18 reported in 2011. Motor vehicle fires increased by five from the one reported the previous year. Outside and other fires increased by eight from the eight reported in 2011. Increasing outside fires was a statewide trend in 2012.

DUKES COUNTY FIRES FROM 2008 TO 2012

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	19	12	3	4	0	0	0	0
2009	19	8	5	6	0	0	0	0
2010	30	17	5	8	1	0	1	0
2011	27	18	1	8	2	1	0	1
2012	38	16	6	16	2	0	1	1

Fire and Fire Death Rates

Dukes County had 2.3 fires per 1,000 population. That figure ranks Dukes County last in the state and below the state rate of 4.8 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 below the state rate of 0.06 fire deaths per 10,000 population.

Oak Bluffs Had Dukes County Largest Loss Fire

- On July 10, 2012, at 4:57 a.m., the Oak Bluffs Fire Department responded to an electrical fire at a single-family home. The fire was started by an electrical failure of an HVAC unit in the basement. No one was injured at this fire. Detectors were present and they operated. The building did not have sprinklers. Damages were estimated at \$36,000 for this fire.

STRUCTURE FIRES

Reported Structure Fires 42% of All Reported Fires

There were 16 reported structure fires in Dukes County in 2012. These incidents represented 42% of Dukes County's reported fires in 2012 and all of the county's reported dollar loss. The total number of reported structure fires decreased by two, or 11%, from the 18 reported in 2011.

0 Reported Structure Arson in 2012

There was no reported structure arson in Dukes County in 2012.

BUILDING FIRES

There were 16 building fires of different types in Dukes County in 2012. These 16 building fires accounted for all of the structure fires in Dukes County.

81% of Dukes Building Fires Occurred in People's Homes

Thirteen (13), or 81%, of Dukes County's 16 building fires occurred in residential occupancies. One (1) fire occurred in a business, one happened in a public assembly property and another fire occurred in a storage facility.

RESIDENTIAL FIRES

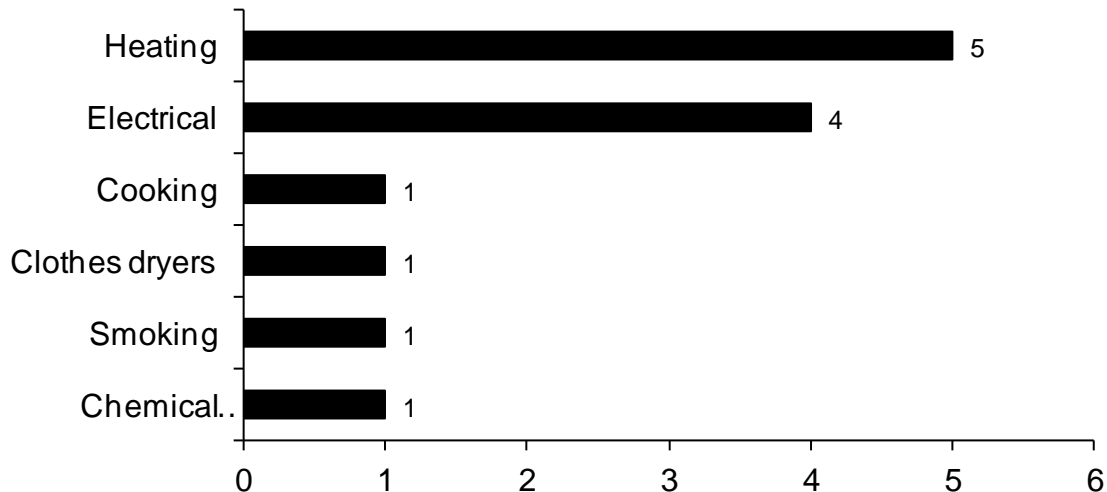
13 Residential Building Fires

There were 13 reported residential building fires in Dukes County in 2012. These 13 fires are a decrease of one, or 7%, from the 14 residential building fires reported in 2011. They caused \$57,000 in estimated damages.

Heating & Electrical Were the Leading Cause of Residential Fires

Heating equipment was the leading cause of residential building fires in Dukes County; accounting for five or, or 38%, of these fires. Electrical problems caused four, or 31% of these fires. Cooking, clothes dryers, smoking, and a chemical reaction were each the cause for one, or 8%, of the fires in Dukes County in 2012.

2012 Leading Causes of Fires in Dukes County Homes



5 Residential Building Fires Are Confined to Non-Combustible Containers¹

Five (5), or 38%, of the reported fires in Dukes County were confined to a non-combustible container. Three, or 23%, of these fires were confined to a chimney or flue. One (1), or 8%, was a confined cooking fire and one, or 8%, was a confined fuel burner or boiler malfunction.

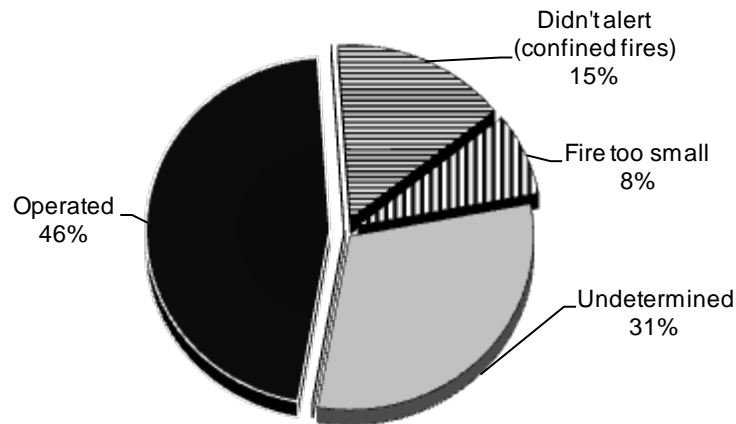
Detectors Operated in 46% of Fires

Smoke or heat detectors operated and alerted the occupants in six, or 46%, of the residential building fires. In two, or 15%, of these fires², the detectors did not alert the occupants. There were no reported fires where detectors were present but did not operate. There were no reported fires where there were no smoke detectors present. The fire was too small to activate the detector in one, or 8%, of these incidents. Smoke detector performance was undetermined in four incidents, or 31%, of Dukes County's residential building fires.

¹ 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.

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

Detector Status in Dukes County's Residential Fires 2012



VACANT BUILDINGS

1 Vacant Building Fires

There was one reported fire in a building that was vacant in Dukes County in 2012. This fire occurred in a single-family home. It was not arson.

JUVENILE-SET FIRES

No Juvenile-set Fires

There were no reported juvenile-set fires in Dukes County in 2012.

ARSONS

2 Arsons

There were two reported arsons in Dukes County in 2012. The one motor vehicle arson and one brush arson was the same number of arsons reported in 2011. Structure arson decreased by one and motor vehicle arsons increased by one.

ALL INCIDENTS

False Alarms Over 1/2 of All Reported Responses

In 2012, Dukes County fire departments reported 400 responses³ to MFIRS. Of these 400 incidents, 358 non-fire calls⁴ were voluntarily reported.

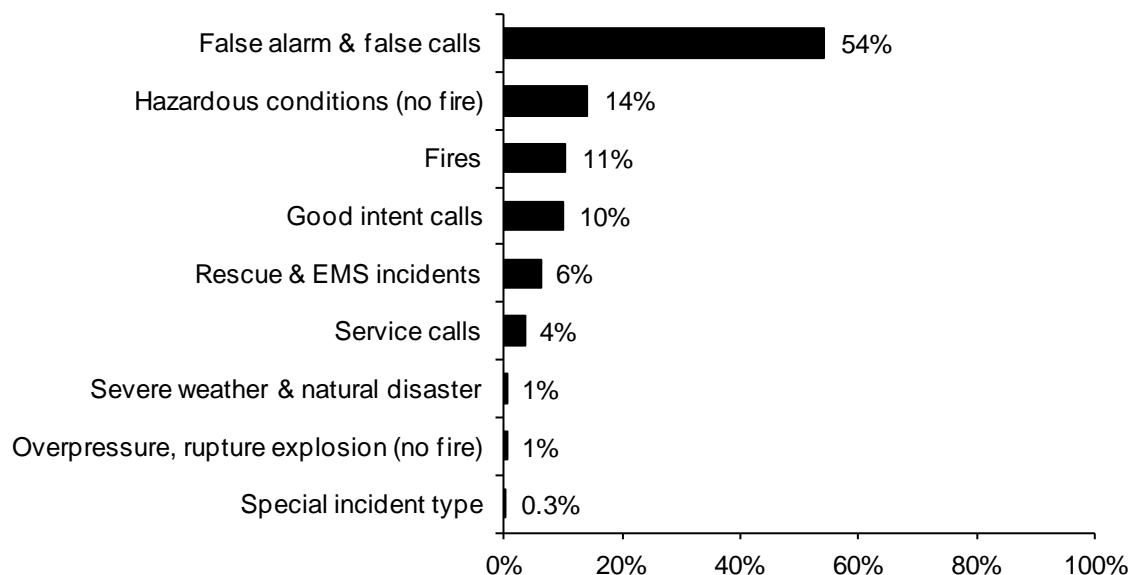
³ These figures include responses in which Dukes County fire departments gave mutual aid to other fire departments.

⁴ Tisbury is the only department in Dukes County that reports non-fire calls.

Of these 358 non-fire calls, 217, or 54%, were reported false alarm or false calls; 57, or 14%, were reported hazardous condition calls with no fire; 40, or 10%, were reported good intent calls; 25, or 6% of all of the responses reported in 2012, were reported rescue and emergency medical services (EMS) calls; 14, or 4%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; two, or 1%, were severe weather calls; two, or 1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and another call was a special incident type accounting for 0.3%.

Forty-two (42), or 11%, of the total incidents submitted by Dukes County fire departments were fires.

2012 Incidents by Incident Type



Dukes County Fire Departments Gave Mutual Aid 9 Times

In 2012, Dukes County fire departments reported coming to the aid of other fire departments nine times. Of these nine responses, four, or 44%, were for fires; two, or 22%, were for false alarms or false calls; one, or 11%, was for a rescue or EMS call; one, or 11%, was for a service call; and another call, or 1%, was for an overpressure, rupture, explosion or overheat call with no fire.

Dukes County Fire Departments Received Mutual Aid in 6 Incidents

In 2012, Dukes County fire departments reported receiving aid from surrounding departments in six incidents. Four (4), or 67%, of these incidents were for fires; and the other two, or 33%, were for rescue or EMS calls.

Dukes County**Population: 16,535****2.3 Fires/1,000 Population****Total Fires: 38 \$57,200**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	16	42%	\$57,200
Vehicle Fires	6	16%	0
Other Fires	16	42%	0

No Injuries

Building Fires: 16**Residential Structure Fires: 13****Residential Structure Fires Confined to Non-Combustible Containers: 5****Unconfined Residential Structure Fires: 8**

No Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	12	92%	Operated	6	46%
Apartments	1	8%	Didn't operate	0	0%
			None	0	0%
			Fire too small	1	8%
			Didn't alert (confined)	2	15%
			Undetermined	4	31%

Area of Origin⁵	%	Heat Source	%	%Unconfined⁶
Chimney or flue	23%	Arcing	15%	25%
Bedroom	15%	Cigarette	8%	13%
Substructure area or space	15%	Hot ember or ask	8%	13%
		Spark/ember/flame fr op. eq.	8%	13%
		Heat from op. equip. other	8%	13%
		Spontan. com., chem.. react.	8%	13%

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

⁶ 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.

Item First Ignited⁷	%	Factor Contrib. to Ignit.	%	%Unconfined⁸
Film, residue (creosote)	23%	Failure to clean	23%	38%
Electrical wire, cable insulation	23%	Elec. failure, malfunct. other	15%	25%
Structural member, framing	15%	Construction deficiency	15%	25%

Equipment⁹	%	Cause of Ignition	%	%Unconfined¹⁰
Chimney or flue	23%	Unintentional	38%	63%
None	23%	Failure of eq. or heat source	8%	13%
		Undetermined	8%	13%
		Cause under investigation	8%	13%

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

Alerted occupants	60%
Didn't alert occupants	40%
Undetermined	0%

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

⁸ 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.

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

¹⁰ 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.

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

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	5	1	1	3
Monday	9	4	1	4
Tuesday	9	6	1	2
Wednesday	2	1	0	1
Thursday	1	0	0	1
Friday	6	1	2	3
Saturday	6	3	1	2

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	3	2	0	1
04:01 - 08:00	6	3	2	1
08:01 - 12:00	6	4	1	1
12:01 - 16:00	11	1	2	8
16:01 - 20:00	7	4	1	2
20:01 - 00:00	5	2	0	3

Motor Vehicle Fires

Total: 6

Automobiles: 5 (83%)

0 (0%) of the automobile fires were incendiary in 2012.

Arson Fires**Total Arsons: 2****Dollar loss: \$0****0.12 Arson Fires/1,000 Population**

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	0	0%	0%	\$0
Vehicle Arsons	1	17%	50%	0
Other Arsons	1	6%	50%	0

0.00 Structure arsons/1,000 population

0.06 Vehicle arsons/1,000 population

0.06 Other arsons/1,000 population

No Injuries

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
			08:01 – 12:00	1	100%

Other Arsons	#	%
12:01 – 16:00	1	100%

Peak Fixed Property Uses for Structure Arsons # %

Population: 4,067Tisbury Population: 3,959

Population: 3,959

West Tisbury **Population: 2,740**

Population: 2,740[illegible]

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	45	1	0	5	0	0	0	38	0	1
07062	Chilmark	1	1	0	0	0	0	0	0	0	0
07089	Edgartown	0	0	0	0	0	0	0	0	0	0
07109	Gosnold	0	0	0	0	0	0	0	0	0	0
07221	Oak Bluffs	90	7	1	3	13	4	13	47	2	0
07296	Tisbury	264	33	1	17	44	10	27	132	0	0
07327	West Tisbury	0	0	0	0	0	0	0	0	0	0
Total	Dukes County	400	42	2	25	57	14	40	217	2	1

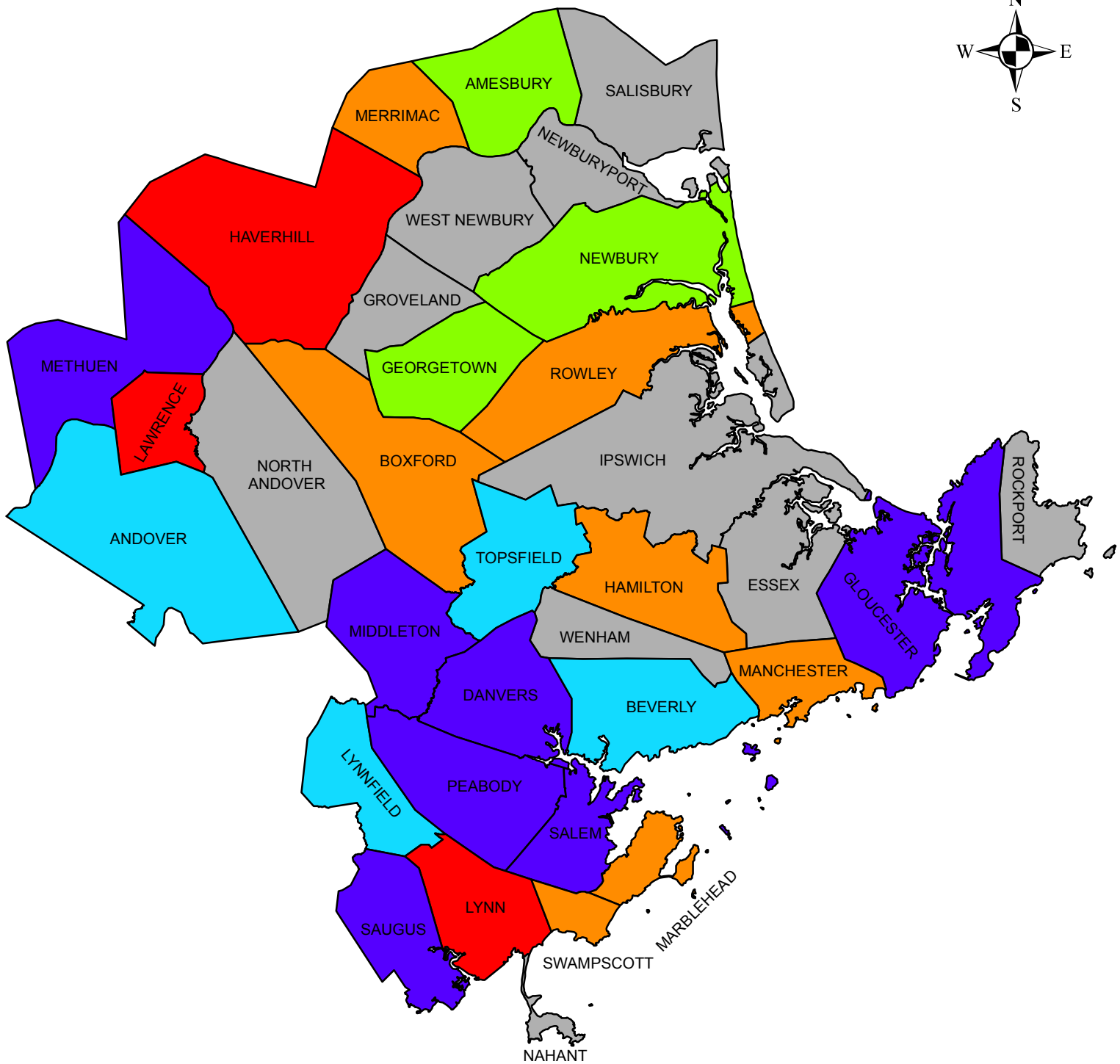
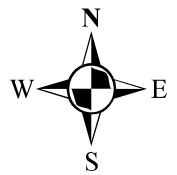
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any department that wants to send all of their responses to do so.



Essex County

2012 Fire Data Analysis

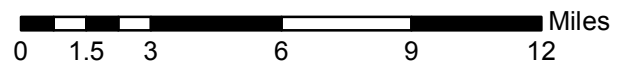
Essex County Fires 2012



2012 Fires



MFIRS
Massachusetts Fire Incident Reporting System



Massachusetts Fire Incident Reporting System 2012

Essex County Fires in 2012

2,997 Total Fires — 1,574 Structures, 236 Vehicles & 1,187 Other Fires

Essex County ranked fifth out of the fourteen Massachusetts counties in total reported fires. The county reported 2,997 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 1,574 structure fires, 236 motor vehicle fires, 693 brush, tree or lawn fires, 290 outside rubbish fires, 91 special outside fires, one cultivated crop or vegetation fire, and 112 other fires caused four civilian deaths, 31 civilian injuries, 40 fire service injuries and an estimated dollar loss of \$13.4 million. Essex County's fires accounted for 10% of the 31,229 Massachusetts fires reported in 2012.

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 2012.

Structure & MV Fires Down

The total number of reported fire incidents decreased by 11 incidents from the 3,008 that were reported in 2011. Reported structure fires decreased by 310 from the 1,884 reported during the previous year. The total number of motor vehicle fires decreased by 55 from the 291 incidents reported during 2011. Reported outside and other fires increased by 354 from the 833 reported the year before.

Brush Fires Down by Half

After a large decrease in brush fires in 2011, they increased by 275, or 66%, in 2012. This is a major decrease and the main reason for the increase in all Essex County fires. This was a statewide trend in 2012.

ESSEX COUNTY FIRES FROM 2008 TO 2012

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2,886	1,629	326	931	132	19	17	96
2009	2,780	1,642	333	805	186	32	19	134
2010	3,576	1,979	295	1,302	154	24	19	111
2011	3,008	1,884	291	833	108	23	18	65\7
2012	2,997	1,574	236	1,187	105	23	11	71

Fire and Fire Death Rates

Essex County had 4.0 fires per 1,000 population. That figure ranks Essex County tied for eighth in the state and below the state rate of 4.8 fires per 1,000 population. Essex County had 0.05 fire deaths per 10,000 population making it tied for eighth among Massachusetts counties and below the state rate of 0.06 deaths per 10,000 population.

4 Residents Died in 3 Essex County Fires

- On January 14, 2012, at 6:35 p.m., the Lynn Fire Department was called to a fatal cooking fire in a 45-unit apartment building. The victim, a 32-year old woman, was

sleeping at the time of the fire. She was discovered unconscious by firefighters in her bedroom. Carbon monoxide readings inside the apartment topped out at 500 ppm. No one else was injured at this fire. Detectors were present but they failed to operate because the batteries were missing. The home was not sprinklered. Damages from this fire were not estimated.

- On March 7, 2012, at 12:37 a.m., the Haverhill Fire Department was dispatched to a smoking fire in a three-unit apartment building. The victim, an 84-year old woman, was smoking while on home oxygen. Her cigarette ignited her bedding. She was overcome by the heat and smoke as she attempted to escape. Another occupant of the building was injured at this fire. Detectors were present and alerted the other occupants of the building. The building was not sprinklered. Damages from this fire were estimated at \$350,000.
- On October 6, 2012, at 5:34 a.m., the Lynn Fire Department was called to a fatal fire in a single-family home of undetermined cause. The victims, a 69-year old physically disabled woman and her 38-year old son were asleep at the time of the fire. No other civilians were injured at this fire but three firefighters were injured fighting it. Detectors were present and operated but sprinklers were not present. Damages from the blaze were not estimated.

Beverly Had Largest Loss Fire in 2012

- On January 30, 2012, at 4:40 p.m., the Beverly Fire Department was dispatched to an electrical fire in the First Assembly of God church. There were no injuries at this fire. Detectors were present and operated. The building was not sprinklered. Damages from this fire were estimated to be \$600,000.

STRUCTURE FIRES

Reported Structure Fires Down

The 1,574 structure fires caused four civilian deaths, 26 civilian injuries, 30 fire service injuries and an estimated dollar loss of \$11.2 million. These incidents represented 53% of Essex County's reported fires in 2012. The average estimated dollar loss per structure fire was \$7,143. The total number of reported structure fires decreased by 310, or 16%, from the 1,884 reported in 2011.

Arson Caused 1% of Structure Fires

The 23 structure arsons caused one fire service injury and an estimated dollar loss of \$268,559. Arson was indicated as the cause of 1% of the structure fires and 2% of Essex County's structure fire dollar loss. The 23 structure arsons accounted for 22% of the Essex County arson fires reported in 2012. The total number of reported structure arsons remained the same with 24 reported in both 2011 and 2012.

Almost 1/2 of Structure Arsons Occurred in Residences

Forty-one percent (41%) of Essex County's 23 structure arsons occurred in residential occupancies. Special properties were responsible for 36% and storage facilities accounted

for 9% of these arsons. Public assembly properties, educational facilities and mercantile or business facilities were each responsible for 5% of Essex County's structure arsons in 2012.

BUILDING FIRES

There were 1,570 building fires of different types in Essex County in 2012. These 1,570 building fires accounted for 99.4% of all structure fires in Essex County.

82% of Essex Building Fires Occurred in People's Homes

One thousand two hundred and eighty-four (1,284), or 82%, of Essex County's 1,570 building fires occurred in residential occupancies. Sixty-three (63) building fires in Essex County occurred in special properties such as outbuildings, bus stop shelters and toll booths. Mercantile and business properties had 62 fires. Sixty (60) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 38 fires. Twenty-four (24) building fires took place on educational properties. Fourteen (14) fires took place in storage properties. Thirteen (13) fires took place in manufacturing and processing facilities. Four (4) fires happened in industrial facilities, and three fires occurred in unclassified properties in Essex County in 2012.

RESIDENTIAL FIRES

Residential Building Fires Down in 2012

There were 1,284 reported residential building fires in Essex County in 2012. These 1,284 fires are a decrease of 294, or 19%, from the 1,578 residential building fires reported in 2011.

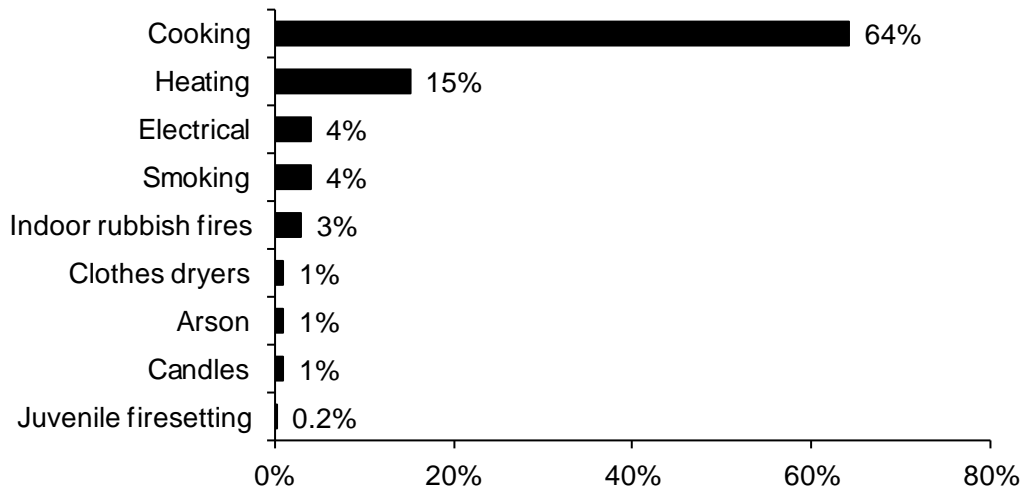
1- & 2-Family Homes Accounted for 47% of Residential Building Fires

The peak fixed property uses for residential building fires were 1- and 2-family homes, accounting for almost half, or 47%, of the building fires in Essex County; another 45% occurred in apartments; 3% happened in rooming houses; 2% took place in residential board and care facilities, and 1% each in dormitories and hotels or motels. Twenty-one (21), or 2% 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 64% of these fires. Heating was the second leading cause, accounting for 15% of these fires. Electrical problems and smoking each caused 4%. Indoor rubbish fires caused 3% of these fires. Clothes dryers, arson and candles each caused 1% of these fires; and juvenile-set fires caused less than 1% of the fires in people's homes in Essex County in 2012.

2012 Leading Causes of Fires in Essex County Homes



78% of Residential Building Fires Are Confined to Non-Combustible Containers¹

One thousand and four (1,004), or 78%, of all residential building fires were reported as confined to non-combustible containers in 2012. Seven hundred and eighty-nine (789), or 61%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. One hundred and eight (108), or 8%, were fires confined to a fuel burner or boiler malfunction. Seventy-two (72) of the reported fires were confined to a chimney accounting for 6% of residential building fires. Thirty-five (35), or 3%, of these fires were rubbish fires contained to a non-combustible container.

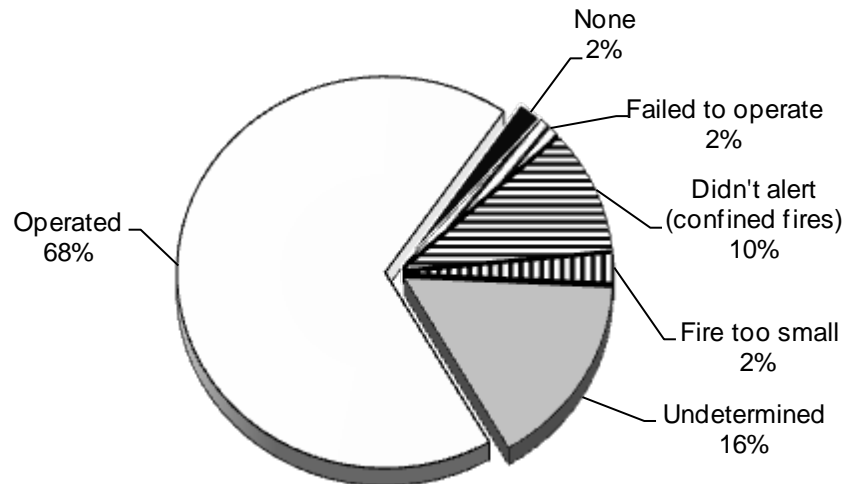
Detectors Operated in Over 2/3 of Fires

Smoke or heat detectors operated and alerted the occupants in 873, or 68%, of the residential building fires. In 10% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 2% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 2% of the residential fires. Smoke detector performance was undetermined in 204 incidents, or 16%, of Essex County's residential building fires.

¹ 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.

² 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 2012



30% of Failed Detectors Had Missing or Dead Batteries

Of the 23 fires where smoke detectors were present but failed to operate, four, or 17%, failed because the batteries were either missing or disconnected. Four (4), or 17%, failed because of power failures, shutoffs or disconnects. Three (3), or 17%, did not operate because of dead batteries. One (1) detector, or 4%, failed because of improper installation or placement. Another detector, or 4%, failed because it was defective; and one other detector, or 4%, failed from a lack of maintenance. It was undetermined or unclassified in nine cases, or 39%, why the detectors failed to operate.

VACANT BUILDINGS

2% of Building Fires Occurred in Vacant Buildings

Essex County reported 31 fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the total 1,570 building fires reported to MFIRS in 2012. Nineteen (19) fires occurred in vacant residential properties. Mercantile or business facilities and storage facilities each accounted for three vacant building fire incidents. Manufacturing or processing facilities and public assembly properties each accounted for two of these fires. Educational facilities and special properties each accounted for one vacant building fire in Essex County in 2012.

Three (3) of the vacant building fires in Essex County in 2012 were determined to be intentionally set. A single-family home, a rooming house and a government building were vacant building arsons.

JUVENILE-SET FIRES

10 Juvenile-set Fires

There were 10 reported juvenile-set fires in Essex County in 2012. The five structure fires, one motor vehicle fire, and three brush fires caused one civilian injury and \$11,215 in estimated damages.

ARSONS

105 Total Arsons — 23 Structures, 11 Vehicles & 71 Other Arsons

One hundred and five (105), or 4%, of Essex County's 2,997 fires were considered intentionally set, or, for purposes of this analysis, arson. The 23 structure arsons, 11 motor vehicle arsons and 71 outside and other arsons caused one civilian death, two fire service injuries and an estimated dollar loss of \$328,559.

All Arsons Down Slightly

The total number of reported arson fires decreased by three from the 108 reported in 2011. Reported structure arsons remained the same with 23 reported in both 2011 and 2012. Motor vehicle arsons decreased by seven from the 18 reported in 2011. Outside and other arsons increased by four from 67 reported the year before.

ALL INCIDENTS

Rescue & EMS Calls Are 55% of All Reported Responses

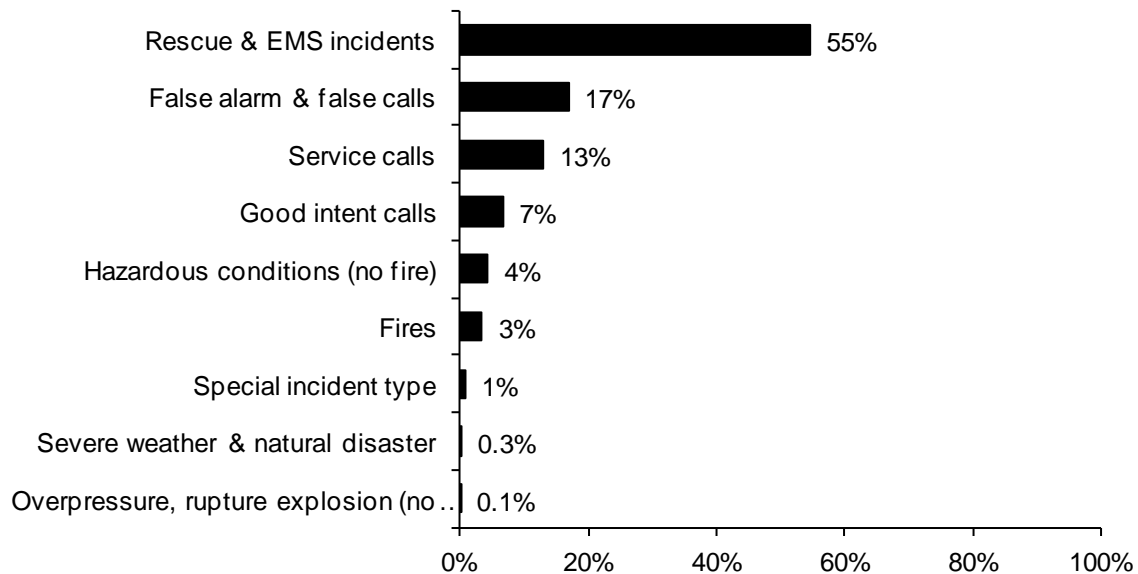
In 2012, fire departments in Essex County reported 90,044 responses³ to MFIRS. Of these 90,044 incidents, 86,954 non-fire calls were voluntarily reported.

Of these 86,954 non-fire calls, 49,130, or 55%, of all the reported responses in 2012 were reported rescue and emergency medical services (EMS) calls; 15,193, or 17%, were reported false alarm or false calls; 11,743, or 13%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 6,006, or 7%, were reported good intent calls; 3,872, or 4%, were reported hazardous condition calls with no fire; 664, or 1%, were special incident type calls such as citizen complaints; 242, or 0.3%, were severe weather responses; and 104, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Three thousand and ninety (3,090), or 3%, of the total incidents submitted by Essex County fire departments were fires.

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

2012 Responses by Incident Type



Essex County Fire Departments Reported Giving Mutual Aid 1,081 Times

In 2012, Essex County fire departments reported coming to the aid of other fire departments 1,081 times. Of these 1,081 responses, 374, or 35%, were for service calls such as cover assignments; 367, or 34%, were for rescue or EMS calls; 169, or 16%, were for good intent calls; 93, or 9%, were for fires; 56, or 5%, were for false alarms or false calls; 13, or 1%, were for hazardous conditions calls with no fire; six, or 1%, were special incident types; and three or 0.3%, was for severe weather calls.

Essex County Received Mutual Aid in 1,011 Incidents

In 2012, Essex County fire departments reported receiving aid from surrounding departments in 1,011 incidents. Of these 1,011 incidents, 655, or 65%, were rescue and emergency medical services calls; 159, or 16%, were for fires; 127, or 13%, were false alarms or false calls; 27, or 3%, were good intent calls; 27, or 3%, were hazardous conditions calls with no fire; 12, or 1%, were service calls; two, or 0.2%, were for severe weather or natural disaster calls; one, or 0.1%, was a reported overpressure, rupture, explosion or overheat call with no fire; and another one, or 0.1%, was for a special incident type call.

Essex County**Population: 743,159****4.0 Fires/1,000 Population****Total Fires: 2,997 \$13,398,910**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	1,574	52%	\$11,243,413
Vehicle Fires	236	8%	1,441,787
Other Fires	1,187	40%	713,710

3 Fatal Fires 1.33 Civilian Deaths/1,000 Fires
 4 Civilian Deaths 0.05 Civilian Deaths/10,000 Population
 31 Civilian Injuries 40 Fire Service Injuries

Building Fires: 1,570**Residential Structure Fires: 1,284****Residential Structure Fires Confined to Non-Combustible Containers: 1,004****Unconfined Residential Structure Fires: 280**

4 Civilian Deaths 25 Civilian Injuries 27 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	602	47%	Operated	873	68%
Apartments	575	45%	Didn't operate	23	2%
Rooming houses	38	3%	None	24	2%
Residential board & care	25	2%	Fire too small	30	2%
Dormitories	16	1%	Didn't alert (confined)	130	10%
Hotels/motels	7	1%	Undetermined	204	16%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	66%	Heat from operating equip.	3%	12%
Heating equipment room	9%	Arcing	2%	10%
Chimney or flue	6%	Cigarette	2%	9%
Exterior balcony/unencl. porch	2%	Radiated heat from oper. eq.	2%	7%
Bedroom	1%	Hot or smoldering obj., other	1%	6%
Wall assembly, concealed space	1%	Hot ember or ash	1%	6%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignit.	%	%Unconfined⁷
Food, cooking materials	63%	Abandoned materials	2%	11%
Flammable/comb. liquid	8%	Too close to combustibles	2%	9%
Film, residue (creosote)	6%	Electrical failure, malfunc.	2%	8%
Rubbish, trash, waste	4%	Equipment unattended	1%	4%
Structural member, framing	2%	Misuse of materials	1%	4%

Equipment⁸		Cause of Ignition	%	%Unconfined⁹
Kitchen & cooking equipment	63%	Unintentional	13%	58%
None	14%	Failure of eq. or heat source	2%	11%
Boiler, furnace, cent. heat. unit	9%	Intentional	1%	3%
Chimney, flue	6%	Undetermined	2%	7%
Clothes dryer	1%	Cause under investigation	4%	18%
		Act of Nature	0.5%	2%

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

Alerted occupants	73%
Didn't alert occupants	13%
Undetermined	15%

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

⁷ 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.

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

⁹ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	215	145	23	47
February	265	144	13	108
March	273	147	20	106
April	470	141	13	316
May	220	112	20	88
June	186	103	22	61
July	276	112	25	139
August	183	75	24	84
September	219	116	17	86
October	231	163	15	53
November	257	170	20	67
December	202	146	24	32

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	468	240	25	203
Monday	396	209	42	145
Tuesday	425	216	33	176
Wednesday	395	216	33	146
Thursday	408	240	33	135
Friday	407	195	36	176
Saturday	498	258	34	206

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	178	99	21	58
04:01 - 08:00	193	99	29	65
08:01 - 12:00	457	263	43	151
12:01 - 16:00	780	365	53	362
16:01 - 20:00	939	516	52	371
20:01 - 00:00	450	232	38	180

Motor Vehicle Fires

Total: 236

Automobiles: 201 (85%)

9, or (4%), of the automobile fires considered intentionally set.

Arson Fires

Total Arsons: 105

Dollar loss: \$328,559

0.14 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	23	1%	22%	\$268,559
Vehicle Arsons	11	5%	10%	60,000
Other Arsons	71	6%	68%	0

0.03 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.10 Other arsons/1,000 population

1 Civilian Death

2 Fire Service Injuries

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
16:01 - 20:00	8	35%	00:01 - 04:00	4	36%
00:01 - 04:00	7	30%	20:01 - 00:00	3	27%

Other Arsons	#	%
16:01 - 20:00	23	32%
08:01 - 12:00	14	20%
20:01 - 00:00	14	20%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartment buildings	4	17%
1- and 2-Family homes	3	13%
Rooming Houses	2	9%
Bridge, trestle	2	9%

Amesbury**Population: 16,283**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	64	33	12	19	1	1	0	0
2009	52	35	8	9	1	0	0	1
2010	51	26	4	21	0	0	0	0
2011	55	26	12	17	1	0	0	1
2012	64	35	6	23	0	0	0	0

Andover**Population: 33,201**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	146	78	32	36	0	0	0	0
2009	127	75	22	30	4	1	1	2
2010	130	59	24	47	1	1	0	0
2011	109	54	17	38	4	0	0	4
2012	92	40	14	38	5	0	0	5

Beverly**Population: 39,502**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	159	100	18	41	5	3	1	1
2009	128	66	17	45	5	0	2	3
2010	118	51	13	54	2	1	0	1
2011	105	64	8	33	7	2	2	3
2012	98	40	7	51	3	1	1	1

Boxford**Population: 7,965**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	34	20	0	14	2	0	0	2
2009	25	12	5	8	1	0	0	1
2010	30	9	9	12	0	0	0	0
2011	30	19	6	5	0	0	0	0
2012	30	12	5	13	0	0	0	0

Danvers**Population: 26,493**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	118	44	10	64	3	1	1	1
2009	90	31	13	46	1	0	1	0
2010	188	52	13	123	9	1	0	8
2011	93	43	15	35	2	0	0	2
2012	130	34	19	77	11	0	0	11

Essex**Population: 3,504**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	7	4	3	0	0	0	0	0
2009	27	11	5	11	1	0	0	1
2010	15	7	2	6	0	0	0	0
2011	17	11	1	5	0	0	0	0
2012	13	9	0	4	1	0	0	1

Georgetown**Population: 8,183**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	55	49	1	5	1	0	0	1
2009	70	59	5	6	0	0	0	0
2010	71	58	2	11	0	0	0	0
2011	55	50	4	1	0	0	0	0
2012	58	45	6	7	0	0	0	0

Gloucester**Population: 28,789**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	164	100	17	47	7	0	1	6
2009	124	65	20	39	7	1	1	5
2010	164	91	9	64	7	1	1	5
2011	111	56	10	45	2	0	0	2
2012	134	72	7	55	5	0	0	5

Groveland**Population: 6,459**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2	1	1	0	0	0	0	0
2009	6	4	2	0	0	0	0	0
2010	3	2	1	0	0	0	0	0
2011	2	1	1	0	0	0	0	0
2012	1	1	0	0	0	0	0	0

Hamilton**Population: 7,764**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	31	17	4	10	1	0	0	1
2009	21	16	2	3	0	0	0	0
2010	56	36	2	18	0	0	0	0
2011	51	41	0	10	0	0	0	0
2012	36	24	1	11	2	0	0	2

Haverhill**Population: 60,879**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	311	209	8	94	52	2	0	50
2009	305	182	21	102	69	1	1	65
2010	227	158	10	59	36	2	0	34
2011	279	169	16	94	32	1	0	31
2012	263	94	24	145	4	0	0	4

Ipswich**Population: 13,175**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	41	19	7	15	1	0	0	1
2009	24	13	7	4	2	0	0	2
2010	30	9	2	19	3	0	0	3
2011	18	4	3	11	1	0	0	1
2012	21	4	2	15	1	0	0	1

Lawrence**Population: 76,377**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	260	136	40	84	11	5	5	1
2009	219	114	45	62	43	17	6	20
2010	412	208	45	159	25	6	9	10
2011	251	127	53	71	31	15	13	3
2012	294	134	34	126	37	18	7	12

Lynn**Population: 90,329**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	126	83	42	1	8	2	6	0
2009	257	199	19	39	4	3	1	0
2010	482	378	20	84	5	2	2	1
2011	540	428	14	98	6	0	0	6
2012	436	331	13	92	2	0	0	2

Lynnfield**Population: 11,596**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	57	31	4	22	1	0	0	1
2009	83	54	10	19	1	0	0	1
2010	94	50	7	37	2	1	0	1
2011	105	83	7	15	1	0	0	1
2012	87	60	4	23	4	0	0	4

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

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	27	18	1	8	0	0	0	0
2009	27	16	5	6	0	0	0	0
2010	29	14	5	10	1	0	0	1
2011	25	14	2	9	1	0	1	0
2012	28	20	2	6	1	0	0	1

Marblehead**Population: 19,808**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	52	25	7	20	5	1	0	4
2009	39	25	3	11	2	0	0	2
2010	43	20	2	21	1	1	0	0
2011	27	19	1	7	1	1	0	0
2012	39	15	5	19	2	1	0	1

Merrimac**Population: 6,338**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	49	27	2	20	5	0	0	5
2009	62	35	4	23	9	0	0	9
2010	63	28	10	25	12	0	1	11
2011	41	21	5	15	3	0	0	3
2012	42	21	1	20	2	0	0	5

Methuen**Population: 47,255**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	118	55	29	34	2	0	1	1
2009	150	86	23	41	4	1	1	2
2010	189	105	25	59	12	3	2	7
2011	133	61	27	45	2	1	0	1
2012	141	60	23	58	2	0	1	1

Middleton**Population: 8,987**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	169	137	1	31	3	1	0	2
2009	125	113	2	10	1	0	0	1
2010	187	146	5	36	0	0	0	0
2011	157	139	5	13	0	0	0	0
2012	146	125	6	15	1	1	0	0

Nahant**Population: 3,410**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	11	2	0	9	3	0	0	3
2009	7	3	1	3	0	0	0	0
2010	9	4	0	5	0	0	0	0
2011	12	6	0	6	0	0	0	0
2012	16	13	0	3	1	0	0	1

Newbury**Population: 6,666**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	6	3	3	0	0	0	0	0
2009	21	13	1	7	1	1	0	0
2010	53	30	2	21	4	0	0	4
2011	14	9	2	3	1	1	0	0
2012	51	26	3	22	4	0	0	4

Newburyport**Population: 17,416**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	8	5	2	1	0	0	0	0
2009	13	6	1	6	0	0	0	0
2010	18	13	4	1	0	0	0	0
2011	21	15	5	1	0	0	0	0
2012	23	17	3	3	1	1	0	0

North Andover**Population: 28,352**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	121	76	12	33	0	0	0	0
2009	135	104	8	23	1	0	0	1
2010	145	84	12	49	12	3	2	7
2011	158	118	11	29	2	0	0	2
2012	9	8	0	1	0	0	0	0

Peabody**Population: 51,251**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	180	74	22	84	4	1	1	2
2009	127	61	21	45	2	0	0	2
2010	193	79	19	95	2	0	0	2
2011	154	69	17	68	1	0	1	0
2012	180	63	10	107	2	0	0	2

Rockport**Population: 6,952**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	13	5	2	6	0	0	0	0
2009	10	7	1	2	0	0	0	0
2010	12	9	0	3	0	0	0	0
2011	15	7	1	7	0	0	0	0
2012	18	7	1	10	0	0	0	0

Rowley**Population: 5,856**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	28	14	5	9	0	0	0	0
2009	27	20	5	2	0	0	0	0
2010	20	7	2	11	0	0	0	0
2011	44	33	6	5	0	0	0	0
2012	34	27	2	5	0	0	0	0

Salem**Population: 41,340**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	189	78	14	97	2	0	1	1
2009	171	59	25	87	10	1	3	6
2010	174	73	9	92	3	0	2	1
2011	128	51	14	63	3	1	1	1
2012	181	80	17	84	3	1	1	1

Salisbury**Population: 8,283**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	19	6	6	7	0	0	0	0
2009	10	3	5	2	0	0	0	0
2010	29	12	7	10	1	0	0	1
2011	4	1	2	1	0	0	0	0
2012	14	5	2	7	0	0	0	0

Saugus**Population: 26,628**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	165	69	12	84	14	2	0	12
2009	166	68	14	84	7	1	1	5
2010	170	57	20	93	8	0	0	8
2011	114	49	12	53	5	1	0	4
2012	156	43	10	103	2	0	0	2

Swampscott**Population: 13,787**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	56	30	5	21	1	1	0	0
2009	40	23	4	13	8	4	0	4
2010	63	27	4	32	1	0	0	1
2011	36	14	7	15	0	0	0	0
2012	44	18	2	24	3	0	0	3

Topsfield**Population: 6,085**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	73	64	1	8	0	0	0	0
2009	70	55	5	10	2	0	0	2
2010	80	63	3	14	4	0	0	4
2011	66	58	1	7	0	0	0	0
2012	95	79	4	12	3	0	1	2

Wenham **Population: 4,875**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	21	15	2	4	1	0	0	1
2009	16	9	4	3	0	0	0	0
2010	19	11	2	6	1	1	0	0
2011	12	10	0	2	0	0	0	0
2012	11	6	2	3	0	0	0	0

West Newbury **Population: 4,235**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	6	1	1	4	0	0	0	0
2009	1	1	0	0	0	0	0	0
2010	7	1	1	5	0	0	0	0
2011	10	9	1	0	0	0	0	0
2012	12	6	1	5	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	3,454	70	4	2,051	107	735	235	249	0	3
09009	Andover	2,502	92	6	775	218	209	114	713	1	374
09030	Beverly	3,525	100	16	1,910	202	236	152	889	8	12
09038	Boxford	657	34	1	343	53	47	47	128	4	0
09071	Danvers	7,136	130	6	2,884	158	2,762	269	857	18	52
09092	Essex	173	16	0	39	19	25	7	61	6	0
09105	Georgetown	1,201	60	0	546	51	366	58	117	3	0
09107	Gloucester	4,546	134	4	3,101	173	363	249	502	11	9
09116	Groveland	1	1	0	0	0	0	0	0	0	0
09119	Hamilton	395	37	1	17	56	85	32	163	2	2
09128	Haverhill	8,589	265	7	5,251	336	692	626	1,375	5	32
09144	Ipswich	1,379	21	3	740	96	108	134	275	1	1
09149	Lawrence	6,231	294	5	3,159	235	278	454	1,778	2	26
09163	Lynn	11,589	439	9	6,956	334	1,006	556	2,270	7	12
09164	Lynnfield	1,246	93	8	757	65	93	59	147	24	0
09166	Manchester	885	37	4	390	74	111	52	210	7	0
09168	Marblehead	2,570	43	1	937	120	508	537	417	2	5

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
09180	Merrimac	821	51	2	548	22	72	61	62	2	1
09181	Methuen	6,079	141	0	4,352	234	427	237	664	4	20
09184	Middleton	1,665	154	0	769	64	268	118	279	0	13
09196	Nahant	543	16	0	314	34	78	33	59	1	8
09205	Newbury	1,066	59	1	476	52	274	48	147	7	2
09206	Newburyport	26	23	0	0	0	0	0	0	0	0
09210	North Andover	9	9	0	0	0	0	0	0	0	0
09229	Peabody	7,711	180	8	4,891	307	391	727	1,176	20	11
09252	Rockport	163	18	1	10	56	9	0	66	2	1
09254	Rowley	537	39	0	324	15	33	54	68	2	2
09258	Salem	6,108	181	8	3,269	358	503	334	1,359	91	5
09259	Salisbury	19	14	0	0	2	2	0	1	0	0
09262	Saugus	4,197	162	2	2,282	191	331	551	604	5	69
09291	Swampscott	1,846	52	3	976	151	240	138	281	4	1
09298	Topsfield	2,265	98	2	565	47	1,359	48	142	1	3
09320	Wenham	550	12	2	297	31	61	50	97	0	0
09324	West Newbury	360	15	0	201	8	71	26	37	2	0
Essex County		90,044	3,090	104	49,130	3,869	11,743	6,006	15,193	242	664

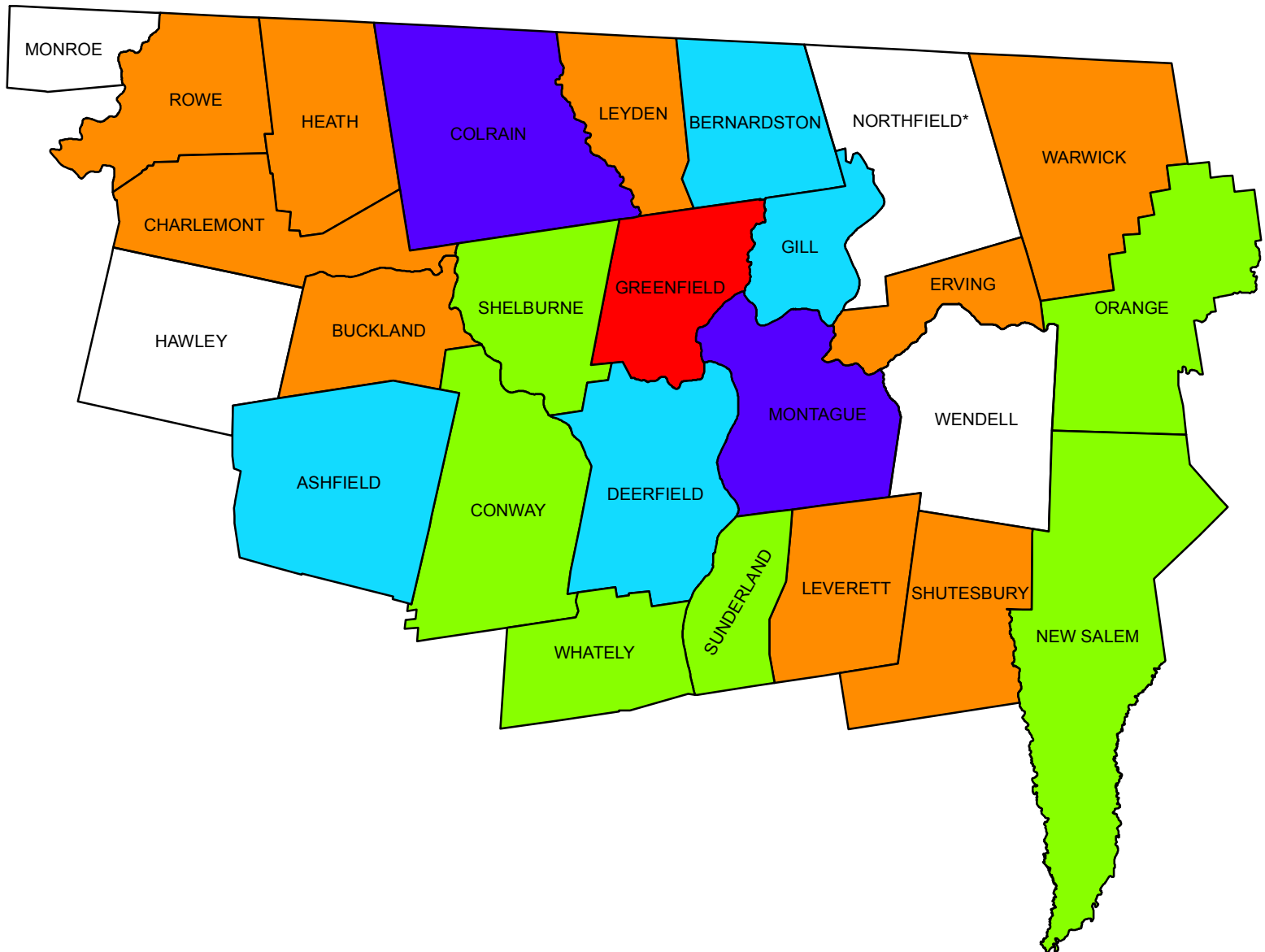
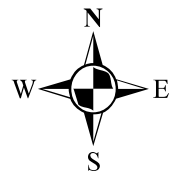
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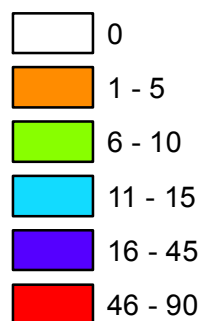
Franklin County

2012 Fire Data Analysis

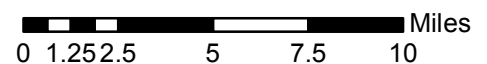
Franklin County Fires 2012



2012 Fires



*Non-reporting Department



MFIRS
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2012

Franklin County Fires in 2012

279 Total Fires — 128 Structures, 29 Motor Vehicles & 122 Outside or Other Fires

Franklin County ranked twelfth out of the fourteen Massachusetts counties in total fires. Franklin County fire departments reported 279 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 128 structure fires, 29 motor vehicle fires, 60 brush, tree or lawn fires, 33 outside rubbish fires, 15 special outside fires, and 14 unclassified fires caused three civilian injuries, one fire service injury and an estimated dollar loss of \$8.8 million. Franklin County's fires accounted for 1% of the 31,229 Massachusetts fires reported in 2012.

Twenty-eight (28) of the 29, or 96.6%, fire departments in Franklin County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2012.

0 Civilian Fire Deaths in Franklin County in 2012

There were no reported fire deaths in Franklin County in 2012.

Structure Fires Down

The total number of reported fire incidents increased by 44, or 19%, from the 279 reported in 2011. Reported structure fires decreased by 12 from the 140 reported during the previous year. Motor vehicle fires remained the same with 29 reported in both 2011 and 2012. Outside and other fires increased by 56 from the 66 reported the year before. The increase in outside fires was a statewide trend.

FRANKLIN COUNTY FIRES FROM 2008 TO 2012

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
Year	Fires	Fires	Fires	Fires	Arsons	Arsons	Arsons	Arsons
2008	306	160	32	114	14	1	1	12
2009	307	164	27	116	17	2	1	14
2010	412	193	43	176	30	8	1	21
2011	235	140	29	66	13	4	2	7
2012	279	128	29	122	18	6	1	11

Fire and Fire Death Rates

Franklin County had 3.9 fires per 1,000 population. That figure ranks Franklin County tenth in the state and below the state rate of 4.8 fires per 1,000 population. Franklin County had 0 fire deaths per 10,000 population ranking it tied for eleventh among Massachusetts counties and below the state rate of 0.06 fire deaths per 10,000 population.

Rowe Has Franklin County's Largest Loss Fire

- On August 4, 2012, at 3:37 p.m., the Rowe Fire Department was called to a fire caused by a lightning strike at a local elementary school. One firefighter was injured at this fire. Detectors were present but it was undetermined if they operated. There were no sprinklers. Damages from this fire were estimated to be \$7.8 million.

STRUCTURE FIRES

Reported Structure Fires Down

The 128 structure fires caused two civilian injuries, one fire service injury, and an estimated dollar loss of \$8.7 million. These incidents represented 46% of Franklin County's reported fires in 2012. The average estimated dollar loss per structure fire was \$68,114¹. The total number of reported structure fires decreased by 12, or 9%, from the 140 reported in 2011.

Arson Caused 5% of Structure Fires

The six structure arsons caused an estimated dollar loss of \$16,450. Arson was indicated as the cause of 5% of the structure fires and 0.2% of Franklin County's structure fire dollar loss. The six structure arsons accounted for 33% of the Franklin County arson fires reported in 2012. The total number of reported structure arsons increased by two, or 50%, from the four reported in 2011.

1/2 of Structure Arsons Occurred in Residences

Three (3), or 50%, of Franklin County's structure arsons occurred in residential properties. The other three arsons in 2012 occurred in special properties.

BUILDING FIRES

There were 125 building fires of different types in Franklin County in 2012. These 125 building fires accounted for 97.7% of all structure fires in Franklin County.

81% of Franklin Building Fires Occurred in People's Homes

One hundred and one (101), or 81%, of Franklin County's 125 building fires occurred in residential occupancies. Special properties had nine fires. Mercantile or business properties had five fires. Educational facilities, storage facilities and manufacturing or processing facilities each had three fires. One (1) fire occurred at an institutional facility in Franklin County in 2012.

RESIDENTIAL FIRES

Residential Building Fires Down

There were 101 reported residential building fires in Franklin County in 2012. These 101 fires are a decrease of 16, or 14%, from the 117 residential building fires reported in 2011.

1- & 2-Family Homes Accounted for Over 3/4 of Residential Building Fires

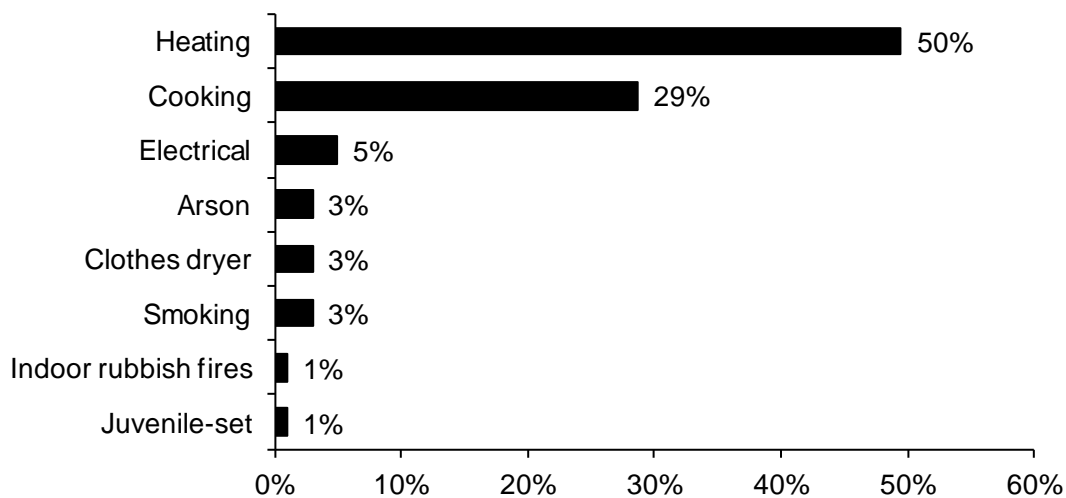
The peak fixed property uses for residential building fires were one- & two-family homes, accounting for 76% of the building fires in Franklin County; 20% occurred in apartments; 3% happened in rooming houses and 1% in dormitories.

¹ If you take out the single large loss fire in Rowe with \$7.8 million in damages, the average dollar loss for all Franklin County structure fires in 2012 would be \$7,233.

Heating Leading Cause of Residential Fires

Heating was the leading cause of residential fires in Franklin County in 2012. Fifty percent (50%) of the residential fires were caused by heating. Eighty-two percent (82%) of these heating fires involved chimneys. Franklin County was the only county where cooking was not the leading cause of residential fires in 2012. Unattended cooking and other unsafe cooking practices accounted for 29% of the fires in people's homes. Electrical problems caused 5% of these fires. Arson, clothes dryers and smoking each accounted for 3% of the residential building fires. Indoor rubbish fires and juvenile-set fires each caused 1% of the fires in people's homes in Franklin County in 2012.

2012 Leading Causes of Fires in Franklin County Homes



72% of Residential Building Fires Are Confined to Non-Combustible Containers²

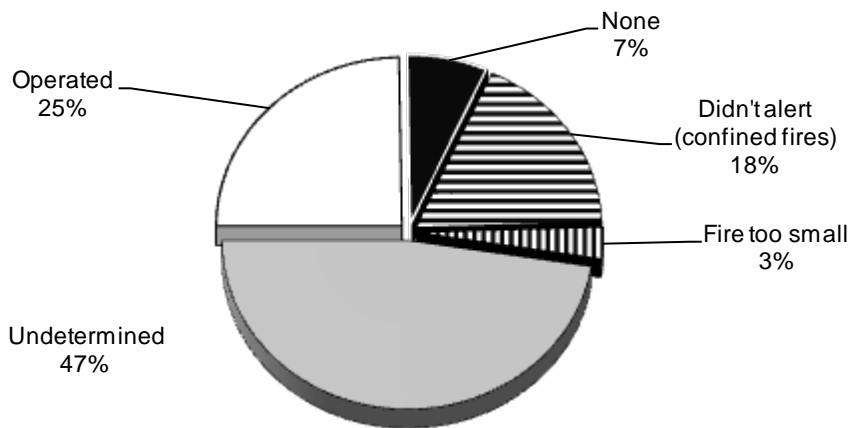
Seventy-three (73), or 72%, of these fires were confined to a non-combustible container. Forty (40), or 40%, of all residential building fires reported in 2012 were fires confined to a chimney or flue. Twenty-five (25) of the reported fires were cooking fires contained to a non-combustible container accounting for 25% of residential building fires. Seven (7), or 7%, were fires confined to a fuel burner or boiler malfunction. One (1), or 1%, of these fires was an indoor rubbish fire contained to a non-combustible container in Franklin County in 2012.

² 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.

Detectors Operation Undetermined in 47% of Fires

Smoke or heat detectors operated and alerted the occupants in 25, or 25%, of the residential building fires. In 18% of these fires³, the detectors did not alert the occupants. There were no reported fires where detectors were present but did not operate. In 7% 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 48 incidents, or 47%, of Franklin County's residential building fires.

Detector Status in Franklin County's Residential Structure Fires 2012



VACANT BUILDINGS

4% of Building Fires Occurred in Vacant Buildings

Franklin County reported five fires that occurred in buildings that were vacant, under construction or demolition. This represented 4% of the total 125 building fires reported to MFIRS in 2012. Four (4) fires occurred at vacant residences; and one occurred at a storage facility in Franklin County in 2012.

One (1) of the vacant building fires in Franklin County in 2012 was determined to be intentionally set. It occurred in a single-family home.

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

JUVENILE-SET FIRES

3 Juvenile-set Fires

There were three reported juvenile-set fires in Franklin County in 2012. The one structure fire, one brush fire and one special outside fire caused an estimated \$100 in damages.

ARSONS

18 Total Arsons — 6 Structure, 1 Motor Vehicle & 11 Other Arsons

Eighteen (18), or 6%, of Franklin County's 279 fires were intentionally set, or, for purposes of this analysis, arson. The six structure arsons, one motor vehicle arson and 11 outside and other arsons caused once civilian injury an estimated dollar loss of \$16,450.

All Arson Up

The number of arsons increased by five, or 38%, from the 13 reported in 2011. Structure arsons increased by two from six reported in 2011. Motor vehicle arsons decreased by one from two reported the previous year. Outside and other arsons increased by four from the seven reported in 2011.

ALL INCIDENTS

Rescue & EMS Calls Are 48% of All Reported Responses

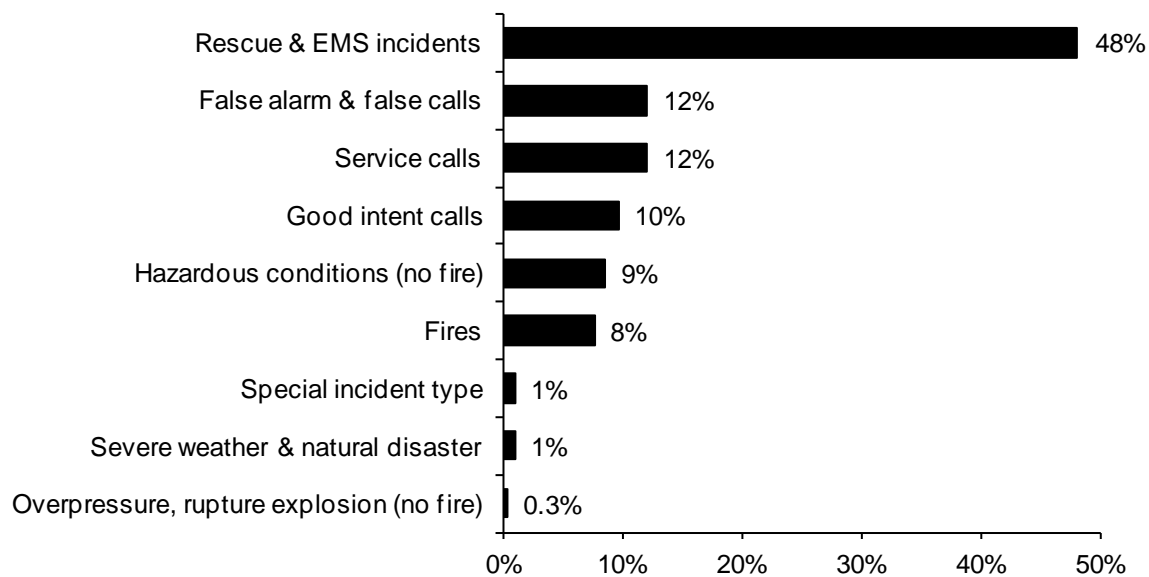
In 2012, Franklin County fire departments reported 5,585 responses⁴ to MFIRS. Of these 5,585 incidents, 5,158 non-fire calls were voluntarily reported.

Of these 5,158 non-fire calls, 2,685, or 48%, of all of the responses reported in 2012 were reported rescue and emergency medical services (EMS) calls; 687, or 12%, were reported false alarm or false calls; 662, or 12%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 535, or 10%, were reported good intent calls; 478 or 9%, were reported hazardous condition calls with no fire; 60, or 1%, were special incident type calls such as citizen complaints; 35, or 1%, were severe weather responses; and 16, or 0.3%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Four hundred and twenty-seven (427), or 8%, of the total incidents submitted by Franklin County fire departments were fires.

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

2012 Responses by Incident Type



Franklin County Fire Departments Gave Mutual Aid 381 Times

In 2012, Franklin County fire departments reported coming to the aid of other fire departments 381 times. Of these 381 responses, 148, or 39%, were for fires; 126, or 33%, were for rescue or EMS calls; 52, or 14%, were for service calls such as cover assignments; 31, or 8%, were for good intent calls; 11, or 3%, were for hazardous conditions calls with no fire; six, or 2%, were for false alarms or false calls; five, or 1%, were special incident types; and two, or 1%, were overpressure, rupture explosions with no fire.

Franklin County Received Mutual Aid in 301 Incidents

In 2012, Franklin County fire departments reported receiving aid from surrounding departments in 332 incidents. Of these 332 incidents, 262, or 79%, were rescue and emergency medical services calls; 47, or 14%, were for fires; seven, or 2%, were hazardous conditions calls with no fire; six, or 2%, were false alarm or false calls; four, or 2%, were service calls; another four, or 2%, were good intent calls; one, or 0.3%, was a special incident type; and another one, or 0.1%, was an overpressure, rupture explosion with no fire.

Franklin County**Population: 71,372****3.9 Fires/1,000 Population****Total Fires: 279 \$8,824,596**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	128	46%	\$8,718,596
Vehicle Fires	29	10%	78,200
Other Fires	122	44%	27,520

3 Civilian Injuries 1 Fire Service Injury

Building Fires: 125**Residential Structure Fires: 101****Residential Structure Fires Confined to Non-Combustible Containers: 73****Unconfined Residential Structure Fires: 28**

2 Civilian Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	77	76%	Operated	25	25%
Apartments	20	20%	Didn't operate	0	0%
Rooming houses	3	3%	None	7	7%
Dormitories	1	1%	Fire too small	3	3%
			Didn't Alert (confined)	18	18%
			Undetermined	48	47%

Area of Origin⁵	%	Heat Source	%	%Unconfined⁶
Chimney or flue	40%	Arcing	3%	11%
Kitchen	30%	Radiated heat from oper. eq.	3%	11%
Heating room or area	8%	Heat from oper. equipment	3%	11%
Laundry room	3%	Cigarette	2%	7%
		Hot or smoldering object	2%	7%

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

⁶ 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.

Item First Ignited⁷	%	Factor Contrib. to Ignit.	%	%Unconfined⁸
Film, residue (creosote)	40%	Too close to combustibles	4%	14%
Cooking materials	28%	Equipment unattended	3%	11%
Flamm. or combustible liquid	7%			
Structural member, framing	5%			
Electrical wire, cable insulation	3%			

Equipment⁹	%	Cause of Ignition	%	%Unconfined¹⁰
Chimney or flue	40%	Unintentional	16%	57%
Cooking equipment	26%	Failure of eq. or heat source	3%	11%
None	16%	Intentional	3%	11%
Boiler, furnace, cent. heat. unit	7%	Cause under investigation	3%	7%
		Undetermined	4%	11%

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

Alerted occupants	21%
Didn't alert occupants	25%
Undetermined	55%

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

⁸ 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.

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

¹⁰ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	33	20	4	9
February	27	13	1	13
March	30	13	1	16
April	55	18	2	35
May	16	8	4	4
June	16	7	1	8
July	16	7	4	5
August	18	7	6	5
September	13	6	1	6
October	15	7	3	8
November	25	12	1	12
December	15	10	1	4

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	38	18	7	13
Monday	36	15	4	17
Tuesday	36	20	3	13
Wednesday	44	17	1	26
Thursday	34	13	5	16
Friday	34	14	4	16
Saturday	57	31	5	21

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	21	11	2	8
04:01 - 08:00	25	14	4	7
08:01 - 12:00	47	22	5	20
12:01 - 16:00	60	21	7	32
16:01 - 20:00	87	36	10	41
20:01 - 00:00	39	24	1	14

Motor Vehicle Fires

Total: 29

Automobiles: 21 (72%)

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

Arson Fires

Total Arsons: 18

Dollar loss: \$16,450

0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	6	5%	33%	\$16,450
Vehicle Arsons	1	3%	6%	0
Other Arsons	11	9%	61%	0

0.08 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.15 Other arsons/1,000 population

1 Civilian Injury

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
20:01 - 00:00	3	50%	12:01 - 16:00	1	100%
00:01 - 04:00	2	33%			
16:01 - 20:00	1	17%			

Other Arsons	#	%
20:01 - 00:00	2	36%
00:01 - 04:00	2	18%
04:01 - 08:00	2	18%
16:01 - 20:00	2	18%

Peak Fixed Property Uses for Structure Arsons	#	%
1- or 2-Family homes	2	50%

Ashfield**Population: 1,737**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	2	2	0	0	0	0	0	0
2010	3	3	0	0	0	0	0	0
2011	1	0	1	0	0	0	0	0
2012	14	1	1	12	0	0	0	0

Bernardston**Population: 2,129**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	22	7	1	14	0	0	0	0
2009	16	4	3	9	2	0	0	2
2010	15	6	1	8	2	0	0	2
2011	9	2	5	2	1	0	0	1
2012	13	6	0	7	1	0	0	1

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

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	Fire Department in Good Standing, Certified No Reportable Fires							
2010	Fire Department in Good Standing, Certified No Reportable Fires							
2011	1	1	0	0	0	0	0	0
2012	2	1	0	1	0	0	0	0

Charlemont**Population: 1,266**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	9	7	0	2	0	0	0	0
2009	6	3	0	3	2	0	0	2
2010	6	4	0	2	0	0	0	0
2011	1	1	0	0	0	0	0	0
2012	1	1	0	0	0	0	0	0

Colrain					Population: 1,671			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Non-Reporting Community							
2009	9	5	1	3	0	0	0	0
2010	23	12	2	9	3	0	0	3
2011	7	3	1	3	0	0	0	0
2012	26	12	3	11	0	0	0	0

Conway					Population: 1,897			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	9	5	0	4	0	0	0	0
2009	12	8	0	4	0	0	0	0
2010	12	7	0	5	2	1	0	1
2011	4	1	2	1	0	0	0	0
2012	7	4	0	3	1	1	0	0

DEERFIELD FIRE DISTRICTS					Population: 5,125			
Deerfield					Est. Pop. Protected: 2,819			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	7	2	0	5	0	0	0	0
2009	10	2	1	7	1	0	0	1
2010	5	1	0	4	0	0	0	0
2011	Non-Reporting Community							
2012	7	2	1	4	0	0	0	0

South Deerfield					Est. Pop. Protected: 2,306			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	17	10	4	3	0	0	0	0
2009	12	5	1	6	0	0	0	0
2010	17	7	6	4	0	0	0	0
2011	12	5	3	4	0	0	0	0
2012	6	2	1	3	0	0	0	0

Erving

Population: 1,800

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	6	1	1	4	0	0	0	0
2009	4	3	1	0	0	0	0	0
2010	1	1	0	0	1	1	0	0
2011	2	2	0	0	0	0	0	0
2012	2	1	0	1	0	0	0	0

Gill

Population: 1,500

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	8	5	0	3	0	0	0	0
2009	6	3	0	3	2	0	0	2
2010	10	5	1	4	1	0	0	1
2011	5	4	0	1	1	1	0	0
2012	15	2	2	11	1	0	0	1

Greenfield

Population: 187,456

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	116	65	9	42	9	1	0	2
2009	100	62	7	31	7	2	0	5
2010	98	43	13	42	9	2	0	7
2011	56	29	5	22	2	0	1	4
2012	88	44	10	34	4	1	0	3

Hawley

Population: 337[illegible]

Orange**Population: 7,839**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	5	4	0	1	0	0	0	0
2009	32	14	5	13	0	0	0	0
2010	48	25	3	20	0	0	0	0
2011	33	22	4	7	1	0	0	1
2012	9	5	1	3	1	0	0	1

Rowe**Population: 393**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	Fire Department in Good Standing, Certified No Reportable Fires							
2010	Non-Reporting Community							
2011	1	1	0	0	0	0	0	0
2012	4	3	1	0	0	0	0	0

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

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	2	1	0	1	0	0	0	0
2010	5	4	0	1	0	0	0	0
2011	6	1	2	3	0	0	0	0
2012	4	1	2	1	0	0	0	0

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

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	6	4	0	2	1	0	0	1
2009	4	1	1	2	0	0	0	0
2010	7	5	1	1	0	0	0	0
2011	4	3	0	1	0	0	0	0
2012	2	2	0	0	0	0	0	0

Whately					Population: 1,496			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	11	3	3	5	2	0	0	2
2009	5	2	2	1	0	0	0	0
2010	10	1	2	7	2	0	1	1
2011	3	1	1	1	0	0	0	0
2012	8	0	1	7	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	70	17	3	12	8	15	4	8	3	0
11029	Bernardston	240	25	0	165	18	15	8	8	0	1
11047	Buckland	30	4	1	7	13	2	0	3	0	0
11053	Charlemont	27	3	0	9	5	0	1	7	1	1
11066	Colrain	205	33	0	118	19	23	2	7	1	2
11068	Conway	46	10	0	5	20	5	0	5	1	0
11975	Deerfield	73	9	0	10	6	7	0	38	1	2
11091	Erving	2	2	0	0	0	0	0	0	0	0
11106	Gill	102	24	0	11	4	21	5	26	6	5
11114	Greenfield	2,081	95	1	893	208	233	335	309	0	7
11129	Hawley	21	4	0	10	2	2	0	3	0	0
11130	Heath	45	8	0	26	2	4	0	4	1	0
11154	Leverett	8	7	0	1	0	0	0		0	0
11156	Leyden	26	6	0	2	7	1	4	2	4	0
11192	Montague Center	175	14	1	97	18	25	10	9	1	0

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

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
11204	New Salem	98	17	1	52	7	5	3	6	4	3
11223	Orange	583	22	3	382	14	97	18	20	0	27
11253	Rowe	62	5	0	38	2	1	6	5	2	3
11990	Shelburne Ctr	145	15	0	68	22	5	15	18	2	0
11989	Shelburne Falls	67	7	1	7	13	3	9	26	1	0
11272	Shutesbury	14	13	0	0	0	0	0	0	0	0
11976	South Deerfield	133	16	1	10	30	8	9	57	1	1
11289	Sunderland	360	14	0	258	15	7	34	32	0	0
11984	Turners Falls	949	45	4	496	45	179	72	94	6	8
11312	Warwick	2	2	0	0	0	0	0	0	0	0
11337	Whately	21	10	0	8	0	3	0	0	0	0
Total	Franklin County	5,585	427	16	2,685	478	661	535	687	35	60

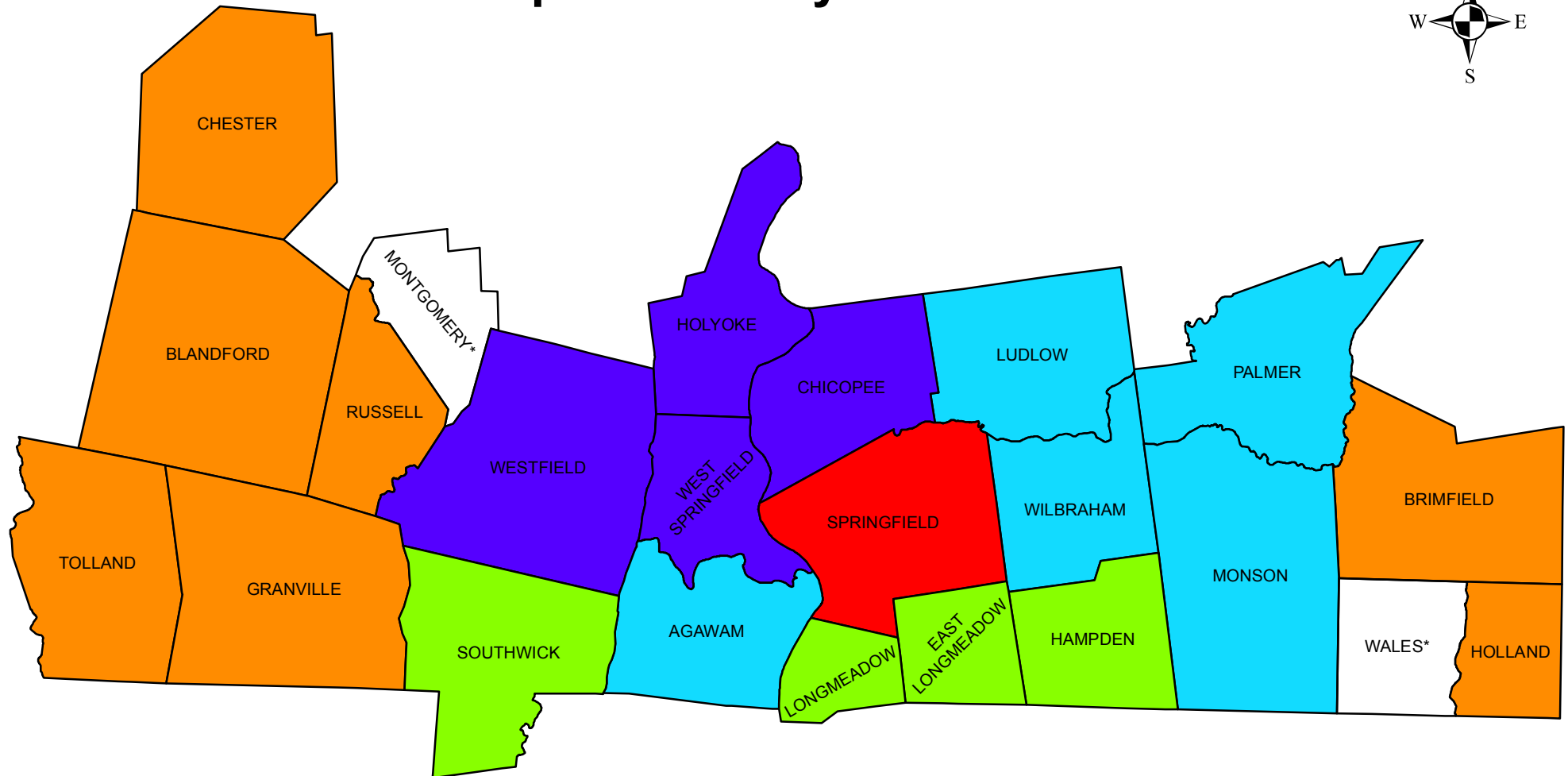
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Hampden County

2012 Fire Data Analysis

Hampden County Fires 2012

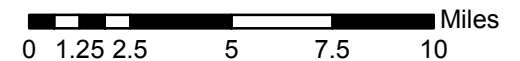


2012 Fires



MFIRS
Massachusetts Fire Incident Reporting System

*Non-reporting Department



Massachusetts Fire Incident Reporting System 2012

Hampden County Fires in 2012

2,181 Total Fires — 1,102 Structures, 220 Vehicles & 859 Other Fires

Hampden County ranked seventh out of the fourteen Massachusetts counties in total reported fires. Hampden County fire departments reported 2,181 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 1,102 structure fires, 220 motor vehicle fires, 449 brush, tree or lawn fires, 273 outside rubbish fires, 51 special outside fires, two cultivated vegetation or crop fires, and 84 other fires caused three civilian fire deaths, 31 civilian injuries, 65 fire service injuries and an estimated dollar loss of \$14.5 million. Hampden County's 2,181 fires accounted for 7% of the 31,229 fire incidents reported to MFIRS in 2012.

Twenty-three (23), or 92%, 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 2012.

Structure & MV Fires Down

The total number of reported fire incidents increased by 87 from the 2,094 reported in 2011. Reported structure fires decreased by 113 from the 1,215 reported during the previous year. Motor vehicle fires decreased by 73 from the 293 reported during 2011. Outside and other fires increased by 273 from the 586 reported the year before. The significant rise in outside fires was a statewide trend in 2012.

HAMPDEN COUNTY FIRES FROM 2008 TO 2012

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2,489	1,398	270	821	97	33	15	49
2009	2,051	1,158	255	638	70	16	12	42
2010	2,343	1,187	289	867	76	17	12	47
2011	2,094	1,215	293	586	50	9	12	29
2012	2,181	1,102	220	859	67	24	10	33

Fire and Fire Death Rates

Hampden County had 4.7 fires per 1,000 population. That figure ranks Hampden County fourth in the state and just below the state rate of 4.8 fires per 1,000 population. Hampden County also had 0.06 fire deaths per 10,000 population ranking it tied for fifth among Massachusetts counties as tied with the state rate of 0.06 fire deaths per 10,000 population.

3 Residents Died in 3 Hampden County Fires

In 2012, Hampden County had three fatal fires that killed three people.

- On January 30, 2012, at 8:33 a.m., the Holyoke Fire Department was called to a fatal smoking fire in a senior living apartment building. The 51-year old female victim was lighting a cigarette when she dropped the match and ignited her clothing. She was transported to a local hospital where she succumbed to her injuries. There were no

other injuries at this fire. The fire was confined to the victim, a couch and the room's carpet. Detectors were present and alerted the other occupants of the building. There were no sprinklers. Damages from this fire were estimated to be \$2,000.

- On May 21, 2012, at 3:58 a.m., the Longmeadow Fire Department was called to a fatal arson fire in a single-family home. The victim of a homicide, a 67-year old woman, set herself on fire in a successful attempt of self-immolation. She was transported to a local hospital where she succumbed to her injuries. No one else was injured at this fire. Smoke detectors were present and operated. Damages from this fire were estimated to be \$66,980.
- On November 19, 2012, at 12:32 a.m., the Westfield Fire Department responded to a fatal heating fire at a single-family home. The victim, a 92-year old man, was asleep at the time of the fire and was overcome by the heat and smoke. He was transported to a local hospital where he succumbed to his injuries. No one else was injured at this fire. Detectors were not present, and the building was not sprinklered. Damages from this fire were estimated to be \$228,000.

Holyoke Had Largest Loss Fire in Hampden County

- On March 18, 2012, at 3:44 a.m., the Holyoke Fire Department was dispatched to a fire of undetermined cause in a warehouse. No one was injured at this fire. It was undetermined if detectors were present and the building was not sprinklered. Damages from this fire were estimated to be \$1.05 million.

STRUCTURE FIRES

Reported Structure Fires Down

The 1,102 structure fires caused all three civilian deaths, 27 civilian injuries, 61 fire service injuries and an estimated dollar loss of \$13.3 million. These incidents represented 51% of Hampden County's reported fires in 2012. The average estimated dollar loss per structure fire was \$12,097. The total number of reported structure fires decreased by 113, or 9%, from the 1,215 reported in 2011.

Arson Caused 2% of Structure Fires

The 24 structure arsons caused one civilian death, two civilian injuries and an estimated dollar loss of \$572,600. Arson was indicated as the cause of 2% of the structure fires and 4% of Hampden County's structure fire dollar loss. The 24 structure arsons accounted for 36% of the Hampden County arson fires reported in 2012. The total number of reported structure arsons increased by 15, or 167%, from the nine reported in 2011.

79% of Structure Arsons Occurred in Residences

Seventy-nine percent (79%) of Hampden County's 24 structure arsons occurred in residential occupancies. Eight percent (8%) each occurred in educational facilities and storage facilities; and 4% happened in public assembly properties.

BUILDING FIRES

There were 1,101 building fires of different types in Hampden County in 2012. These 1,101 building fires accounted for 99.9% of all structure fires in Hampden County.

88% of Hampden Building Fires Occurred in People's Homes

Nine hundred and forty-three (943), or 84%, of Hampden County's 1,101 building fires occurred in residential occupancies. Mercantile and business properties experienced 35 fires. Thirty (30) building fires took place on educational properties. Another 30 fires took place in public assembly properties, including restaurants and churches. Twenty-nine (29) fires took place in storage properties. Hospitals, prisons, and other institutional buildings also experienced 17 fires. Special properties had nine fires. Four (4) fires took place in manufacturing and processing facilities. Four (4) fires occurred in industrial, utility, defense, agricultural or mining facilities in Hampden County in 2012.

RESIDENTIAL FIRES

Residential Building Fires Down

There were 943 reported residential building fires in Hampden County in 2012. These 943 fires are a decrease of 69, or 7%, from the 1,012 residential building fires reported in 2011.

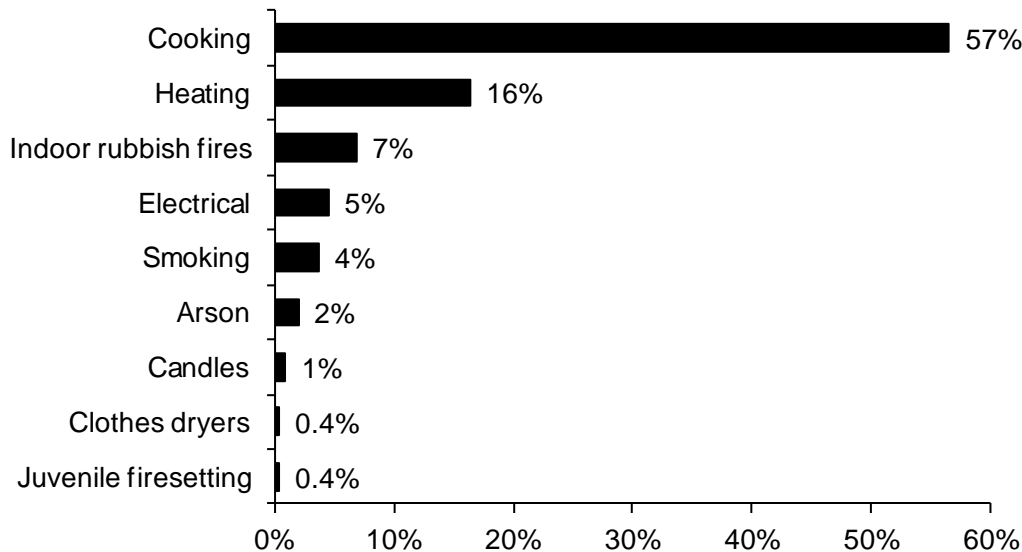
1- & 2-Family Homes Accounted for Over 1/2 of Residential Building Fires

The peak fixed property uses for residential building fires were 1- & 2-family homes, accounting for over half, or 53%, of the building fires in Hampden County; 41% occurred in apartments; 2% occurred in rooming houses; 1% happened in dormitories; 1% happened in residential board and care facilities; and another 1% happened in hotels or motels. Ten (10), or 1%, of the residential building fires in Hampden County occurred in unclassified residential buildings.

Cooking Causes 57% of Residential Fires

The leading cause of residential building fires in Hampden County was unattended cooking and other unsafe cooking practices, accounting for 57% of these fires. Heating was the second leading cause of fires in people's homes, accounting for 16% of these fires. Indoor rubbish fires caused 7%. Electrical problems caused 5% and smoking started 4% of these fires. Arson was responsible for 2% and candles caused 1% of these residential fires. Clothes dryers and juvenile-set fires each caused less than 1% of the fires in Hampden County in 2012.

2012 Leading Causes of Fires in Hampden County Homes



74% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Seven hundred and one (701), or 74% of all residential building fires, were reported as confined to non-combustible containers in 2012. Four hundred and ninety-five (495) of the reported fires were cooking fires contained to a non-combustible container, accounting for 52% of residential building fires. Ninety-nine (99), or 14%, were fires confined to a fuel burner or boiler malfunction. Sixty-four (64), or 7%, of these fires were contained rubbish fires. Forty-one (41), or 4%, of all residential building fires reported in 2012 were fires confined to a chimney. Two (2), or less than 1% of confined fires, were confined to commercial compactors.

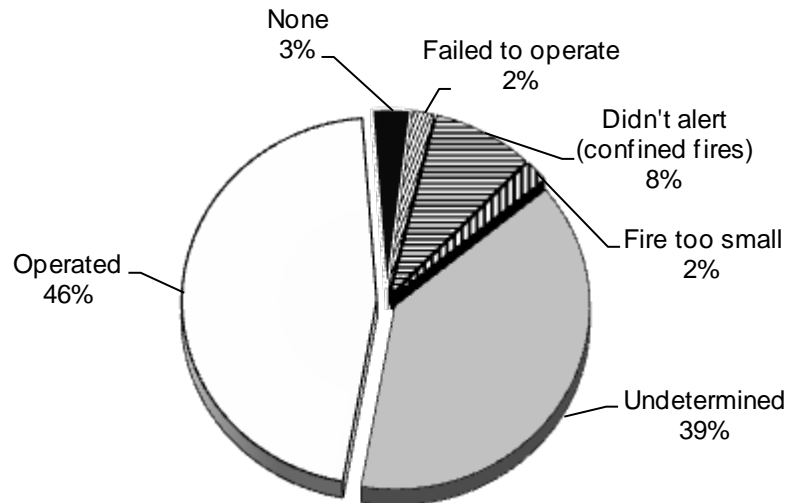
Detectors Alerted Occupants in 46% of Fires

Smoke or heat detectors operated and alerted the occupants in 434, or 46%, of the residential building fires. In 8% of these fires², 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 2% of the residential fires. Smoke detector performance was undetermined in 365 incidents, or 39%, of Hampden County's residential building fires.

¹ 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.

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

Detector Status in Hampden County's Residential Structure Fires 2012



Almost 1/2 of Failed Detectors Had Dead, Missing or Disconnected Batteries

Of the 17 fires where smoke detectors were present but failed to operate, five, or 29%, failed because the batteries were dead. In three incidents, or 18%, the detectors failed because batteries were either missing or disconnected. In one fire, or 5%, the detector failed because of a power failure, shutoff or disconnect. Eight (8), or 47%, of the detectors failed for unclassified or undetermined reasons.

VACANT BUILDINGS

3% of Building Fires Occurred in Vacant Buildings

Hampden County reported 31 fires that occurred in buildings that were vacant, under construction or demolition. This represented 3% of the total 1,101 building fires reported to MFIRS in 2012. Twenty (20) fires occurred in vacant residential properties. Eight (8) fires in storage facilities were reported as vacant building fires. Industrial facilities had two of these fires and mercantile and business properties accounted for one vacant building fire in Hampden County in 2012.

Four (4), or 13%, of the vacant building fires in Hampden County in 2012 were determined to be intentionally set.

JUVENILE-SET FIRES

11 Juvenile-set Fires Caused 1 Civilian Injury

There were 11 reported juvenile-set fires in Hampden County in 2012. The four structure fires, five brush fires, one special outside fire, and one unclassified fire caused \$145,100 in estimated damages.

ARSONS

67 Total Arsons — 24 Structures, 10 Vehicles & 33 Other Arsons

Sixty-seven (67), or 3%, of Hampden County's 2,181 fires were considered intentionally set, or, for purposes of this analysis, arson. The 24 structure arsons, 10 motor vehicle arsons and 33 outside and other arsons caused one civilian death, four civilian injuries and an estimated dollar loss of \$633,185.

All Arson Up

The total number of reported arson fires increased by 17 from the 50 reported in 2012. Structure arsons increased by 15 from the nine reported in 2012. Motor vehicle arsons decreased by two from 12 reported in 2011. Outside and other fires increased by four from the 29 reported the year before.

ALL INCIDENTS

Rescue & EMS Calls Are 56% of All Reported Responses

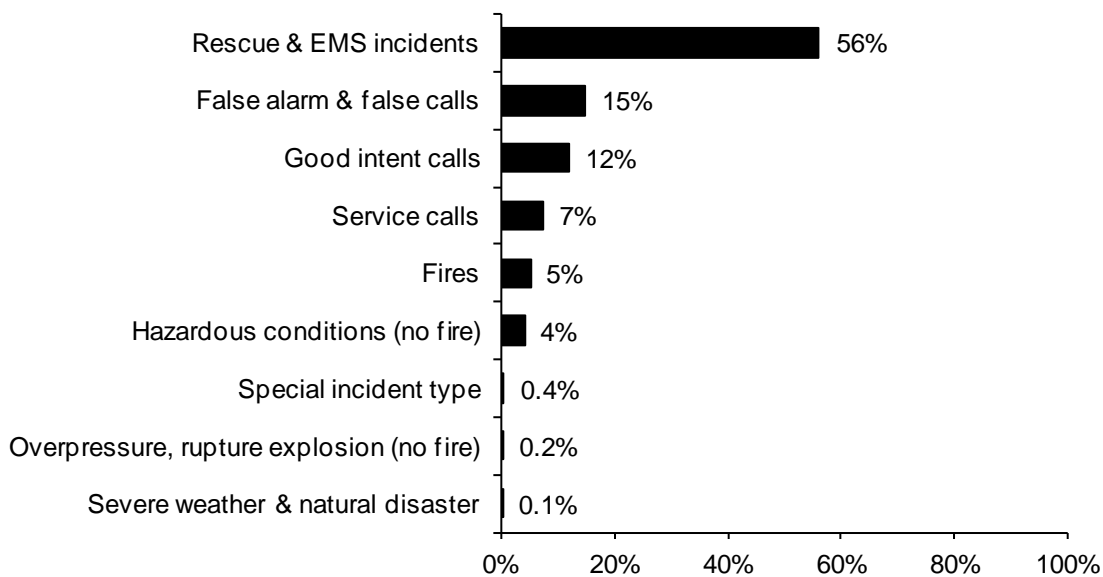
In 2012, fire departments in Hampden County reported 44,824 responses³ to MFIRS. Of these 44,824 incidents, 43,007 non-fire calls were voluntarily reported.

Of these 43,007 non-fire calls 25,134, or 56% of all reported responses in 2012, were reported rescue and emergency medical services (EMS) calls; 6,592, or 15%, were reported false alarm or false calls; 5,311, or 12%, were reported good intent calls; 3,355, or 7%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 1,817, or 4%, were reported hazardous condition calls with no fire; 193, or 0.4%, were special incident type calls such as citizen complaints; 80, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 48, or 0.1%, were severe weather responses.

Two thousand two hundred and ninety-four (2,294), or 5%, of the total responses submitted by Hampden County fire departments were fires.

³ These figures include responses in which Hampden County fire departments gave mutual aid to other fire departments.

2012 Responses by Incident Type



Hampden County Fire Departments Gave Mutual Aid 661 Times

In 2012, Hampden County fire departments reported coming to the aid of other fire departments 661 times. Of these 661 responses, 359, or 54%, were for rescue or EMS calls; 106, or 16%, were for fires; 94, or 14%, were for service calls such as cover assignments; 52, or 8%, were for good intent calls; 32, or 5%, were for hazardous conditions calls with no fire; 12, or 2%, were for false alarms or false calls; three, or less than 1%, were overpressure, rupture explosions with no fire calls; and three, or less than 1%, were special incident types.

Hampden County Received Mutual Aid in 926 Incidents

In 2012, Hampden County fire departments reported receiving aid from surrounding departments in 926 incidents. Of these 926 incidents, 764, or 83%, were rescue and emergency medical services calls; 76, or 8%, were for fires; 25, or 3%, were good intent calls; 22, or 2%, were false alarms or false calls; 19, or 2%, were service calls; 17, or 2%, were hazardous conditions calls with no fire; one, or less than 1%, was a severe weather call; one, or less than 1%, was an overpressure, rupture explosion with no fire call; and one, or less than 1%, was a special incident type.

Hampden County**Population: 463,490****4.7 Fires/1,000 Population**

Total Fires: 2,181 \$14,529,379

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	1,102	51%	\$13,330,546
Vehicle Fires	220	10%	1,052,702
Other Fires	859	39%	146,131

3 Fatal Fires 1.38 Civilian Deaths/1,000 Fires
 3 Civilian Deaths 0.06 Civilian Deaths/10,000 Population
 45==31 Civilian Injuries 65 Fire Service Injuries

Building Fires: 1,101**Residential Structure Fires: 943****Residential Structure Fires Confined to Non-Combustible Containers: 701****Unconfined Residential Structure Fires: 242**

3 Civilian Deaths 24 Civilian Injuries 54 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	502	53%	Operated	434	46%
Apartments	391	41%	Didn't operate	17	2%
Rooming houses	15	2%	None	30	3%
Hotels or motels	10	1%	Fire too small	18	2%
Dormitories	8	1%	Didn't alert (confined)	79	8%
Residential board & care	7	1%	Undetermined	365	39%

Area of Origin⁴	%	Heat Source	%	% Unconfined⁵
Kitchen	58%	Heat from operating equip.	4%	14%
Heating room or area	11%	Arcing	2%	8%
Chimney, flue	4%	Rad., cond. heat/oper. eq.	2%	7%
Bedroom	2%	Hot or smoldering object	2%	6%
Exterior balcony/unencl. porch	2%	Open flame or smok. mat.	1%	5%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignit.	%	%Unconfined⁷
Food, cooking materials	55%	Abandoned materials	2%	9%
Flammable or combust. liquid	10%	Equipment unattended	1%	5%
Rubbish, trash, waste	8%	Too close to combustibles	1%	5%
Film, residue (creosote)	4%	Misuse of materials or prod.	1%	5%
Structural member, framing	2%	Unspecified short circuit arc	1%	5%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	56%	Unintentional	13%	53%
None	16%	Failure of eq./heat source	3%	11%
Boiler, furnace, cent. heat unit	11%	Intentional	2%	7%
Chimney or flue	4%	Act of Nature	0%	0%
Electrical wiring, other	1%	Undetermined	1%	4%
		Cause under investigation	5%	21%

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

Alerted occupants	49%
Didn't alert occupants	11%
Undetermined	40%

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

⁷ 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.

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

⁹These 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	153	97	20	36
February	186	80	24	82
March	217	100	20	97
April	294	93	21	180
May	172	96	14	62
June	161	84	16	61
July	245	94	20	131
August	140	77	17	46
September	121	72	14	35
October	135	86	19	30
November	190	106	17	67
December	167	117	18	32

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	395	202	30	163
Monday	316	162	28	126
Tuesday	287	136	38	113
Wednesday	287	146	29	112
Thursday	306	151	29	126
Friday	280	139	37	104
Saturday	310	166	29	115

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 – 04:00	204	101	32	71
04:01 – 08:00	150	87	21	42
08:01 – 12:00	321	186	24	111
12:01 – 16:00	587	262	54	271
16:01 – 20:00	571	283	50	238
20:01 – 00:00	348	183	39	126

Motor Vehicle Fires

Total: 220

Automobiles: 177 (80%)

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

Arson Fires

Total Arsons: 67

Dollar loss: \$633,185

0.14 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	24	2%	36%	\$572,600
Vehicle Arsons	10	5%	15%	56,050
Other Arsons	33	4%	49%	4,535

0.05 Structure arsons/1,000 population

0.02 Vehicle arsons/1,000 population

0.07 Other arsons/1,000 population

1 Civilian Death

4 Civilian Injuries

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	7	29%	16:01 - 20:00	4	40%
00:01 - 04:00	6	25%	00:01 - 04:00	2	20%
08:01 - 12:00	5	21%	20:01 - 00:00	2	20%

Other Arsons	#	%
00:01 - 04:00	9	27%
12:00 - 16:00	9	27%
20:01 - 00:00	6	18%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	12	50%
Apartment buildings	7	29%

Agawam **Population: 28,438**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	100	56	13	31	4	0	1	3
2009	76	36	14	26	2	0	2	0
2010	94	38	13	43	6	2	0	4
2011	73	33	18	22	2	0	1	1
2012	63	33	2	28	1	0	1	0

Blandford **Population: 1,233**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	7	3	1	3	0	0	0	0
2009	9	4	3	2	0	0	0	0
2010	7	3	3	1	0	0	0	0
2011	4	0	2	2	0	0	0	0
2012	8	0	2	6	1	0	0	1

Brimfield **Population: 3,609**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	6	3	2	1	0	0	0	0
2010	26	11	4	11	0	0	0	0
2011	15	7	2	6	0	0	0	0
2012	5	1	1	3	0	0	0	0

Chester **Population: 1,337**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	12	1	1	10	0	0	0	0
2009	2	2	0	0	1	1	0	0
2010	11	6	0	5	0	0	0	0
2011	2	1	0	1	0	0	0	0
2012	4	3	0	1	0	0	0	0

Chicopee **Population: 55,298**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	244	134	33	77	20	10	0	10
2009	224	131	26	67	11	4	1	6
2010	246	121	24	101	17	5	2	10
2011	252	120	44	88	11	2	2	7
2012	228	104	24	100	8	2	3	3

East Longmeadow **Population: 15,720**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	43	18	1	24	1	1	0	0
2009	28	10	6	12	1	0	0	1
2010	37	12	2	23	0	0	0	0
2011	38	24	1	13	0	0	0	0
2012	31	11	2	18	2	0	1	1

Granville **Population: 1,566**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Non-Reporting Community							
2009	Non-Reporting Community							
2010	Non-Reporting Community							
2011	9	7	1	1	0	0	0	0
2012	8	3	0	5	0	0	0	0

Hampden **Population: 5,139**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	4	3	1	0	1	1	0	0
2010	35	20	5	10	2	0	2	0
2011	25	23	0	2	0	0	0	0
2012	28	24	1	3	0	0	0	0

Holland**Population: 2,481**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	23	6	1	16	5	0	0	5
2009	10	3	0	7	3	0	0	3
2010	17	3	1	13	0	0	0	0
2011	9	4	2	3	0	0	0	0
2012	6	3	2	1	0	0	0	0

Holyoke**Population: 39,880**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	330	196	29	105	17	3	3	11
2009	244	147	24	73	11	1	1	9
2010	262	123	38	101	10	4	1	5
2011	200	106	38	56	11	3	2	6
2012	201	105	25	71	11	3	0	8

Longmeadow**Population: 15,784**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	42	18	0	24	4	0	0	4
2009	42	16	6	20	1	0	0	1
2011	42	18	4	20	4	0	0	4
2012	34	13	3	18	1	1	0	0

Ludlow**Population: 21,103**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	64	38	12	14	1	0	2	2
2009	53	25	11	17	3	0	0	3
2010	76	31	13	3	2	1	0	3
2011	68	43	10	15	3	0	1	2
2012	77	43	6	28	7	3	1	3

Monson**Population: 8,560**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	31	18	3	10	1	0	0	1
2009	37	16	5	16	0	0	0	0
2010	49	23	7	19	2	1	1	0
2011	63	21	6	36	1	0	0	1
2012	65	14	5	46	0	0	0	0

Montgomery**Population: 838**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	6	0	3	3	2	0	1	1
2010	4	1	1	2	0	0	0	0
2011	Fire Department in Good Standing, Certified No Reportable Fires							
2012	Non-Reporting Community							

Town of Palmer Fire Districts**Population: 12,140****Palmer District # 1****Est. Pop. Protected: 5,584**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	61	41	9	11	1	1	0	0
2009	44	29	5	10	1	1	0	0
2010	40	15	6	19	0	0	0	0
2011	37	26	6	5	1	0	0	1
2012	53	22	4	27	6	2	1	3

Bondsville**Est. Pop. Protected: 2,792**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	12	1	2	9	0	0	0	0
2009	15	2	2	11	5	0	0	5
2010	7	0	0	7	0	0	0	0
2011	6	3	0	3	0	0	0	0
2012	5	3	1	1	0	0	0	0

Three Rivers**Est. Pop. Protected: 3,763**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	12	7	0	5	0	0	0	0
2009	5	2	1	2	0	0	0	0
2010	10	7	1	2	0	0	0	0
2011	4	2	1	1	0	0	0	0
2012	8	1	0	7	0	0	0	0

Russell**Population: 1,775**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	14	8	3	3	0	0	0	0
2009	9	1	2	6	0	0	0	0
2010	19	9	3	7	0	0	0	0
2011	8	6	0	2	0	0	0	0
2012	9	2	2	5	0	0	0	0

Southwick**Population: 9,502**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	51	29	4	18	2	1	1	0
2009	21	11	1	9	1	0	0	1
2010	50	28	4	18	4	0	1	3
2011	35	18	5	12	4	0	1	3
2012	49	18	8	23	3	1	1	1

Springfield**Population: 153,060**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1,138	687	104	347	24	13	6	5
2009	960	583	109	268	16	7	6	3
2010	1,053	613	108	332	10	2	3	5
2011	961	635	105	221	9	4	3	2
2012	1,004	548	98	358	19	9	2	8

Tolland**Population: 485**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	3	3	0	0	0	0	0	0
2009	5	0	1	4	0	0	0	0
2010	8	4	1	3	0	0	0	0
2011	2	1	0	1	0	0	0	0
2012	1	0	0	1	0	0	0	0

Wales**Population: 1,838**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2	2	0	0	0	0	0	0
2009	3	0	0	3	0	0	0	0
2010	1	0	1	0	0	0	0	0
2011	Fire Department in Good Standing, Certified No Reportable Fires							
2012	Non-Reporting Community							

West Springfield**Population: 28,391**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	120	46	27	47	7	0	0	7
2009	65	22	13	30	4	0	0	4
2010	74	28	17	29	2	1	0	1
2011	74	24	23	27	2	0	1	1
2012	104	47	16	41	2	1	0	1

Westfield**Population: 41,094**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	135	60	20	55	2	1	1	0
2009	123	72	17	34	2	1	1	0
2010	123	52	23	15	4	1	0	3
2011	125	69	20	36	1	0	0	1
2012	144	82	16	46	3	1	0	2

Wilbraham					Population: 14,219			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	39	21	8	10	1	0	0	1
2009	46	32	3	11	2	0	0	2
2010	32	10	7	15	4	0	2	2
2011	41	23	5	13	1	0	1	0
2012	51	22	2	27	3	1	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
13005	Agawam	2,236	63	1	1,359	78	344	166	215	2	8
13033	Blandford	79	9	0	49	4	6	0	5	0	6
13987	Bondsville	65	13	0	4	13	18	7	8	2	0
13043	Brimfield	307	18	0	185	12	19	23	44	5	1
13059	Chester	73	9	0	51	2	5	3	2	0	1
13061	Chicopee	4,553	231	13	2,320	176	618	501	658	1	35
13085	East Longmeadow	503	32	0	9	78	73	68	240	2	1
13112	Granville	196	9	0	134	12	22	9	8	2	0
13120	Hampden	96	32	0	2	10	18	7	26	0	1
13135	Holland	175	13	0	117	18	18	1	8	0	0
13137	Holyoke	5,537	202	4	3,607	125	225	291	1,039	1	43
13159	Longmeadow	2,170	34	4	1,408	99	224	100	295	4	2
13161	Ludlow	773	81	4	210	83	79	120	168	0	28
13191	Monson	970	76	1	721	50	36	27	33	19	7
13986	Palmer #1	403	53	0	17	89	100	73	69	0	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
13256	Russell	105	16	0	61	7	4		17	0	0
13279	Southwick	296	54	0	27	56	47	38	69	3	2
13281	Springfield	15,087	1,010	45	7,123	537	688	3,170	2,490	2	22
13988	Three Rivers	124	21	1	4	9	48	15	26	0	0
13297	Tolland	69	8	0	29	20	3	3	5	0	1
13325	West Springfield	5,847	105	2	4,764	142	213	208	403	0	10
13329	Westfield	2,749	150	4	1,235	128	341	329	541	3	18
13339	Wilbraham	2,411	55	1	1,698	69	206	152	223	2	5
	Hampden County	44,824	2,294	80	25,134	1,817	3,355	5,311	6,592	48	193

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.

Springfield Fires in 2012

1,003 Total Fires — 551 Structures, 98 Vehicles & 354 Other Fires

The Springfield Fire Department reported 1,003 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 551 structure fires, 98 motor vehicle fires, 160 outside trash fires, 149 brush fires, 19 special outside fires, one cultivated crop or vegetation fire, and 25 unclassified fires caused 12 civilian injuries, 45 fire service injuries and an estimated dollar loss of \$4.2 million.

No One Killed in a Fire in Springfield

In 2012, no one was killed in a fire in Springfield.

Structure Fires & MV Fires Down in 2012

Total fires increased by 42 from 961 incidents in 2011. Reported structure fires were down 84 from the 635 reported during the previous year. Motor vehicle fires decreased by seven from 105 the year before. Outside and other fires increased by 133 from the 221 reported in 2011.

SPRINGFIELD FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1,138	687	104	347	22	12	6	4
2009	960	583	109	268	15	7	6	2
2010	1,053	613	108	332	10	2	3	5
2011	961	635	105	221	9	4	3	2
2012	1,003	551	98	354	19	9	2	8

BUILDING FIRES

There were 550 building fires of different types in Springfield in 2012. These 550 building fires accounted for all but one of the structure fires in Springfield.

87% of Building Fires in Homes

The 550 building fires that occurred in Springfield in 2012 can be broken down by fixed property use as follows: 477, or 87% of all building fires, were in residential properties; 22 fires occurred in educational properties; 19 fires happened in mercantile or business properties; 12 fires took place in public assembly properties; 10 fires occurred in institutional facilities; five fires occurred in storage properties; three fires occurred in special properties; and two fires happened in manufacturing or processing facilities.

RESIDENTIAL FIRES

Residential Building Fires Down

There were 477 reported residential building fires in Springfield in 2012. These 477 fires are a decrease of 60, or 11%, from the 537 residential building fires reported in 2011.

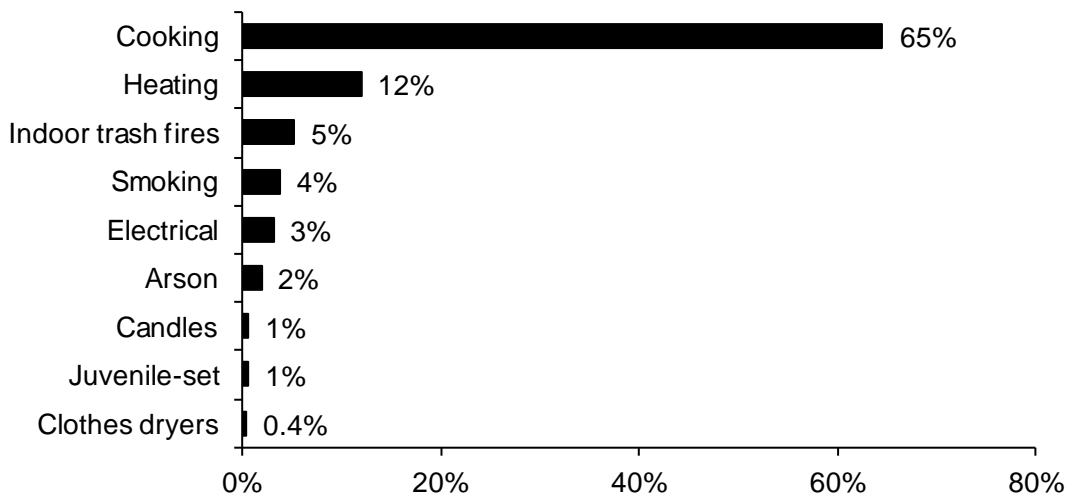
Apartments Accounted for 48% of Residential Building Fires

The peak fixed property uses for residential building fires were apartments, accounting for 48% of these building fires in Springfield; 47% occurred in 1- or 2-family homes; 3% occurred in rooming houses; and less than 1% occurred each in residential board and care facilities, dormitories and hotels or motels. One percent (1%) occurred in unclassified residential buildings.

Unattended Cooking Leading Cause of Residential Fires

The leading cause of residential building fires in Springfield was unattended cooking and other unsafe cooking practices, accounting for 65% of these fires. Heating equipment accounted for 12% of the residential building fires in 2012. Indoor rubbish fires were responsible for 5%. Smoking caused 4% of these fires, and electrical problems caused 3%. Arsons were the cause of 2% of Springfield's home fires. Candles and juvenile-set fires each caused 1% of the fires; and clothes dryers caused less than 1% of the fires in people's homes in Springfield in 2012.

2012 Leading Causes of Fires in Springfield Homes



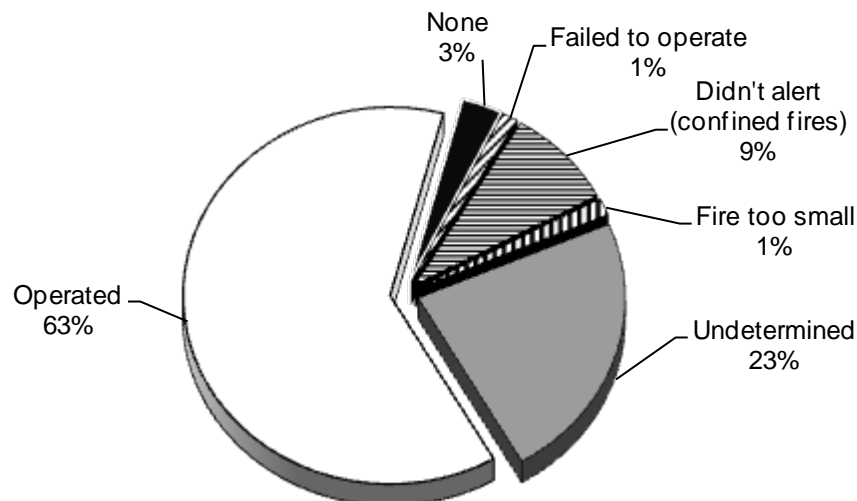
77% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Three hundred and sixty-six (366), or 77% of all residential building fires were confined to non-combustible containers in 2012. Two hundred and eighty-four (284), or 60% of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Fifty (50), or 10% of all residential fires were fuel burner or boiler malfunctions. Twenty-five (25), or 5% of residential fires were rubbish fires contained to a non-combustible container. Five (5) fires were confined to chimneys, which accounted for 1% of residential building fires. Two (2) commercial compactor fires caused less than 1% of residential building fires in 2012.

Detectors Alerted Occupants in 63% of Fires

Smoke or heat detectors operated and alerted the occupants in 298, or 63%, of the residential building fires. In 9% of these fires², 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 1% of the residential fires. Smoke detector performance was undetermined in 110 incidents, or 23% of Springfield's residential building fires.

Detector Status in Springfield Residential Fires 2012



¹ 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.

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

2 Failed Detectors Had Missing Batteries

Of the six fires where smoke detectors were present but failed to operate, two, or 33%, failed because the batteries were either missing or disconnected. One detector, or 17%, failed because of a power shutoff or disconnect. It was undetermined in the other three cases, or 50%, why the detectors failed to operate.

VACANT BUILDINGS

18 Building Fires in Vacant Buildings

Springfield reported 18 fires that occurred in buildings that were vacant, under construction or under demolition. This represented 3% of the total 550 building fires reported to MFIRS in 2012. Twelve (12) one- or two-family homes, two apartment buildings, two detached garages, and two unclassified industrial facilities were reported as vacant building fire incidents.

JUVENILE-SET FIRES

4 Juvenile-set Fires

There were four juvenile-set fires reported in Springfield in 2012. The three structure fires and one unclassified fire caused \$105,100 in estimated damages.

ARSONS

19 Total Arsons — 9 Structures, 2 Motor Vehicles, & 8 Other

Nineteen (19), or 2%, of Springfield's 1,003 fires were intentionally set, or, for purposes of this analysis, arson. The nine structure arsons, two motor vehicle arsons and eight outside and other arsons caused an estimated dollar loss of \$230,275.

Structure Arsons Up

The total number of arsons reported increased by 10 from the nine reported in 2011. Reported structure arsons increased five from four the year before. Motor vehicle arsons decreased by one from three in 2011. Outside and other arsons increased by six from two reported last year.

Springfield reported 137, or 14% of all fires, are still under investigation or undetermined after investigation. This high number of fires with these classifications is one possible reason for the unusually low number of reported arsons in Springfield in 2012.

Rescue & EMS Calls Are Almost 1/2 of All Reported Incidents

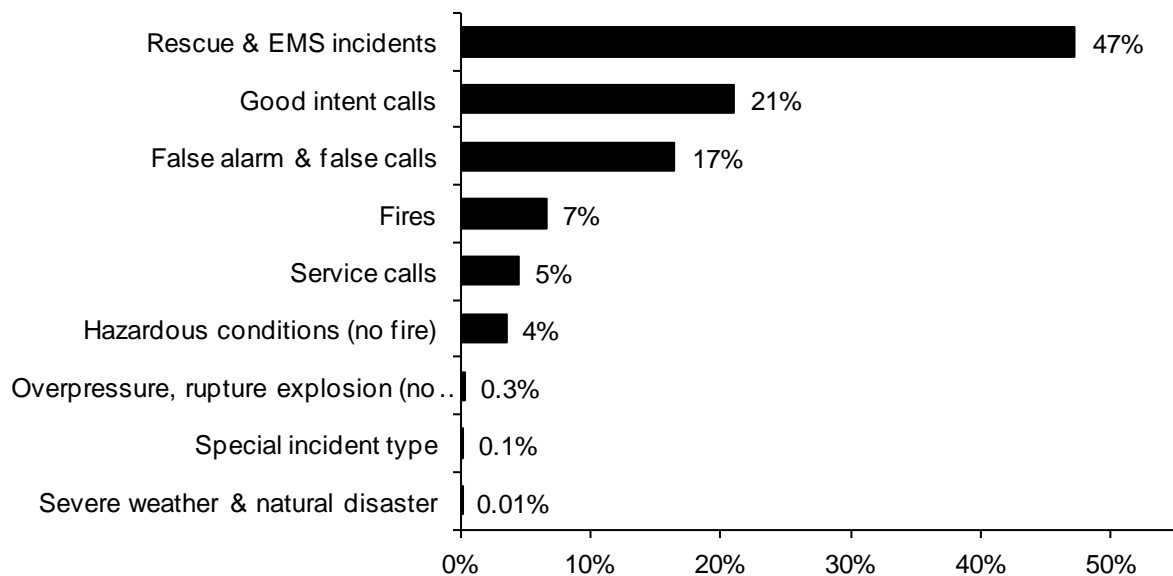
In 2012, Springfield voluntarily reported 15,087 incidents to MFIRS. Of these 15,087 incidents, 14,077, or 93% were non-fire incidents.

Of these 14,077 non-fire incidents 7,123, or 47%, were reported rescue and emergency medical services (EMS) calls; 3,170, or 21%, were reported good intent calls; 2,490, or 17%, were reported false alarm or false calls; 688, or 5%, were reported service calls such as lock-outs, water or smoke problem, unauthorized burning or public service

assistance; 537, or 4%, were reported hazardous condition calls with no fire; 45, or 0.3%, were reported overpressure, rupture, explosion or overheat calls with no fire; 22, or 0.1%, were special incident type calls, such as citizen complaints; and two, or 0.01%, were responses to severe weather.

In 2012, Springfield reported 1,010 fires³ to MFIRS, accounting for 7% of all reported incidents.

2012 Incidents by Incident Type



Springfield Gave Mutual Aid in 62 Reported Incidents

In 2012, Springfield reported giving mutual aid 62 times. Of these 62 incidents, 32, or 52%, were rescue or EMS incidents; 12, or 19% were good intent calls; five, or 8%, were for cover assignments (service calls); five, or 8%, were for fires; four, or 6% were false alarms; three, or 5%, were hazardous condition calls; and a special incident type was responsible for one, or 2%, of Springfield's mutual aid given calls.

Springfield Received Mutual Aid in 90 Incidents

In 2012, Springfield reported receiving mutual aid from surrounding fire departments in 90 incidents. Of these 90 incidents, 44, or 49%, were for rescue or EMS incidents; 14, or 16%, were good intent calls; seven, or 8%, were for fires; five, or 6%, were service calls; three, or 3%, were hazardous condition calls without fire; and one, or 1% was for an overpressure, rupture or explosion with no ensuing fire.

³ This figure includes fires that Springfield responded to calls of mutual aid outside of their jurisdiction.

Springfield**Population: 153,060****6.6 Fires/1,000 Population****Total Fires: 1,003 \$4,191,697**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	551	55%	\$3,688,419
Vehicle Fires	98	10%	474,100
Other Fires	354	35%	29,178

No Civilian Deaths

12 Civilian Injuries 45 Fire Service Injuries

Building Fires: 550**Residential Structure Fires: 477****Residential Structure Fires Confined to Non-Combustible Containers: 366****Unconfined Residential Structure Fires: 111**

12 Civilian Injuries 39 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	231	42%	Operated	298	63%
1- & 2-Family homes	224	41%	Didn't operate	6	1%
Boarding house	10	2%	None	15	3%
Dormitories	2	0.4%	Fire too small	7	1%
Hotels, motels	2	0.4%	Didn't Alert (confined)	41	9%
Residential board & care	2	0.4%	Undetermined	110	23%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	65%	Heat from operating eq.	6%	24%
Heating room or area	5%	Hot or smoldering object	2%	8%
Bedroom	3%	Radiated heat from oper. eq.	2%	7%
Exterior balcony/unencl. porch	2%	Cigarette	1%	5%
Wall surface, exterior	1%			
Chimney or flue	1%			

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignition	%	%Unconfined⁷
Cooking materials	63%	Abandoned/discarded mater.	2%	10%
Flammable or combust. liquid	10%	Misuse of material or prod.	2%	8%
Rubbish, trash, waste	6%	Equipment unattended	2%	8%
Structural component, finish	2%	Electrical failure/malfunc.	1%	5%
Structural member/framing	1%	Combustibles too close	1%	5%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	63%	Unintentional	11%	46%
None	15%	Failure of eq. or heat source	2%	7%
Boiler, furnace, cent. heat. unit	10%	Intentional	2%	7%
Chimney or flue	1%	Act of Nature	0%	0%
Fan	0.4%	Undetermined	0.2%	1%
Power cord, plug	0.4%	Cause Under Investigation	7%	32%

All Reported Incidents	# of Incidents	% of Incidents
Rescue & EMS incidents	7,123	47%
Good intent calls	3,170	21%
False alarms & false calls	2,490	17%
Fires ¹⁰	1,010	7%
Service calls	688	5%
Hazardous conditions (no fire)	537	4%
Overpressure rupture, explosion or overheat calls (no fire)	45	0.3%
Special incident type	22	0.1%
Severe weather & natural disaster	2	0.01%

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

⁷ 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.

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

⁹ 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.

¹⁰ This figure contains calls for mutual aid assistance.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	68	45	10	13
February	87	38	14	35
March	82	45	10	27
April	115	45	4	66
May	87	47	7	33
June	69	45	3	21
July	103	46	5	52
August	79	45	11	23
September	70	40	9	21
October	63	41	9	13
November	94	55	7	32
December	86	59	9	18

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	202	118	15	69
Monday	141	82	13	46
Tuesday	135	68	20	47
Wednesday	132	68	14	50
Thursday	138	74	8	56
Friday	125	68	17	40
Saturday	130	73	11	46

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	94	51	16	27
04:01 - 08:00	72	46	9	17
08:01 - 12:00	150	98	12	40
12:01 - 16:00	245	134	18	93
16:01 - 20:00	265	129	21	115
20:01 - 24:00	177	93	22	62

Motor Vehicle Fires

Total: 98

Automobiles: 87 (89%)

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

Arson Fires

Total Arsons: 19

Dollar loss: \$230,275

0.12 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	9	2%	47%	\$225,600
Vehicle Arsons	2	2%	11%	3,100
Other Arsons	8	2%	42%	325

No Injuries

0.06 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.05 Other arsons/1,000 population

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	3	33%	20:01 - 00:00	1	50%
00:01 - 04:00	2	33%	00:01 - 04:00	1	50%
16:01 - 20:00	2	22%			

Other Arsons	#	%
00:01 - 04:00	3	38%

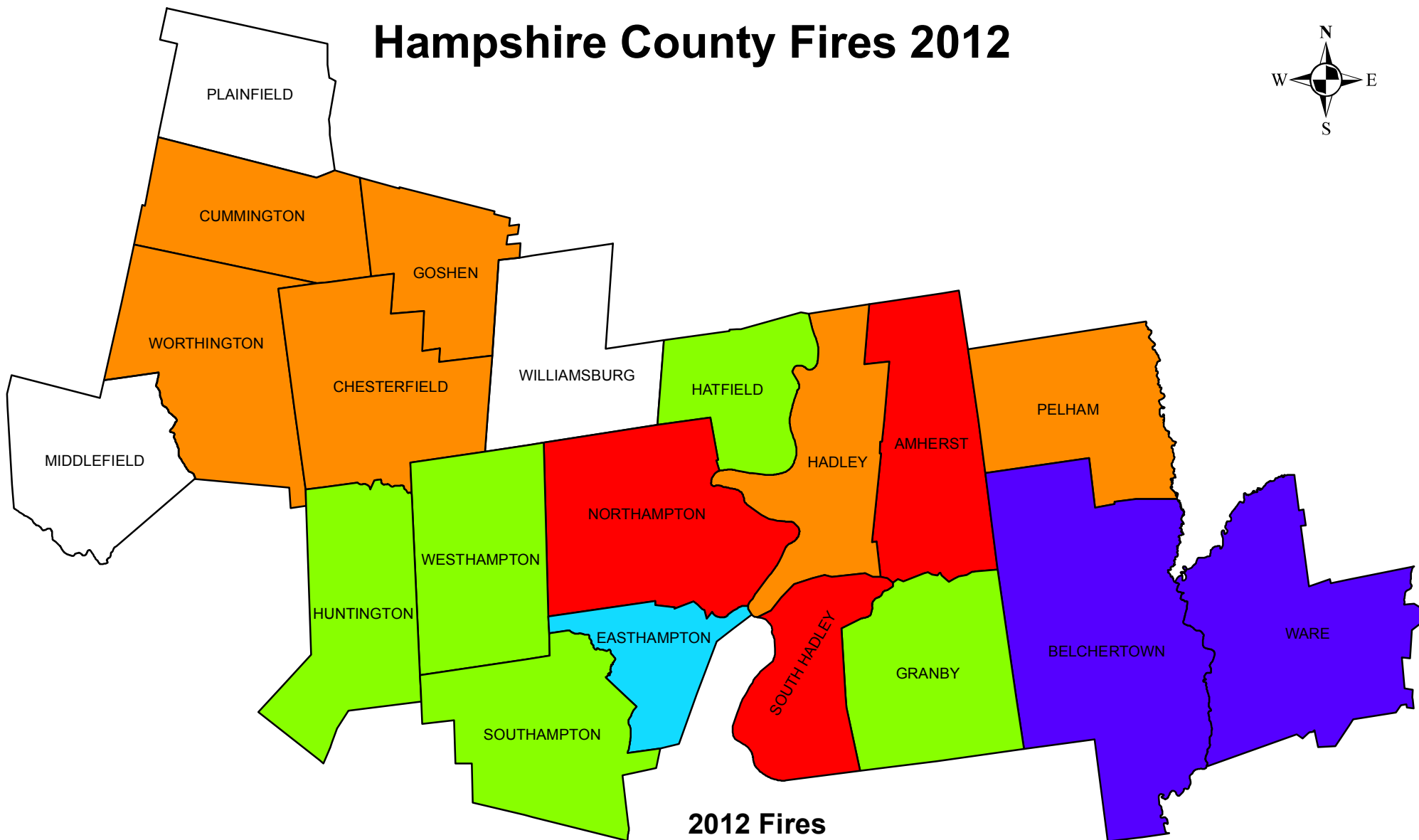
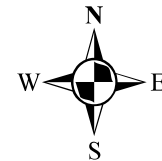
Peak Fixed Property Uses for Structure Arsons	#	%
1- & 2-Family homes	7	78%
Apartments	2	22%



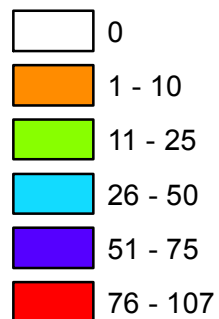
Hampshire County

2012 Fire Data Analysis

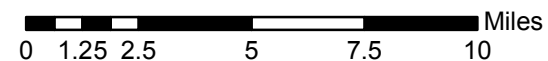
Hampshire County Fires 2012



2012 Fires



MFIRS
Massachusetts Fire Incident Reporting System



Massachusetts Fire Incident Reporting System 2012

Hampshire County Fires in 2012

539 Total Fires — 208 Structures, 46 Vehicles & 285 Other Fires

Hampshire County ranked eleventh out of the fourteen Massachusetts counties in total reported fires. Hampshire County fire departments reported 539 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 208 structure fires, 46 motor vehicle fires, 141 brush, tree or lawn fires, 64 outside rubbish fires, 33 special outside fires, and 47 other fires caused one civilian fire death, one civilian injury, one fire service injury and an estimated dollar loss of \$2.2 million. Hampshire County's 539 total reported fires accounted for 2% of the 31,229 fires reported to MFIRS in 2012.

All 21 fire departments in Hampshire County either reported incidents to the Massachusetts Fire Incident Reporting System (MFIRS) or certified that they had no reportable fires in 2012.

All Fires Up

The total number of reported fire incidents increased by 87 from the 452 reported in 2011. Reported structure fires decreased by 10 from the 218 reported during the previous year. Motor vehicle fires increased by six from 40 the year before. The number of outside and other fires increased by 91 from 194 in 2011. An increase in brush fires was a statewide trend.

HAMPSHIRE COUNTY FIRES FROM 2008 TO 2012

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
Year	Fires	Fires	Fires	Fires	Arsons	Arsons	Arsons	Arsons
2008	537	233	45	259	54	1	2	51
2009	535	246	58	231	45	7	8	30
2010	574	241	59	274	44	9	1	34
2011	452	218	40	194	28	0	0	28
2012	539	208	46	285	37	4	0	33

Fire and Fire Death Rates

Hampshire County had 3.4 fires per 1,000 population. That figure ranks Hampshire County tied for twelfth in the state and below the state rate of 4.8 fires per 1,000 population. Hampshire County also had 0.06 fire deaths per 10,000 population, ranking it tied for fifth among Massachusetts counties and tied with the state rate of 0.06 fire deaths per 10,000 population.

1 Hampshire County Fire Death

There was one reported fire death in Hampshire County in 2012.

- On June 9, 2012, at 3:38 p.m., the Northampton Fire Department was called to a fatal outside fire in a backyard. The victim, a 49-year old woman, poured gasoline over herself and ignited it in a successful attempt at self-immolation. She was transported to a local hospital where she later succumbed to her injuries. No one else was injured in this fire.

Easthampton Has Hampshire County's Largest Loss Fire

- On March 27, 2012, at 3:01 p.m., the Easthampton Fire Department was called to an electrical fire at a three-unit apartment building. Arcing from the electrical heater ignited some of the framing inside a kitchen wall. No one was injured at this fire. Detectors were present but did not operate and the building was not sprinklered. Damages from the blaze were estimated to be \$300,000.

STRUCTURE FIRES**Reported Structure Fires Down Slightly**

The 208 structure fires caused one civilian injury, one fire service injury and an estimated dollar loss of \$1.9 million. These incidents represented 39% of Hampshire County's reported fires in 2012. The average estimated dollar loss per structure fire was \$9,194. The total number of reported structure fires decreased by 10, or 5%, from the 218 reported in 2011.

4 Structure Arsons

The four structure arsons caused an estimated dollar loss of \$115,100. Arson was indicated as the cause of 2% of the structure fires and 6% of Hampshire County's structure fire dollar loss. The four structure arsons accounted for 11% of the Hampshire County arson fires reported in 2012. The total number of reported structure arsons increased by four, or 400%, from none reported in 2011.

BUILDING FIRES

There were 208 building fires of different types in Hampshire County in 2012. These 208 building fires accounted for all structure fires in Hampshire County.

81% of Hampshire Building Fires Occurred in People's Homes

One hundred and sixty-nine (169), or 81%, of Hampshire County's 208 building fires occurred in residential occupancies. Thirteen (13) fires occurred in educational facilities. Storage facilities experienced nine fires. Six (6) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties and special properties such as outbuildings or sheds each had four fires. Hospitals, prisons, and other institutional buildings had two fires. An industrial facility had one fire in Hampshire County in 2012.

RESIDENTIAL FIRES**Residential Building Fires Drop**

There were 169 reported residential building fires in Hampshire County in 2012. Residential fires decreased by 20 from the 189 reported in 2011.

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

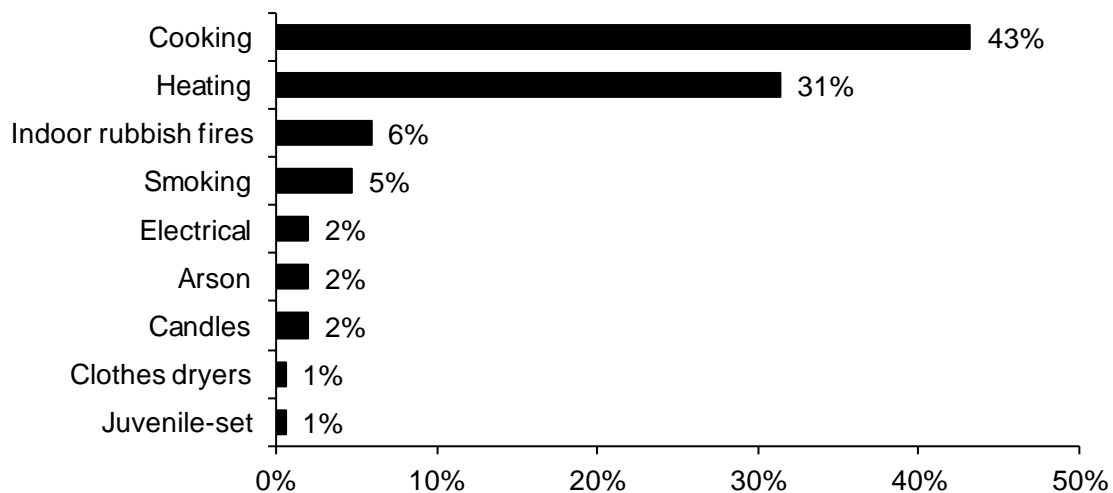
The peak fixed property use for residential building fires were 1- & 2-family homes, accounting for 67% of the residential building fires in Hampshire County; 19% occurred in apartments; 11% occurred in dormitories; 2% happened in residential board and care facilities; and 1% in hotels or motels. One percent (1%) of the residential building fires in Hampshire County 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. Eighteen (18), or 11%, of Hampshire County's residential fires occurred in dormitories. Dormitory fires make up smaller percentages of the other counties' fires.

Cooking Causes 43% of Residential Fires

Unattended cooking and other unsafe cooking practices was the leading cause of the 169 residential building fires in Hampshire County, accounting for 43% of these fires.

Heating equipment fires accounted for 31% of home fires. Indoor rubbish fires caused 6%. Smoking fires were responsible for 5% of these fires. Electrical problems, arson and candles each caused 2% of the residential fires. Clothes dryers and juvenile-set fires each accounted for 1% of the residential fires in Hampshire County in 2012.

**2012 Leading Causes of Fires
in Hampshire County Homes**

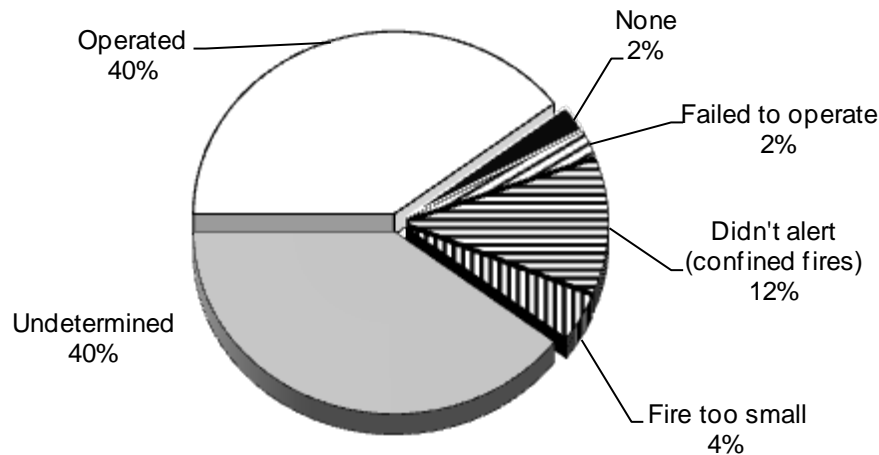
72% of Residential Building Fires Are Confined to Non-Combustible Containers¹

One hundred and twenty-two (122), or 72%, of all residential building fires were reported as confined to non-combustible containers in 2012. Sixty-three (63) of the reported fires were cooking fires contained to a non-combustible container, accounting for 37% of residential building fires. Thirty-two (32), or 19%, of all residential building fires reported in 2012 were fires confined to a chimney. Eighteen (18), or 11%, were fires confined to a fuel burner or boiler malfunction. Nine (9), or 5%, of these fires were rubbish fires contained to a non-combustible container in Hampshire County in 2012.

Detectors Operated in Only 40% of Fires

Smoke or heat detectors operated and alerted the occupants in 67, or 40%, of the residential building fires. In 12% of these fires², 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 67 incidents, or 40%, of Hampshire County's residential building fires.

Detector Status in Hampshire County's Residential Structure Fires 2012



1/2 of Failed Detectors Were Undetermined

One (1) detector failed because the battery was missing and another detector failed because it was defective. It was undetermined why the detectors failed in two fires where smoke detectors were reported as present but failed to operate.

¹ 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.

² 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 208 building fires reported to MFIRS in 2012. Three (3) of these vacant building fires occurred in residential occupancies and one occurred in a storage facility.

One (1) of the vacant building fires in Hampshire County in 2012 was determined to be intentionally set.

JUVENILE-SET FIRES

3 Juvenile-set Fires

There were three reported juvenile-set fires in Hampshire County in 2012. One (1) was a building fire and two were brush fires. These three fires caused an estimated dollar loss of \$320.

ARSONS

37 Total Arsons — 4 Structures, 0 Motor Vehicle & 33 Other Arsons

Thirty-seven (37), or 7%, of Hampshire County's 539 fires were intentionally set, or, for purposes of this analysis, arson. The four structure arsons, 16 brush arsons, eight outside rubbish arsons and eight special outside arsons caused one civilian death and an estimated dollar loss of \$115,376.

All Arsons Up

The total number of reported arson fires increased by nine from the 28 reported in 2011. Structure arsons increased by four from none reported the previous year. Motor vehicle arsons remained the same with none reported in both 2011 and 2012. Reported outside and other arsons increased by five from the 28 reported in 2011.

ALL INCIDENTS

Rescue & EMS Calls Are 61% of All Reported Responses

In 2012, Hampshire County fire departments reported 13,762 responses³ to MFIRS. Of these 13,762 incidents, 13,145 non-fire calls were voluntarily reported.

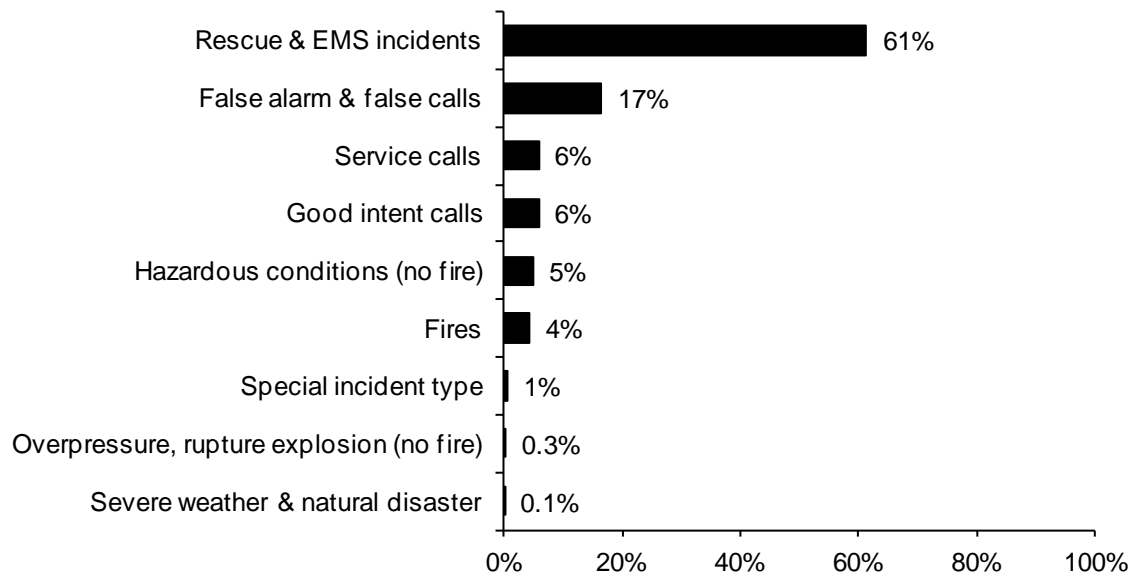
Of these 13,145 non-fire calls, 8,439, or 61%, of all the responses reported in 2012 were reported rescue and emergency medical services (EMS) calls; 2,274, or 17%, were reported false alarm or false calls; 791, or 6%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 770, or

³ These figures include responses in which Hampshire County fire departments gave mutual aid to other fire departments.

6%, were reported good intent calls; 706, or 5%, were reported hazardous condition calls with no fire; 107, or 1%, were special incident type calls such as citizen complaints; 45, or 0.3%, were reported overpressure, rupture, explosion or overheat calls with no fire; and 13, or 0.1%, were severe weather responses.

Six hundred and seventeen (617), or 4%, of the total responses submitted by Hampshire County fire departments were fires.

2012 Responses by Incident Type



Hampshire County Fire Departments Gave Mutual Aid 338 Times

In 2012, Hampshire County fire departments reported coming to the aid of other fire departments 338 times. Of these 338 responses, 144, or 43%, were for rescue or EMS calls; 76, or 22%, were for fires; 50, or 15%, were for good intent calls; 35, or 10%, were for service calls such as cover assignments; 16, or 5%, were hazardous conditions calls with no fire; 12, or 4%, were for false alarms or false calls; six, or 2%, were severe weather calls; four calls, or 1%, were for special incident types; and one, or 0.3%, was a reported overpressure, rupture, explosion or overheat call with no fire.

Hampshire County Received Mutual Aid in 118 Incidents

In 2012, Hampshire County fire departments received aid from surrounding departments in 118 incidents. Of these 118 incidents, 58, or 49%, were rescue and emergency medical services calls; 33, or 28%, were for fires; 10 were good intent calls accounting for 8%; eight, or 7%, were hazardous conditions calls with no fire; five, or 4%, were service calls; and four, or 3%, were false alarm or false calls in Hampshire County in 2012.

Hampshire County**Population: 158,080****3.4 Fires/1,000 Population****Total Fires: 539 \$2,208,787**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	208	39%	\$1,912,413
Vehicle Fires	46	9%	226,350
Other Fires	285	53%	70,024

1 Fatal Fire 1.86 Civilian Deaths/1,000 Fires
 1 Civilian Death 0.06 Civilian Deaths/10,000 Population
 1 Civilian Injury 1 Fire Service Injury

Building Fires: 208**Residential Structure Fires: 169****Residential Structure Fires Confined to Non-Combustible Containers: 122****Unconfined Residential Structure Fires: 47**

1 Civilian Injury 1 Fire Service Injury

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	113	67%	Operated	67	40%
Apartments	32	19%	Didn't operate	4	2%
Dormitories	18	11%	None	4	2%
Residential board & care	4	2%	Fire too small	7	4%
Hotels or motels	1	1%	Didn't alert (confined)	20	12%
			Undetermined	67	40%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	45%	Radiated, con. Heat op. eq.	4%	15%
Chimney or flue	19%	Heat from operating eq.	4%	13%
Heating room or area	11%	Hot embers or ash	2%	9%
Bedroom	3%	Candle	2%	6%
Living room	3%	Cigarette	2%	6%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignit.	%	%Unconfined⁷
Food, cooking materials	42%	Abandoned materials	2%	6%
Film, residue (creosote)	19%	Too close to combustibles	2%	6%
Flamm. or combustible liquid	11%			
Rubbish, trash, waste	7%			
Structural member, framing	4%			

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	40%	Unintentional	13%	47%
Chimney or flue	19%	Failure of eq. or heat source	6%	21%
None	17%	Intentional	2%	6%
Boiler, furnace, cent. heat unit	11%	Cause under investigation	4%	15%
		Undetermined	2%	6%
		Act of nature	1%	4%

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

Alerted occupants	39%
Didn't alert occupants	16%
Undetermined	45%

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

⁷ 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.

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

⁹ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	38	20	4	14
February	53	26	2	25
March	77	23	5	49
April	77	11	3	63
May	49	16	11	22
June	33	12	3	18
July	37	10	2	25
August	35	16	7	12
September	27	14	2	11
October	28	15	2	11
November	61	26	3	32
December	24	19	2	3

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	66	20	4	42
Monday	90	28	10	52
Tuesday	81	30	7	44
Wednesday	68	30	8	30
Thursday	60	32	1	27
Friday	77	33	8	36
Saturday	97	35	8	54

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	37	12	3	22
04:01 - 08:00	34	19	2	13
08:01 - 12:00	86	30	10	46
12:01 - 16:00	137	46	18	73
16:01 - 20:00	152	67	7	78
20:01 - 00:00	93	34	6	53

Motor Vehicle Fires

Total: 46

Automobiles: 34 (74%)

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

Arson Fires

Total Arsons: 37

Dollar loss: \$115,376

0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	4	2%	11%	\$115,100
Vehicle Arsons	0	0%	0%	0
Other Arsons	33	12%	89%	276

0.03 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.21 Other arsons/1,000 population

1 Civilian Death

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
00:01 - 04:00	2	50%			
12:01 - 16:00	2	50%			

Other Arsons	#	%
20:01 - 00:00	11	33%
16:01 - 20:00	9	27%
12:01 - 16:00	5	15%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	1	25%
Apartment buildings	1	25%
Residential, other	1	25%
Household goods, sales, repairs	1	25%

Amherst **Population: 37,819**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	102	55	6	41	12	1	0	11
2009	98	44	8	46	16	2	0	14
2010	119	46	6	67	21	4	0	17
2011	85	31	3	51	12	0	0	12
2012	107	39	7	61	17	2	0	14

Belchertown **Population: 14,649**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	52	24	3	25	1	0	0	1
2009	33	16	4	13	2	0	0	2
2010	50	21	4	25	0	0	0	0
2011	45	26	3	16	0	0	0	0
2012	51	22	6	23	0	0	0	0

Chesterfield **Population: 1,222**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	8	4	1	3	0	0	0	0
2009	13	6	1	6	0	0	0	0
2010	8	3	0	5	1	0	0	1
2011	Fire Department in Good Standing, Certified No Reportable Fires							
2012	5	1	1	3	0	0	0	0

Cummington **Population: 872**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	0	1	0	0	0	0	0
2009	1	1	0	0	0	0	0	0
2010	5	4	1	0	0	0	0	0
2011	1	1	0	0	0	0	0	0
2012	1	1	0	0	0	0	0	0

Easthampton **Population: 16,053**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	56	26	5	25	7	0	1	6
2009	48	30	3	15	2	0	0	2
2010	52	29	5	18	3	2	0	1
2011	43	28	5	10	2	0	0	2
2012	34	18	4	12	0	0	0	0

Goshen **Population: 1,054**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	4	3	1	0	0	0	0	0
2009	4	1	0	3	0	0	0	0
2010	5	2	1	2	0	0	0	0
2011	6	2	0	4	0	0	0	0
2012	6	4	0	2	0	0	0	0

Granby **Population: 6,240**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	36	13	2	21	6	0	0	6
2009	41	19	2	20	1	0	0	1
2010	35	14	9	12	1	0	0	1
2011	24	10	3	11	1	0	0	1
2012	24	15	3	6	1	0	0	1

Hadley **Population: 5,250**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	5	1	3	1	1	0	1	0
2009	9	4	2	3	0	0	0	0
2010	7	7	0	0	0	0	0	0
2011	10	3	6	1	0	0	0	0
2012	10	3	2	5	0	0	0	0

Hatfield**Population: 3,279**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	6	2	2	2	0	0	0	0
2009	11	7	2	2	0	0	0	0
2010	8	0	3	5	0	0	0	0
2011	4	1	1	2	0	0	0	0
2012	12	3	3	6	0	0	0	0

Huntington**Population: 2,180**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	11	6	0	5	0	0	0	0
2010	14	7	2	5	1	0	0	1
2011	16	3	2	11	5	0	0	5
2012	20	4	2	14	5	0	0	5

Middlefield**Population: 521**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	Fire Department in Good Standing, Certified No Reportable Fires							
2010	Fire Department in Good Standing, Certified No Reportable Fires							
2011	1	1	0	0	0	0	0	0
2012	Fire Department in Good Standing, Certified No Reportable Fires							

Northampton**Population: 28,549**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	114	54	12	48	0	0	0	0
2009	89	34	23	32	15	5	7	3
2010	93	33	16	44	0	0	0	0
2011	75	24	13	38	0	0	0	0
2012	77	21	6	50	1	0	0	1

Pelham**Population: 1,321**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	1	1	0	0	0	0	0	0
2010	3	1	2	0	0	0	0	0
2011	1	1	0	0	0	0	0	0
2012	1	0	1	0	0	0	0	0

Plainfield**Population: 648**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	Fire Department in Good Standing, Certified No Reportable Fires							
2010	2	1	1	0	0	0	0	0
2011	1	0	1	0	0	0	0	0
2012	Fire Department in Good Standing, Certified No Reportable Fires							

SOUTH HADLEY FIRE DISTRICTS**Population: 17,514*****South Hadley District # 1******Est. Pop. Protected: 11,734***

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	7	7	0	0	0	0	0	0
2009	46	9	7	30	4	0	1	3
2010	50	17	2	31	9	2	0	1
2011	24	12	0	12	3	0	0	3
2012	49	16	3	30	1	1	0	0

South Hadley District # 2***Est. Pop. Protected: 5,780***

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	13	11	1	1	0	0	0	0
2009	44	42	0	2	0	0	0	0
2010	44	38	2	4	1	0	0	1
2011	55	51	0	4	0	0	0	0
2012	39	33	2	4	2	0	0	2

Worthington					Population: 1,156			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	1	1	0	0	0	0	0	0
2010	Fire Department in Good Standing, Certified No Reportable Fires							
2011	Fire Department in Good Standing, Certified No Reportable Fires							
2012	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
15008	Amherst	1,222	107	5	163	107	46	97	689	1	7
15024	Belchertown	329	52	0	7	64	48	45	112	1	0
15060	Chesterfield	102	12	0	63	9	5	5	8	0	0
15069	Cummington	1	1	0	0	0	0	0	0	0	0
15087	Easthampton	2,530	38	4	2,040	59	109	78	190	0	12
15108	Goshen	93	9	0	50	9	6	7	12	0	0
15111	Granby	211	27	0	13	23	47	32	65	2	2
15117	Hadley	13	10	0	0	2	0	1	0	0	0
15127	Hatfield	122	12	0	13	27	21	7	35	0	7
15143	Huntington	292	40	0	129	32	24	34	29	0	4
15183	Middlefield	0	0	0	0	0	0	0	0	0	0
15214	Northampton	6,792	82	33	5,061	202	266	285	805	6	52
15230	Pelham	1	1	0	0	0	0	0	0	0	0
15237	Plainfield	0	0	0	0	0	0	0	0	0	0
15978	South Hadley #1	347	54	2	14	46	84	54	87	0	6
15979	South Hadley #2	673	52	0	402	32	42	52	93	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 department that wants to send all of their responses to do so.

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
15276	Southampton	526	18	0	379	18	36	14	55	2	4
15309	Ware	331	79	1	10	54	47	55	71	1	13
15331	Westhampton	137	22	0	70	19	7	1	18	0	0
15340	Williamsburg	39	0	0	25	3	3	3	5	0	0
15349	Worthington	1	1	0	0	0	0	0	0	0	0
Total	Hampshire County	13,762	617	45	8,439	706	791	770	2,274	13	107

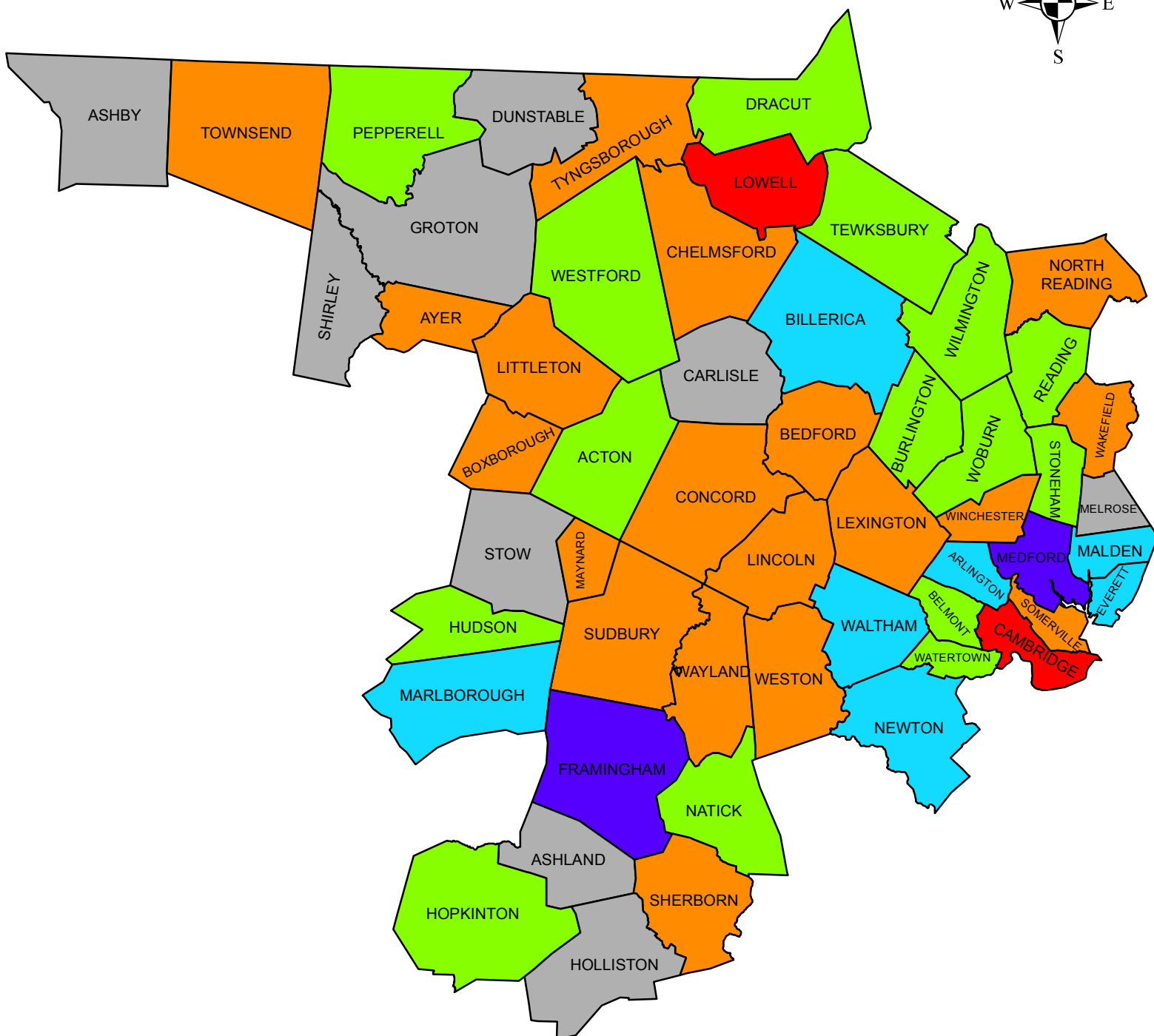
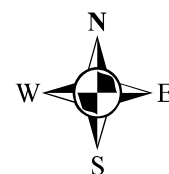
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Middlesex County

2012 Fire Data Analysis

Middlesex County Fires 2012



2012 Fires



MFIRS
Massachusetts Fire Incident Reporting System

0 1.25 2.5 5 7.5 10 Miles

Massachusetts Fire Incident Reporting System 2012

Middlesex County Fires in 2012

5,175 Total Fires — 3,199 Structures, 407 Vehicles & 1,569 Other Fires

Middlesex County ranked second out of the fourteen Massachusetts counties in total reported fires. Middlesex County fire departments reported 5,175 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 3,199 structure fires, 407 motor vehicle fires, 885 brush fires, 398 outside rubbish fires, 132 special outside fires, three cultivated vegetation or crop fires, and 151 unclassified fires caused seven civilian deaths, 44 civilian injuries, 85 fire service injuries and an estimated dollar loss of \$38.8 million. Middlesex County's fires accounted for 17% of the 31,229 Massachusetts fires reported in 2012.

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 2012.

Outside Fires Up

The total number of reported fire incidents increased by 311 from the 4,864 reported in 2011. Reported structure fires decreased by 44 from 3,243 in the previous year. Motor vehicle fires decreased by 105 from the 512 reported during 2011. Reported outside and other fires increased by 460 from 1,109 the year before. The significant increase in outside fires was a statewide trend in 2012.

MIDDLESEX COUNTY FIRES FROM 2008 TO 2012

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	5,323	3,447	512	1,364	168	40	27	101
2009	5,161	3,389	503	1,269	167	39	28	100
2010	5,762	3,406	506	1,850	161	44	13	104
2011	4,864	3,243	512	1,109	114	33	20	61
2012	5,175	3,199	407	1,569	136	35	14	87

Fire and Fire Death Rates

Middlesex County had 3.4 fires per 1,000 population. That figure ranks Middlesex County tied for twelfth in the state and below the state rate of 4.8 fires per 1,000 population. Middlesex County also had 0.05 fire deaths per 10,000 population ranking it tied for eighth among Massachusetts counties and just below the state rate of 0.06 fire deaths per 10,000 population.

7 Fatal Fires Killed 7 Middlesex County Residents

In 2012, seven fatal fires killed seven people in Middlesex County.

- On February 19, 2012, at 7:49 a.m., the Somerville Fire Department was called to a fatal cooking fire in a single-family home. The victim, a 95-year old woman, was cooking at the stove when her clothes ignited. No one else was injured at this fire.

Detectors were present but it was undetermined if they operated. The home was not sprinklered. Damages from this fire were estimated to be \$110,000.

- On March 2, 2011, at 12:08 a.m., the Wayland Fire Department was called to a fatal electrical fire in a single-family home. It is believed that an overloaded extension cord with multiple items on top of it overheated and started the fire. The victim, an 85-year old man was overcome by smoke inhalation as he attempted to escape the fire. One (1) firefighter was also injured at this fire. Detectors were present but failed to operate because of missing batteries. Sprinklers were not present. The fire caused an estimated \$70,000 worth of damage.
- On June 16, 2012, at 2:21 a.m., the Marlborough Fire Department was dispatched to a spate of motor vehicle fires in the parking lot of a local not-for-profit. The victim, a 59-year old man, parked his car near some of the organization's vans and successfully attempted self-immolation by pouring gasoline inside his car and igniting it. The fire spread to three of the vans nearby. No one else was injured at this fire. Damages were estimated to be \$93,000 for the victim's car and three vans that were destroyed.
- On October 3, 2012, at 10:30 a.m., the Littleton Fire Department was called to a fatal explosion at a single-family home. The home's owner, a 52-year old man, had bypassed some of the safety features of the home's natural gas system, intentionally allowing the gas to vent into the home in a successful suicide attempt. An unknown heat source ignited the gas causing the explosion and ensuing fire. No one else was injured at this fire. Detectors were present but failed to operate because of missing batteries. The home was not sprinklered. Damages were estimated to be \$70,000.
- On October 28, 2012, at 1:04 a.m., the Marlborough Fire Department was called to a fatal explosion at a single-family home. The home's owner, a 55-year old man, had tampered with the home's natural gas system, intentionally allowing the gas to vent into the home in a successful suicide attempt. An unknown heat source ignited the gas causing the explosion and ensuing fire. He was transported to a local hospital where he succumbed to his injuries. No one else was injured at this fire. It was undetermined if detectors were present. The home was not sprinklered. Damages were estimated to be \$200,000.
- On November 13, 2012, at 12:32 a.m., the Cambridge Fire Department was dispatched to a fire in a three-unit apartment building of undetermined cause. The fire began on the victim's third story living room. There were multiple potential heat sources in the area of origin as well as much accumulation of clutter. The victim was the 55-year old male occupant of the apartment. One firefighter was injured at this fire. Detectors were present but it was undetermined if they operated. The building was not sprinklered. Damages from this fire were estimated to be \$50,000.
- On November 27, 2012, at 3:24 p.m., the Lowell Fire Department was called to a fatal fire in a five-unit apartment building with shops on the first floor. The fire began

in a second floor bathroom. The victim, a 79-year old man was repairing some of the plumbing when the plumber's torch he was using ignited some of the framing inside the wall. He was overcome by the heat and smoke and was unable to escape. Two (2) other civilians were injured at this fire. There were no smoke detectors and the building was not sprinklered. Damages from this fire were estimated to be \$400,000.

Largest Loss Fire in 2012

In 2012, Middlesex County fire departments reported three fires with a reported dollar loss of \$1 million or greater. The combined dollar loss of these three fires totaled \$6.3 million, or 16%, of the county's total dollar loss.

- On April 23, 2012, at 9:36 a.m., the Marlborough Fire Department was called to a fire of undetermined cause at a 32-unit apartment building. The fire started on the third floor. Four (4) firefighters were injured at this fire. Detectors were present and operated and sprinklers were not present. Damages from this fire were estimated to be \$4 million.

STRUCTURE FIRES

Reported Structure Fires Drop Slightly

The 3,199 structure fires caused all six civilian deaths, 38 civilian injuries, 80 fire service injuries and an estimated dollar loss of \$34.7 million. These incidents represented 62% of Middlesex County's reported fires in 2012. The average estimated dollar loss per structure fire was \$10,832. The total number of reported structure fires decreased by 44, or 1%, from the 3,243 reported in 2011.

Arson Caused of 1% of Structure Fires

The 35 structure arsons caused two civilian deaths, four fire service injuries and an estimated dollar loss of \$2.5 million. Arson was indicated as the cause of 1% of the structure fires and 7% of Middlesex County's structure fire dollar loss. The 35 structure arsons accounted for 26% of the Middlesex County arson fires reported in 2012. The total number of reported structure arsons increased by two, or 6%, from 33 in 2011.

60% of Structure Arsons Occurred in Residences

Sixty-percent (60%) of Middlesex County's 35 structure arsons occurred in residential occupancies. Special properties accounted for 14% of these fires and public assembly facilities accounted for 9%. Six percent (6%) each occurred in educational facilities and storage facilities. Mercantile or business properties and institutional facilities were each involved in 3% of Middlesex County's structure arsons in 2012.

BUILDING FIRES

There were 3,178 building fires of different types in Middlesex County in 2012. These 3,178 building fires accounted for 99.3% of all structure fires in Middlesex County.

82% of Middlesex Building Fires Occurred in People's Homes

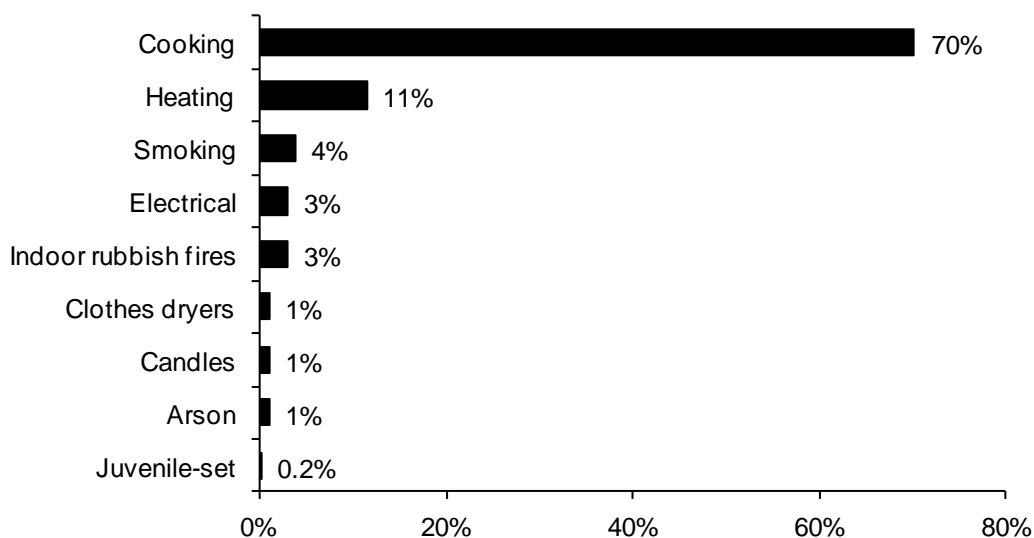
Two thousand six hundred and nineteen (2,619), or 82%, of Middlesex County's 3,178 building fires occurred in residential occupancies. One hundred and thirty-seven (137) fires took place in public assembly properties, including restaurants and churches. Mercantile and business properties had 136 fires. Hospitals, prisons, and other institutional buildings experienced 81 fires. Seventy (70) building fires took place in educational facilities. Sixty-eight (68) building fires in Middlesex County occurred in special properties such as outbuildings, bus stop shelters and tollbooths. Thirty-five (35) fires took place in storage properties. Sixteen (16) fires took place in manufacturing and processing facilities. Thirteen (13) fires occurred in industrial, utility, defense, agricultural or mining facilities in Middlesex County in 2012.

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

There were 2,619 reported residential building fires in Middlesex County in 2012. These 2,619 fires are a decrease of 14, or 1%, from the 2,633 residential building fires reported in 2011.

Unsafe Cooking Causes 70% of All Residential Fires

The leading cause of residential building fires in Middlesex County was unattended cooking and other unsafe cooking practices, accounting for 70% of these fires. Heating caused 11% of fires in people's homes. Smoking caused 4%. Electrical problems and indoor rubbish fires each accounted for 3% of these fires. Clothes dryers, candles and arsons each caused 1%, and juvenile-set fires accounted for less than 1% of the residential fires in Middlesex County in 2012.

**2012 Leading Causes of Fires
in Middlesex County Homes**

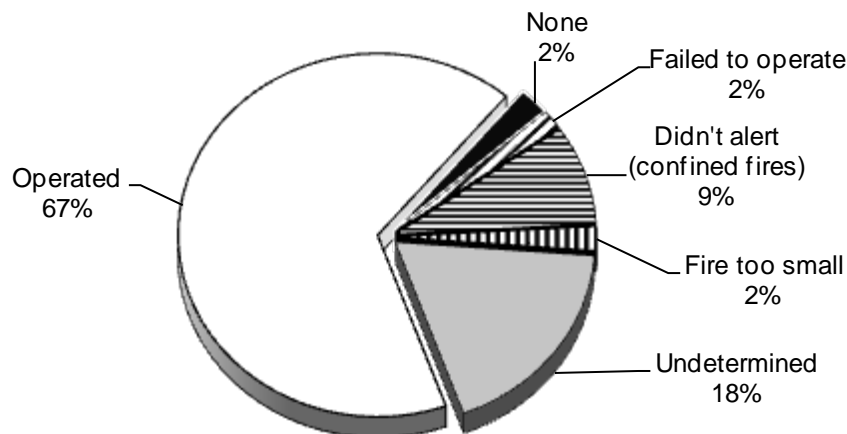
81% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Two thousand one hundred and fourteen (2,114), or 81%, of all residential building fires were reported as confined to non-combustible containers in 2012. One thousand seven hundred and seventy (1,770) of the reported fires were cooking fires contained to a non-combustible container accounting for 68% of residential building fires. One hundred and eighty-five (185), or 7%, were fires confined to a fuel burner or boiler malfunction. Eighty-eight (88), or 3%, of all residential building fires reported in 2012 were fires confined to a chimney. Sixty-seven (67), or 3%, of these fires were rubbish fires contained to a non-combustible container. Three (3) commercial compactor fires accounted for less than 1%, and one incinerator overload or malfunction also accounted for less than 1% of the residential fires in Middlesex County in 2012.

Detectors Alerted Occupants in 2/3 of Fires

Smoke or heat detectors operated and alerted the occupants in 1,747, or 67%, of the residential building fires. In 9% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 2% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 2% of the residential fires. Smoke detector performance was undetermined in 478 incidents, or 18%, of Middlesex County's residential building fires.

Detector Status in Middlesex County's Residential Structure Fires 2012



¹ 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.

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

1/5 of Failed Detectors Were Missing Batteries

Of the 44 fires where smoke detectors were present but failed to operate, nine, or 20%, failed because the batteries were either missing or disconnected. In six, or 14%, of these cases the batteries were dead. Four (4), or 9%, failed because of a power failure, shutoff or disconnect. Three (3) detectors, or 7%, failed from a lack of maintenance. One (1) unit, or 2%, failed because of improper installation or placement. It was undetermined or unclassified in 21 cases, or 48%, why the detectors failed to operate.

VACANT BUILDINGS**1% of Building Fires Occurred in Vacant Buildings**

Middlesex County reported 37 fires that occurred in buildings that were vacant, under construction or demolition. This represented 1% of the total 3,178 building fires reported to MFIRS in 2012. Twenty-one (21) fires occurred in vacant residential properties. Six (6) vacant building fires occurred in storage facilities. Mercantile and business properties had five of these fires. Manufacturing or processing facilities accounted for two of these fires. Public assembly facilities, institutional facilities and special properties each accounted for one vacant building fire incident in Middlesex County in 2012.

Six (6), or 16%, of the vacant building fires in Middlesex County in 2012 were determined to be intentionally set. Two (2) of these fires occurred in one- or two-family homes, two occurred in detached residential parking garages, one happened in a gym and another in an outbuilding.

JUVENILE-SET FIRES**19 Juvenile-set Fires**

There were 19 reported juvenile-set fires in Middlesex County in 2012. The 10 structure fires, seven brush fires, one outside rubbish fire, and one unclassified fire caused one fire service injury and an estimated \$158,855 in damages.

ARSONS**136 Total Arsons — 35 Structures, 14 Vehicles & 87 Other Arsons**

One hundred and thirty-six (136), or 3%, of Middlesex County's 5,175 fires were considered intentionally set, or, for purposes of this analysis, arson. The 35 structure arsons, 14 motor vehicle arsons and 87 outside and other arsons caused three civilian deaths, one civilian injury, four fire service injuries and an estimated dollar loss of \$2.6 million.

Structure & Outside Arson Up

The total number of reported arson fires increased by 22 from the 114 reported in 2011. Reported structure arsons increased by two from the 33 reported in the previous year. Motor vehicle arsons decreased by six from 20 in 2011. Reported outside and other arsons increased by 26 from 61 the year before.

ALL INCIDENTS

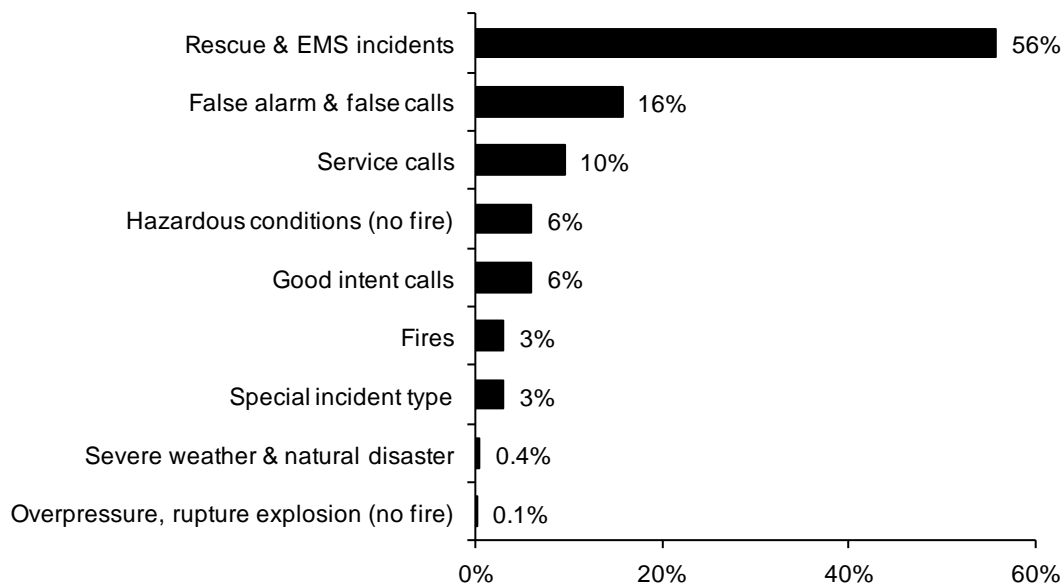
Rescue & EMS Calls Are 56% of All Reported Responses

In 2012, fire departments in Middlesex County reported 155,245 responses³ to MFIRS. This is a 4% decrease from the 161,128 responses reported in 2011. Of these 155,245 incidents, 149,834 non-fire calls were voluntarily reported.

Of these 149,834 non-fire calls, 86,532, or 56%, of all the responses reported in 2012 were reported rescue and emergency medical services (EMS) calls; 24,371, or 16%, were reported false alarm or false calls; 14,815, or 10%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 9,783, or 6%, reported hazardous condition calls with no fire; 9,130, or 6%, were reported good intent calls; 4,486, 3%, were special incident type calls such as citizen complaints; 559, or 0.4%, were severe weather responses; and 118, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Five thousand four hundred and eleven (5,411), or 3%, of the total responses submitted by Middlesex County fire departments were fires.

2012 Responses by Incident Type



³ These figures include incidents in which Middlesex County fire departments gave mutual aid to other fire departments.

Middlesex County Fire Departments Gave Mutual Aid 2,827 Times

In 2012, Middlesex County fire departments reported coming to the aid of other fire departments 2,827 times. Of these 2,827 responses, 1,376, or 49%, were for rescue or EMS calls; 619, or 22%, were for service calls such as cover assignments; 460, or 16%, were for good intent calls; 228, or 8%, were for fires; 69, or 2%, were for false alarms or false calls; 57, or 2%, were for hazardous conditions calls with no fire; 16, or 1%, were special incident types; and two, or less than 1%, were for a reported overpressure, rupture, explosion or overheat call with no fire.

Middlesex County Received Mutual Aid in 1,680 Incidents

In 2012, Middlesex County fire departments reported receiving aid from surrounding departments in 1,680 incidents. Of these 1,680 incidents, 1,193, or 71%, were rescue and emergency medical services calls; 247, or 15%, were for fires; 114, or 7%, were false alarms or false calls; 41, or 2%, were hazardous conditions calls with no fire; 41, or 2%, were good intent calls; 33, or 2%, were service calls; seven, or less than 1%, were severe weather calls; three, or less than 1%, were overpressure, rupture, explosion or overheat calls with no fire; and one, or less than 1%, was a special incident type.

Middlesex County**Population: 1,503,085****3.4 Fires/1,000 Population****Total Fires: 5,175 \$38,768,870**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	3,199	62%	\$34,651,716
Vehicle Fires	407	8%	3,260,383
Other Fires	1,569	30%	856,771

7 Fatal Fires 1.35 Civilian Deaths/1,000 Fires
 7 Civilian Deaths 0.05 Civilian Deaths/10,000 Population
 44 Civilian Injuries 85 Fire Service Injuries

Building Fires: 3,178**Residential Building Fires: 2,619****Residential Building Fires Confined to Non-Combustible Containers: 2,114****Unconfined Residential Building Fires: 505**

6 Civilian Deaths 35 Civilian Injuries 74 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	1,226	47%	Operated	1,747	67%
1- & 2-Family homes	980	37%	Didn't operate	44	2%
Dormitories	172	7%	None	64	2%
Rooming houses	64	2%	Fire too small	55	2%
Residential board & care	32	1%	Didn't alert (confined)	231	9%
Hotels or motels	26	1%	Undetermined	478	18%

Area of Origin⁴	%	Heat Source	%	% Unconfined⁵
Kitchen	71%	Heat from operating eq.	3%	14%
Heating equipment room	7%	Cigarette	2%	12%
Chimney or flue	3%	Arcing	2%	10%
Bedroom	2%	Radiated heat/oper. eq.	2%	8%
Exterior balcony/unencl. porch	1%	Hot or smoldering object	1%	5%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignit.	%	%Unconfined⁷
Food, cooking materials	69%	Too close to combustibles	2%	11%
Flammable, combustible liquid	9%	Abandoned materials	2%	10%
Film, residue (creosote)	3%	Equipment unattended	1%	5%
Rubbish, trash, waste	3%	Elec. failure or malfunction	1%	4%
Structural member, framing	1%	Mech. failure or malfunction	1%	4%
Electrical wire, cable insulation	1%	Misuse of material or prod.	1%	3%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	69%	Unintentional	12%	65%
None	11%	Failure of eq. or heat source	2%	12%
Boiler, furnace, cent. heat unit	7%	Intentional	1%	5%
Chimney or flue	3%	Act of nature	1%	3%
Clothes dryer	1%	Undetermined	1%	8%
		Cause under investigation	1%	7%

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

Alerted occupants	72%
Didn't alert occupants	11%
Undetermined	17%

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

⁷ 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.

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

⁹ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	400	307	34	59
February	430	307	20	103
March	494	282	37	175
April	749	293	28	428
May	358	232	44	82
June	382	224	42	116
July	459	211	40	208
August	317	187	35	95
September	391	251	35	105
October	385	294	27	64
November	433	309	38	86
December	377	302	27	48

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	820	522	50	248
Monday	750	451	66	233
Tuesday	750	459	48	243
Wednesday	667	413	52	202
Thursday	687	435	66	186
Friday	739	455	61	223
Saturday	762	464	64	234

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	328	191	38	99
04:01 - 08:00	342	194	40	108
08:01 - 12:00	813	541	71	201
12:01 - 16:00	1,326	746	99	481
16:01 - 20:00	1,531	972	97	462
20:01 - 00:00	835	555	62	218

Motor Vehicle Fires

Total: 407

Automobiles: 331 (81%)

12, or (4%), of the automobile fires considered intentionally set.

Arson Fires

Total Arsons: 136

Dollar loss: \$2,648,957

0.09 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	35	1%	26%	\$2,547,750
Vehicle Arsons	14	3%	10%	98,901
Other Arsons	87	6%	64%	2,306

0.02 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.06 Other arsons/1,000 population

3 Civilian Deaths

1 Civilian Injury

4 Fire Service Injuries

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
04:01 - 08:00	7	20%	00:01 - 04:00	5	36%
08:01 - 12:00	7	20%	04:01 - 08:00	4	29%
20:01 - 00:00	7	20%	20:01 - 00:00	4	29%

Other Arsons	#	%
12:01 - 16:00	25	29%
16:01 - 20:00	20	23%
20:01 - 00:00	18	21%

Peak Fixed Property Uses for Structure Arsons	#	%
1- & 2-Family homes	11	31%
Apartment buildings	7	20%

Acton **Population: 21,924**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	66	49	0	17	0	0	0	0
2009	58	43	4	11	0	0	0	0
2010	73	40	1	32	8	0	0	8
2011	46	26	5	15	0	0	0	0
2012	54	36	5	13	1	0	1	0

Arlington **Population: 42,844**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	92	51	11	30	7	3	0	4
2009	72	41	5	26	5	0	0	5
2010	114	43	8	63	2	0	0	2
2011	93	38	15	40	5	0	2	3
2012	122	59	6	57	10	1	0	9

Ashby **Population: 3,074**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	7	6	1	0	0	0	0	0
2009	3	2	1	0	0	0	0	0
2010	8	7	1	0	0	0	0	0
2011	8	7	1	0	0	0	0	0
2012	3	3	0	0	0	0	0	0

Ashland **Population: 16,593**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	35	18	2	15	0	0	0	0
2009	10	8	0	2	1	1	0	0
2010	22	10	1	11	0	0	0	0
2011	10	7	3	0	0	0	0	0
2012	5	1	4	0	0	0	0	0

Ayer					Population: 7,427			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	24	10	3	11	1	1	0	0
2009	31	22	2	7	0	0	0	0
2010	39	12	6	21	0	0	0	0
2011	28	15	7	6	1	0	1	0
2012	34	15	1	18	0	0	0	0

Bedford					Population: 13,320			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	26	15	3	8	0	0	0	0
2009	33	18	6	9	1	0	1	0
2010	34	10	2	22	2	0	0	2
2011	22	14	2	6	0	0	0	0
2012	33	18	4	11	2	0	0	2

Belmont					Population: 24,729			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	186	164	5	17	2	1	0	1
2009	148	118	4	26	6	0	0	6
2010	157	123	2	32	12	2	0	10
2011	101	81	2	18	4	0	0	4
2012	100	71	6	23	5	0	0	5

Billerica					Population: 40,243			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	129	58	21	50	9	1	2	6
2009	150	71	20	59	1	0	0	1
2010	153	55	14	84	6	3	0	3
2011	90	39	17	34	4	1	0	3
2012	128	43	16	69	7	0	1	6

Boxborough**Population: 4,996**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	13	3	3	7	2	0	0	2
2009	11	1	3	7	0	0	0	0
2010	17	2	8	7	1	0	0	1
2011	25	8	6	11	0	0	0	0
2012	28	1	8	19	0	0	0	0

Burlington**Population: 24,498**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	69	26	12	31	3	1	0	2
2009	68	34	8	26	5	1	0	4
2010	93	36	12	45	4	0	0	4
2011	68	24	26	18	5	0	1	4
2012	77	41	16	20	1	0	0	1

Cambridge**Population: 105,162**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	860	748	14	98	9	2	0	7
2009	874	775	17	82	4	0	0	4
2010	901	782	16	103	7	2	1	4
2011	835	746	13	76	0	0	0	0
2012	932	830	19	83	2	2	0	0

Carlisle**Population: 4,852**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	0	0	1	0	0	0	0
2009	1	0	0	1	0	0	0	0
2010	3	1	1	1	0	0	0	0
2011	4	4	0	0	0	0	0	0
2012	4	2	2	0	0	0	0	0

Chelmsford**Population: 33,802**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	43	21	16	6	0	0	0	0
2009	36	13	16	7	2	0	1	1
2010	23	9	7	7	0	0	0	0
2011	35	9	13	13	1	0	1	0
2012	30	13	10	7	1	0	0	1

Concord**Population: 17,668**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	43	23	7	13	0	0	0	0
2009	38	14	4	20	3	1	1	1
2010	52	24	8	20	2	0	0	2
2011	41	20	7	14	3	1	0	2
2012	38	16	5	17	0	0	0	0

Devens**Population: 3,290**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	9	5	3	1	0	0	0	0
2009	16	2	1	13	0	0	0	0
2010	11	2	1	8	0	0	0	0
2011	23	7	5	11	0	0	0	0
2012	11	2	4	5	1	0	0	1

Dracut**Population: 29,457**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	61	25	11	25	6	1	3	2
2009	87	45	14	28	11	2	2	7
2010	95	36	7	52	12	1	0	10
2011	77	42	7	28	9	2	1	6
2012	82	38	7	37	7	1	0	6

Dunstable					Population: 3,179			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	3	3	0	0	0	0	0	0
2010	24	5	2	17	1	0	0	1
2011	12	4	2	6	0	0	0	0
2012	13	4	2	7	0	0	0	0

Everett					Population: 41,667			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	139	86	13	40	10	4	4	2
2009	152	90	27	35	12	7	3	2
2010	173	91	20	62	8	4	0	4
2011	144	95	9	40	7	3	0	4
2012	142	75	16	51	11	2	3	6

Framingham					Population: 68,318			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	420	305	39	76	8	3	2	3
2009	385	313	19	53	4	2	2	0
2010	440	326	29	85	0	0	0	0
2011	463	378	34	51	1	1	0	0
2012	481	410	21	50	4	3	0	1

Groton					Population: 10,646			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	31	15	1	15	2	0	0	2
2009	10	6	4	0	1	1	0	0
2010	32	6	3	23	1	0	0	1
2011	14	9	2	3	0	0	0	0
2012	10	7	2	1	0	0	0	0

Holliston **Population: 13,547**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	7	7	0	0	0	0	0	0
2010	4	3	1	0	0	0	0	0
2011	3	3	0	0	0	0	0	0
2012	7	7	0	0	0	0	0	0

Hopkinton **Population: 14,925**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	81	54	6	21	0	0	0	0
2009	50	23	11	16	0	0	0	0
2010	60	29	7	24	1	0	0	1
2011	36	14	9	13	0	0	0	0
2012	63	31	11	21	1	0	0	1

Hudson **Population: 19,063**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	75	37	10	28	1	1	0	0
2009	59	24	7	28	5	1	1	3
2010	60	22	5	33	0	0	0	0
2011	48	20	10	18	0	0	0	0
2012	67	26	4	37	0	0	0	0

Lexington **Population: 31,394**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	57	36	12	9	1	0	0	1
2009	47	28	8	11	2	0	1	1
2010	73	39	12	22	1	0	0	1
2011	72	43	13	16	1	0	0	1
2012	31	16	8	7	0	0	0	0

Lincoln**Population: 6,362**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	25	12	4	9	2	0	0	2
2009	35	23	3	9	1	0	0	1
2010	44	28	4	12	0	0	0	0
2011	24	21	0	3	0	0	0	0
2012	41	33	1	7	2	0	0	2

Littleton**Population: 8,924**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	51	31	8	12	4	2	0	2
2009	48	32	6	10	0	0	0	0
2010	48	23	7	18	1	0	0	1
2011	40	24	9	7	0	0	0	0
2012	50	26	7	17	1	1	0	0

Lowell**Population: 106,519**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	573	403	43	127	24	5	12	7
2009	506	324	45	137	24	8	6	10
2010	662	392	45	225	20	7	8	5
2011	546	370	46	130	29	9	13	7
2012	552	371	28	153	20	8	4	8

Malden**Population: 59,450**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	307	212	18	77	4	3	0	1
2009	355	267	25	63	9	0	4	5
2010	344	248	14	82	7	1	0	6
2011	195	139	10	46	14	7	0	7
2012	189	87	15	87	17	3	0	14

Marlborough**Population: 38,499**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	131	63	21	47	8	3	1	4
2009	120	52	18	50	2	1	1	0
2010	133	54	14	65	9	2	1	6
2011	117	53	22	42	5	2	0	3
2012	145	56	14	75	9	5	2	2

Maynard**Population: 10,106**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	4	3	1	0	0	0	0	0
2009	3	1	2	0	0	0	0	0
2010	9	5	1	3	0	0	0	0
2011	11	8	3	0	0	0	0	0
2012	27	11	2	14	0	0	0	0

Medford**Population: 56,173**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	251	147	20	84	9	2	1	6
2009	367	217	34	116	18	1	1	16
2010	288	148	30	110	4	1	1	2
2011	265	168	22	75	4	0	0	4
2012	291	175	16	100	1	0	0	1

Melrose**Population: 26,983**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	20	13	4	3	0	0	0	0
2009	25	13	7	5	0	0	0	0
2010	25	23	1	1	0	0	0	0
2011	28	23	4	1	1	1	0	0
2012	18	13	3	2	0	0	0	0

Natick**Population: 33,006**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	128	71	12	45	4	0	0	4
2009	94	58	8	28	4	1	0	3
2010	131	61	17	53	3	2	0	1
2011	93	57	11	25	2	0	0	2
2012	93	50	5	38	3	0	0	3

Newton**Population: 85,146**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	190	126	19	45	2	0	0	2
2009	111	66	16	29	5	1	0	4
2010	145	74	22	49	3	0	1	2
2011	142	90	17	35	1	0	0	1
2012	145	75	9	61	2	1	1	0

North Reading**Population: 14,892**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	43	25	3	15	0	0	0	0
2009	49	26	2	21	4	0	0	4
2010	50	23	4	23	0	0	0	0
2011	50	25	6	19	1	0	0	1
2012	44	20	2	22	2	1	0	1

Pepperell**Population: 11,497**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	34	15	6	13	1	0	0	1
2009	38	21	2	15	0	0	0	0
2010	37	19	1	17	0	0	0	0
2011	43	27	2	14	2	1	0	1
2012	59	40	3	16	1	0	0	1

Reading **Population: 24,747**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	96	56	4	36	15	1	0	14
2009	71	32	9	30	6	0	0	6
2010	89	49	5	35	5	0	0	5
2011	77	55	7	15	1	0	0	1
2012	53	33	0	20	5	1	0	4

Sherborn **Population: 4,119**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	27	4	2	21	7	0	0	7
2009	26	10	3	13	5	1	1	3
2010	21	7	3	11	4	0	0	4
2011	18	2	1	15	0	0	0	0
2012	43	8	4	31	3	0	0	3

Shirley **Population: 7,211**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	3	3	0	0	0	0	0	0
2009	23	23	0	0	1	1	0	0
2010	7	6	1	0	0	0	0	0
2011	11	11	0	0	0	0	0	0
2012	11	9	2	0	0	0	0	0

Somerville **Population: 75,754**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	60	34	25	1	3	3	0	0
2009	49	32	16	1	2	2	0	0
2010	43	29	13	1	1	1	0	0
2011	50	33	17	0	2	2	0	0
2012	37	23	13	1	1	0	1	0

Stoneham**Population: 21,437**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	67	57	7	3	1	0	0	1
2009	87	72	6	9	1	1	0	0
2010	78	58	14	6	1	1	0	0
2011	75	69	4	2	0	0	0	0
2012	72	57	6	9	0	0	0	0

Stow**Population: 6,590**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	16	9	1	6	1	0	0	1
2009	18	5	3	10	2	0	0	2
2010	26	13	2	11	2	0	0	0
2011	16	13	2	1	0	0	0	0
2012	20	11	3	6	0	0	0	0

Sudbury**Population: 17,659**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	58	58	5	25	0	0	0	0
2009	32	13	4	15	1	0	1	0
2010	61	21	3	37	0	0	0	0
2011	41	13	4	24	0	0	0	0
2012	44	20	6	18	2	0	1	1

Tewksbury**Population: 28,961**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	82	27	11	44	3	0	0	3
2009	92	44	15	33	2	1	0	1
2010	105	41	11	53	7	5	0	2
2011	90	45	12	33	2	1	0	1
2012	87	38	7	42	4	1	0	2

Townsend					Population: 8,926			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2	2	0	0	0	0	0	0
2009	8	6	2	0	0	0	0	0
2010	3	2	1	0	1	1	0	0
2011	15	10	2	3	0	0	0	0
2012	26	16	1	9	1	0	0	1

Tyngsborough					Population: 11,292			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	25	6	8	11	0	0	0	0
2009	19	7	4	8	0	0	0	0
2010	43	7	12	24	0	0	0	0
2011	18	8	4	6	0	0	0	0
2012	35	8	6	21	0	0	0	0

Wakefield					Population: 24,932			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	59	54	5	0	1	0	1	0
2009	54	38	13	3	1	0	1	0
2010	59	52	6	1	1	1	0	0
2011	53	43	8	2	2	2	0	0
2012	37	31	3	3	1	1	0	0

Waltham					Population: 60,632			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	173	76	22	75	1	0	1	0
2009	148	74	13	61	6	1	0	5
2010	185	76	26	83	6	3	0	3
2011	141	68	19	54	3	2	0	1
2012	170	65	15	90	1	1	0	0

Watertown **Population: 31,915**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	58	26	7	25	4	1	0	3
2009	50	24	7	19	0	0	0	0
2010	63	34	5	24	3	2	0	1
2011	69	35	7	27	1	0	0	1
2012	72	29	5	38	2	1	0	1

Wayland **Population: 12,994**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	27	19	4	4	0	0	0	0
2009	25	15	3	7	0	0	0	0
2010	47	26	5	16	1	1	0	0
2011	25	15	6	4	0	0	0	0
2012	32	12	1	19	0	0	0	0

Westford **Population: 21,951**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	77	27	9	41	6	0	0	6
2009	68	22	8	38	1	0	0	1
2010	74	24	12	38	7	2	0	5
2011	53	21	6	26	2	0	1	1
2012	54	14	8	32	1	0	0	1

Weston **Population: 11,261**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	41	20	7	14	1	0	0	1
2009	56	32	10	14	2	0	0	2
2010	39	22	8	9	1	1	0	0
2011	44	21	10	13	1	0	0	1
2012	38	13	10	15	1	0	0	1

Wilmington**Population: 22,325**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	47	13	13	21	1	0	0	1
2009	92	51	14	27	4	2	1	1
2010	118	58	20	40	4	1	0	3
2011	97	56	16	25	0	0	0	0
2012	96	40	12	44	1	1	0	0

Winchester**Population: 21,374**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	43	25	6	12	2	0	0	2
2009	64	42	7	15	3	2	0	13
2010	53	23	7	23	2	0	0	2
2011	35	23	2	10	1	0	0	1
2012	47	25	5	17	3	1	0	2

Woburn**Population: 38,120**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	72	40	18	14	2	2	0	0
2009	70	42	17	11	0	0	0	0
2010	71	47	18	6	1	0	0	1
2011	76	41	23	12	0	0	0	0
2012	60	28	22	10	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
17002	Acton	3,733	54	1	1,323	167	197	77	268	0	1,646
17010	Arlington	4,713	133	3	2,899	362	370	207	647	82	10
17012	Ashby	22	9	0	0	0	12	1	0	0	0
17014	Ashland	5	5	0	0	0	0	0	0	0	0
17019	Ayer	671	44	0	96	38	262	81	146	0	4
17023	Bedford	2,814	44	1	1,372	175	211	96	348	9	558
17026	Belmont	2,866	104	1	1,713	113	224	261	425	24	1
17031	Billerica	3,976	128	6	2,560	262	399	91	490	17	23
17037	Boxborough	468	31	0	165	22	105	18	120	0	7
17048	Burlington	3,812	78	0	2,317	158	559	129	569	1	1
17049	Cambridge	12,536	932	12	5,882	791	480	1,606	2,819	8	6
17051	Carlisle	4	4	0	0	0	0	0	0	0	0
17056	Chelmsford	35	30	0	0	5	0	0	0	0	0
17067	Concord	2,922	40	1	1,649	176	253	194	593	2	14
17919	Devens	615	19	0	184	35	245	17	115	0	0
17079	Dracut	3,195	88	4	1,998	158	385	59	490	7	6
17081	Dunstable	284	22	2	138	15	48	19	30	10	0
17093	Everett	5,002	147	7	3,200	184	282	342	827	7	6
17100	Framingham	9,500	484	1	6,084	276	893	561	1,199	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
17115	Groton	441	14	9	98	82	54	25	155	2	2
17136	Holliston	7	7	0	0	0	0	0	0	0	0
17139	Hopkinton	1,781	80	3	1,028	140	121	134	240	19	16
17141	Hudson	3,328	80	2	1,550	285	507	117	425	8	354
17155	Lexington	33	31	1	1	0	0	0	0	0	0
17157	Lincoln	989	49	7	451	57	98	38	266	1	22
17158	Littleton	1,306	58	0	800	68	120	79	175	1	5
17160	Lowell	13,842	559	14	7,813	497	1,584	922	2,284	94	75
17165	Malden	7,650	189	3	5,400	208	526	262	1,048	0	14
17170	Marlborough	6,027	148	0	3,310	315	463	507	1,201	11	72
17174	Maynard	1,483	37	0	740	69	105	120	178	1	233
17176	Medford	8,802	304	3	5,176	865	736	466	1,120	109	23
17178	Melrose	19	18	0	0	1	0	0	0	0	0
17198	Natick	4,614	94	3	2,819	336	412	243	662	34	11
17207	Newton	8,041	145	4	4,045	678	1,068	412	1,681	8	0
17213	North Reading	1,994	56	2	1,056	139	263	126	294	33	25
17232	Pepperell	412	59	1	61	50	84	37	113	7	0
17246	Reading	639	57	0	289	83	17	16	99	0	78
17269	Sherborn	343	45	0	15	97	55	28	76	24	3
17270	Shirley	11	11	0	0	0	0	0	0	0	0

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

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
17274	Somerville	37	37	0	0	0	0	0	0	0	0
17284	Stoneham	2,878	72	0	1,803	445	152	134	272	0	0
17286	Stow	833	26	0	514	40	55	37	140	14	7
17288	Sudbury	1,705	52	1	890	155	159	148	259	1	40
17295	Tewksbury	3,756	88	1	2,264	116	698	183	381	2	23
17299	Townsend	1,341	29	2	914	52	158	120	66	0	0
17301	Tyngsborough	1,245	35	0	506	153	264	47	239	1	0
17305	Wakefield	144	37	0	0	12	0	0	95	0	0
17308	Waltham	7,726	172	5	4,305	647	749	457	1,349	5	37
17314	Watertown	4,266	73	4	2,733	251	370	126	675	11	23
17315	Wayland	3,168	39	10	1,165	285	353	76	142	0	1,098
17330	Westford	2,187	57	2	1,321	72	219	93	402	5	16
17333	Weston	2,157	45	0	1,114	168	172	96	546	13	3
17342	Wilmington	2,741	97	1	1,752	138	183	200	330	23	17
17344	Winchester	1,976	55	0	1,011	323	138	119	325	3	2
17347	Woburn	150	60	1	8	19	7	3	47	2	3
Middlesex County		155,245	5,411	118	86,532	9,783	14,815	9,130	24,371	599	4,486

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Cambridge Fires in 2012

932 Total Fires — 830 Structures, 19 Vehicles & 83 Other Fires

The Cambridge Fire Department reported 932 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 830 structure fires, 19 motor vehicle fires, 49 outside rubbish fires, 21 brush fires, four six outside fires, one cultivated crop fire, and six unclassified fires caused one civilian death, two civilian injuries, 15 fire service injuries and an estimated dollar loss of \$2.5 million.

1 Cambridge Resident Killed in 1 Fires

- On November 13, 2012, at 12:32 a.m., the Cambridge Fire Department was dispatched to a fire in a three-unit apartment building of undetermined cause. The fire began in the victim's third story living room. There were multiple potential heat sources in the area of origin as well as much accumulation of clutter. The victim was the 55-year old male occupant of the apartment. One firefighter was injured at this fire. Detectors were present but it was undetermined if they operated. The building was not sprinklered. Damages from this fire were estimated to be \$50,000.

All Fires Up in 2012

Total fires increased by 97, or 12%, from 835 incidents reported in 2011. Reported structure fires increased by 84, or 11%, from the 746 reported during the previous year. Motor vehicle fires increased by six, or 46%, from 13 the year before. Outside and other fires increased by seven from the 76 reported the year before; this is an increase of 9%.

CAMBRIDGE FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	860	748	14	98	9	2	0	7
2009	874	775	17	82	4	0	0	4
2010	901	782	16	103	7	2	1	4
2011	835	746	13	76	0	0	0	0
2012	932	830	19	83	2	2	0	0

BUILDING FIRES

There were 829 building fires of different types in Cambridge in 2012. These 829 building fires accounted for all but one of the structure fires in Cambridge.

82% of Building Fires in Homes

The 829 building fires that occurred in Cambridge in 2012 can be broken down by fixed property use as follows: 677, or 82% of all structure fires, were in residential properties; 49 occurred in public assembly properties; 34 fires occurred in mercantile or business properties; 24 occurred in special properties; 23 fires happened in educational facilities; 18 fires took place in institutional properties; three occurred in industrial, utility, defense, agricultural or mining facilities; and one occurred in a storage facility.

RESIDENTIAL FIRES

Residential Building Fires Are Up

There were 677 reported residential building fires in Cambridge in 2012. These 677 fires are an increase of 69, or 11%, from the 608 residential building fires reported in 2011.

Apartments Accounted for 58% of Residential Building Fires

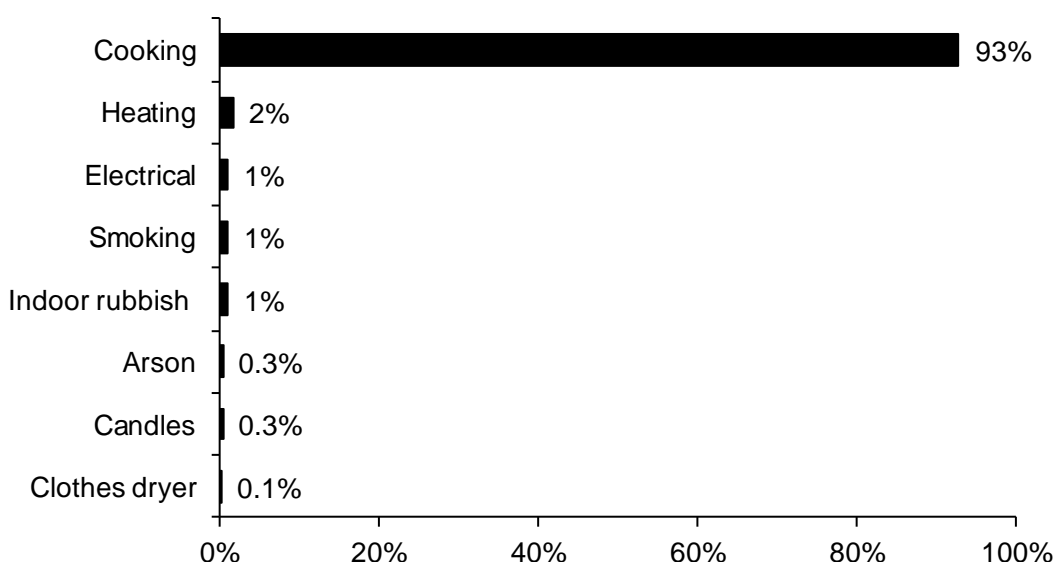
The peak fixed property uses for residential building fires were apartments, accounting for 58% of the residential building fires in Cambridge. Twenty-one percent (21%) occurred in dormitories; 12% occurred in 1- or 2-family homes; 2% occurred in hotels or motels; 1% happened in rooming houses; less than 1% happened in residential board and care facilities; and 7% occurred in unclassified residences.

Cambridge is home to several colleges and universities, Massachusetts Institute of Technology and Harvard University among them. This is the main reason dormitory fires make up such a high percentage of Cambridge's residential fires.

Unattended Cooking Caused 93% of Residential Fires

The leading cause of residential building fires in Cambridge was unattended cooking and other unsafe cooking practices, accounting for 93% of these fires. Heating equipment caused 2% of these fires. Electrical problems, smoking and indoor rubbish fires each caused 1% of the residential fires in Cambridge. Arson, candles and clothes dryers each caused less than 1% of the fires in Cambridge homes in 2012.

2012 Leading Causes of Fires in Cambridge Homes



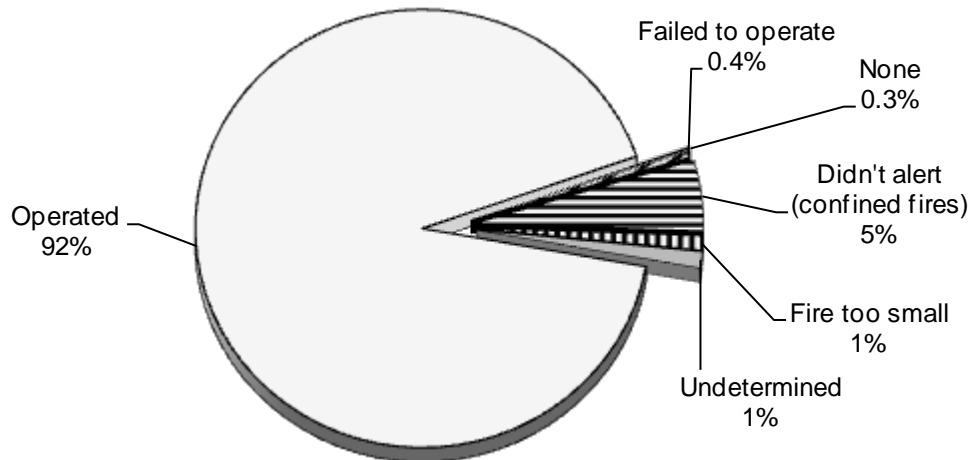
94% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Six hundred and thirty-eight (638), or 94% of all residential building fires were confined to non-combustible containers in 2012. Six hundred and twenty-four (624), or 92%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Eight (8), or 1%, were fires confined to a fuel burner or boiler malfunction. Four (4), or 1%, of these fires were rubbish fires contained to a non-combustible container. One (1) fire, or less than 1%, was confined to a chimney or flue; and one fire, or less than 1%, was confined to a commercial compactor in Cambridge in 2012.

Detectors Alerted Occupants in 92% of Fires

Smoke or heat detectors operated and alerted the occupants in 622, or 92%, of the residential building fires. In 5% of these fires², the detectors did not alert the occupants. Detectors were present but failed to operate in less than 1% of these fires. In less than 1% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 1% of the residential fires. Smoke detector performance was undetermined in eight incidents, or 1% of Cambridge's residential building fires.

Detector Status in Cambridge Residential Fires 2012



¹ 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.

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

3 Failed Detectors

Cambridge reported three residential fires where the detector failed to operate. In two of these fires, the detector failed because of a missing or disconnected battery. In the other case the detector failed because of a lack of maintenance.

VACANT BUILDINGS

3 Building Fires Occurred in Vacant Buildings

In 2012 Cambridge reported three fires in buildings that were vacant, under construction or under demolition. Two (2) of these fires occurred in business offices and one in an unclassified mercantile or business facility. In 2011 Cambridge did not report any fires that occurred in buildings that were vacant, under construction or under demolition.

JUVENILE-SET FIRES

0 Juvenile-set Fires

In 2012, Cambridge did not report any juvenile-set fires.

ARSONS

2 Total Arsons

The total number of arsons increased by two. This is a 200% increase from the zero arsons reported in 2011. Reported structure arsons increased by two from the none reported in 2011. For the second year in a row, Cambridge did not report any motor vehicle or outside and other arsons.

Cambridge reported 14 fires that are still under investigation or undetermined after investigation. Five (5) of these fires were reported as under investigation and nine were classified as undetermined.

Rescue & EMS Calls Are 47% of All Reported Incidents

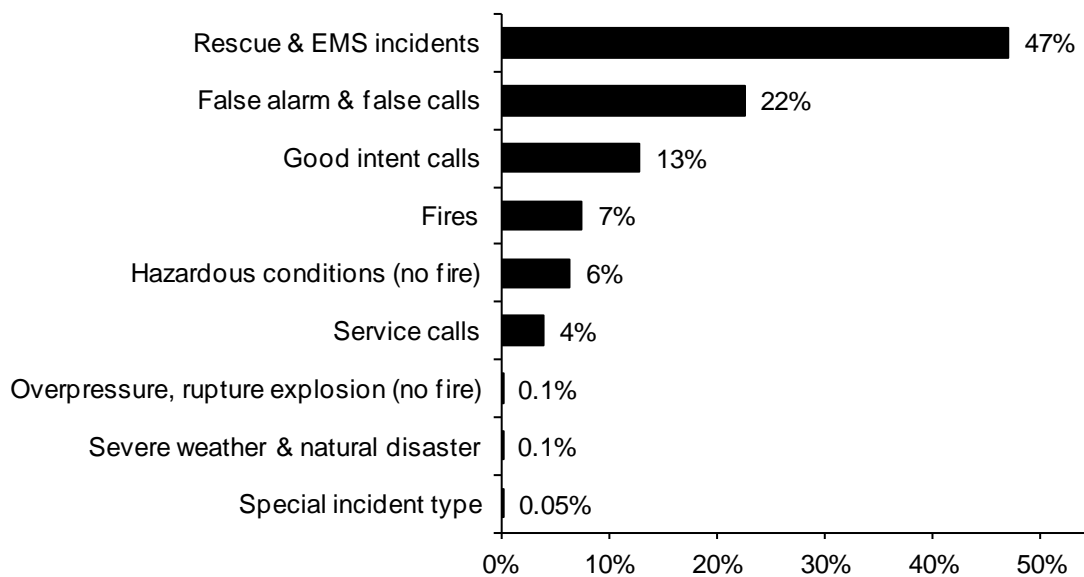
In 2012, Cambridge voluntarily reported 12,536 incidents to MFIRS. Of these 12,536 incidents, 11,604, or 93%, were non-fire incidents.

Of these 11,604 non-fire incidents 5,882, or 47% of all the incidents reported in 2012, were reported rescue and emergency medical services (EMS) calls; 2,819, or 22%, were reported false alarm or false calls; 1,606, or 13%, were reported good intent calls; 791, or 6%, were reported hazardous condition calls with no fire; 480, or 4%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 12, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; eight, or 0.1%, were responses to severe weather and five, or 0.05%, were special incident type calls such as citizen complaints.

In 2012, Cambridge reported 932 fires³, accounting for 7% of all reported incidents.

³ These fire calls include mutual aid calls outside of Cambridge's jurisdiction.

2012 Incidents by Incident Type



Cambridge Gave Mutual Aid in 51 Reported Incidents

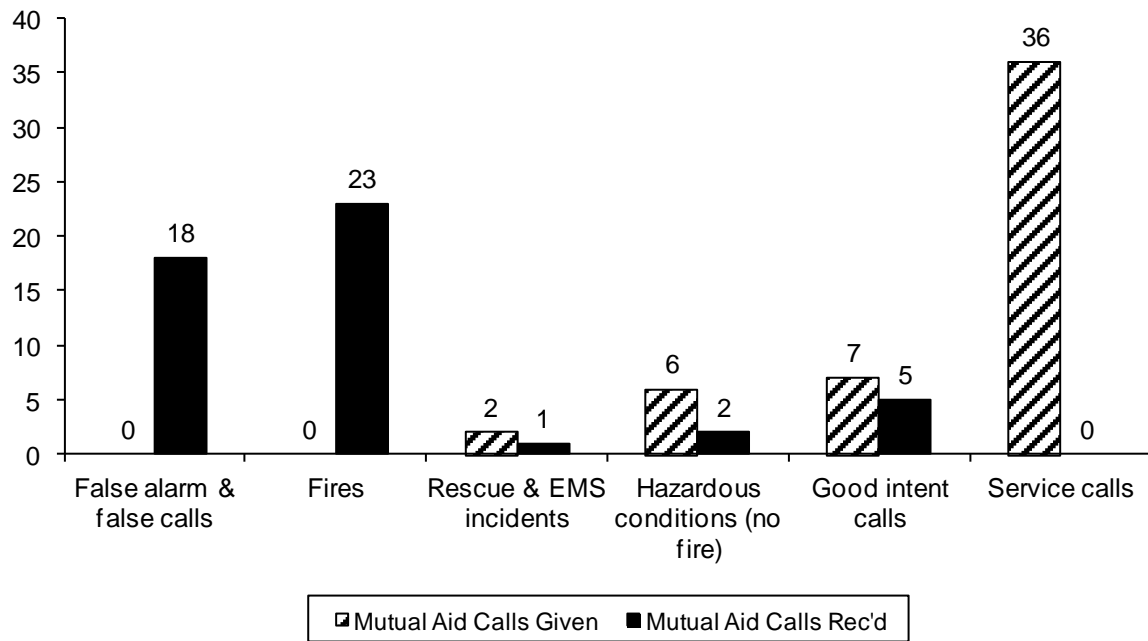
In 2012, Cambridge reported coming to the aid of other fire departments 51 times. Of these 51 incidents, 36, or 71%, were for cover assignments (service calls); seven, or 14%, were for good intent calls; six, or 12%, were for hazardous conditions calls with no fire; and two, or 4%, were for rescue or EMS calls.

Cambridge Received Mutual Aid in 49 Incidents

In 2012, surrounding fire departments gave aid to Cambridge in 49 incidents. Of these 49 incidents, 23, or 47%, were fires; 18, or 37%, were false alarms or false calls; five, or 10%, were good intent calls; two, or 4%, were hazardous conditions calls with no fire; and one, or 2% was a rescue or EMS call.

The following chart compares the number of calls that the Cambridge Fire Department gave mutual aid to a neighboring community as compared to the number of calls that a neighboring community assisted Cambridge. In 2012 Cambridge was asked to send an apparatus outside of Cambridge as many times as they asked neighboring fire departments for help.

Cambridge's Mutual Aid Calls in 2012



Cambridge**Population: 105,162****8.9 Fires/1,000 Population****Total Fires: 932 \$2,466,180**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	830	89%	\$2,445,770
Vehicle Fires	19	2%	13,800
Other Fires	83	9%	6,610

1 Civilian Death 1.07 Civilian Deaths/1,000 Fires
 1 Fatal Fire 0.10 Civilian Deaths/10,000 Population
 2 Civilian Injuries 15 Fire Service Injuries

Building Fires: 829**Residential Structure Fires: 677****Residential Structure Fires Confined to Non-Combustible Containers: 638****Unconfined Residential Structure Fires: 39**

1 Civilian Death 2 Civilian Injuries 13 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	392	58%	Operated	622	92%
Dormitories	139	21%	Didn't operate	3	0.4%
1- & 2-Family homes	78	12%	None	2	0.3%
Rooming houses	11	2%	Fire too small	7	1%
Hotels, motels	8	1%	Didn't Alert (confined)	35	5%
Residential board & care	2	0.3%	Undetermined	8	1%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	93%	Heat from operating. eq.	1%	23%
Heating room or area	1%	Cigarettes	1%	18%
Living room	1%	Arcing	1%	13%
Bedroom	1%	Rad., conduct./heat-op. eq.	1%	10%
Bathroom	1%	Candles	0.3%	5%
Exterior balcony/unencl. porch	1%			

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

⁵ 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.

Item First Ignited ⁶	%	Factor Contrib. to Ignition %	%Unconfined ⁷
Cooking materials	92%	Too close to combustibles	1% 21%
Flammable or combustible liq.	1%	Misuse of materials, other	0.4% 8%
Rubbish, trash, waste	1%	Mechan. failure, malfunc.	0.4% 8%
Exterior sidewall covering	1%	Abandoned materials	0.3% 5%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	93%	Unintentional	4%	67%
None	3%	Failure of eq./heat source	1%	18%
Boiler, furnace, cent. heat unit	1%	Intentional	0.3%	5%
Electrical wiring, other	0.3%	Act of nature	0.1%	3%
Lamp, lighting, other	0.3%	Undetermined	0.1%	3%
		Cause under investigation	0.3%	5%

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

Alerted Occupants	94%
Didn't Alert Occupants	5%
Undetermined	1%

All Reported Incidents	# of Incidents	% of Incidents
Rescue & EMS incidents	5,882	47%
False alarms & false calls	2,819	22%
Good intent calls	1,606	13%
Fires	932 ¹⁰	7%
Hazardous conditions (no fire)	791	6%
Service calls	480	4%
Overpressure rupture, explosion or overheat calls (no fire)	12	0.1%
Special incident type	8	0.1%
Severe weather & natural disaster	6	0.05%

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

⁷ 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.

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

⁹ 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.

¹⁰ This includes the mutual aid fire calls outside of Cambridge's city limits.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	78	75	1	2
February	78	76	1	1
March	79	72	0	7
April	92	67	3	22
May	74	65	4	5
June	77	66	1	10
July	52	36	2	14
August	54	49	0	5
September	86	82	1	3
October	95	86	2	7
November	84	77	2	5
December	83	79	2	2

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	152	139	3	10
Monday	138	113	3	22
Tuesday	147	134	2	11
Wednesday	116	105	2	9
Thursday	128	118	5	5
Friday	135	114	1	20
Saturday	116	107	3	6

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	76	62	2	12
04:01 - 08:00	53	41	2	10
08:01 - 12:00	133	121	4	8
12:01 - 16:00	192	168	4	20
16:01 - 20:00	274	250	6	18
20:01 - 24:00	204	188	1	15

Motor Vehicle Fires

Total: 19

Automobiles: 18 (95%)

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

Arson Fires

Total Arsons: 2

Dollar loss: \$500

0.02 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	2	0.2%	100%	\$500
Motor Vehicle Arsons	0	0%	0%	0
Other Arsons	0	0%	0%	0

No Injuries

0.02 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.00 Other arsons/1,000 population

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
08:01 – 12:00	1	50%			
12:01 – 16:00	1	50%			
Other Arsons	#	%			

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	1	50%
Dormitory type residence, other	1	50%

Lowell Fires in 2012

552 Total Fires — 371 Structures, 28 Vehicles & 153 Other Fires

The Lowell Fire Department reported 552 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 371 structure fires, 28 motor vehicle fires, 85 outside rubbish fires, 56 brush fires, seven special outside fires; and five unclassified fires caused three civilian injuries and an estimated dollar loss of \$2.3 million.

MV Fires Down in 2012

Total fires increased by six from the 546 incidents reported in 2011. Reported structure fires increased by one from the 370 reported during the previous year. Motor vehicle fires decreased by 18 from 46 reported in 2011. Outside and other fires increased by 23 from the 130 reported in 2011.

LOWELL FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	573	403	43	127	24	5	12	7
2009	506	324	45	137	24	8	6	10
2010	662	392	45	225	20	7	8	5
2011	546	370	46	130	29	9	13	7
2012	552	371	28	153	20	8	4	8

BUILDING FIRES

There were 367 building fires of different types in Lowell in 2012. These 367 building fires accounted for 98.9% of all structure fires in Lowell.

82% of Building Fires in Homes

The 367 building fires that occurred in Lowell in 2012 can be broken down by fixed property use as follows: 302, or 82% of all building fires, were in residential properties; 17 fires occurred in public assembly properties; 14 fires occurred in special properties; 12 happened in mercantile or business properties; 10 fires occurred in educational facilities; five fires happened in storage facilities; four fires occurred in institutional facilities; two fires happened at industrial facilities; and another fire occurred in a manufacturing or processing facility.

RESIDENTIAL FIRES

Residential Building Fires Were Down

There were 302 reported residential building fires in Lowell in 2012, a decrease of 12 from the 313 reported residential building fires reported in 2011.

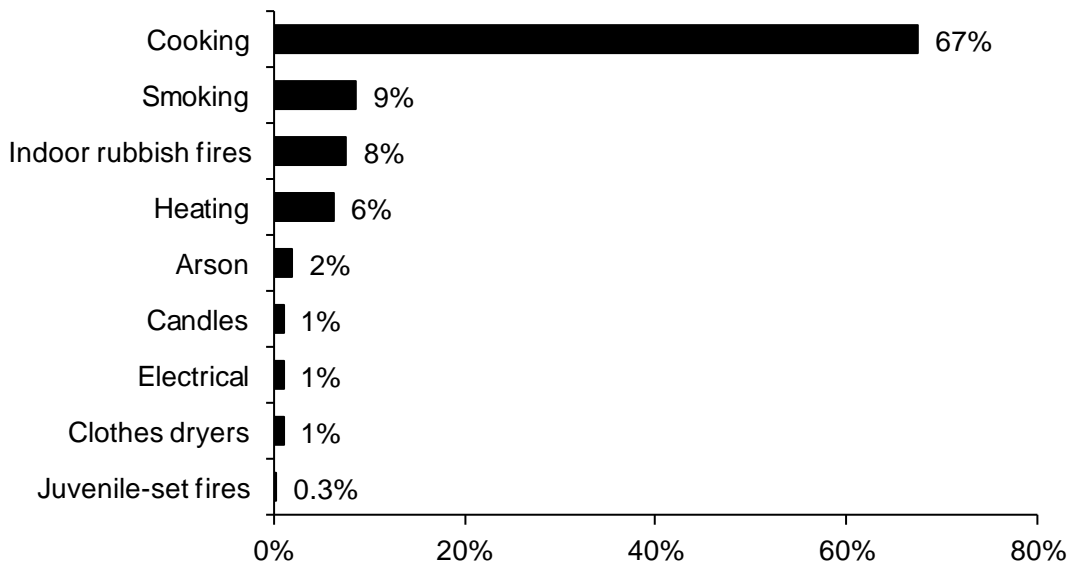
Apartments Accounted for Almost 3/4 of Residential Building Fires

Apartments, accounting for 73% of the building fires in Lowell were the peak fixed property use for residential building fires in 2012. Twenty percent (20%) of residential fires occurred in 1- or 2-family homes; 4% happened in rooming houses; 2% happened in residential board and care facilities; 1% occurred in dormitories; and less than 1% happened in unclassified residential properties.

Unattended Cooking Caused 2/3 of Residential Fires

The leading cause of residential building fires in Lowell was unattended cooking and other unsafe cooking practices, causing two-thirds, or 67%, of these fires. Smoking caused 9% of these fires. Indoor rubbish fires caused 8% while heating fires were the cause of 6% of Lowell's residential fires. Arsons caused 2% of these fires. Candles, electrical problems and clothes dryers were the cause of 1%; and juvenile-set fires caused less than 1% of the fires in Lowell's residential occupancies in 2012.

2012 Leading Causes of Fires in Lowell Homes



77% of Residential Building Fires Are Confined to Non-Combustible Containers¹

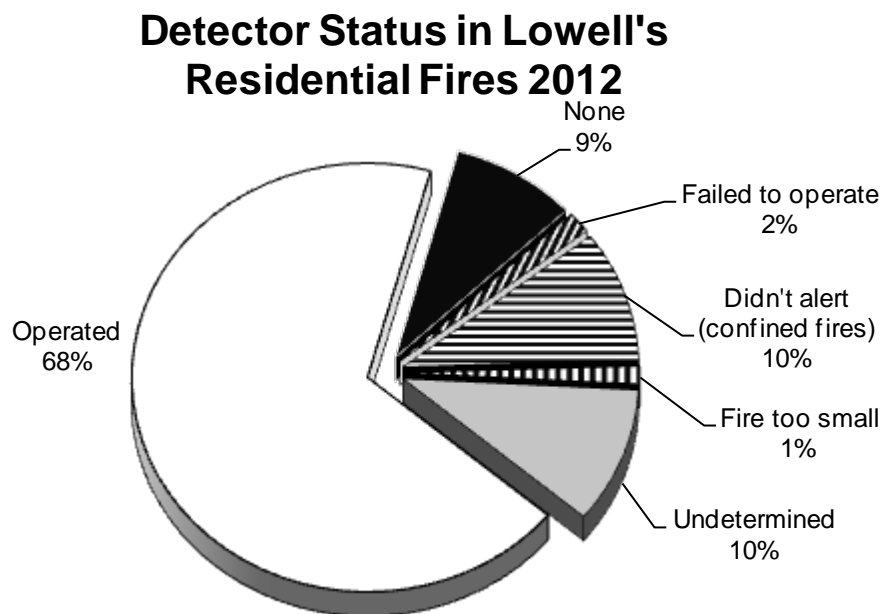
Two hundred and thirty-two (232), or 77% of all residential building fires were confined to non-combustible containers in 2012. One hundred and ninety-five (194), or 65%, of all residential building fires reported in 2012 were cooking fires contained to a non-

¹ 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.

combustible container. Twenty-three (23), or 8%, of these fires were rubbish fires contained to a non-combustible container. Fourteen (14), or 5%, were fires confined to a fuel burner or boiler malfunction.

Detectors Worked in Over 2/3 of Fires

Smoke or heat detectors operated and alerted the occupants in 206, or 68%, of the residential building fires. In 10% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 9% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 1% of these fires. Smoke detector performance was undetermined in 31 incidents, or 10% of Lowell's residential building fires.



1 Failed Detector Had a Dead Battery

Of the five fires where smoke detectors were present but failed to operate, one, or 20%, failed because the batteries were dead; and another, or 20%, failed because the battery was missing. A power failure, shutoff or disconnect also caused one, or 20%, of the detectors to fail. It was undetermined in the other two, or 40% of the cases why the detectors failed to operate.

VACANT BUILDINGS

5 Building Fires in Vacant Buildings

Lowell reported five fires that occurred in buildings that were vacant, under construction or under demolition. This represented 1% of the 367 building fires reported to MFIRS in

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

2012. One (1) single-family home, one apartment building, and one outbuilding were reported as vacant building fire incidents.

JUVENILE-SET FIRES

2 Juvenile-set Fires

There were two reported juvenile-set fires in Lowell in 2012. Both of these fires were building fires.

ARSONS

20 Arsons - 8 Structure, 4 Motor Vehicle and 8 Outside & Other

Twenty (20), or 4%, of Lowell's 552 fires were considered intentionally set, or, for purposes of this analysis, arson. There were eight structure arsons, four motor vehicle arsons and eight outside and other arsons.

All Arsons Down Slightly in 2012

The total number of arsons decreased by nine from the 29 total arsons reported in 2011. Reported structure arsons decreased by one from the nine reported in 2011. Motor vehicle arsons decreased by nine from the 13 reported in 2011. Outside and other arsons increased by one from seven reported the year before.

20 Fires Reported as Undetermined

In 2012, Lowell reported 20 fires with an undetermined cause after investigation. Eleven (11), or 55%, of these 20 fires were structure fires. Four (4), or 20% were motor vehicle fires; and five, or 25%, were outside or other fires.

ALL INCIDENTS

Rescue & EMS Calls Are 56% of All Reported Incidents

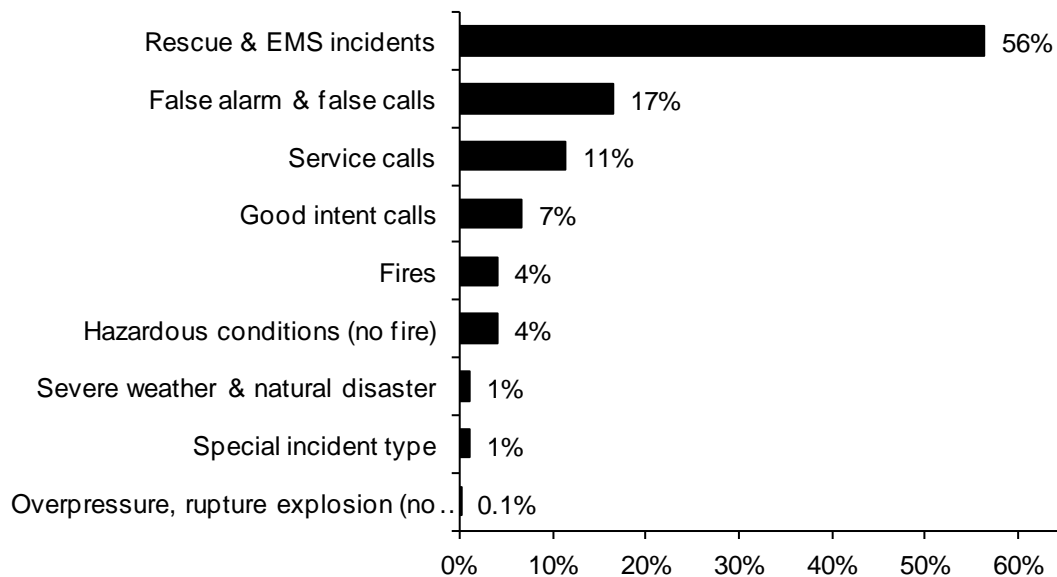
In 2012, Lowell voluntarily reported 13,842 incidents to MFIRS. Of these 13,842 incidents, 13,283, or 96% were non-fire incidents.

Of these 13,283 non-fire incidents 7,813, or 56% of all reported incidents in 2012, were reported rescue and emergency medical services (EMS) calls; 2,284, or 17%, were reported false alarm or false calls; 1,584, or 11%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 922, or 7%, were reported good intent calls; 497, or 4%, were reported hazardous condition calls with no fire; 94 or 1%, were severe weather calls; 75, or 1%, were special incident types; 14, or 0.1%, were reported overpressure, rupture, explosion or overheat calls.

In 2012, Lowell reported 559 fires³, accounting for 4% of all reported incidents.

³ This includes the fires that Lowell responded to as mutual aid calls outside of their jurisdiction.

2012 Incidents by Incident Type



Lowell Gave Mutual Aid in 14 Reported Incidents

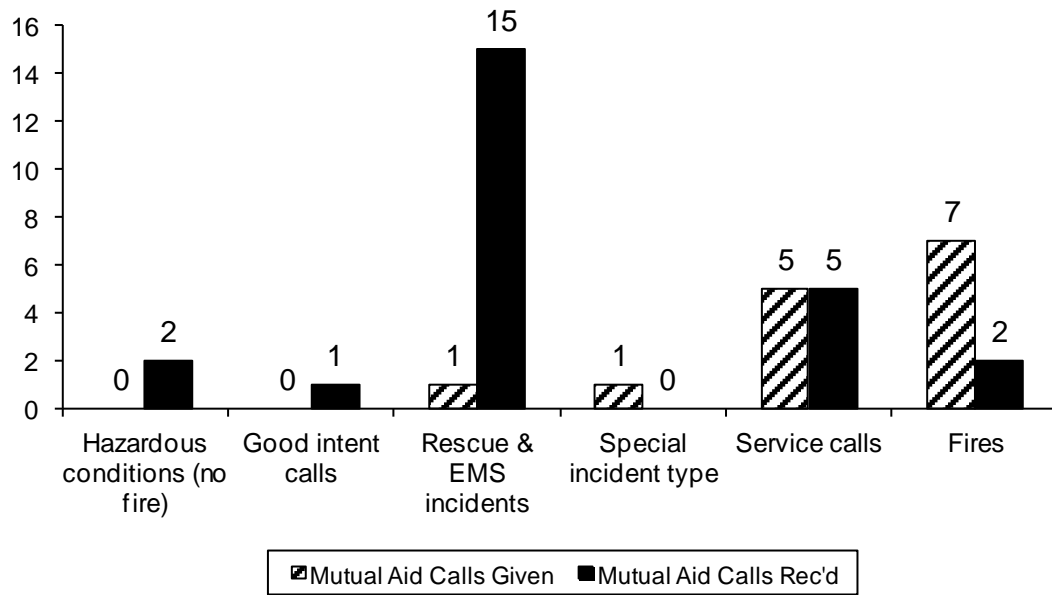
In 2012, Lowell reported coming to the aid of other fire departments 14 times. Of these 14 incidents, seven, or 50%, were for fires; five, or 36%, were for cover assignments or other service calls; one, or 7%, was for a rescue or EMS call, and another call, or 7%, was for a special incident type.

Lowell Received Mutual Aid in 25 Incidents

In 2012, surrounding fire departments gave aid to Lowell during 25 incidents. Of these 25 incidents, 15, or 60%, were rescue or EMS calls, five, or 20%, were service calls; two, or 8%, were for fires; two or 8%, were hazardous condition calls with no ensuing fire; and one, or 4%, was a good intent call.

The following chart compares the number of calls that the Lowell Fire Department received mutual aid from a neighboring community compared to the number of calls that Lowell gave assistance to a neighboring community. In 2012 Lowell received aid almost twice as many times as they gave it.

Lowell's Mutual Aid Calls in 2012



Lowell**Population: 106,519****5.2 Fires/1,000 Population****Total Fires: 552 \$2,343,140**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	371	67%	\$2,182,740
Vehicle Fires	28	5%	143,900
Other Fires	153	28%	16,500

3 Civilian Injuries

Building Fires: 367**Residential Structure Fires: 302****Residential Structure Fires Confined to Non-Combustible Containers: 232****Unconfined Residential Structure Fires: 69**

3 Civilian Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	220	73%	Operated	206	68%
1- & 2-Family homes	60	20%	Didn't operate	5	2%
Boarding houses	12	4%	None	26	9%
Residential board & care	6	2%	Fire too small	4	1%
Dormitories	3	1%	Didn't Alert (confined)	30	10%
			Undetermined	31	10%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	70%	Heat from operating eq.	5%	20%
Heating room or area	5%	Cigarette	3%	13%
Exterior stairway	3%	Heat from open flame, other	2%	9%
Wall surface, exterior	2%	Rad. or con. heat from op eq.	2%	7%
Bedroom	2%	Candles	1%	6%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignition	%	%Unconfined⁷
Cooking materials	67%	Abandoned materials	6%	28%
Rubbish, trash, waste	8%	Too close to combustibles	4%	17%
Flammable or combustible liq.	5%	Equipment unattended	2%	9%
Structural member, framing	3%	Misuse of material, other	2%	7%
Exterior sidewall covering, other	3%	Mechanical fail./malf., other	2%	7%

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Cooking equipment	67%	Unintentional	18%	77%
None	15%	Intentional	2%	9%
Boiler, furnace, cent. heat. unit	5%	Failure of eq./heat source	1%	6%
Stove, heating	2%	Cause Under Investigation	0%	0%
		Undetermined	2%	10%

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

Alerted Occupants	75%
Didn't Alert Occupants	13%
Undetermined	12%

All Reported Incidents	# of Incidents	% of Incidents
Rescue & EMS incidents	7,813	56%
False alarms & false calls	2,284	17%
Service calls	1,584	11%
Good intent calls	922	7%
Fires ¹⁰	559	4%
Hazardous conditions (no fire)	497	4%
Severe weather & natural disaster	94	1%
Special incident type	75	1%
Overpressure rupture, explosion or overheat calls (no fire)	14	0.1%

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

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

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¹⁰ This figure contains the fires that Lowell gave mutual aid to in another jurisdiction.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	35	27	5	3
February	63	37	5	21
March	53	33	3	17
April	77	37	3	37
May	33	26	1	6
June	42	27	1	14
July	50	34	1	15
August	29	24	0	5
September	46	27	1	18
October	45	34	5	6
November	48	37	3	8
December	31	28	0	3

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	88	61	0	27
Monday	66	43	4	19
Tuesday	69	41	3	25
Wednesday	73	54	4	15
Thursday	73	51	5	17
Friday	87	60	6	21
Saturday	96	61	6	29

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	47	23	6	18
04:01 - 08:00	38	24	4	10
08:01 - 12:00	80	62	2	16
12:01 - 16:00	132	88	2	42
16:01 - 20:00	150	107	4	39
20:01 - 24:00	105	67	10	28

Motor Vehicle Fires

Total: 28

Automobiles: 24 (86%)

3 (13%) of the automobile fires considered intentionally set.

Arson Fires

Total Arsons: 20

Dollar loss: \$165,500

0.19 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	8	2%	40%	\$155,300
Vehicle Arsons	4	14%	20%	10,200
Other Arsons	8	5%	40%	0

0.08 Structure arsons/1,000 population

0.04 Vehicle arsons/1,000 population

0.08 Other arsons/1,000 population

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
04:01 - 08:00	3	38%	20:01 - 00:00	2	50%
16:01 - 20:00	3	38%	00:01 - 04:00	1	25%
			04:01 - 08:00	1	25%

Other Arsons	#	%
00:01 - 04:00	2	25%
08:01 - 12:00	2	25%
20:01 - 00:00	2	25%

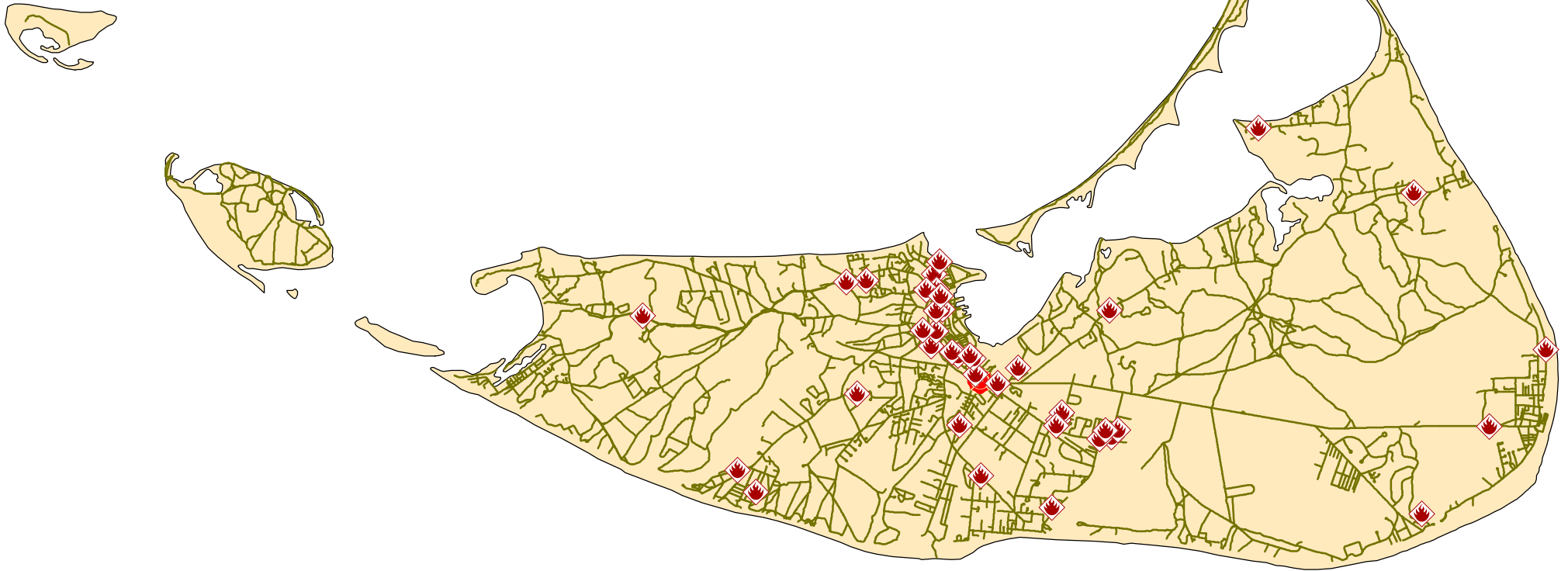
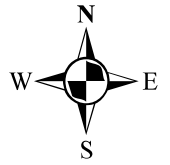
Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	4	50%
1- or 2-Family	2	25%





Nantucket County

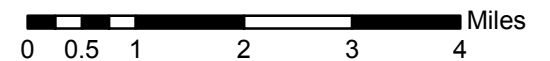
2012 Fire Data Analysis

Nantucket County Fires 2012



2012 Fires

-  Fires
-  Fire Stations



MFIRS
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2012

Nantucket County Fires in 2012

39 Total Fires — 31 Structures, 3 Vehicles & 9 Outside and Other Fires

Nantucket County ranked thirteenth out of the fourteen Massachusetts counties in total reported fires. The Nantucket Fire Department reported 39 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 31 structure fires, three motor vehicle fires, three brush fires, one outside rubbish fire, and one unclassified fire caused an estimated dollar loss of \$5,000. Nantucket County's fires accounted for 0.1% of the 31,229 Massachusetts fires reported in 2012.

All Fires Down

The total number of reported fire incidents decreased by nine from the 48 fires reported in 2011. Structure fires decreased by six from the 37 reported in 2011. Motor vehicle fires increased by one from the two reported the previous year. Reported outside and other fires decreased by four from the nine reported in 2011. An increase in outside fires was a statewide trend in 2012; Nantucket County was the only county to go against this trend.

Nantucket is an island community with a small year round population. During the summer months, the population increases immensely. Consequently, 54% of Nantucket's fires occurred between the months of May and September.

No Reported Fire Deaths

In 2012, Nantucket did not report any fire-related deaths.

NANTUCKET FIRES FROM 2008 TO 2012

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	25	14	5	6	0	0	0	0
2009	39	27	3	9	1	0	0	1
2010	47	30	3	14	1	0	0	1
2011	48	37	2	9	2	0	0	2
2012	39	31	3	5	1	0	0	1

Fire and Fire Death Rates

Nantucket County had 3.8 fires per 1,000 population. That figure ranks Nantucket County eleventh in the state and below the state rate of 4.8 fires per 1,000 population. Nantucket County also had no fire deaths, tying it for twelfth among Massachusetts counties and below the state rate of 0.06 fire deaths per 10,000 population.

Only 1 Fire With a Dollar Loss in 2012

In 2012 Nantucket reported only one of their 39 fires as having any dollar loss.

- On April 21, 2012, at 8:08 p.m., the Nantucket Fire Department was called to a boat fire that was in storage behind a single-family home. No one was injured at this fire. Damages were estimated to be \$5,000.

STRUCTURE FIRES

Reported Structure Fires Down

There were 31 structure fires in Nantucket in 2012. These incidents represented 79% of Nantucket County's reported fires in 2012. No dollar loss was estimated in 2012. The total number of reported structure fires decreased by six from the 37 reported in 2011.

No Reported Structure Arsons

Nantucket County did not report any structure arsons in 2012. The last year that Nantucket reported a structure arson was 2003.

BUILDING FIRES

There were 31 building fires of different types in Nantucket County in 2012. These 31 building fires accounted for all of the structure fires in Nantucket County.

86% of Nantucket Building Fires Occurred in People's Homes

Thirty (30), or 97%, of Nantucket County's 31 building fires occurred in residential occupancies. One (1) fire took place in a mercantile or business property.

RESIDENTIAL FIRES

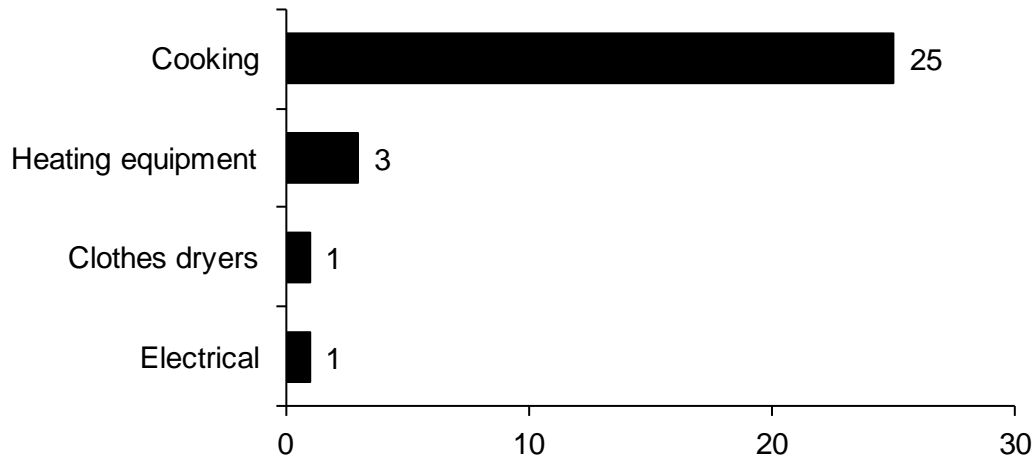
Residential Building Fires Down Slightly

There were 30 reported residential building fires in Nantucket County in 2012. These 30 fires are a decrease of two, or 6%, from the 32 residential building fires reported in 2011. Twenty-five (25), or 83%, occurred in one- or two-family homes; three, or 10%, happened in a rooming house; and two, or 7%, occurred in dormitories.

Cooking Fires Cause 25 of 30 Residential Fires

The leading cause of residential building fires in Nantucket County was unattended cooking and other unsafe cooking practices, accounting for 25, or 83%, of these fires. Heating equipment caused three, or 10%, of these fires. Clothes dryers and electrical problems each were the cause of one, or 3%, of Nantucket's 2012 residential fires.

2012 Leading Causes of Fires in Nantucket Homes



28 Residential Building Fires Are Confined to Non-Combustible Containers¹

Twenty-eight (23), or 93%, of all residential building fires were reported as confined to non-combustible containers in 2012. Twenty-five (25) of the reported fires were cooking fires contained to a non-combustible container accounting for 83% of the residential fires. Three, or 11%, of Nantucket's residential fires were confined to a chimney or flue.

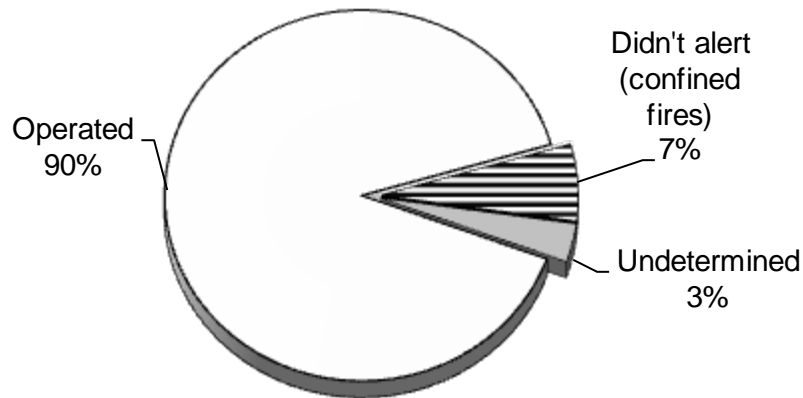
Detectors Alerted Occupants in 90% of Fires

Smoke or heat detectors operated and alerted the occupants in 27, or 90%, of the residential building fires. In two, or 7%, of these fires² the detectors did not alert the occupants. There were no reported fires where there were no detectors. There were no reported fires where the fire was too small to activate the detector. Detector performance was undetermined in one, or 3%, of Nantucket's residential fires.

¹ 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.

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

Detector Status in Nantucket County's Residential Fires 2012



VACANT BUILDING FIRES

0 of Nantucket County 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

No Juvenile-set Fires

Nantucket County did not report any juvenile-set fires in 2012.

ARSONS

1 Total Arsons — 1 Brush Arson

One (1), or 3%, of Nantucket County's 39 fires was considered intentionally set, or, for purposes of this analysis, arson. The one brush arson accounted for all of the county's total arson fires, and none of the county's total dollar losses.

Outside Arson Fires Remain the Same

Nantucket reported one arson. The total number of arsons decreased by one from the two reported in 2011. Reported structure arsons remained the same with none reported in both 2011 and 2012. Motor vehicle arsons decreased by one from the one reported in 2011. Outside and other arsons remained the same with one reported in both 2011 and 2012.

ALL INCIDENTS

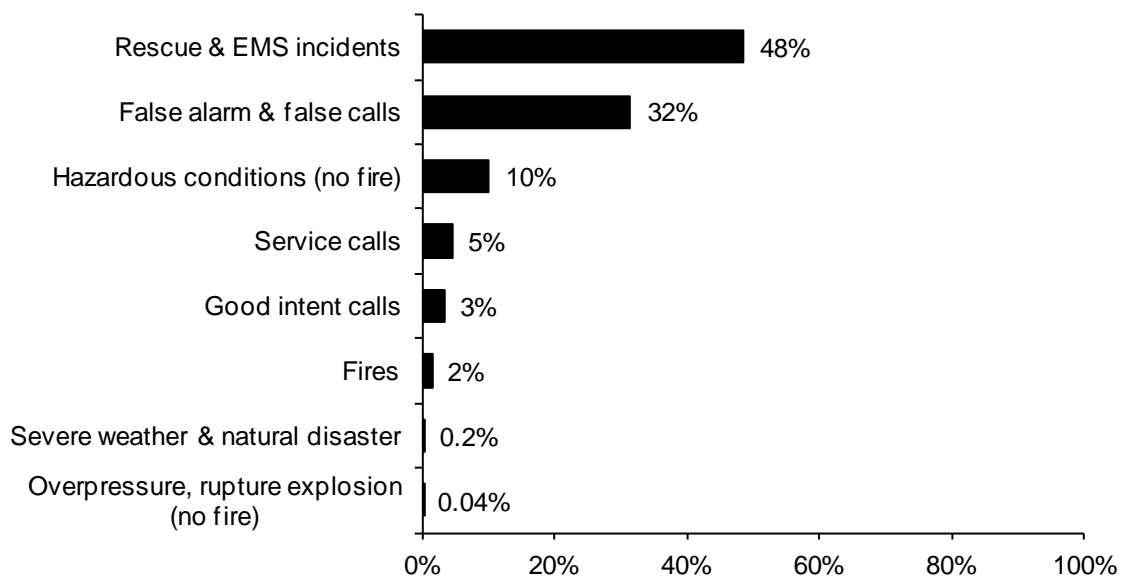
Rescue & EMS Calls Are 48% of All Reported Incidents

In 2012, Nantucket County reported 2,507 responses to MFIRS. Of these 2,507 incidents, 2,468 non-fire calls were voluntarily reported.

Of these 2,468 non-fire calls, 1,215, or 48%, of the total responses reported in 2012 were reported rescue and emergency medical services (EMS) calls; 790, or 32%, were reported false alarm or false calls; 254, or 10%, were reported hazardous condition calls with no fire; 117, or 5%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 86, or 3%, were reported good intent calls; five, or 0.2%, were severe weather calls; and one, or 0.04%, was an overpressure, rupture or explosion call with no fire.

Thirty-nine (39), or 2%, of the total responses submitted by the Nantucket Fire Department were fires.

2012 Incidents by Incident Type



Nantucket County**Population: 10,172****3.8 Fires/1,000 Population****Total Fires: 39 \$5,000**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	31	79%	\$0
Vehicle Fires	3	8%	5,000
Other Fires	5	13%	0

No Casualties

Building Fires: 31**Residential Structure Fires: 30****Residential Structure Fires Confined to Non-Combustible Containers: 28****Unconfined Residential Structure Fires: 2**

No Casualties

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	25	83%	Operated	27	90%
Hotels, motels	3	10%	Didn't operate	0	0%
Dormitories	2	7%	None	0	0%
			Fire too small	0	0%
			Didn't alert (confined)	2	7%
			Undetermined	1	3%

Area of Origin³	%	Heat Source	%	%Unconfined⁴
Kitchen	83%	Multiple heat sources	3%	50%
Chimney or flue	10%	Hot or smoldering object	3%	50%
Service or equipment area, other	3%			
Wall assembly, concealed space	3%			

³ This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

⁴ 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.

Item First Ignited⁵	%	Factor Contrib. to Ignit.	%	%Unconfined⁶
Cooking materials	83%			
Film, residue (creosote)	10%			
Structural member, framin	3%			
Wearing apparel not on a person	3%			

Equipment⁷	%	Cause of Ignition	%	%Unconfined⁸
Cooking equipment	83%	Unintentional	3%	50%
Chimney or flue	10%	Other	0%	0%
Clothes dryer	3%	Cause under investigation	3%	50%
Electrical wiring from meter box	3%	Undetermined	0%	0%

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

Alerted Occupants	89%
Didn't Alert Occupants	7%
Undetermined	4%

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

⁶ 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.

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

⁸ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	0	0	0	0
February	1	1	0	0
March	1	0	0	1
April	4	3	1	0
May	3	1	1	1
June	4	4	0	0
July	6	5	0	1
August	4	4	0	0
September	4	4	0	0
October	2	1	0	1
November	3	3	0	0
December	7	5	1	1

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	8	6	0	2
Monday	7	4	1	2
Tuesday	4	4	0	0
Wednesday	3	2	1	0
Thursday	3	3	0	0
Friday	8	8	0	0
Saturday	6	4	1	1

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	3	2	1	0
04:01 - 08:00	3	3	0	0
08:01 - 12:00	2	2	0	0
12:01 - 16:00	10	7	1	2
16:01 - 20:00	14	12	0	2
20:01 - 00:00	7	5	1	1

Motor Vehicle Fires

Total: 3

Automobiles: 1(33%)

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

Arson Fires

Total Arsons: 1

Dollar loss: \$0

0.10 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	0	0%	0%	\$0
Vehicle Arsons	0	0%	0%	0
Other Arsons	1	20%	100%	0

0.00 Structure arsons/1,000 population

0.00 Vehicle arsons/1,000 population

0.10 Other arsons/1,000 population

No Injuries

Peak Times of Day for:

Other Arsons	#	%
16:01 – 20:00	1	100%

Responses Reported to MFIRS by Month

Incident Type	# of Incidents	January	February	March	April	May	June	July	August	September	October	November	December
Fires	39	0	1	1	4	3	4	6	4	4	2	3	7
Overpressure, rupture explosion (no fire)	1	0	0	0	0	0	1	0	0	0	0	0	0
Rescue & EMS incidents	1,215	75	56	69	91	110	112	177	194	105	85	65	76
Hazardous conditions (no fire)	254	17	18	10	24	9	20	39	42	24	18	20	13
Service calls	117	11	15	10	9	7	3	17	14	13	6	7	5
Good intent calls	86	6	1	4	3	5	5	18	14	6	12	7	5
False alarm & false calls	790	46	35	45	39	87	58	99	110	61	70	77	63
Severe weather & natural disaster	5	0	0	0	0	0	1	0	3	0	1	0	0
Special incident type	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,507	155	126	139	170	221	204	356	381	213	194	179	169

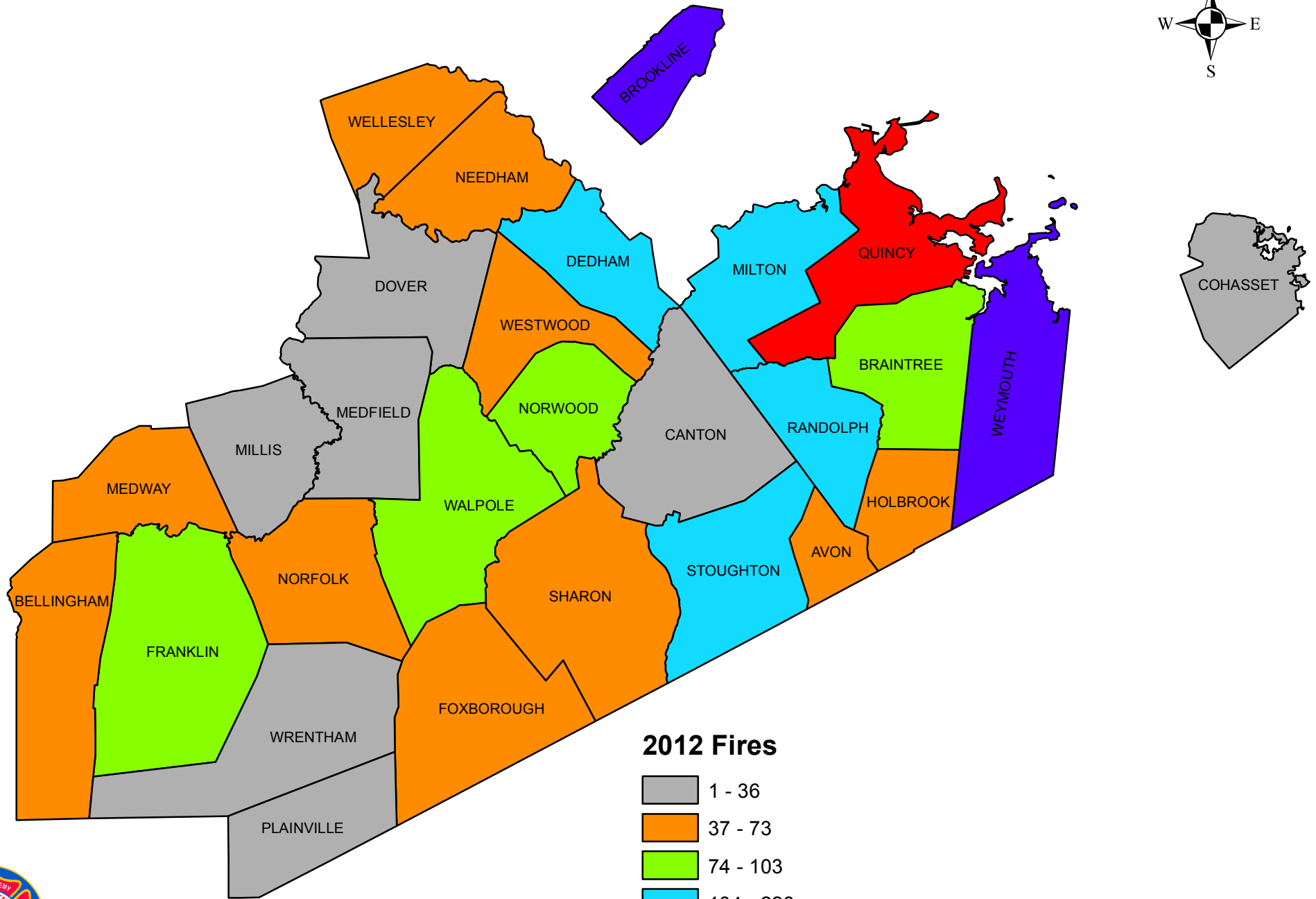
All non-fire responses or fire incidents without a dollar loss or human casualty are voluntarily reported to MFIRS. The Office of the State Fire Marshal strongly encourages any departments that want to send all of their responses to do so.



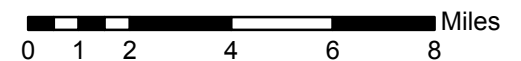
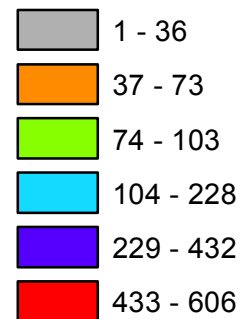
Norfolk County

2012 Fire Data Analysis

Norfolk County Fires 2012



2012 Fires



Massachusetts Fire Incident Reporting System 2012



MFIRS
Massachusetts Fire Incident Reporting System

Norfolk County Fires in 2012

3,270 Total Fires — 1,884 Structures, 226 Vehicles & 1,160 Other Fires

Norfolk County ranked fourth out of the fourteen Massachusetts counties in total reported fires. Norfolk County fire departments reported 3,270 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 1,884 structure fires, 226 motor vehicle fires, 670 brush, tree or lawn fires, 268 outside rubbish fires, 125 special outside fires, 13 cultivated vegetation or crop fires, and 84 other fires caused three civilian deaths, 31 civilian injuries, 113 fire service injuries and an estimated dollar loss of \$16.8 million. Norfolk County's fires accounted for 10% of the 31,229 Massachusetts fires reported in 2012.

All 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 2012.

Structure & MV Fires Down

The total number of reported fire incidents increased by 202 from the 3,068 reported in 2011. Reported structure fires decreased 115 from the 1,999 reported during the previous year. Motor vehicle fires decreased by 63 from the 289 reported the year before. Reported outside and other fires increased by 380 from the 780 reported a year earlier.

Brush Fires Up by 61%

Brush fires increased by 255, or 61%, from the 415 reported in 2012. This is a major increase and the main reason for the increase in all Norfolk County fires. This was a statewide trend.

NORFOLK COUNTY FIRES FROM 2008 TO 2012

Year	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	3,068	1,830	290	948	86	17	6	63
2009	2,786	1,850	275	661	59	9	5	45
2010	3,423	2,023	284	1,116	81	16	4	61
2011	3,068	1,999	289	780	65	7	3	55
2012	3,270	1,884	226	1,160	96	10	10	76

Fire and Fire Death Rates

Norfolk County had 4.9 fires per 1,000 population. That figure ranks Norfolk County third in the state and slightly above the state rate of 4.8 fires per 1,000 population. Norfolk County also had 0.04 fire deaths per 10,000 population ranking it tenth among Massachusetts counties and below the state rate of 0.06 fire deaths per 10,000 population.

3 Norfolk Fires Kill 3 People

In 2012, three successful attempts of self-immolation in motor vehicle fires killed three people in Norfolk County.

- On March 19, 2012, at 11:44 p.m., the Dedham Fire Department was dispatched to a motor vehicle fire. The driver and only occupant of the vehicle had poured gasoline inside her car and then ignited it. The vehicle crashed into the front porch of a home. The victim, a 31-year old female, was trapped inside the vehicle. No one else was injured in this fire. Damages were not estimated.
- On August 18, 2012 at 1:17 a.m., the Weymouth Fire Department was dispatched to an abandoned motor vehicle that may have been dangerous due to a possible chemical suicide. Upon forcing entry into the vehicle, the department's Hazmat team member discovered a self-extinguished fire, a partially burned body, and a five gallon gas can and a lighter. The 52-year old female victim ignited the gasoline she had poured around the inside of the vehicle in a successful attempt at self-immolation.
- On October 10, 2012, at 3:09 a.m., the Quincy Fire Department was called to a fatal arson motor vehicle fire in a vacant lot. The victim, a 49-year old man, drove to the lot, wired the vehicle's doors shut; poured gasoline inside the car and ignited it in a successful attempt at self immolation.

Braintree Has Norfolk County's Largest Loss Fire in 2012

There were two fires in Norfolk County that caused over \$1 million in estimated damages. These two fires accounted for 19% of the total dollar loss for the county.

- The Braintree Fire Department was dispatched to a fire at a nursing home at 2:30 a.m. on April 8, 2012. The fire started on an exterior wall. Four of the elderly residents were injured at this fire. Detectors were present and alerted the residents of the building. Sprinklers were present and suppressed the fire. Damages from this fire were estimated to be \$2.2 million.

STRUCTURE FIRES

Reported Structure Fires Down

The 1,884 structure fires caused 26 civilian injuries, 102 fire service injuries and an estimated dollar loss of \$15.6 million. These incidents represented 58% of Norfolk County's reported fires in 2012. The average estimated dollar loss per structure fire was \$8,292. The total number of reported structure fires decreased by 115, or 6%, from the 1,999 reported in 2011.

Arson Caused <1% of Structure Fires

The 10 structure arsons caused an estimated dollar loss of \$395,280. Arson was indicated as the cause of less than 1% of the structure fires and 3% of Norfolk County's structure fire dollar loss. The 10 structure arsons accounted for 10% of the Norfolk County arson fires reported in 2012. The total number of reported structure arsons increased by three, or 43%, from seven in 2011.

3 of 10 Structure Arsons Occur in Residential Properties

Thirty percent (30%), of Norfolk County's 10 structure arsons occurred in residential occupancies; 20% each occurred in educational facilities and special properties; and 10% each occurred in mercantile or business properties, institutional facilities, and manufacturing or processing facilities.

BUILDING FIRES

There were 1,875 building fires of different types in Norfolk County in 2012. These 1,875 building fires accounted for 99.5% of all structure fires in Norfolk County.

86% of Norfolk Building Fires Occurred in People's Homes

One thousand six hundred and six (1,606), or 86%, of Norfolk County's 1,875 building fires occurred in residential occupancies. Mercantile and business properties had 81 fires. Sixty-two (62) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 61 fires. Twenty-two (22) building fires took place on educational properties. Seventeen (17) building fires in Norfolk County occurred in special properties such as outbuildings, bus stop shelters and telephone booths. Twelve (12) fires took place in storage properties. Ten (10) fires took place in manufacturing and processing facilities and three fires occurred in industrial facilities. One (1) fire occurred in an unclassified building in Norfolk County in 2012.

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

The peak fixed property uses for residential building fires were apartments, accounting for 54% of the residential building fires in Norfolk County; 38% occurred in 1- or 2-family homes; 3% happened in rooming houses; 1% occurred in residential board and care facilities; 1% happened in hotels or motels; and 1% occurred in dormitories. Twenty-seven (27), or 1%, of the residential building fires in Norfolk County occurred in unclassified residential buildings.

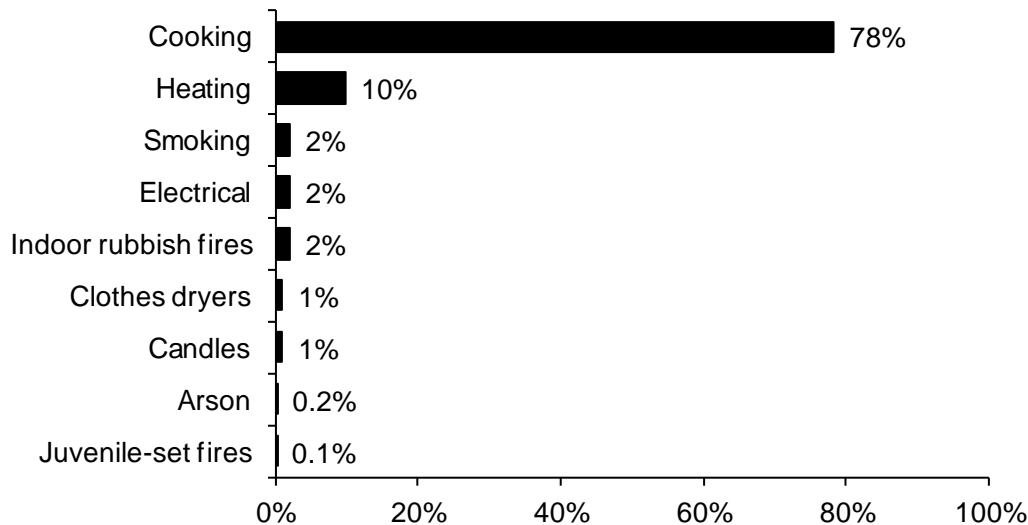
Residential Building Fires Are Down

There were 1,606 reported residential building fires in Norfolk County in 2012. These 1,606 fires are a decrease of 84, or 5%, from the 1,690 residential building fires reported in 2011.

Cooking Caused Over 3/4 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 10% of fires in people's homes. Smoking, electrical problems and indoor rubbish fires each caused 2% of these fires. Clothes dryers and candles 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 2012.

2012 Leading Causes of Fires in Norfolk County Homes



87% of Residential Building Fires Are Confined to Non-Combustible Containers¹

One thousand four hundred and five (1,405), or 87%, of all residential building fires were reported as confined to non-combustible containers in 2012. One thousand two hundred and twenty-nine (1,229) of the reported fires were cooking fires contained to a non-combustible container, accounting for 77% of residential building fires. One hundred and five (105), or 7%, were fires confined to a fuel burner or boiler malfunction. Forty-six (46), or 3%, of all residential building fires reported in 2012 were fires confined to a chimney. Twenty-five (25), or 2% of Norfolk County's residential fires in 2012 were contained rubbish fires.

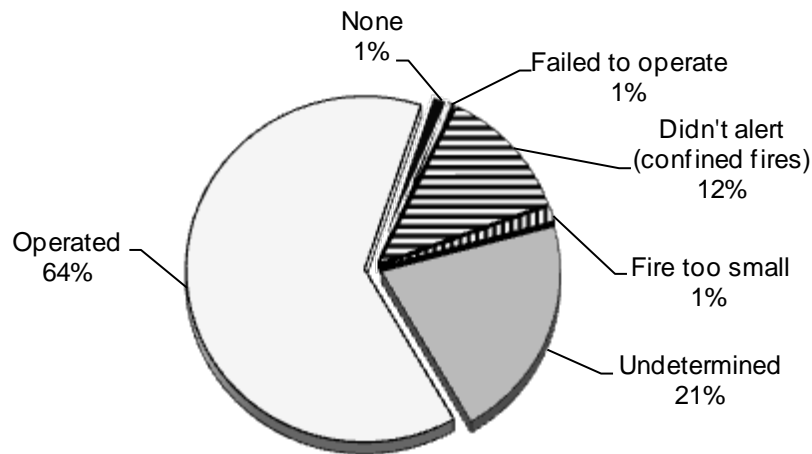
Detectors Alerted Occupants in 64% of Fires

Smoke or heat detectors operated and alerted the occupants in 1,019, or 64%, of the residential building fires. In 12% of these fires², 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 1% of the residential fires. Smoke detector performance was undetermined in 335 incidents, or 21%, of Norfolk County's residential building fires.

¹ 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.

² 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 2012



3 Failed Detectors Had Missing Batteries

Of the 10 fires where smoke detectors were present but failed to operate, three, or 30%, failed because of missing batteries. Another two detectors, or 20%, failed because the power was shut-off or disconnected. Improper installation and a dead battery were each responsible for one incident of a detector that failed to operate, or 10%. It was undetermined or unclassified in three cases, or 30%, why the detectors failed to operate.

VACANT BUILDINGS

1% of Building Fires Occurred in Vacant Buildings

Norfolk County reported 15 fires that occurred in buildings that were vacant, under construction or demolition. This represented 1% of the total 1,875 building fires reported to MFIRS in 2012. Nine (9) fires occurred in vacant residential properties. Vacant mercantile or business properties had three fires. Institutional facilities and manufacturing and processing properties each reported one vacant building fire.

Three (3), or 20%, of the vacant building fires in Norfolk County in 2012 were determined to be intentionally set. One (1) vacant building arson occurred in an apartment building; one occurred in a nursing home and another in a manufacturing or processing facility.

JUVENILE-SET FIRES

13 Juvenile-set Fires

There were 13 reported juvenile-set fires in Norfolk County in 2012. The three structure fires, six brush fires, three special outside fires, and one outdoor rubbish fire caused one fire service injury and \$81,650 in estimated damages.

ARSONS

96 Total Arsons - 10 Structures, 10 Vehicles & 76 Other Arsons

Ninety-six (96), or 3%, of Norfolk County's 3,270 fires were intentionally set, or, for purposes of this analysis, arson. The 10 structure arsons, 10 motor vehicle arsons and 76 outside and other arsons caused all three deaths, one civilian injury and an estimated loss of \$442,183.

All Arsons Up

The total number of reported arson fires increased by 31 from the 65 reported in 2011. Reported structure arsons increased by three from the seven reported the previous year. Motor vehicle arsons increased by seven from the three reported in 2011. Reported outside and other arsons increased by 21 from 55 the year before.

ALL INCIDENTS

Rescue & EMS Calls Are 58% of All Reported Incidents

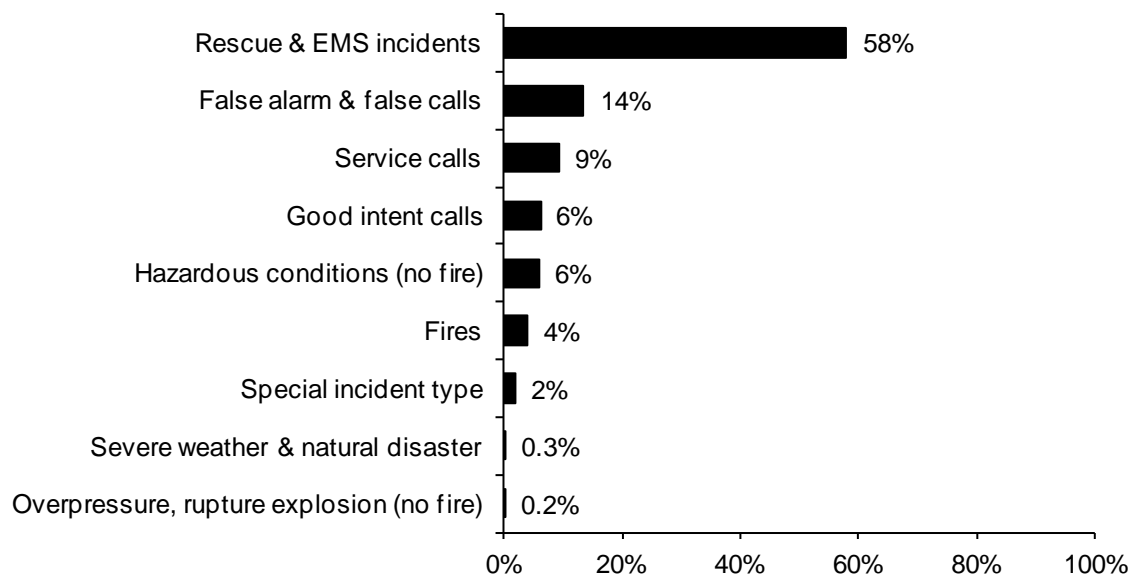
In 2012, fire departments in Norfolk County reported 84,463 responses³ to MFIRS. Of these 84,463 incidents, 80,972 non-fire calls were voluntarily reported.

Of these 80,972 non-fire incidents, 48,960, or 58%, of all the incidents reported in 2012 were reported rescue and emergency medical services (EMS) calls; 11,464, or 14%, were reported false alarm or false calls; 7,989, or 9%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 5,292, or 6%, were reported good intent calls; 5,128, or 6%, were reported hazardous condition calls with no fire; 1,776, 2%, were special incident type calls such as citizen complaints; 220, or 0.3%, were severe weather responses; and 143, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire;.

Three thousand four hundred and ninety-one (3,491), or 4%, of the total responses submitted by Norfolk County fire departments were fires.

³ These figures include responses in which Norfolk County fire departments gave mutual aid to other fire departments.

2012 Responses by Incident Type



Norfolk County Fire Departments Gave Mutual Aid 2,936 Times

In 2012, Norfolk County fire departments reported coming to the aid of other fire departments 2,936 times. Of these 2,936 responses, 1,658, or 56%, were for rescue or EMS calls; 437, or 15%, were for service calls such as cover assignments; 422, or 14%, were for good intent calls; 204, or 7%, were for fires; 136, or 5%, were for false alarms or false calls; 41, or 1%, were for hazardous conditions calls with no fire; 36, or 1%, were special incident types; one, or 0.03%, was a severe weather call; and one, or 0.03% was an overpressure, rupture explosion with no fire.

Norfolk County Received Mutual Aid in 1,977 Incidents

In 2012, Norfolk County fire departments reported receiving aid from surrounding departments in 1,977 incidents. Of these 1,977 incidents, 1,525, or 77%, were rescue and emergency medical services calls; 162, or 8%, were false alarms or false calls; 158, or 8%, were for fires; 49, or 2%, were good intent calls; 45, or 2%, were hazardous conditions calls with no fire; 32 or 2%, were service calls; four, or 0.2%, were special incident types; and two, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Norfolk County**Population: 670,850****4.9 Fires/1,000 Population****Total Fires: 3,270 \$16,806,661**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	1,884	58%	\$15,621,801
Vehicle Fires	226	7%	1,061,514
Other Fires	1,160	35%	123,346

3 Fatal Fires 0.92 Civilian Deaths/1,000 Fires
 3 Civilian Deaths 0.04 Civilian Deaths/10,000 Population
 31 Civilian Injuries 113 Fire Service Injuries

Building Fires: 1,875**Residential Structure Fires: 1,606****Residential Structure Fires Confined to Non-Combustible Containers: 1,405****Unconfined Residential Structure Fires: 201**

18 Civilian Injuries 46 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	865	54%	Operated	1,019	64%
1- & 2-Family homes	612	38%	Didn't operate	10	1%
Rooming houses	53	3%	None	22	1%
Dormitories	20	1%	Fire too small	22	2%
Residential board & care	18	1%	Didn't alert (confined)	198	12%
Hotels or motels	11	1%	Undetermined	335	21%

Area of Origin⁴	%	Heat Source	%	%Unconfined⁵
Kitchen	79%	Radiated heat from oper. eq.	1%	11%
Heating equipment room	7%	Cigarette	1%	9%
Chimney or flue	3%	Hot or smoldering object	1%	8%
Ext. balcony, unenclosed porch	1%	Hot ember or ash	1%	8%
Bedroom	1%	Cigarette	1%	7%
Wall surface, exterior	1%	Heat from operating equip.	1%	5%

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

⁵ 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.

Item First Ignited⁶	%	Factor Contrib. to Ignit.	%	%Unconfined⁷
Food, cooking materials	77%	Too close to combustibles	1%	12%
Flammable/comb. liquid	7%	Abandoned materials	1%	9%
Film, residue (creosote)	3%	Misuse of material/product	1%	6%
Rubbish, trash, waste	2%	Electrical failure, malfunc.	1%	5%
Structural member, framing	1%			

Equipment⁸	%	Cause of Ignition	%	%Unconfined⁹
Kitchen & cooking equipment	78%	Unintentional	7%	59%
None	8%	Failure of eq. or heat source	1%	9%
Boiler, furnace, cent. heat. unit	7%	Intentional	0.3%	2%
Chimney, flue	3%	Act of nature	0.2%	2%
Clothes dryer	1%	Cause under investigation	2%	17%
		Undetermined	1%	10%

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

Alerted occupants	65%
Didn't alert occupants	14%
Undetermined	21%

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

⁷ 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.

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

⁹ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	268	204	15	49
February	247	158	15	74
March	338	187	21	130
April	541	174	23	344
May	245	162	20	63
June	246	134	27	85
July	306	125	18	163
August	230	127	22	81
September	196	130	15	51
October	201	137	19	45
November	226	167	16	43
December	226	179	15	32

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	525	327	32	166
Monday	468	252	30	186
Tuesday	489	287	36	166
Wednesday	454	273	21	160
Thursday	393	237	35	121
Friday	455	246	36	173
Saturday	486	262	36	188

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	179	94	25	60
04:01 - 08:00	167	93	19	55
08:01 - 12:00	505	344	33	128
12:01 - 16:00	813	400	60	353
16:01 - 20:00	1,071	646	54	371
20:01 - 00:00	535	307	35	193

Motor Vehicle Fires

Total: 226

Automobiles: 201 (89%)

8, or (4%), of the automobile fires were considered intentionally set.

Arson Fires

Total Arsons: 96

Dollar loss: \$442,183

0.14 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Loss
Structure Arsons	10	0.5%	10%	\$395,280
Vehicle Arsons	10	4%	10%	46,300
Other Arsons	76	7%	80%	603

0.01 Structure arsons/1,000 population

0.01 Vehicle arsons/1,000 population

0.11 Other arsons/1,000 population

3 Civilian Deaths

Peak Times of Day for

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	4	40%	12:01 - 16:00	3	30%
16:01 - 20:00	4	40%	20:01 - 00:00	3	30%

Other Arsons	#	%
20:01 - 00:00	28	37%
16:01 - 20:00	19	25%
12:01 - 16:00	12	16%

Peak Fixed Property Uses for Structure Arsons	#	%
High/junior high/middle school	2	20%
1- and 2-Family homes	1	10%
Apartments	1	10%
Rooming house	1	10%
Nursing home	1	10%
Specialty Shop	1	10%
Manufacturing, processing	1	10%
Bridge, trestle	1	10%

Avon **Population: 4,356**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	55	17	14	24	0	0	0	0
2009	30	8	11	11	0	0	0	0
2010	32	8	13	11	4	0	1	3
2011	34	12	9	13	1	1	0	0
2012	43	14	9	20	3	1	0	2

Bellingham **Population: 16,332**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	55	33	7	15	3	2	0	1
2009	50	25	6	19	2	0	0	2
2010	59	26	6	27	1	1	0	0
2011	56	29	10	17	1	0	0	1
2012	60	26	4	30	0	0	0	0

Braintree **Population: 35,744**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	100	18	21	61	5	0	0	5
2009	81	15	16	50	5	0	0	5
2010	114	24	19	71	5	0	0	5
2011	92	28	19	45	2	0	0	2
2012	102	24	20	58	1	0	1	0

Brookline **Population: 58,732**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008 ¹⁰	372	322	11	39	1	0	1	0
2009	430	387	11	32	1	0	1	0
2010	464	423	13	28	1	1	0	0
2011	427	409	5	13	0	0	0	0
2012	432	379	10	43	1	0	0	1

¹⁰ In 2008 Brookline automated its fire incident reporting and began reporting all incidents to MFIRS, not just the mandated fires and explosions that resulted in a dollar loss or human casualty.

Canton					Population: 21,561			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	45	21	15	9	1	0	0	1
2009	31	10	17	4	3	1	0	2
2010	36	17	13	6	2	1	1	0
2011	24	7	13	4	1	0	1	0
2012	36	16	13	7	1	1	0	0

Cohasset					Population: 7,542			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	37	12	3	22	4	0	0	4
2009	27	16	0	11	1	0	0	1
2010	41	15	2	24	7	1	0	6
2011	36	24	2	10	3	0	0	3
2012	31	8	0	23	9	0	0	9

Dedham					Population: 24,729			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	17	14	3	0	0	0	0	0
2009	34	19	7	8	0	0	0	0
2010	192	119	10	63	9	0	0	9
2011	155	104	16	35	6	0	0	6
2012	196	107	8	81	11	0	2	9

Dover					Population: 5,589			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	2	2	0	0	0	0	0	0
2009	7	4	1	2	0	0	0	0
2010	27	17	3	7	0	0	0	0
2011	35	25	2	8	0	0	0	0
2012	29	14	1	14	0	0	0	0

Foxborough**Population: 16,865**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	50	16	13	21	3	1	1	1
2009	36	17	8	11	0	0	0	0
2010	35	14	6	15	4	0	1	3
2011	37	15	6	16	0	0	0	0
2012	64	20	13	31	2	0	0	2

Franklin**Population: 31,635**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	64	22	9	33	2	2	0	0
2009	51	15	8	28	1	0	0	1
2010	74	24	8	42	1	0	0	1
2011	58	20	7	31	2	2	0	0
2012	88	27	8	53	4	0	0	4

Holbrook**Population: 10,791**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	46	23	3	20	0	0	0	0
2009	36	18	7	11	2	0	2	0
2010	55	21	0	34	4	0	0	4
2011	46	30	5	11	1	1	0	0
2012	47	23	4	20	4	0	2	2

Medfield**Population: 12,024**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	31	13	3	15	13	0	2	11
2009	19	9	3	7	6	1	0	5
2010	26	15	1	10	3	1	0	2
2011	22	15	1	6	2	0	0	2
2012	27	13	3	11	5	0	1	4

Medway**Population: 12,752**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	0	0	1	0	0	0	0
2009	50	41	3	6	0	0	0	0
2010	44	28	4	12	1	1	0	0
2011	10	2	5	3	0	0	0	0
2012	59	41	2	16	0	0	0	0

Millis**Population: 7,891**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	1	1	0	0	0	0	0	0
2010	Non-Reporting Community							
2011	Non-Reporting Community							
2012	1	1	0	0	0	0	0	0

Milton**Population: 27,003**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	187	129	15	43	5	0	0	5
2009	160	111	17	32	8	0	0	8
2010	175	102	17	56	6	1	0	5
2011	166	94	22	50	15	0	0	15
2012	165	87	9	69	20	0	0	20

Needham**Population: 28,886**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	78	35	14	29	6	0	0	6
2009	49	25	7	17	4	0	0	4
2010	84	34	13	37	0	0	0	0
2011	49	24	8	17	0	0	0	0
2012	67	26	6	35	0	0	0	0

Norfolk **Population: 11,227**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	57	43	3	11	3	3	0	0
2009	62	50	1	11	0	0	0	0
2010	66	47	2	17	2	0	0	2
2011	82	69	4	9	3	1	0	2
2012	62	43	3	16	0	0	0	0

Norwood **Population: 28,602**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	91	34	9	48	0	0	0	0
2009	75	33	9	33	1	1	0	0
2010	118	43	14	61	0	0	0	0
2011	69	33	8	22	0	0	0	0
2012	103	37	6	60	0	0	0	0

Plainville **Population: 8,264**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	36	17	4	15	5	1	0	4
2009	29	9	8	12	1	0	0	1
2010	30	11	7	12	3	1	0	2
2011	32	13	7	12	0	0	0	0
2012	32	10	8	14	3	0	0	3

Quincy **Population: 92,271**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	532	282	45	205	15	2	0	13
2009	531	308	44	179	7	0	1	6
2010	574	268	38	268	4	0	0	4
2011	564	326	33	205	8	0	1	7
2012	606	326	24	256	16	2	1	13

Randolph**Population: 32,112**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	214	141	17	56	0	0	0	0
2009	187	136	22	29	1	0	0	1
2010	218	143	24	51	1	0	1	0
2011	196	136	23	37	4	1	0	3
2012	228	154	15	59	2	2	0	0

Sharon**Population: 17,612**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	51	22	11	18	0	0	0	0
2009	38	23	12	3	0	0	0	0
2010	53	27	8	18	2	0	0	2
2011	39	21	9	9	1	0	0	1
2012	44	21	6	17	1	0	0	1

Stoughton**Population: 26,962**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	266	219	24	23	4	0	2	2
2009	266	246	11	9	0	0	0	0
2010	266	238	11	17	1	0	0	1
2011	272	230	14	28	3	1	0	2
2012	195	160	6	29	2	1	1	0

Walpole**Population: 24,070**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	105	69	8	28	7	4	0	3
2009	86	58	8	20	2	2	0	0
2010	114	77	6	31	1	0	0	1
2011	86	59	10	17	3	0	0	3
2012	93	54	1	38	0	0	0	0

Wellesley **Population: 27,982**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	94	75	6	13	1	1	0	0
2009	77	48	6	23	2	1	0	1
2010	48	16	10	23	0	0	0	0
2011	42	20	11	11	1	0	0	1
2012	43	22	6	15	1	0	0	1

Westwood **Population: 14,618**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	110	56	9	45	2	1	0	1
2009	81	64	8	9	0	0	0	0
2010	121	81	11	29	1	0	0	1
2011	90	64	8	18	1	0	0	1
2012	73	59	4	10	0	0	0	0

Weymouth **Population: 53,743**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	307	188	17	102	6	0	0	6
2009	220	137	21	62	8	3	1	4
2010	308	173	21	114	11	6	0	5
2011	306	164	23	119	4	0	1	3
2012	338	178	32	128	5	2	2	1

Wrentham **Population: 10,955**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	63	6	6	51	0	0	0	0
2009	39	15	3	21	4	0	0	4
2010	46	9	4	33	6	0	0	6
2011	23	10	7	6	3	0	0	3
2012	31	10	5	16	5	1	0	4

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	1,349	58	6	857	36	169	115	107	1	0
21025	Bellingham	1,829	61	2	1,217	60	227	94	166	0	2
21040	Braintree	5,004	102	56	2,523	312	832	458	696	1	24
21046	Brookline	6,993	432	11	4,105	393	440	346	1,228	36	2
21050	Canton	44	36	0	0	6	1	1	0	0	0
21065	Cohasset	2,093	38	4	963	162	547	76	261	22	20
21073	Dedham	4,374	204	8	3,075	238	171	151	515	6	6
21078	Dover	235	31	0	20	35	12	16	119	2	
21099	Foxborough	740	68	3	118	128	52	78	280	8	5
21101	Franklin	3,331	107	4	2,329	88	156	214	417	1	15
21133	Holbrook	2,380	57	1	1,286	76	484	260	212	1	3
21175	Medfield	1,133	33	3	608	111	145	44	161	23	5
21177	Medway	552	59	6	171	83	42	51	118	15	7
21187	Millis	1	1	0	0	0	0	0	0	0	0
21189	Milton	3,696	159	2	1,916	224	306	100	455	3	531

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
21199	Needham	3,394	67	4	1,831	206	491	170	617	4	4
21208	Norfolk	1,436	85	1	792	227	32	20	276	3	0
21220	Norwood	5,185	106	8	3,818	215	306	183	538	7	4
21238	Plainville	2,541	35	0	963	64	167	112	224	12	964
21243	Quincy	9,024	608	10	5,351	531	664	482	1,348	14	16
21244	Randolph	4,821	235	1	3,155	301	478	224	421	0	6
21266	Sharon	1,993	58	2	1,155	156	181	223	208	9	1
21285	Stoughton	5,231	211	4	3,046	166	570	446	648	7	133
21307	Walpole	2,853	113	0	1,882	134	227	140	349	1	7
21317	Wellesley	3,797	43	0	1,786	340	397	206	990	33	2
21335	Westwood	2,532	110	2	1,476	176	248	178	338	1	3
21336	Weymouth	6,305	339	1	3,440	575	449	854	623	10	14
21350	Wrentham	1,597	35	4	1,077	85	195	50	149	0	2
Norfolk County		84,463	3,491	143	48,960	5,128	7,989	5,292	11,464	220	1,776

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.



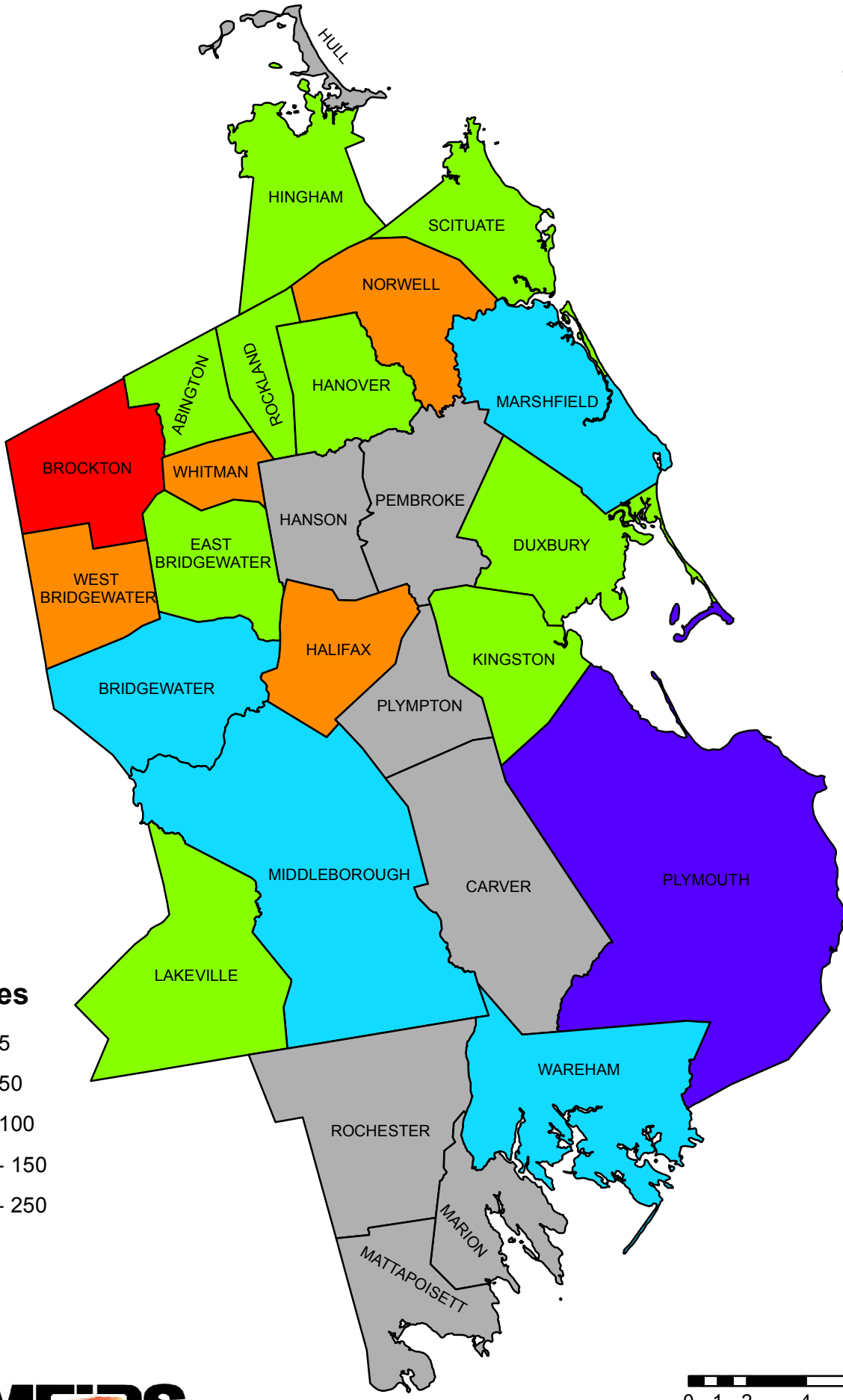
Plymouth County

2012 Fire Data Analysis

Plymouth County Fires 2012



2012 Fires



MFIRS
Massachusetts Fire Incident Reporting System

0 1 2 4 6 8 Miles

Massachusetts Fire Incident Reporting System 2012

Plymouth County Fires in 2012

2,067 Total Fires — 826 Structures, 212 Vehicles & 1,029 Other Fires

Plymouth County ranked eighth out of the fourteen Massachusetts counties in total reported fires. Plymouth County fire departments reported 2,067 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 826 structure fires, 212 motor vehicle fires, 616 brush, tree or lawn fires, 207 outside rubbish fires, 117 special outside fires, five cultivated vegetation or crop fires and 84 other fires caused three civilian deaths, 46 civilian injuries, 36 fire service injuries and an estimated dollar loss of \$13.8 million. Plymouth County's fires accounted for 7% of the 31,229 Massachusetts fires reported in 2012.

Twenty-seven (27), or 96%, of the 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 2012.

Motor Vehicle Fires Down

The total number of reported fire incidents increased by 267, or 15%, from the 1,800 reported in 2011. Reported structure fires increased by 18 from 808 the year before. Motor vehicle fires decreased by 59 from 271 the previous year. Reported outside and other fires increased by 308 from 721 in 2011.

Brush Fires Up

Plymouth County had a large increase in brush fires in 2012. Brush fires increased by 266, or 76%, from the 350 reported in 2011. This is the main reason for the rise in overall fires in Plymouth County. This was a statewide trend.

PLYMOUTH COUNTY FIRES FROM 2008 TO 2012

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
Year	Fires	Fires	Fires	Fires	Arsons	Arsons	Arsons	Arsons
2008	1,776	776	232	768	99	34	9	56
2009	1,486	727	257	502	75	25	23	30
2010	1,916	818	219	879	95	19	12	64
2011	1,800	808	271	721	98	19	13	66
2012	2,067	826	212	1,029	104	40	10	54

Fire and Fire Death Rates

Plymouth County had 4.2 fires per 1,000 population. That figure ranks Plymouth County sixth in the state and below the state rate of 4.8 fires per 1,000 population. Plymouth County also had 0.06 fire deaths per 10,000 population ranking it tied for fifth among Massachusetts counties and tied with the state rate of 0.06 fire deaths per 10,000 population.

3 Plymouth County Fatal Fires Killed 3 Civilians in 2012

- On April 23, 2012, at 5:29 p.m., the Bridgewater Fire Department was called to a fatal electrical fire in a single-family home. The fire began in the kitchen behind the

refrigerator where both the refrigerator and stove were plugged in. The victim, a 48-year old woman was sleeping at the time of the fire. No one else was injured at this fire. Detectors were present and operated. There were no sprinklers. The fire caused an estimated \$245,000 worth of damage.

- On June 16, 2012, at 9:59 p.m., the Hanover Fire Department was called to a fatal outside fire in a backyard. The victim, a 64-year old man, poured gasoline over himself and ignited it in a successful attempt at self-immolation. His wife was also injured attempting to extinguish the fire. He was transported to a local hospital where he later succumbed to his injuries.
- On October 18, 2012, at 1:38 p.m., the Pembroke Fire Department was called to a fatal outside fire in a backyard. The victim, a 67-year old man, was working on a truck when the gasoline he was using ignited and caught his clothing on fire. His wife saw him on fire and extinguished it. Arriving firefighters transported the victim to a local hospital and transferred via Med Flight to a Boston hospital where he later succumbed to his injuries.

Scituate Has Plymouth County's Largest Loss Fire in 2012

- On November 6, 2012, at 1:25 a.m., the Scituate Fire Department responded to a fire of undetermined cause in a single-family home. The fire spread to two other buildings next door. One (1) civilian and three firefighters were injured by this fire. Detectors were present and operated. The building was not sprinklered. Total damages from all three buildings were estimated to be \$1.6 million.

STRUCTURE FIRES

Reported Structure Fires Up Slightly

The 826 structure fires caused one civilian death, 38 civilian injuries, 30 fire service injuries and an estimated dollar loss of \$11.4 million. These incidents represented 40% of Plymouth County's reported fires in 2012. The average estimated dollar loss per structure fire was \$13,849. The total number of reported structure fires increased by 18, or 2%, from the 808 reported in 2011.

Arson Caused 5% of Structure Fires

The 40 structure arsons caused two fire service injuries and an estimated dollar loss of \$604,536. Arson was indicated as the cause of 5% of the structure fires and 5% of Plymouth County's structure fire dollar loss. The 40 structure arsons accounted for 38% of the Plymouth County arson fires reported in 2012. The total number of reported structure arsons increased by 21, or 111%, from 19 in 2011.

70% of Structure Arsons Occurred in Residences

Seventy percent (70%) of Plymouth County's 40 structure arsons occurred in residential occupancies; 10% occurred in educational facilities; 8% happened in special properties; 5% happened in mercantile or business properties; another 5% happened in public assembly properties; and 3% occurred in storage facilities.

BUILDING FIRES

There were 815 building fires of different types in Plymouth County in 2012. These 815 building fires accounted for 98.7% of all structure fires in Plymouth County.

83% of Plymouth Building Fires Occurred in People's Homes

Six hundred and seventy-seven (677), or 83%, of Plymouth County's 815 building fires occurred in residential occupancies. Mercantile and business properties had 35 fires. Twenty (27) fires took place in public assembly properties, including restaurants and churches. Hospitals, prisons, and other institutional buildings experienced 21 fires. Twenty-one (21) fires took place in storage facilities. Eighteen (18) building fires took place in educational facilities. Seven (7) building fires in Plymouth County occurred in special properties such as outbuildings and sheds. Five (5) fires took place in manufacturing and processing facilities. Four (4) fires occurred in industrial, utility, defense, agricultural or mining facilities in Plymouth County in 2012.

RESIDENTIAL FIRES

Residential Building Fires Up Slightly

There were 677 reported residential building fires in Plymouth County in 2012. These 677 fires are an increase of 12, or 2%, from the 665 residential building fires reported in 2011.

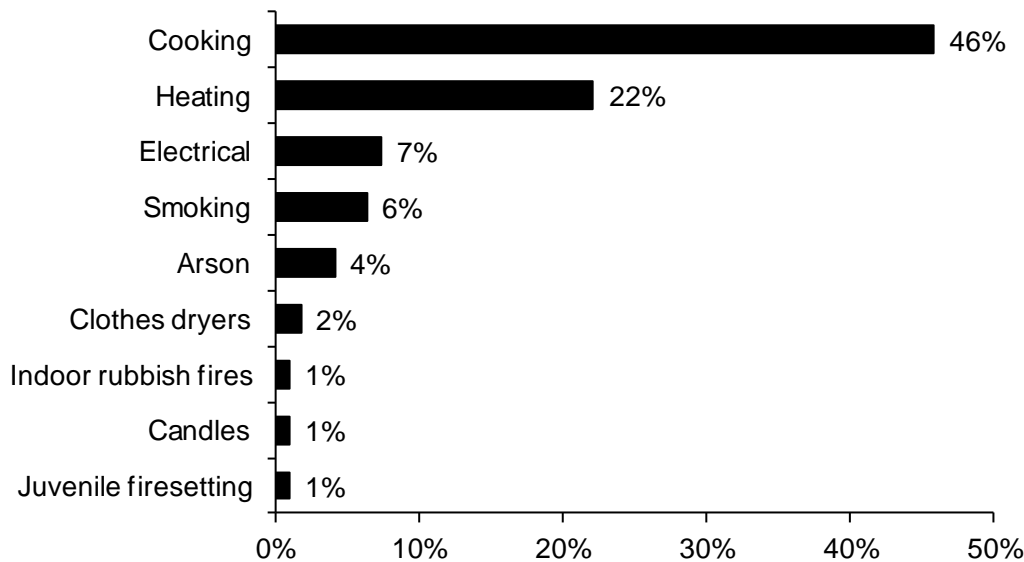
1- & 2-Family Homes Accounted for 64% of Residential Building Fires

The peak fixed property use for residential building fires were 1- & 2-family homes, accounting for 64% of the residential building fires in Plymouth County; 31% occurred in apartments. Residential board and care facilities, dormitories, and hotels or motels each had 1% of these fires. Rooming houses had less than 1% of these fires. Seven (7), or 1%, 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 677 residential building fires in Plymouth County was unattended cooking and other unsafe cooking practices, accounting for 46% of these fires. Heating problems caused 22% of the fires in people's homes. Electrical problems caused 7% and smoking caused 6% of these fires. Arsons were responsible for 4% and clothes dryers caused 2% of these fires. Indoor rubbish fires, candles and juvenile set fires each caused 1% of residential fires in Plymouth County in 2012.

2012 Leading Causes of Fires in Plymouth County Homes



62% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Four hundred and twenty-one (421), or 62% of all residential building fires, were reported as confined to non-combustible containers in 2012. Two hundred and seventy-three (273) of the reported fires were cooking fires contained to a non-combustible container accounting for 40% of residential building fires. Seventy-nine (79), or 12%, were fires confined to a fuel burner or boiler malfunction. Sixty-one (61), or 9%, of all residential building fires reported in 2012 were fires confined to a chimney. Seven (7), or 1%, of these fires were contained rubbish fires; and one, or 0.1%, was an incinerator overload or malfunction.

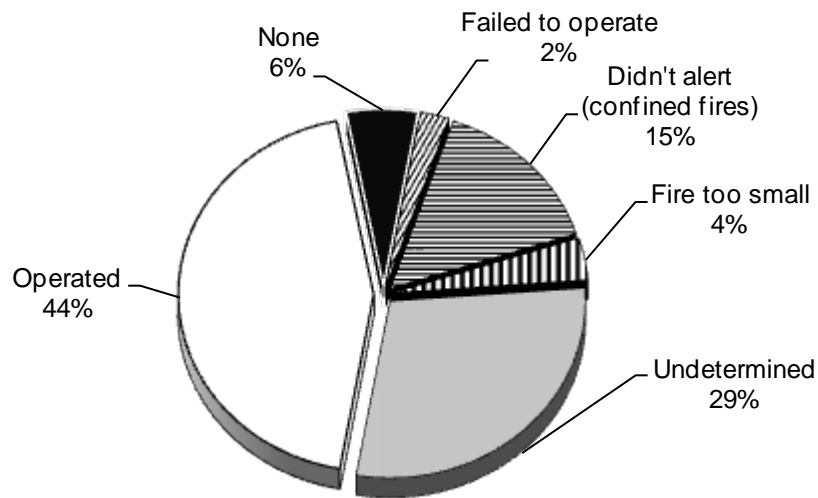
Detectors Alerted Occupants in 44% of Fires

Smoke or heat detectors operated and alerted the occupants in 299, or 44%, of the residential building fires. In 15% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 2% of these incidents. In 6% 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 196 incidents, or 29%, of Plymouth County's residential building fires.

¹ 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.

² 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 2012



44% of Failed Detectors Had Missing Batteries

Of the 16 fires where smoke detectors were present but failed to operate, seven, or 44%, failed because the batteries were either missing or disconnected. Three (3), or 19%, failed because they were defective. One (1) detector, or 6%, failed from a power failure, shutoff or disconnect. It was undetermined or unclassified in five cases, or 31%, why the detectors failed to operate.

VACANT BUILDINGS

5% of Building Fires Occurred in Vacant Buildings

Plymouth County reported 39 fires that occurred in buildings that were vacant, under construction or demolition³. This represented 5% of the total 815 building fires reported to MFIRS in 2012. Twenty-three (23) fires occurred in vacant residential properties. Six (6) vacant building fires occurred in storage facilities. Four (4) of these fires happened in mercantile and business properties, and three occurred in industrial facilities. Educational facilities, manufacturing and processing facilities and special properties each had one vacant building fire in Plymouth County in 2012.

Twelve (12), or 31%, of the vacant building fires in Plymouth County in 2012 were determined to be intentionally set. Two (2) occurred in hotels or motels; and one each in an outbuilding or shed, a warehouse and a business office.

³ 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

12 Juvenile-set Fires

There were 12 reported juvenile-set fires in Plymouth County in 2012. The six structure fires, one motor vehicle fire, four brush fires, and one unclassified fire caused \$22,000 in estimated damages.

ARSONS

104 Total Arsons — 40 Structures, 10 Vehicles & 54 Other Arsons

One hundred and four (104), or 5%, of Plymouth County's 2,067 fires were considered intentionally set, or, for purposes of this analysis, arson. The 40 structure arsons, 10 motor vehicle arsons and 54 outside and other arsons caused one civilian death, four civilian injuries, two fire service injuries and an estimated dollar loss of \$1.2 million.

Structure Arsons Up

The total number of reported arson fires increased by six from the 98 reported in 2011. Reported structure arsons increased by 21 from the 19 reported in 2011. Motor vehicle arsons decreased by three from 13 in 2011. Reported outside and other arsons decreased by 12 from 66 reported the year before.

ALL INCIDENTS

Rescue & EMS Calls Are Almost 2/3 of All Reported Responses

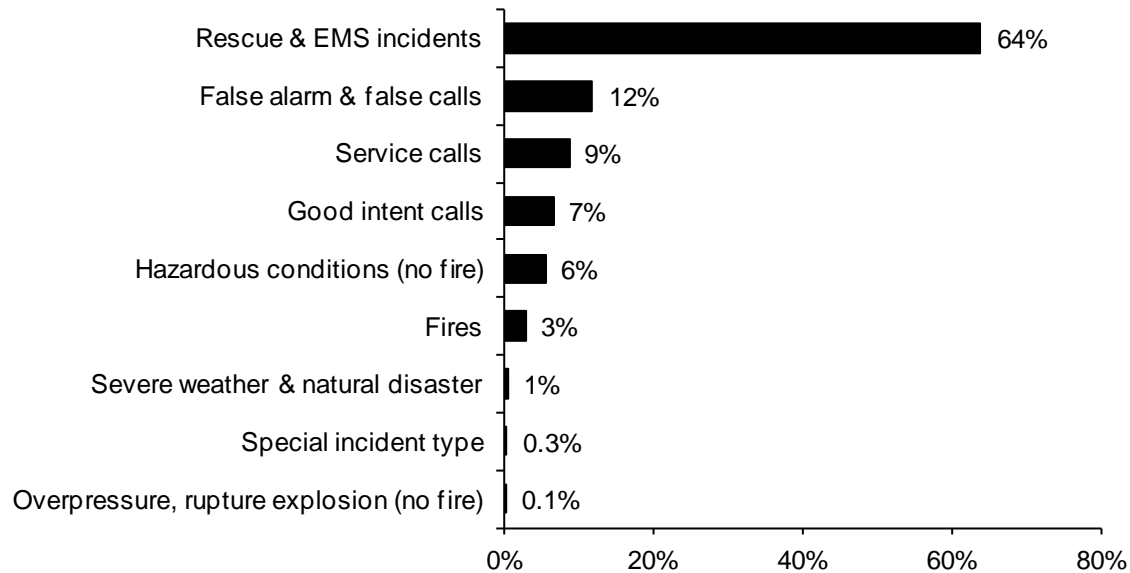
In 2012, Plymouth County fire departments reported 77,071 responses⁴ to MFIRS. Of these 77,071 incidents, 74,880 non-fire calls were voluntarily reported.

Of these 74,880 non-fire calls, 49,097, or 64%, of the total responses reported in 2012, were reported rescue and emergency medical services (EMS) calls; 9,066 or 12%, were reported false alarm or false calls; 6,658, or 9%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 5,084, or 7%, were reported good intent calls; 4,239, or 6%, were reported hazardous condition calls with no fire; 386, or 1%, were severe weather responses; 253, or 0.3%, were special incident type calls such as citizen complaints; and 97, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

Two thousand one hundred and ninety-one (2,191), or 3%, of the total responses submitted by Plymouth County fire departments were fires.

⁴ These figures include responses in which Plymouth County fire departments gave mutual aid to other fire departments.

2012 Responses by Incident Type



Plymouth County Fire Departments Gave Mutual Aid 2,574 Times

In 2012, Plymouth County fire departments reported coming to the aid of other fire departments 2,574 times. Of these 2,574 responses, 1,723, or 67%, were for rescue or EMS calls; 374, or 15%, were for good intent calls; 294, or 11%, were for service calls such as cover assignments; 120, or 5%, were for fires; 31, or 1%, were for hazardous conditions calls with no fire; 24, or 1%, were for false alarms or false calls; four, or 0.2%, were for a special incident type calls; three, or 0.1%, were overpressure, rupture explosions with no fire; and one, or 0.04%, was for a severe weather call.

Plymouth County Received Mutual Aid in 2,086 Incidents

In 2012, Plymouth County fire departments received aid from surrounding departments in 2,086 incidents. Of these 2,086 incidents, 1,807, or 87%, were rescue and emergency medical services calls; 129, or 6%, were for fires; 40, or 2%, were good intent calls; 39, or 2%, were hazardous conditions calls with no fire; 38, or 2%, were false alarms or false calls; 25, or 1%, were service calls; four, or 0.2%, were reported overpressure, rupture, explosion or overheat calls with no fire; and four, or 0.2%, were severe weather calls.

Plymouth County**Population: 494,919****4.2 Fires/1,000 Population****Total Fires: 2,067 \$13,780,449**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	826	40%	\$11,439,271
Vehicle Fires	212	10%	1,482,539
Other Fires	1,029	50%	858,639

3 Fatal Fires 1.45 Civilian Deaths/1,000 Fires
 3 Civilian Deaths 0.06 Civilian Deaths/10,000 Population
 46 Civilian Injuries 36 Fire Service Injuries

Building Fires: 815**Residential Building Fires: 677****Residential Building Fires Confined to Non-Combustible Containers: 421****Unconfined Residential Building Fires: 256**

1 Civilian Death 35 Civilian Injuries 27 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
1- & 2-Family homes	435	64%	Operated	299	44%
Apartments	209	31%	Didn't operate	16	2%
Residential board & care	9	1%	None	40	6%
Dormitories	7	1%	Fire too small	26	4%
Hotels or motels	6	1%	Didn't Alert (confined)	100	15%
Rooming houses	4	1%	Undetermined	196	29%

Area of Origin⁵	%	Heat Source	%	%Unconfined⁶
Kitchen	49%	Arcing	5%	13%
Heating room or area	12%	Heat from operating eq.	4%	10%
Chimney or flue	9%	Radiated, cond./heat op. eq.	4%	10%
Bedroom	4%	Cigarette	4%	10%
Wall surface, exterior	2%	Hot or smoldering object	3%	8%

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

⁶ 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.

Item First Ignited⁷	%	Factor Contrib. to Ignit.	%	%Unconfined⁸
Food, cooking materials	42%	Abandoned materials	5%	13%
Flammable or combust. liquid	12%	Too close to combustibles	3%	9%
Film, residue (creosote)	9%	Electrical failure, malfunc.	2%	5%
Structural member, framing	3%	Storm	2%	4%
Exterior sidewall covering	3%	Misuse of material or prod.	1%	4%

Equipment⁹	%	Cause of Ignition	%	%Unconfined¹⁰
Cooking equipment	46%	Unintentional	22%	59%
None	22%	Failure of eq. or heat source	6%	15%
Boiler, furnace, cent. heat. unit	12%	Intentional	4%	10%
Chimney or flue	9%	Act of Nature	2%	4%
Clothes dryer	2%	Cause under investigation	3%	8%
		Undetermined	2%	4%

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

Alerted Occupants	47%
Didn't Alert Occupants	24%
Undetermined	29%

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

⁸ 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.

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

¹⁰ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	145	89	15	41
February	141	76	18	47
March	225	78	19	128
April	432	89	16	327
May	137	64	13	60
June	128	52	17	59
July	220	65	22	133
August	154	56	22	76
September	116	56	18	42
October	111	54	18	39
November	142	75	14	53
December	116	72	20	24

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	324	130	28	166
Monday	294	121	29	144
Tuesday	319	127	25	167
Wednesday	264	116	34	114
Thursday	278	113	33	132
Friday	292	111	27	154
Saturday	296	108	36	152

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	122	65	24	33
04:01 - 08:00	156	71	24	61
08:01 - 12:00	305	129	38	138
12:01 - 16:00	627	181	55	391
16:01 - 20:00	561	249	43	269
20:01 - 00:00	296	131	28	137

Motor Vehicle Fires

Total: 212

Automobiles: 176 (83%)

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

Arson Fires

Total Arsons: 104

Dollar loss: \$1,170,936

0.2 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	40	5%	38%	\$604,536
Vehicle Arsons	10	5%	10%	566,000
Other Arsons	54	5%	52%	400

0.08 Structure arsons/1,000 population

0.02 Vehicle arsons/1,000 population

0.11 Other arsons/1,000 population

1 Civilian Death

4 Civilian Injuries

2 Fire Service Injuries

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
00:01 – 04:00	8	20%	00:01 – 04:00	4	40%
20:01 – 00:00	8	20%	04:01 – 08:00	2	20%
08:01 – 12:00	7	18%	20:01 – 00:00	2	20%
12:01 – 16:00	7	18%			

Other Arsons	#	%
12:01 – 16:00	24	29%
20:01 – 00:00	23	27%
16:01 – 20:00	19	23%

Peak Fixed Property Uses for Structure Arsons	#	%
1- and 2-Family homes	20	50%
Apartments	4	10%
Hotels or motels	4	10%
High/junior high/middle schools	3	8%

Abington					Population: 15,985			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	82	42	6	34	4	0	0	4
2009	61	34	9	18	0	0	0	0
2010	78	47	3	28	3	1	0	2
2011	55	26	12	17	3	1	1	1
2012	71	32	9	30	4	1	0	3

Bridgewater					Population: 26,563			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	95	26	22	47	2	1	1	0
2009	67	24	13	30	8	2	2	4
2010	87	31	14	42	15	4	2	9
2011	105	55	14	36	8	5	1	2
2012	104	46	11	47	3	2	0	1

Brockton					Population: 93,810			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	197	142	36	19	13	9	1	3
2009 ¹¹	199	138	35	26	18	11	5	2
2010	375	181	41	153	25	8	3	14
2011	452	224	55	173	46	9	3	34
2012	505	201	41	263	58	17	3	37

Carver					Population: 11,509			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	9	2	7	0	1	0	1	0
2009	10	6	4	0	0	0	0	0
2010	12	6	6	0	0	0	0	0
2011	4	1	3	0	0	0	0	0
2012	10	8	2	0	0	0	0	0

¹¹ In 2009, this does not include their July incidents. Because of computer problems the Brockton Fire Department was unable to submit them to MFIRS.

Duxbury**Population: 15,059**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	38	14	20	1	0	0	0	1
2009	41	18	4	19	8	4	1	3
2010	45	23	5	17	4	2	1	1
2011	42	18	8	16	0	0	0	0
2012	56	21	9	26	2	0	0	2

East Bridgewater**Population: 13,794**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	44	25	4	15	0	0	0	0
2009	51	34	5	12	1	1	0	0
2010	62	37	6	19	1	1	0	0
2011	43	18	10	15	1	0	1	0
2012	58	23	7	28	0	0	0	0

Halifax**Population: 7,518**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	65	29	3	33	6	2	0	4
2009	20	9	4	7	1	0	1	0
2010	48	25	4	19	4	0	0	4
2011	33	17	4	12	2	1	0	1
2012	40	16	4	20	3	2	0	1

Hanover**Population: 13,879**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	59	15	4	40	4	0	0	4
2009	47	25	7	15	0	0	0	0
2010	33	16	3	14	0	0	0	0
2011	31	17	4	10	1	0	0	1
2012	77	30	4	43	1	0	0	1

Hanson					Population: 10,209			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	38	12	1	25	2	1	0	1
2009	21	14	2	5	1	0	0	1
2010	22	10	3	9	1	0	0	1
2011	19	9	5	5	0	0	0	0
2012	20	9	1	10	2	0	0	2

Hingham					Population: 22,157			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	75	35	11	29	3	1	1	1
2009	69	33	8	28	2	0	1	1
2010	69	35	3	31	4	0	1	3
2011	46	21	2	23	3	0	0	3
2012	66	22	6	38	2	0	0	2

Hull					Population: 10,293			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	26	19	2	5	1	1	0	0
2009	27	13	2	12	1	1	0	0
2010	31	20	3	8	0	0	0	0
2011	23	15	0	8	0	0	0	0
2012	24	9	1	14	1	0	0	1

Kingston					Population: 12,629			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	62	23	10	29	4	1	2	1
2009	41	14	8	19	1	0	0	1
2010	52	21	5	26	5	0	0	5
2011	46	20	9	17	2	0	0	2
2012	65	24	10	31	5	1	2	2

Lakeville**Population: 10,602**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	52	6	6	40	0	0	0	0
2009	39	7	4	28	5	1	1	3
2010	54	8	6	40	0	0	0	0
2011	31	7	3	21	1	0	0	1
2012	51	15	5	31	1	0	0	1

Marion**Population: 4,907**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	1	1	0	0	0	0	0	0
2010	19	11	1	7	0	0	0	0
2011	17	6	3	8	2	0	0	2
2012	16	4	2	10	1	0	0	1

Marshfield**Population: 25,132**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	129	59	5	65	8	0	0	8
2009	127	63	11	53	6	0	2	4
2010	128	40	8	80	5	0	0	5
2011	117	48	18	51	3	0	1	2
2012	125	55	9	61	9	0	1	8

Mattapoisett**Population: 6,045**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	25	14	2	9	1	0	0	1
2009	14	9	2	3	0	0	0	0
2010	17	6	1	10	2	0	0	2
2011	12	4	2	6	0	0	0	0
2012	21	1	0	20	3	0	0	3

Middleborough**Population: 23,116**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	101	35	15	51	3	0	0	3
2009	73	26	17	30	3	0	1	2
2010	105	20	26	59	0	0	0	0
2011	83	31	16	36	1	0	0	1
2012	116	45	10	61	4	4	0	0

Norwell**Population: 10,506**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	54	20	8	26	4	1	0	3
2009	36	20	6	10	0	0	0	0
2010	37	10	5	22	0	0	0	0
2011	36	15	8	13	3	0	0	3
2012	31	11	6	14	2	1	0	1

Pembroke**Population: 17,837**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	22	15	5	2	0	0	0	0
2009	13	9	3	1	2	2	0	0
2010	22	16	4	2	0	0	0	0
2011	19	9	6	4	0	0	0	0
2012	17	10	6	1	0	0	0	0

Plymouth**Population: 56,468**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	200	68	29	103	12	5	0	7
2009	167	66	37	64	6	1	3	2
2010	205	73	25	107	5	1	0	4
2011	188	80	28	80	6	2	2	2
2012	208	96	19	93	11	6	1	4

Plympton					Population: 2,820			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	21	8	0	13	2	0	0	2
2009	12	6	3	3	0	0	0	0
2010 ¹²	Non-Reporting Community							
2011	6	2	3	1	0	0	0	0
2012	2	2	0	0	0	0	0	0

Rochester					Population: 5,232			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	12	9	3	0	1	0	1	0
2009	9	6	3	0	0	0	0	0
2010	2	2	0	0	0	0	0	0
2011	6	3	1	2	0	0	0	0
2012	6	5	1	0	0	0	0	0

Rockland					Population: 17,489			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	59	25	3	31	2	0	0	0
2009	58	23	12	23	2	0	1	1
2010	53	28	2	23	1	1	0	0
2011	68	25	14	29	5	0	1	4
2012	63	25	6	32	1	0	0	1

Scituate					Population: 18,133			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	72	36	8	28	4	3	0	1
2009	55	25	5	25	2	0	0	2
2010	96	41	4	51	5	0	0	5
2011	62	24	3	35	3	1	0	2
2012	98	40	8	50	10	2	0	8

¹² In 2010 Plympton had some fires, but because of problems with their computer system were unable to report them to MFIRS.

WAREHAM FIRE DISTRICTS**Population: 21,822****Onset****Est. Pop. Protected: 4,801**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	39	15	6	18	5	3	1	1
2009	36	19	6	11	2	0	1	1
2010	35	14	5	16	3	0	2	1
2011	42	30	1	11	0	0	0	0
2012	24	19	3	2	2	2	0	0

Wareham District**Est. Pop. Protected: 17,021**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	118	52	21	45	11	3	1	7
2009	94	44	24	26	2	0	1	1
2010	136	52	22	62	5	0	1	4
2011	135	48	24	63	5	0	2	3
2012	109	39	18	52	4	1	2	1

West Bridgewater**Population: 6,916**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	38	14	8	16	0	0	0	0
2009	34	6	16	12	2	0	2	0
2010	34	8	11	15	3	0	1	2
2011	34	7	12	15	3	0	1	2
2012	39	9	10	20	4	1	1	2

Whitman**Population: 14,489**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	40	13	3	24	5	1	0	4
2009	42	20	3	19	3	0	0	3
2010	46	17	3	26	2	0	1	1
2011	45	27	3	15	1	0	0	1
2012	47	11	4	32	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
23001	Abington	3,177	72	3	2,132	239	217	176	297	37	4
23042	Bridgewater	2,901	107	2	1,682	136	166	245	472	20	71
23044	Brockton	20,570	512	15	15,037	502	1,137	528	2,805	13	21
23052	Carver	10	10	0	0	0	0	0	0	0	0
23082	Duxbury	2,178	60	5	1,367	184	157	77	293	18	17
23083	East Bridgewater	2,096	71	0	1,597	91	105	58	168	2	4
23118	Halifax	1,317	41	1	871	64	147	68	114	10	1
23122	Hanover	2,694	77	6	1,547	185	394	170	222	85	8
23123	Hanson	1,435	23	2	936	89	183	78	107	4	13
23131	Hingham	3,773	75	6	2,280	264	299	305	509	26	9
23142	Hull	2,418	27	1	1,598	163	285	131	208	5	0
23145	Kingston	2,143	68	2	1,540	123	129	55	213	5	8
23146	Lakeville	1,085	65	1	713	44	74	51	110	18	9
23169	Marion	785	20	1	419	73	38	67	154	5	8
23171	Marshfield	4,230	126	8	2,806	288	524	97	354	13	14

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

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
23173	Mattapoisett	477	24	0	7	122	139	19	123	35	8
23182	Middleborough	3,813	121	5	1,158	127	324	1,680	385	1	12
23219	Norwell	1,934	35	2	1,077	201	223	129	249	17	1
23993	Onset	1,648	32	1	802	146	429	87	144	7	0
23231	Pembroke	17	17	0	0	0	0	0	0	0	0
23239	Plymouth	6,235	215	14	3,844	275	447	445	976	17	2
23240	Plympton	2	2	0	0	0	0	0	0	0	0
23250	Rochester	6	6	0	0	0	0	0	0	0	0
23251	Rockland	2,874	70	6	2,127	118	138	78	315	9	13
23264	Scituate	2,906	104	8	1,818	270	248	153	291	10	4
23992	Wareham	2,275	114	6	1,054	344	244	242	255	9	7
23322	West Bridgewater	1,595	45	0	1,087	51	229	17	133	20	13
23338	Whitman	2,477	52	2	1,598	140	382	128	169	0	6
Total	Plymouth County	77,071	2,191	97	49,097	4,239	6,658	5,084	9,066	386	253

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.

Brockton Fires in 2012

505 Total Fires — 201 Structures, 41 Vehicles & 263 Other Fires

The Brockton Fire Department reported 505 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 201 structure fires, 41 motor vehicle fires, 104 brush fires, 70 outside rubbish fires, 60 special outside fires, two cultivated crop or vegetation fires; and 27 unclassified fires caused 16 civilian injuries, eight firefighter injuries and an estimated dollar loss of \$2 million. There were no fire deaths in Brockton in 2012.

Outside Fires Up in 2012

Total fires increased by 53 from the 452 incidents reported in 2011. Reported structure fires were down 23 from the 224 reported during the previous year. Motor vehicle fires decreased by 14 from 55 the year before. Outside and other fires increased by 90 from the 173 reported in 2011.

BROCKTON FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	197	142	36	19	12	9	1	2
2009 ¹	199	138	35	26	17	11	5	1
2010 ²	375	181	41	153	23	8	3	12
2011	452	224	55	173	41	9	3	29
2012	505	201	41	263	57	17	3	37

BUILDING FIRES

There were 197 building fires of different types in Brockton in 2012. These 197 building fires accounted for 98% of all the structure fires in Brockton.

85% of Building Fires in Homes

The 197 building fires that occurred in Brockton in 2012 can be broken down by fixed property use as follows: 168, or 85% of all building fires, were in residential properties; nine happened in mercantile or business properties; six fires occurred in institutional facilities; five fires happened in public assembly buildings; four fires happened at educational facilities; two fires happened in storage facilities; another two fires occurred at a manufacturing facility; and one fire happened at an industrial facility.

¹ July 2009 fires not included.

² 2010 is the first year that Brockton reported all of their fire incidents electronically in the version 5 format. This included all fires not just the fires mandated by statute. This is the main reason for the large increase in outside fires and subsequently total fires.

RESIDENTIAL FIRES

Residential Building Fires Down

There were 168 reported residential building fires in Brockton in 2012. These 168 fires are a decrease of 29 from the 197 reported residential building fires reported in 2011.

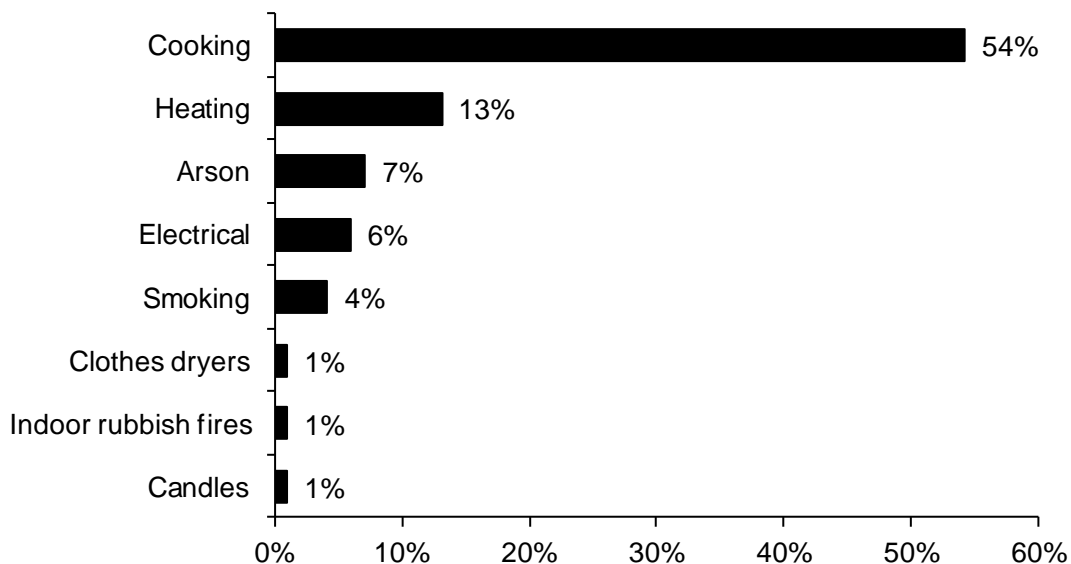
Apartments Accounted for 55% of Residential Building Fires

The peak fixed property uses for residential building fires in Brockton were apartments, accounting for 55% of the building fires; 42% occurred in 1- or 2-family homes; and 1% each happened in hotels or motels and dormitories and in residential board and care facilities. Another 1% occurred in unclassified residences.

Unattended Cooking Leading Cause of Residential Fires

The leading cause of residential building fires in Brockton was unattended cooking and other unsafe cooking practices, accounting for 54% of these fires. Heating fires caused 13% of these fires. Arson caused 7%, and electrical problems caused 6% of these fires. Smoking was the cause of 4% of Brockton's residential fires. Clothes dryers, indoor rubbish fires and candles each caused 1% of fires in Brockton's residential occupancies in 2012.

2012 Leading Causes of Fires in Brockton Homes



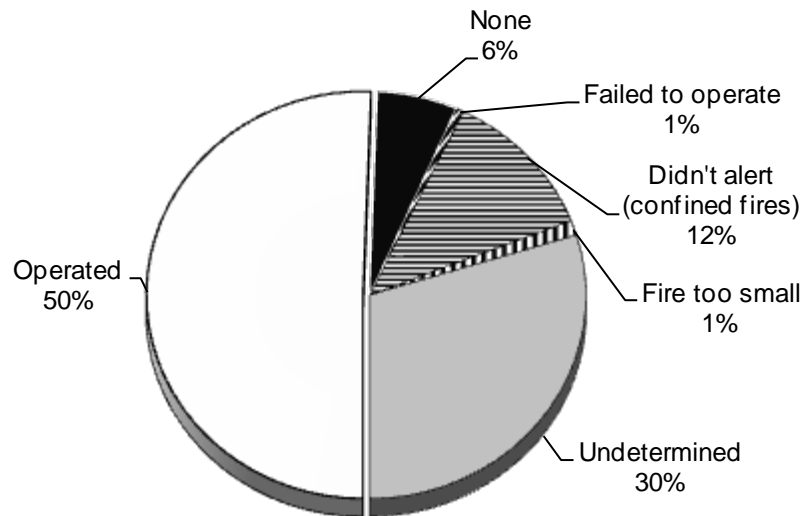
60% of Residential Building Fires Are Confined to Non-Combustible Containers³

One hundred (100), or 60% of all residential building fires were confined to non-combustible containers in 2012. Seventy-nine (79), or 47%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Eighteen (18), or 11%, were fires confined to a fuel burner or boiler malfunction. Two (2), or 1%, were confined indoor rubbish fires. One (1) fire, or 1%, was reported to have been contained to a chimney or flue.

Detectors Worked in 1/2 of Fires

Smoke or heat detectors operated and alerted the occupants in 85, or 50%, of the residential building fires. In 12% of these fires⁴, 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 1% of these fires. Smoke detector performance was undetermined in 50 incidents, or 30%, of Brockton's residential building fires.

Detector Status in Brockton's Residential Fires 2012



1 Detector Failed Missing a Battery

One (1) detector failed to operate because of a missing battery.

³ 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.

⁴ 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

Brockton reported six fires that occurred in buildings that were vacant, under construction or under demolition. This represented 3% of the total 197 building fires reported to MFIRS in 2012. Two (2) apartment buildings, two one- or two-family homes, one industrial facility and one manufacturing facility were reported as vacant building fire incidents.

JUVENILE-SET FIRES

No Juvenile-set Fires in 2012

Brockton did not report any juvenile-set fires in 2012.

ARSONS

57 Arsons - 17 Structure, 3 Motor Vehicle and 37 Outside & Other

Fifty-seven (57), or 11%, of Brockton's 505 fires were considered intentionally set, or, for purposes of this analysis, arson. There were 17 structure arsons, three motor vehicle arsons and 37 outside and other arsons.

All Arsons Up in 2012

The total number of arsons increased by 16 from the 41 reported in 2011. Reported structure arsons increased by eight from the nine reported in 2011. Motor vehicle arsons remained the same with three reported in both 2011 and 2012. Outside and other arsons increased by eight from the 29 reported the previous year.

94 Fires Reported as Undetermined or Still Under Investigation

In 2012, Brockton reported 94 fires under investigation or cause undetermined after investigation. Eighty-one (81), or 86%, of these fires were reported to be undetermined after investigation. The other 13, or 14%, were still under investigation.

Sixteen (16), or 17%, of these 94 fires were structure fires. Fourteen (14), or 15% were motor vehicle fires; and 64, or 68%, were outside or other fires. Because so many fires or under investigation or undetermined after investigation, the true arson number might be actually higher in Brockton for 2012.

ALL INCIDENTS

Rescue & EMS Incidents Are Almost 3/4 of All Reported Incidents⁵

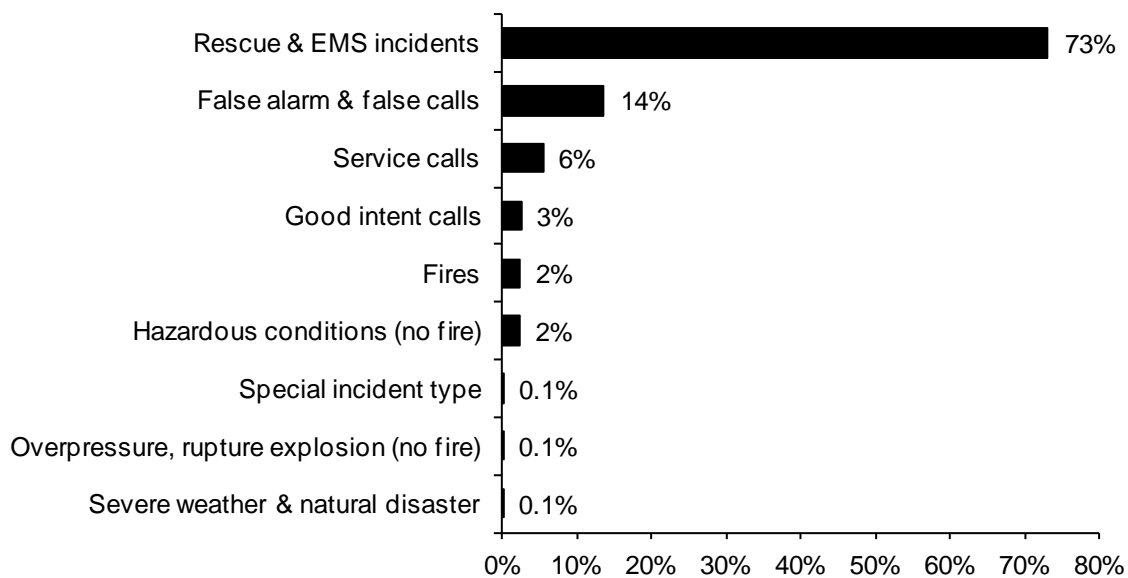
In 2012, Brockton voluntarily reported 20,569 incidents to MFIRS. Of these 20,569 incidents, 20,057, or 98% were non-fire incidents.

⁵ Brockton started to report all of their incidents in August of 2010. 2011 is the first year that Brockton reported all of their incidents for the entire year.

Of these 20,057 non-fire incidents 15,036, or 73%, of all reported incidents in 2012 were reported rescue and emergency medical services (EMS) calls; 2,805, or 14%, were reported false alarm or false calls; 1,137 incidents, or 6%, were service calls; 528, or 3%, were good intent calls; 502, or 2%, were reported hazardous condition calls with no fire; 21, or 0.1%, were special incident types; 15, or 0.1%, were overpressure, rupture or explosions with no fire calls; and 13, or 0.1%, were severe weather or natural disaster calls.

In 2012, Brockton reported 512 fires⁶, accounting for 2% of all reported incidents.

2012 Incidents by Incident Type



Brockton Gave Mutual Aid in 21 Reported Incidents

In 2012, Brockton reported coming to the aid of other fire departments 21 times. Seven (7), or 33%, were for fires; six, or 29%, were for service calls; five, or 24%, of these calls were rescue or EMS calls; one, or 5%, was a good intent call; and the other call, or 5%, was a special incident type.

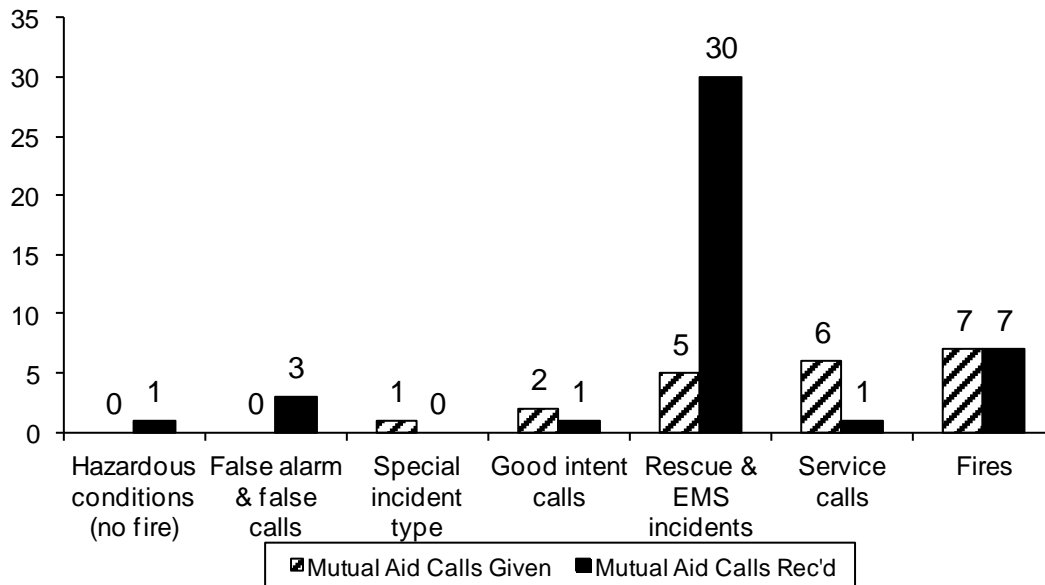
Brockton Received Mutual Aid in 43 Incidents

In 2012, surrounding fire departments gave aid to Brockton during 43 incidents. Thirty (30), or 70%, were for rescue or EMS incidents, seven, or 16%, of these incidents were for fires; three, or 7%, were false alarms; one, or 2%, was for a service call; another one, or 2%, was for a hazardous condition with no ensuing fire; and one, or 2% was for a good intent call.

⁶ This includes fires that Brockton responded to as mutual aid calls outside of their jurisdiction.

The following chart compares the number of calls the Brockton Fire Department gave mutual aid to a neighboring community compared to the number of calls where a neighboring community assisted Brockton. In 2012 Brockton received aid from other fire departments twice as much as they were asked for it.

Brockton's Mutual Aid Calls in 2012



Brockton**Population: 93,810****5.4 Fires/1,000 Population****Total Fires: 505 \$1,999,462**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	201	40%	\$1,892,212
Vehicle Fires	41	8%	84,700
Other Fires	263	52%	22,550

16 Civilian Injuries 8 Fire Service Injuries

Building Fires: 197**Residential Structure Fires: 168****Residential Structure Fires Confined to Non-Combustible Containers: 100****Unconfined Residential Structure Fires: 68**

13 Civilian Injuries 7 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	92	55%	Operated	85	50%
1- & 2-Family homes	70	42%	Didn't operate	1	1%
Dormitories	2	1%	None	10	6%
Hotels/motels	2	1%	Fire too small	2	1%
Residential board & care	1	1%	Didn't Alert (confined)	20	12%
			Undetermined	50	30%

Area of Origin⁷	%	Heat Source	%	%Unconfined⁸
Kitchen	57%	Heat from operating equip.	6%	15%
Heating room or area	11%	Arcing	5%	13%
Bedroom	7%	Cigarette	4%	10%
Wall surface, exterior	3%	Hot or smoldering object	3%	7%
Bathroom	2%			
Exterior balcony/unencl. porch	2%			

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

⁸ 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.

Item First Ignited⁹	%	Factor Contrib. to Ignition	%	%Unconfined¹⁰
Cooking materials	50%	Short circuit arc, worn insul.	1%	3%
Flammable or combustible liq.	11%	Abandoned materials	1%	1%
Structural member, framing	5%	Too close to combustibles	1%	1%
		Elec. failure/malfunction	1%	1%
		Equip. not operated properly	1%	1%

Equipment¹¹	%	Cause of Ignition	%	%Unconfined¹²
Cooking equipment	55%	Unintentional	23%	56%
None	24%	Intentional	6%	17%
Boiler, furnace, cent. heat. unit	11%	Failure of eq./heat source	4%	10%
Clothes dryer	1%	Act of Nature	0%	0%
Electrical wiring, other	1%	Undetermined	3%	7%
		Cause Under Investigation	4%	10%

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

Alerted Occupants	58%
Didn't Alert Occupants	20%
Undetermined	22%

All Reported Incidents	# of Incidents	% of Incidents
Rescue & EMS incidents	15,036	73%
False alarms & false calls	2,805	14%
Service calls	1,137	6%
Good intent calls	528	3%
Fires ¹³	512	2%
Hazardous conditions (no fire)	502	2%
Special incident type calls	21	0.1%
Overpressure rupture, explosion or overheat calls (no fire)	15	0.1%
Severe weather & natural disaster calls	13	0.1%

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

¹⁰ 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.

¹¹ This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

¹² 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.

¹³ This figure contains the fire that Brockton gave mutual aid to in another jurisdiction.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	27	15	3	9
February	39	25	3	11
March	50	18	7	25
April	90	22	0	68
May	37	11	2	24
June	42	18	3	21
July	51	15	8	28
August	45	18	3	24
September	28	12	2	14
October	33	18	1	14
November	39	16	4	19
December	24	13	5	6

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	83	32	8	43
Monday	69	25	5	39
Tuesday	78	34	5	39
Wednesday	68	28	6	34
Thursday	71	27	7	37
Friday	66	30	4	32
Saturday	70	25	6	39

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	34	19	6	9
04:01 - 08:00	45	16	9	20
08:01 - 12:00	62	30	5	27
12:01 - 16:00	138	54	7	77
16:01 - 20:00	135	54	9	72
20:01 - 24:00	91	28	5	58

Motor Vehicle Fires

Total: 41

Automobiles: 37 (90%)

3 (8%) of the automobile fires considered intentionally set.

Arson Fires

Total Arsons: 57

Dollar loss: \$152,900

0.61 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	17	8%	30%	\$151,600
Vehicle Arsons	3	7%	5%	1,000
Other Arsons	37	14%	65%	300

0.18 Structure arsons/1,000 population

0.03 Vehicle arsons/1,000 population

0.39 Other arsons/1,000 population

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 - 16:00	4	24%	00:01 - 04:00	2	67%
08:01 - 12:00	3	18%	04:01 - 08:00	1	33%
16:01 - 20:00	3	18%			
20:01 - 00:00	3	18%			

Other Arsons	#	%
20:01 - 00:00	12	32%
16:01 - 20:00	11	30%
12:01 - 16:00	9	24%

Peak Fixed Property Uses for Structure Arsons	#	%
1- or 2-Family homes	8	47%
Apartments	3	18%
High/junior high/middle school	2	12%
Hotel/motel	1	6%
Elementary school	1	6%
Department or discount store	1	6%
Church, mosque, synagogue	1	6%

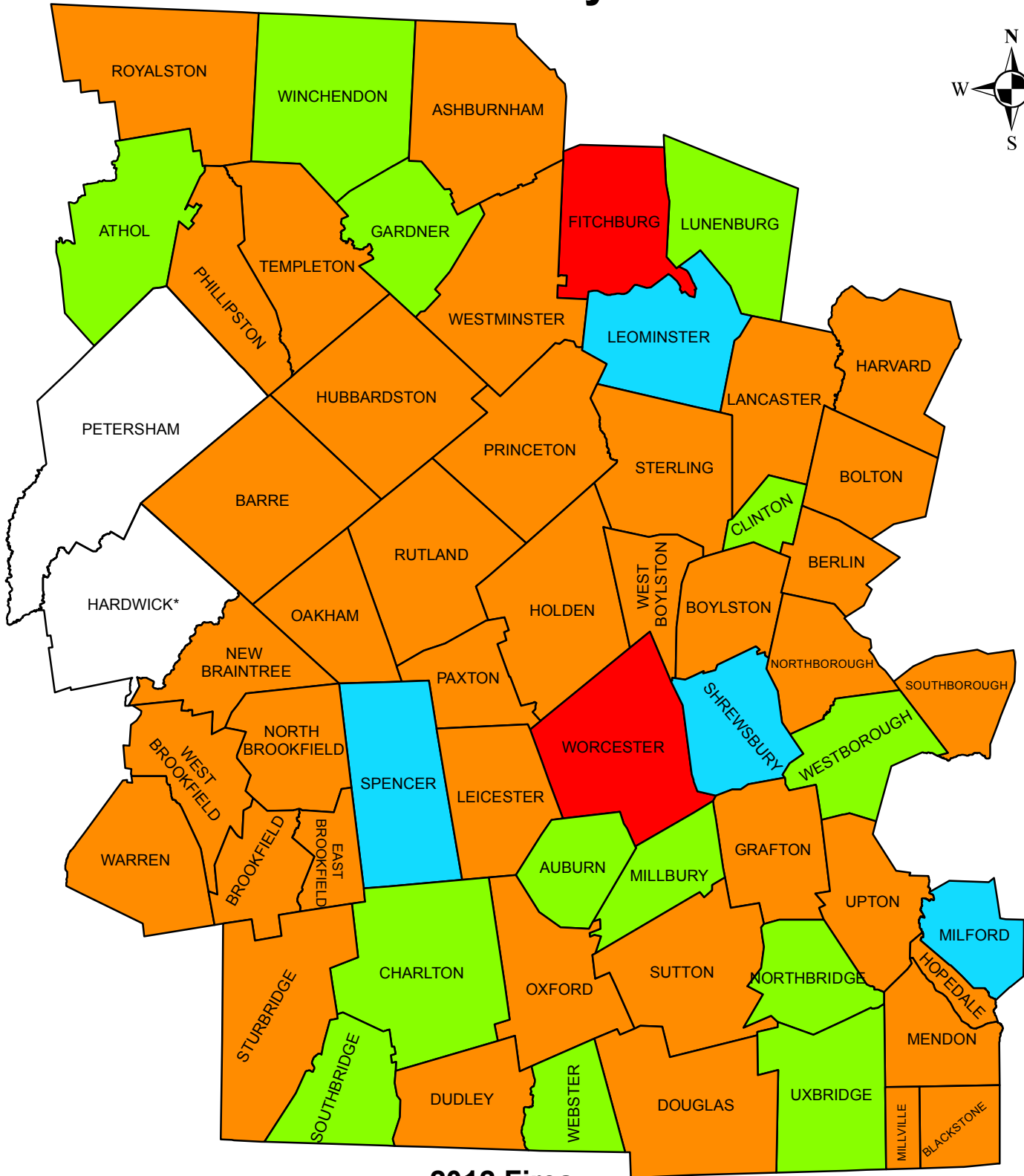
**Suffolk County Has
It's Own In-Depth
Analysis Report
Which Is
Published
Separately**



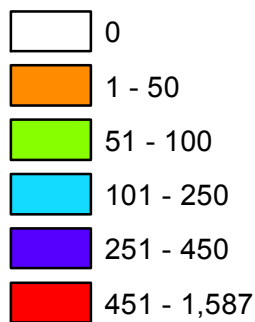
Worcester County

2012 Fire Data Analysis

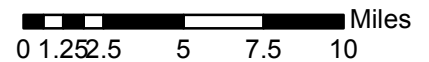
Worcester County Fires 2012



2012 Fires



*Non-reporting Department



MFIRS
Massachusetts Fire Incident Reporting System

Massachusetts Fire Incident Reporting System 2012

Worcester County Fires in 2012

4,283 Total Fires — 2,175 Structures, 366 Vehicles & 1,742 Other Fires

Worcester County ranked third out of the fourteen Massachusetts counties in total reported fires. Worcester County fire departments reported 4,283 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 2,175 structure fires, 366 motor vehicle fires, 858 brush fires, 719 outside rubbish fires, 86 special outside fires, four cultivated vegetation or crop fires and 75 unclassified fires caused seven civilian deaths, 45 civilian injuries, 76 fire service injuries and an estimated dollar loss of \$26.5 million. Worcester County's fires accounted for 14% of the 31,229 Massachusetts fires reported in 2012.

Fifty-eight (58), or 96.7%, of the 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 2012.

Structure & Outside Fires Down

Total fires increased by 421, or 11%, from 3,862 incidents in 2011. Reported structure fires decreased by 43 from the 2,218 reported during the previous year. Motor vehicle fires decreased by 79 from 445 the year before. Outside and other fires increased by 543 from 1,199 the year before.

Brush Fires Up by 82%

Brush fires increased by 387, or 82%, from the 471 reported in 2011. This increase is the main reason for the increase in all Worcester County fires. This was a state wide trend.

WORCESTER COUNTY FIRES FROM 2008 TO 2012

	Total	Structure	Vehicle	Other	Total	Structure	Vehicle	Other
Year	Fires	Fires	Fires	Fires	Arsons	Arsons	Arsons	Arsons
2008	4,182	2,203	461	1,518	142	36	24	82
2009	3,805	2,179	381	1,245	185	40	29	116
2010	4,329	2,277	400	1,652	170	37	11	122
2011	3,862	2,218	445	1,199	149	36	22	91
2012	4,283	2,175	366	1,742	203	53	20	130

Fire and Fire Death Rates

Worcester County had 5.4 fires per 1,000 population. That figure ranks Worcester County second in the state and above the state rate of 4.8 fires per 1,000 population. Worcester County also had 0.09 fire deaths per 10,000 population ranking it tied for second among Massachusetts counties and above the state rate of 1.20 fire deaths per 10,000 population.

7 Residents Died in 6 Worcester County Fires

Worcester County had seven of its residents die in six fires in 2012. All of the deaths occurred in building fires.

- On January 15, 2012, at 2:23 a.m., the Gardner Fire Department was dispatched to a fire in a six-unit apartment building of undetermined cause. The fire began in a first floor living room. The victim, a 49-year old woman, was attempting to escape when she was overcome by heat and smoke. She was transported to a local hospital where she succumbed to her injuries. There were no other civilian injuries associated with this fire; but three firefighters were injured. Smoke detectors were present and alerted the occupants of the building. The building was not sprinklered. Damages from this fire were estimated to be \$201,700.
- On February 10, 2012, at 8:05 p.m., the Shrewsbury Fire Department was called to a fatal fire in a single-family home of undetermined cause. The victim, a 64-year old woman, was found in the bathroom overcome by the heat and smoke. She used home oxygen and was known to be a heavy smoker. No one else was injured at this fire. Detectors were present and operated but the building was not sprinklered. Damages from the blaze were estimated to be \$145,000.
- On June 2, 2012, at 3:40 p.m., the Spencer Fire Department was called to a fatal fire in a six-unit apartment building of undetermined cause. The victim, a 57-year old man, was overcome by the heat and smoke. No one else was injured at this fire. Detectors were present and operated but the building was not sprinklered. Damages from the blaze were not estimated.
- On August 13, 2012, at 12:22 p.m., the Brookfield Fire Department was dispatched to a fire in an eight-unit apartment building of undetermined cause. The victim, a 76-year old man, was found overcome by smoke and transported to a local hospital where he succumbed to his injuries. His wife was also transported after injuring herself jumping from the building in an attempt to escape the fire. One (1) firefighter was also injured at this fire. Detectors were present and operated, but sprinklers were not. Damages from this fire were not estimated.
- On September 9, 2012, at 10:40 p.m., the Uxbridge Fire Department was dispatched to a fire in a five-unit apartment building of undetermined cause. The victims, a 45-year old woman and her six-year old daughter were unable to escape. One (1) firefighter was injured at this fire. It was undetermined if detectors were present, and sprinklers were not. Damages from this fire were estimated to be \$300,000.
- On December 27, 2012, at 10:35 a.m., the Princeton Fire Department was called to a fatal arson fire in a single-family home. The home's occupant, a 61-year old man, had poured gasoline inside the home and intentionally ignited it in a successful suicide attempt. No one else was injured at this fire. It was undetermined if detectors were present. The home was not sprinklered. Damages were estimated to be \$250,000.

Largest Loss Fire in 2012

In 2012, Worcester County fire departments reported three fires with a reported dollar loss of \$1 million or greater. The combined dollar loss of these three fires totaled \$4.5 million, or 17%, of the county's total dollar loss.

- On July 26, 2012, at 9:10 p.m., the Charlton Fire Department was called to an electrical fire in a warehouse. A portable halogen light was placed too close to combustibles and then left unattended. Six (6) firefighters were injured at this fire. It was undetermined if detectors were present. Sprinklers were present but failed to operate because not enough agent was discharged. Damages from this fire were estimated to be \$2 million.

STRUCTURE FIRES**Reported Structure Fires Down**

The 2,175 structure fires caused all seven civilian deaths, 40 civilian injuries, 67 fire service injuries and an estimated dollar loss of \$24.9 million. These incidents represented 51% of Worcester County's reported fires in 2012. The average estimated dollar loss per structure fire was \$11,442. The total number of reported structure fires decreased by 43, or 2%, from the 2,218 reported in 2011.

Arson Caused 2% of Structure Fires

The 53 structure arsons caused one civilian fire death, two civilian injuries, 13 fire service injuries and an estimated dollar loss of \$2.3 million. Arson was indicated as the cause of 2% of the structure fires and 9% of Worcester County's structure fire dollar loss. The 53 structure arsons accounted for 26% of the Worcester County arson fires reported in 2012. The total number of reported structure increased by 17, or 47%, from the 36 reported in 2011.

Over 2/3 of Structure Arsons Occurred in Residences

Sixty-eight percent (68%) of Worcester County's 53 structure arsons occurred in residential occupancies; 6% each happened in educational facilities, mercantile and business properties, storage facilities, and manufacturing or processing facilities; 4% each happened in public assembly facilities and institutional facilities; and special properties accounted for 2% of structure arsons in Worcester County in 2012.

BUILDING FIRES

There were 2,173 building fires of different types in Worcester County in 2012. These 2,173 building fires accounted for 99.9% of all structure fires in Worcester County.

85% of Worcester Building Fires Occurred in People's Homes

One thousand eight hundred and fifty-four (1,854), or 85%, of Worcester County's 2,173 building fires occurred in residential occupancies. Mercantile and business properties had 75 fires. Fifty-three (53) fires took place in public assembly properties, including

restaurants and churches. Fifty-two (52) building fires took place in educational properties. Hospitals, prisons, and other institutional buildings experienced 51 fires. Thirty-seven (37) fires took place in storage properties. Thirty-two (32) fires took place in manufacturing and processing facilities. Twelve (12) building fires in Worcester County occurred in special properties such as outbuildings, bus stop shelters and tollbooths. Five (5) fires occurred in industrial, utility, defense, agricultural or mining facilities, and two fires occurred in unclassified buildings in Worcester County in 2012.

RESIDENTIAL FIRES

Residential Building Fires Were Down

There were 1,854 reported residential building fires in Worcester County in 2012. These 1,854 fires are a decrease of 44, or 2%, from the 1,898 residential building fires reported in 2011.

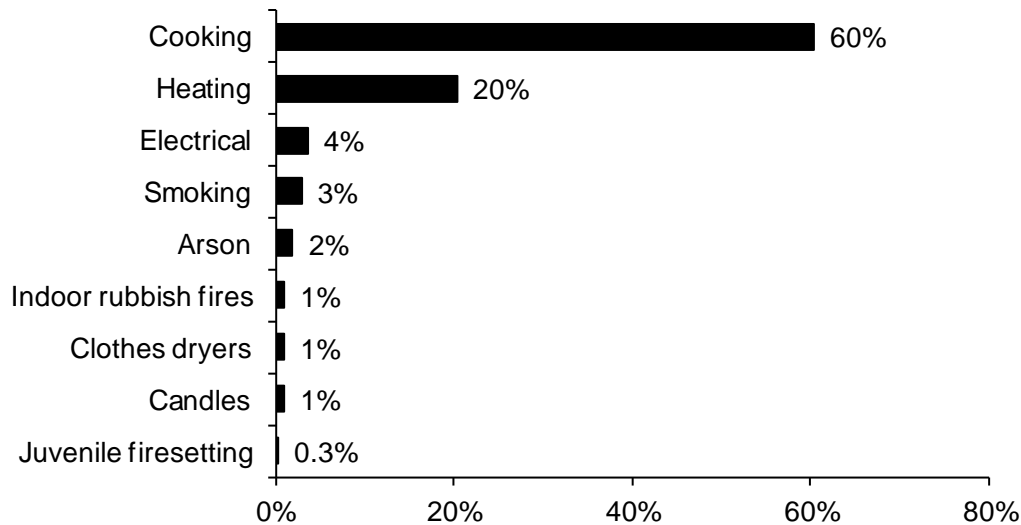
Apartments Accounted for 44% of Residential Building Fires

The peak fixed property uses for residential building fires were apartments, accounting for 44% of the residential building fires in Worcester County; 41% occurred in one- or two-family homes; 7% happened in rooming houses; 4% occurred in dormitories; 2% occurred in residential board and care facilities; and less than 1% happened in hotels or motels. Seventeen (17), or 1%, of the residential building fires in Worcester County occurred in unclassified residential buildings.

Unattended Cooking Caused 60% of Residential Fires

The leading cause of residential building fires in Worcester County was unattended cooking and other unsafe cooking practices, accounting for 60% of these fires. Heating caused 20% of fires in people's homes. Electrical problems accounted for 4% of these fires. Smoking caused 3% and arson caused 2%. Indoor rubbish fires, clothes dryers, and candles each caused 1% of the fires in people's homes in Worcester County in 2012. Juvenile-set fires caused less than 1% of these fires in 2012.

2012 Leading Causes of Fires in Worcester County Homes



76% of Residential Building Fires Are Confined to Non-Combustible Containers¹

One thousand four hundred and eleven (1,411), or 76% of all residential building fires, were reported as confined to non-combustible containers in 2012. One thousand and forty-six (1,046) of the reported fires were cooking fires contained to a non-combustible container accounting for 56% of residential building fires. One hundred and eighty-four (184), or 10%, were fires confined to a fuel burner or boiler malfunction. One hundred and fifty-seven (157), or 8%, of all residential building fires reported in 2012 were confined to a chimney. Twenty-two (22), or 1%, of the residential building fires in Worcester County in 2012 were contained rubbish fires. Two (2) fires, or less than 1%, were confined to a commercial compactor.

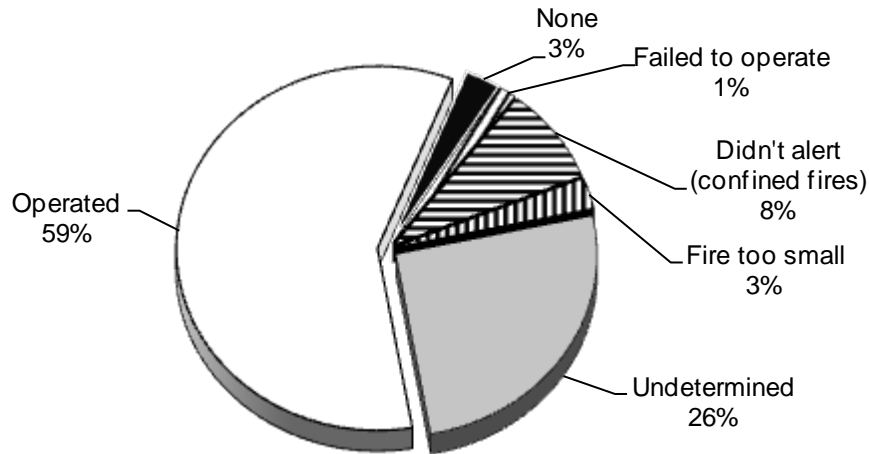
Detectors Alerted Occupants in 59% of Fires

Smoke or heat detectors operated and alerted the occupants in 1,091, or 59%, of the residential building fires. In 8% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 1% of these incidents. In 3% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 3% of the residential fires. Smoke detector performance was undetermined in 475 incidents, or 26%, of Worcester County's residential building fires.

¹ 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.

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

Detector Status in Worcester County's Residential Structure Fires 2012



41% of Failed Detectors Had Missing Batteries

Of the 27 fires where smoke detectors were present but failed to operate, 11, or 41%, failed because the batteries were either missing or disconnected. Two (2), or 7%, failed because of a power failure, shutoff or disconnect. Improper installation or placement and a lack of maintenance each also caused two, or 7%, of the detectors to fail. A lack of maintenance caused one, or 4%, to fail. It was undetermined or unclassified in 11 cases, or 41%, why the detectors failed to operate.

VACANT BUILDINGS

2% of Building Fires Occurred in Vacant Buildings

Worcester County reported 50 fires that occurred in buildings that were vacant, under construction or demolition. This represented 2% of the total 2,173 building fires reported to MFIRS in 2012. Thirty-four (34) fires occurred in vacant residential properties. Six (6) vacant building fires occurred in storage facilities. Manufacturing or processing facilities accounted for four of these fires. Two (2) vacant building fires occurred in educational facilities in 2012. Two (2) of these fires occurred in mercantile or business properties. Special properties also accounted for two vacant building fire incidents in Worcester County in 2012.

Eight (8), or 16%, of the vacant building fires in Worcester County in 2012 were determined to be intentionally set. Four (4) one- or two-family homes, two apartment buildings, a rooming house and a manufacturing facility accounted for the reported vacant structure arsons in 2012.

JUVENILE-SET FIRES

22 Juvenile-set Fires

There were 22 reported juvenile-set fires in Worcester County in 2012. The eight structure fires, 13 brush fires and one outside rubbish fire caused \$431,170 in estimated damages.

ARSONS

203 Total Arsons³ — 53 Structures, 20 Vehicles & 130 Other Arsons

Two hundred and three (203), or 5%, of Worcester County's 4,283 fires were considered intentionally set, or, for purposes of this analysis, arson. The 53 structure arsons, 20 motor vehicle arsons and 130 outside and other arsons caused one civilian death, two civilian injuries, 14 fire service injuries and an estimated dollar loss of \$2.4 million. Worcester County's arson fires accounted for 18% of the state's total arson fires and 18% of the state's total dollar losses from arson.

Structure & Outside Arson Fires Up

The total number of arsons increased by 54 from 149 in 2011. Reported structure arsons increased by 17 from the 36 reported in 2011. Motor vehicle arsons decreased by two from the 20 reported in 2011. Outside and other arsons increased by 39 from the 91 reported last year.

ALL INCIDENTS

Rescue & EMS Calls Are 62% of All Reported Responses

In 2012, fire departments in Worcester County reported 84,567 responses⁴ to MFIRS. This is a decrease of 2,034 runs, or 2%, over the 86,601 reported in 2011. Of these 84,657 responses, 79,884 non-fire calls were voluntarily reported.

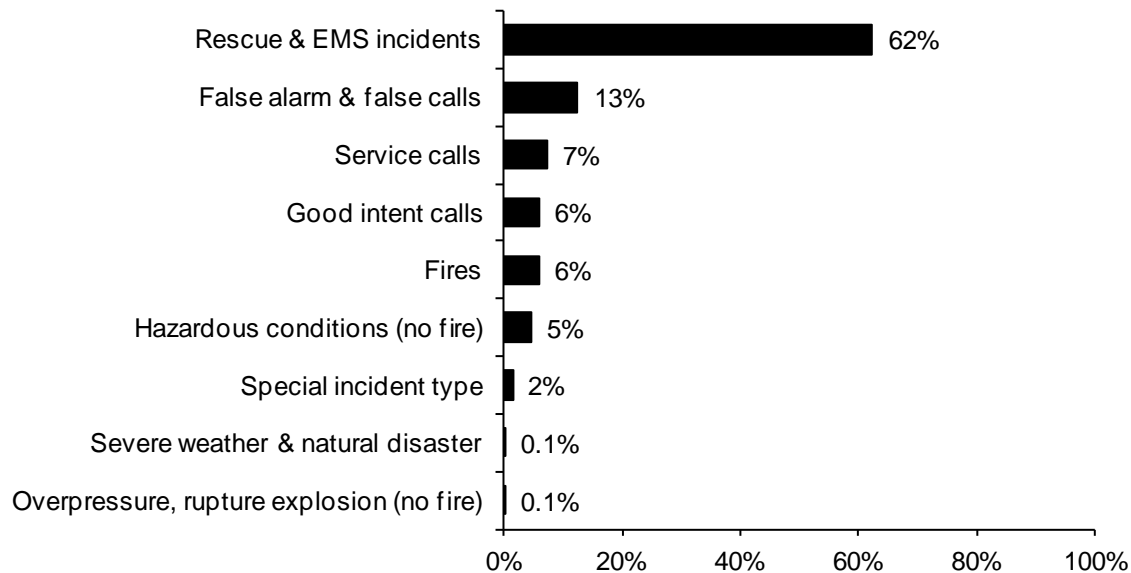
Of these 79,884 non-fire calls, 52,624, or 62%, of all the responses reported in 2012, were reported rescue and emergency medical services (EMS) calls; 10,571, or 13%, were reported false alarm or false calls; 6,275, or 7%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 4,915, or 6%, were reported good intent calls; 3,998, or 5%, reported hazardous condition calls with no fire; 1,271, or 2%, were special incident type calls such as citizen complaints; 124, or 0.1%, were severe weather calls; and 106, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire.

³ 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.

⁴ These figures include responses in which Worcester County fire departments gave mutual aid to other fire departments.

Four thousand six hundred and eighty-three (4,683), or 6%, of the total responses submitted by Worcester County fire departments were fires.

2012 Responses by Incident Type



Worcester County Fire Departments Reported Giving Mutual Aid 1,897 Times

In 2012, Worcester County fire departments reported coming to the aid of other fire departments 1,897 times. Of these 1,897 responses, 827, or 44%, were for rescue or EMS incidents; 420, or 22%, were for service calls such as cover assignments; 395, or 21%, were for fires; 173, or 9%, were for good intent calls; 47, or 2%, were for false alarms or false calls; 27, or 1%, were for hazardous conditions calls with no fire; six, or 0.3%, were special incident types; one, or 0.1%, was a severe weather call; and one, or 0.1%, was an overpressure, rupture, explosion or overheat call with no fire.

Worcester County Fire Departments Received Mutual Aid in 929 Incidents

In 2012, Worcester County fire departments reported receiving aid from surrounding departments in 929 incidents. Of these 929 incidents, 571 or 61% were rescue and emergency medical services calls; 211, or 23%, were for fires; 48, or 5%, were false alarms or false calls; 37, or 4%, were service calls; 34, or 4%, were good intent calls; 27, or 3%, were hazardous conditions calls with no fire; and one, or 0.1%, was a severe weather call.

Worcester County**Population: 798,552****5.4 Fires/1,000 Population****Total Fires: 4,283 \$26,491,181**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	2,175	51%	\$24,886,646
Vehicle Fires	366	9%	1,185,473
Other Fires	1,742	41%	419,062

6 Fatal Fires 1.63 Civilian Deaths/1,000 Fires
 7 Civilian Deaths 0.09 Civilian Deaths/10,000 Population
 45 Civilian Injuries 76 Fire Service Injuries

Building Fires: 2,173**Residential Structure Fires: 1,854****Residential Structure Fires Confined to Non-Combustible Containers: 1,411****Unconfined Residential Structure Fires: 443**

7 Civilian Deaths 37 Civilian Injuries 53 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	825	44%	Operated	1,091	59%
1- & 2-Family homes	769	41%	Didn't operate	27	1%
Rooming houses	123	7%	None	52	3%
Dormitories	80	4%	Fire too small	50	3%
Residential board & care	31	2%	Didn't Alert (confined)	159	8%
Hotels or motels	9	0.5%	Undetermined	475	26%

Area of Origin⁵	%	Heat Source	%	%Unconfined⁶
Kitchen	61%	Radiated heat from oper. eq.	3%	12%
Chimney or flue	10%	Heat from operating eq.	3%	11%
Heating room or area	9%	Hot ember or ash	2%	8%
Bedroom	2%	Arcing	2%	7%
Exterior balcony/unencl. porch	1%	Hot or smoldering object	2%	7%
Living room	1%	Cigarette	2%	7%

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

⁶ 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.

Item First Ignited⁷	%	Factor Contrib. to Ignit.	%	%Unconfined⁸
Food, cooking materials	60%	Too close to combustibles	2%	8%
Film or residue (creosote)	10%	Abandoned materials	2%	7%
Flammable, combustible liquid	8%	Misuse of materials	2%	7%
Structural member, framing	2%	Equipment unattended	1%	4%
Rubbish, trash, waste	2%	Failure to clean	1%	3%
		Elec. fail., malfunc., other	1%	2%
		Mech. fail., malfunc., other	1%	2%

Equipment⁹	%	Cause of Ignition	%	%Unconfined¹⁰
Cooking equipment	59%	Unintentional	12%	51%
None	14%	Failure of eq. or heat source	3%	14%
Chimney or flue	10%	Intentional	2%	7%
Boiler, furnace, cent. heat. unit	9%	Act of Nature	0.3%	1%
Clothes dryer	1%	Cause under investigation	3%	14%
Fan	1%	Undetermined	3%	11%

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

Alerted Occupants	63%
Didn't Alert Occupants	11%
Undetermined	26%

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

⁸ 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.

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

¹⁰ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	282	204	28	50
February	369	210	30	129
March	452	221	29	202
April	719	199	30	490
May	273	128	30	115
June	303	154	38	111
July	416	140	35	241
August	269	141	32	96
September	258	148	22	88
October	287	199	28	60
November	329	209	22	98
December	326	222	42	62

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	693	357	43	293
Monday	625	290	51	284
Tuesday	605	319	56	230
Wednesday	583	315	54	214
Thursday	530	305	57	168
Friday	588	276	58	254
Saturday	659	313	47	299

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 – 04:00	304	138	47	119
04:01 – 08:00	317	170	35	112
08:01 – 12:00	662	401	63	198
12:01 – 16:00	1,131	495	99	537
16:01 – 20:00	1,171	612	74	485
20:01 – 00:00	698	359	48	291

Motor Vehicle Fires

Total: 366

Automobiles: 309 (84%)

18, or (6%), of the automobile fires considered incendiary or suspicious

Arson Fires

Total Arsons: 203

Dollar loss: \$2,397,717

0.3 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	53	2%	26%	\$2,295,620
Vehicle Arsons	20	5%	10%	78,850
Other Arsons	130	7%	64%	23,247

0.07 Structure arsons/1,000 population

0.03 Vehicle arsons/1,000 population

0.16 Other arsons/1,000 population

1 Civilian Death

2 Civilian Injuries

14 Fire Service Injuries

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
12:01 – 16:00	11	21%	00:01 – 04:00	8	40%
04:01 – 08:00	10	19%	20:01 – 00:00	4	20%
08:01 – 12:00	9	17%	08:01 – 12:00	3	15%

Other Arsons	#	%
16:01 – 20:00	41	32%
12:01 – 16:00	39	30%
20:01 – 00:00	26	20%

Peak Fixed Property Uses for Structure Arsons	#	%
1- or 2-Family homes	19	36%
Apartments	11	21%
Rooming houses	3	6%
High/junior high/middle schools	3	6%
Manufacturing, processing	3	6%

Ashburnham					Population: 6,081			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	16	5	4	7	0	0	0	0
2009	13	7	3	3	1	1	0	0
2010	12	7	2	3	0	0	0	0
2011	6	4	2	0	0	0	0	0
2012	9	4	2	3	0	0	0	0

Athol					Population: 11,584			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	63	24	8	31	0	0	0	0
2009	56	21	5	30	7	1	0	6
2010	58	20	7	31	0	0	0	0
2011	39	18	6	15	4	1	0	3
2012	62	22	6	34	6	0	0	6

Auburn					Population: 16,188			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	47	18	11	18	1	0	0	1
2009	50	23	11	16	0	0	0	0
2010	67	20	20	27	2	1	0	1
2011	57	17	25	15	1	0	1	0
2012	57	27	15	15	2	1	0	1

Barre					Population: 5,398			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	21	12	1	8	0	0	0	0
2009	26	11	2	13	0	0	0	0
2010	32	15	2	15	2	2	0	0
2011	16	9	4	3	0	0	0	0
2012	23	8	6	9	2	0	0	2

Berlin								Population: 2,886	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons	
2008	34	14	6	14	0	0	0	0	
2009	16	5	2	9	0	0	0	0	
2010	29	12	6	11	7	3	1	3	
2011	22	10	1	11	2	1	0	1	
2012	13	7	2	4	0	0	0	0	

Blackstone								Population: 9,026	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons	
2008	37	13	2	22	8	1	1	6	
2009	41	18	5	18	2	0	0	2	
2010	35	13	2	20	0	0	0	0	
2011	28	18	1	9	2	0	0	2	
2012	38	11	3	24	6	0	0	6	

Bolton								Population: 4,897	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons	
2008	21	8	8	5	1	1	0	0	
2009	19	5	2	12	0	0	0	0	
2010	29	7	10	12	0	0	0	0	
2011	9	1	2	6	0	0	0	0	
2012	22	7	2	13	1	0	0	1	

Boylston								Population: 4,355	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons	
2008	7	5	2	0	0	0	0	0	
2009	5	3	1	1	0	0	0	0	
2010	5	1	3	1	0	0	0	0	
2011	9	6	2	1	0	0	0	0	
2012	12	2	2	8	0	0	0	0	

Brookfield **Population: 3,390**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	4	3	0	1	0	0	0	0
2009	3	3	0	0	0	0	0	0
2010	5	3	0	2	0	0	0	0
2011	2	1	0	1	0	0	0	0
2012	3	2	0	1	0	0	0	0

Charlton **Population: 12,981**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	67	36	15	16	2	0	0	2
2009	59	37	6	16	2	1	0	1
2010	65	36	8	21	2	1	0	1
2011	63	32	14	17	0	0	0	0
2012	53	36	7	10	1	1	0	0

Clinton **Population: 13,606**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	95	49	6	40	5	0	0	5
2009	149	127	0	22	1	0	0	1
2010	169	128	7	34	0	0	0	0
2011	156	122	9	25	2	1	0	1
2012	94	52	4	38	8	0	0	8

Douglas **Population: 8,471**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	33	24	1	8	3	0	0	3
2009	33	22	3	8	0	0	0	0
2010	41	29	1	11	0	0	0	0
2011	48	23	2	23	7	0	0	7
2012	35	12	2	21	5	2	0	3

Dudley							Population: 11,390	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	54	18	7	29	3	1	0	2
2009	80	24	7	49	7	0	1	6
2010	60	15	5	40	5	0	0	5
2011	29	15	5	9	0	0	0	0
2012	37	20	10	7	1	0	1	0

East Brookfield							Population: 2,183	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	9	6	0	3	1	0	0	1
2009	6	1	0	5	1	0	0	1
2010	5	4	0	1	0	0	0	0
2011	8	7	0	1	0	0	0	0
2012	24	4	0	20	0	0	0	0

Fitchburg							Population: 40,318	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	334	242	26	66	16	4	3	9
2009	366	293	19	54	14	5	2	7
2010	412	308	26	78	7	2	0	5
2011	391	301	28	62	14	1	4	9
2012	453	321	25	107	10	3	2	5

Gardner							Population: 20,228	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	91	40	12	39	0	0	0	0
2009	89	41	10	38	3	1	0	2
2010	80	53	8	19	1	1	0	0
2011	76	46	11	19	4	3	0	1
2012	72	41	6	25	2	1	0	1

Grafton							Population: 17,765	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	7	4	2	1	0	0	0	0
2009	37	17	7	13	2	0	0	2
2010	28	17	7	4	0	0	0	0
2011	51	36	13	2	1	1	0	0
2012	29	20	6	3	3	2	1	0

Hardwick							Population: 2,990	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	16	6	0	10	0	0	0	0
2009	8	5	0	3	0	0	0	0
2010	6	3	0	3	1	0	0	1
2011	15	8	0	7	0	0	0	0
2012	Non-Reporting Community							

Harvard							Population: 6,520	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	26	9	4	13	1	0	0	1
2009	24	6	2	16	1	0	0	1
2010	32	11	1	20	2	0	0	2
2011	8	4	2	2	0	0	0	0
2012	18	7	1	10	3	0	0	3

Holden							Population: 17,346	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	79	45	14	20	1	0	0	1
2009	34	24	3	7	0	0	0	0
2010	50	30	6	14	0	0	0	0
2011	41	24	4	13	2	0	1	1
2012	23	9	1	13	3	0	0	3

Hopedale **Population: 5,911**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	13	9	2	2	2	1	0	1
2009	5	5	0	0	0	0	0	0
2010	9	8	0	1	0	0	0	0
2011	4	2	1	1	0	0	0	0
2012	4	4	0	0	0	0	0	0

Hubbardston **Population: 4,382**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	39	14	2	23	2	0	1	1
2009	19	10	0	9	0	0	0	0
2010	21	9	2	10	0	0	0	0
2011	18	13	1	4	0	0	0	0
2012	23	8	5	10	0	0	0	0

Lancaster **Population: 8,055**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	27	10	4	13	3	2	0	1
2009	19	10	3	6	3	0	0	3
2010	25	5	8	12	1	1	0	0
2011	14	1	5	8	4	0	2	2
2012	13	6	3	4	3	1	1	1

Leicester **Population: 10,970**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	37	12	4	21	1	0	1	0
2009	29	6	9	14	1	1	0	0
2010	20	6	2	12	0	0	0	0
2011	21	7	5	9	3	0	0	3
2012	43	18	5	20	0	0	0	0

Leominster**Population: 40,759**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	257	160	18	79	7	2	0	5
2009	203	120	25	58	8	0	6	2
2010	217	108	22	87	20	4	0	16
2011	213	131	24	58	8	3	0	5
2012	238	116	18	104	9	3	1	5

Lunenburg**Population: 10,086**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	60	34	6	20	0	0	0	0
2009	41	26	1	14	0	0	0	0
2010	48	28	3	17	0	0	0	0
2011	47	33	7	7	2	1	1	0
2012	58	39	4	15	1	0	1	0

Mendon**Population: 5,839**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	24	7	3	14	0	0	0	0
2009	18	4	4	10	6	1	0	5
2010	21	5	1	15	7	0	0	7
2011	18	7	0	11	1	0	0	1
2012	13	5	2	6	0	0	0	0

Milford**Population: 27,999**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	112	54	25	33	0	0	0	0
2009	117	67	20	30	5	3	1	1
2010	98	43	13	42	3	0	2	1
2011	81	53	3	25	9	3	0	6
2012	112	49	13	50	3	2	0	1

Millbury **Population: 13,261**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	33	22	6	5	0	0	0	0
2009	49	31	8	10	2	1	1	0
2010	66	43	8	15	0	0	0	0
2011	56	32	12	12	2	0	2	0
2012	62	27	7	28	4	1	0	3

Millville **Population: 3,190**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2007	10	4	1	5	0	0	0	0
2008	14	10	0	4	0	0	0	0
2009	9	4	0	5	0	0	0	0
2010	7	5	0	2	0	0	0	0
2011	16	11	3	2	0	0	0	0
2012	9	6	2	1	0	0	0	0

New Braintree **Population: 999**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	Non-Reporting Community							
2010	Non-Reporting Community							
2011	Non-Reporting Community							
2012	9	1	0	8	0	0	0	0

North Brookfield **Population: 4,680**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	27	9	2	16	1	0	0	1
2009	22	6	3	13	4	0	1	3
2010	23	9	0	14	3	0	0	3
2011	31	2	1	28	2	0	0	2
2012	25	6	1	18	2	0	0	2

Northborough**Population: 14,155**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	39	12	8	19	1	1	0	0
2009	27	5	10	12	0	0	0	0
2010	43	15	7	21	2	0	0	2
2011	27	15	4	8	3	1	0	2
2012	48	9	2	37	3	0	0	3

Northbridge**Population: 15,707**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	43	18	3	22	2	1	0	1
2009	43	29	3	11	0	0	0	0
2010	82	45	6	31	2	1	0	1
2011	39	25	4	10	2	0	0	2
2012	53	26	4	23	2	0	0	2

Oakham**Population: 1,902**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	12	6	0	6	0	0	0	0
2009	9	4	0	5	0	0	0	0
2010	17	4	0	13	0	0	0	0
2011	8	4	0	4	1	0	0	1
2012	8	6	0	2	0	0	0	0

Oxford**Population: 13,709**

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	70	38	12	20	5	2	3	0
2009	54	35	7	12	2	2	0	0
2010	60	32	10	18	2	1	0	1
2011	53	28	7	18	0	0	0	0
2012	49	25	6	18	6	2	2	2

Paxton					Population: 4,806			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	9	8	1	0	0	0	0	0
2009	5	3	0	2	0	0	0	0
2010	12	7	2	3	0	0	0	0
2011	11	6	3	2	0	0	0	0
2012	19	11	3	5	0	0	0	0

Petersham					Population: 1,234			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	8	5	0	3	0	0	0	0
2009	11	9	0	2	0	0	0	0
2010	5	2	0	3	0	0	0	0
2011	Fire Department in Good Standing, Certified No Reportable Fires							
2012	Fire Department in Good Standing, Certified No Reportable Fires							

Phillipston					Population: 1,682			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	10	1	1	8	0	0	0	0
2009	1	1	0	0	0	0	0	0
2010	2	0	0	2	1	0	0	1
2011 ¹¹	Fire Department in Good Standing, Certified No Reportable Fires							
2012	3	2	0	1	0	0	0	0

Princeton					Population: 3,413			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	17	7	1	9	2	1	0	1
2009	12	3	2	7	3	2	1	0
2010	22	7	2	13	2	1	0	1
2011	19	13	1	5	0	0	0	0
2012	14	6	2	6	1	1	0	0

¹¹ In 2011 Phillipston reported 19 incidents, none of them fires.

Royalston					Population: 1,258			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1	1	0	0	0	0	0	0
2009	6	4	1	1	1	1	0	0
2010	2	2	0	0	0	0	0	0
2011	1	1	0	0	0	0	0	0
2012	3	3	0	0	0	0	0	0

Rutland					Population: 7,973			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	3	2	0	1	1	0	0	1
2009	30	10	1	19	4	1	0	3
2010	24	10	1	13	0	0	0	0
2011	20	10	4	6	1	1	0	0
2012	19	9	0	10	1	1	0	0

Shrewsbury					Population: 35,608			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	126	63	19	44	5	0	1	4
2009	107	71	11	25	4	0	0	4
2010	126	64	13	49	2	0	1	1
2011	90	57	12	21	3	1	2	0
2012	152	75	8	69	12	2	1	9

Southborough					Population: 9,767			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	33	20	3	10	1	0	0	1
2009	25	15	6	4	0	0	0	0
2010	29	10	10	9	0	0	0	0
2011	26	13	4	9	2	0	0	2
2012	24	8	5	11	3	0	0	3

Southbridge							Population: 16,719	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	74	43	10	21	1	0	1	0
2009	76	55	7	14	3	2	1	0
2010	82	48	6	28	2	0	0	2
2011	64	37	11	16	1	0	0	1
2012	54	29	5	20	1	0	0	1

Spencer							Population: 11,688	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	82	46	6	30	0	0	0	0
2009	68	40	8	20	4	1	1	2
2010	91	58	5	28	3	1	0	2
2011	62	45	7	10	0	0	0	0
2012	104	70	8	26	3	2	0	1

Sterling							Population: 7,808	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	45	17	5	23	0	0	0	0
2009	41	15	6	20	4	1	1	2
2010	33	10	3	20	0	0	0	0
2011	46	18	7	21	0	0	0	0
2012	44	22	6	16	0	0	0	0

Sturbridge							Population: 9,268	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	44	6	18	20	0	0	0	0
2009	40	17	7	16	1	0	0	1
2010	43	15	9	19	3	0	0	3
2011	46	15	8	23	6	1	0	5
2012	46	11	14	21	5	0	0	5

Sutton					Population: 8,963			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	10	2	3	5	0	0	0	0
2009	20	10	2	8	1	0	0	1
2010	16	4	3	9	1	0	0	1
2011	22	15	2	5	0	0	0	0
2012	13	3	7	3	0	0	0	0

Templeton					Population: 8,013			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	37	18	4	15	3	0	0	3
2009	47	26	4	17	3	0	0	3
2010	42	32	0	10	2	1	0	1
2011	31	25	2	4	1	0	1	0
2012	4	4	0	0	0	0	0	0

Upton					Population: 7,542			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	36	12	1	23	3	0	0	3
2009	42	23	6	13	9	0	0	9
2010	37	20	5	12	0	0	0	0
2011	32	15	5	12	5	0	0	5
2012	36	20	0	16	8	0	0	8

Uxbridge					Population: 13,457			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	57	27	9	21	3	0	1	2
2009	58	35	6	17	3	0	0	3
2010	45	18	10	17	3	1	0	2
2011	40	19	10	11	1	1	0	0
2012	60	24	3	33	6	1	1	4

Warren					Population: 5,135			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	26	13	2	11	1	0	0	1
2009	21	11	3	7	2	1	0	1
2010	24	11	3	10	0	0	0	0
2011	16	9	3	4	0	0	0	0
2012	29	12	5	12	1	0	0	1

Webster					Population: 16,767			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	69	31	9	29	0	0	0	0
2009	46	12	3	31	5	0	0	5
2010	69	22	6	41	10	2	0	8
2011	49	16	5	28	4	0	0	4
2012	60	14	5	41	5	0	0	5

West Boylston					Population: 7,669			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	28	4	6	18	0	0	0	0
2009	21	6	0	15	3	0	0	3
2010	26	7	7	12	2	0	0	2
2011	23	5	10	8	1	0	0	1
2012	33	3	6	24	1	0	0	1

West Brookfield					Population: 3,701			
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	Fire Department in Good Standing, Certified No Reportable Fires							
2009	9	7	0	2	0	0	0	0
2010 ¹²	Fire Department in Good Standing, Certified No Reportable Fires							
2011	2	1	1	0	1	1	0	0
2012	2	2	0	0	0	0	0	0

¹² In 2010, West Brookfield did not report any fires, but they did report 1 Hazardous condition call with no fire, and 1 severe weather response.

Westborough							Population: 18,272	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	60	26	10	6	2	0	0	2
2009	59	29	10	20	2	0	0	2
2010	64	37	5	22	3	2	0	1
2011	52	35	6	11	1	1	0	0
2012	57	32	7	18	4	2	0	2

Westminster							Population: 7,277	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	32	16	10	6	1	1	0	0
2009	24	10	4	10	3	1	1	1
2010	40	15	6	19	0	0	0	0
2011	27	14	4	9	0	0	0	0
2012	32	14	7	11	1	0	0	1

Winchendon							Population: 10,300	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	40	26	1	13	1	0	0	0
2009	26	20	2	4	0	0	0	0
2010	49	27	2	20	0	0	0	0
2011	42	33	4	5	3	0	1	2
2012	56	28	4	24	2	0	1	1

Worcester							Population: 181,045	
	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1,449	811	117	521	53	18	12	23
2009	1,232	696	111	425	56	13	12	31
2010	1,430	730	95	605	58	13	6	39
2011	1,374	723	122	529	48	15	7	26
2012	1,587	813	99	675	63	25	8	30

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	10	9	0	0	1	0	0	0	0	0
27015	Athol	779	75	1	82	112	223	141	124	2	19
27017	Auburn	2,907	69	2	2,184	143	114	154	226	1	14
27021	Barre	235	23	1	118	17	24	18	26	0	8
27028	Berlin	306	20	0	32	28	17	10	67	4	128
27032	Blackstone	498	51	1	196	32	32	56	125	1	4
27034	Bolton	193	23	0	21	36	25	32	55	0	1
27039	Boylston	56	17	0	10	4	4	3	15	2	1
27045	Brookfield	3	3	0	0	0	0	0	0	0	0
27054	Charlton	1,852	58	4	1,238	200	124	101	117	7	3
27064	Clinton	1,821	101	4	1,182	72	81	36	323	0	22
27077	Douglas	354	52	1	110	38	28	36	74	5	10
27080	Dudley	347	50	13	33	63	43	66	79	0	0
27084	East Brookfield	118	43	0	9	23	17	15	8	0	3
27097	Fitchburg	4,279	466	6	1,874	199	520	394	803	6	11

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

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
27103	Gardner	3,231	76	2	1,563	128	582	78	453	2	347
27110	Grafton	269	35	0	26	34	49	37	86	0	2
27125	Harvard	177	17	0	22	16	71	8	41	1	1
27134	Holden	1,645	25	0	1,183	47	133	115	139	2	1
27138	Hopedale	5	4	0	0	1	0	0	0	0	0
27140	Hubbardston	516	28	0	347	23	51	28	38	1	0
27147	Lancaster	272	13	0	86	16	34	28	74	0	21
27151	Leicester	205	60	1	10	16	39	14	62	1	2
27153	Leominster	7,339	244	1	4,837	246	498	223	797	2	491
27162	Lunenburg	395	63	2	49	62	74	30	97	0	18
27179	Mendon	898	13	0	645	22	41	93	82	0	2
27185	Milford	4,556	126	1	2,893	170	656	205	426	28	51
27186	Millbury	236	73	0	10	41	24	10	77	1	0
27188	Millville	314	21	1	176	16	21	53	26	0	0
27212	North Brookfield	168	41	0	21	41	20		41	1	3
27215	Northborough	1,913	61	0	1,092	71	257	94	337	1	0
27216	Northbridge	752	65	0	201	55	89	117	222	0	3
27222	Oakham	214	14	1	156	6	16	7	13	0	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
27226	Oxford	557	50	5	81	38	135	100	143	3	2
27228	Paxton	88	30	0	12	5	2	4	34	0	1
27235	Phillipston	45	4	0	6	1	22	5	7	0	0
27241	Princeton	285	15	0	149	16	36	24	44	1	0
27255	Royalston	4	4	0	0	0	0	0	0	0	0
27257	Rutland	951	20	1	685	23	70	69	76	4	3
27271	Shrewsbury	3,464	157	1	2,432	177	204	87	371	6	29
27277	Southborough	1,126	30	4	619	86	96	76	211	2	2
27278	Southbridge	964	63	1	441	64	93	63	212	3	24
27280	Spencer	371	118	3	17	73	32	32	91	3	2
27282	Sterling	1,031	66	2	652	9	119	76	104	2	1
27287	Sturbridge	466	50	5	51	65	111	55	124	1	4
27290	Sutton	407	29	0	183	87	57	5	41	5	0
27294	Templeton	41	4	1	10	3	8	6	9	0	0
27303	Upton	289	41	1	26	70	56	16	67	10	2

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

Responses Reported to MFIRS by Department

FDID #	Department	Total # of Reported Responses	Fires	Overpressure Rupt. & Explos. (No fire)	Rescue EMS Incidents	Hazardous Conditions (No fire)	Service Calls	Good Intent Calls	False Alarm Calls	Severe WX & Natural Disaster	Special Incident Type
27304	Uxbridge	2,046	65	1	1,513	69	150	88	158	1	1
27311	Warren	232	43	0	40	34	40	28	46	1	0
27316	Webster	397	71	2	9	77	59	34	137	4	4
27321	West Boylston	1,055	37	0	805	19	65	47	79	3	0
27323	West Brookfield	2	2	0	0	0	0	0	0	0	0
27328	Westborough	2,662	69	2	1,867	121	81	124	393	2	3
27332	Westminster	863	32	3	341	70	166	70	171	2	8
27343	Winchendon	1,701	57	5	1,108	50	230	116	132	2	1
27348	Worcester	28,657	1,587	27	21,171	862	536	1,588	2,868	1	17
Total	Worcester County	84,567	4,683	106	52,624	3,998	6,275	4,915	10,571	124	1,271

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.

Fitchburg Fires in 2012

453 Total Fires — 321 Structures, 25 Vehicles & 107 Other Fires

The Fitchburg Fire Department reported 453 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 321 structure fires, 25 motor vehicle fires, 72 brush fires, 31 outside rubbish fires, one special outside fire, and three unclassified fires caused 10 civilian injuries, four fire service injuries and an estimated dollar loss of \$1 million. There were no civilian fire deaths in Fitchburg in 2012.

Structure & Outside Fires Up in 2012

Total fires increased by 62 from the 391 incidents reported in 2011. Reported structure fires increased by 20 from the 301 reported during the previous year. Motor vehicle fires dropped by three from 28 the year before. Outside and other fires increased by 45 from the 62 reported in 2011.

FITCHBURG FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	334	242	26	66	16	3	3	9
2009	366	293	19	54	14	5	2	7
2010	412	308	26	78	7	2	0	5
2011	391	301	28	62	14	1	4	9
2012	453	321	25	107	10	3	2	5

BUILDING FIRES

There were 321 building fires of different types in Fitchburg in 2012. These 321 building fires accounted for all structure fires in Fitchburg.

84% of Building Fires in Homes

The 321 building fires that occurred in Fitchburg in 2012 can be broken down by fixed property use as follows: 271, or 84% of all building fires, were in residential properties; 12 fires occurred in institutional facilities; nine fires occurred in public assembly properties; eight happened in mercantile or business properties; seven fires occurred in educational facilities; another seven happened in manufacturing or processing facilities; storage facilities had five fires; and two occurred in special properties.

RESIDENTIAL FIRES

Residential Building Fires Up Slightly

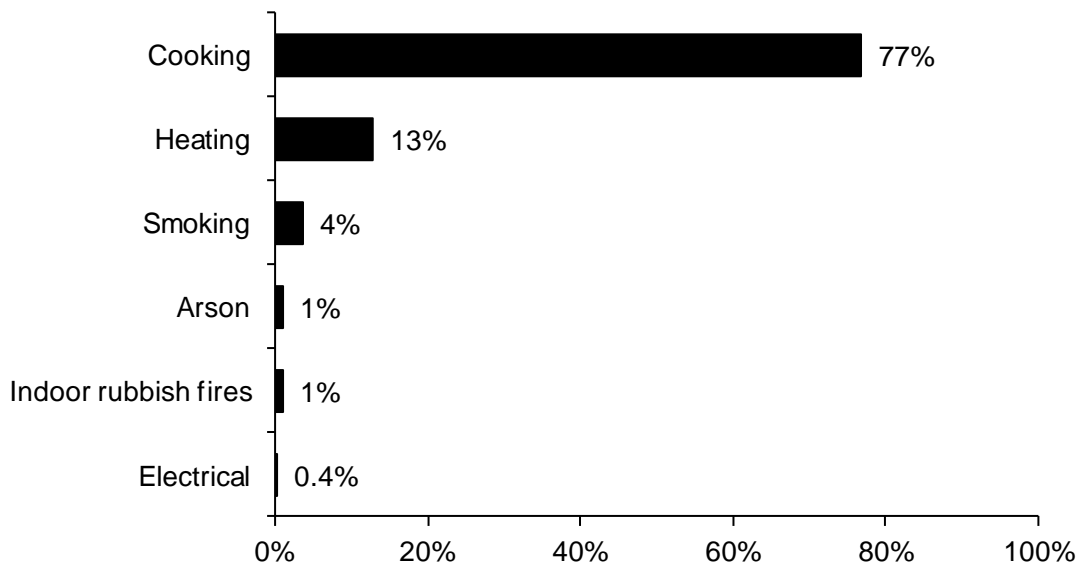
There were 271 reported residential building fires in Fitchburg in 2012. These 271 fires are an increase of 13 from the 258 residential building fires reported in 2011.

Apartments Accounted for 55% of Residential Building Fires

The peak fixed property uses for residential building fires were apartments, accounting for 55% of the building fires in Fitchburg; 32% occurred in 1- or 2-family homes; 6% occurred in dormitory style residences; 3% happened in rooming houses; 1% happened in residential board and care facilities; less than 1% occurred in hotels or motels; and less than 1% occurred in unclassified residences.

Unattended Cooking Cause Over 3/4 of Residential Fires

The leading cause of residential building fires in Fitchburg was unattended cooking and other unsafe cooking practices, accounting for 77% of these fires. Heating fires caused 13% of these fires. Smoking caused 4% of these fires. Arson and indoor rubbish fires were each the cause of 1% of these fires; and electrical problems accounted for less than 1% of the fires in Fitchburg's residential occupancies in 2012.

**2012 Leading Causes of Fires
in Fitchburg Homes****89% of Residential Building Fires Are Confined to Non-Combustible Containers¹**

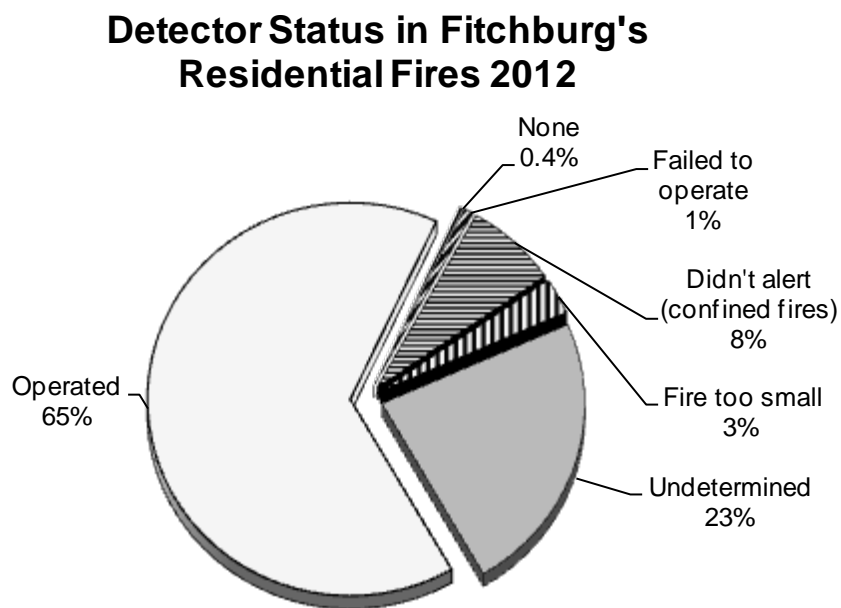
Two hundred and forty (240), or 89% of all residential building fires were confined to non-combustible containers in 2012. Two hundred and five (205), or 76%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Twenty-three (23), or 8%, were fires confined to a fuel burner or

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

boiler malfunction. Nine (9), or 3%, of these fires, were reported to have been contained to a chimney or flue. Three (3), or 1%, were indoor rubbish fires contained to a non-combustible container.

Detectors Worked in Almost 2/3 of Fires

Smoke or heat detectors operated and alerted the occupants in 177, or 65%, of the residential building fires. In 8% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 1% of these incidents. In less than 1% 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 63 incidents, or 23% of Fitchburg's residential building fires.



1 of 2 Detectors Failed from a Power Shutoff or Disconnect

Of the two fires where smoke detectors were present but failed to operate, one, or 50%, failed because of a power failure, shutoff or disconnect, and the other failed because the battery was missing.

VACANT BUILDINGS

3% of Building Fires Occurred in Vacant Buildings

Fitchburg reported 10 fires that occurred in buildings that were vacant, under construction or under demolition. This represented 3% of the 321 building fires reported to MFIRS in 2012. Three (3) apartment buildings, one single-family home, one rooming house, one unclassified storage building, one detached residential garage, one

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

unclassified special property, one shed, and one manufacturing facility were reported as vacant building fire incidents.

JUVENILE-SET FIRES

1 Juvenile-set Fire in 2012

There was one reported juvenile-set fire in Fitchburg in 2012. It was a brush fire.

ARSONS

10 Arsons - 3 Structure, 2 Motor Vehicle & 5 Outside & Other

Ten (10), or 2%, of Fitchburg's 453 fires were considered intentionally set, or, for purposes of this analysis, arson. There were three structure arsons, two motor vehicle arsons and five outside and other arsons.

MV & Outside Arsons Down in 2012

The total number of arsons decreased by three from the 13 reported in 2012. Reported structure arsons increased by two from one reported the year before. Motor vehicle arsons decreased by two from the four reported in 2011. Outside and other arsons decreased by three from the eight reported the year before.

65 Fires Reported as Undetermined or Still Under Investigation

In 2012, Fitchburg reported 65 fires under investigation or cause undetermined after investigation. Sixty-one (61), or 94%, of these fires were reported to be undetermined after investigation. The other four, or 6%, were still under investigation.

Eighteen (18), or 28%, of these 65 fires were structure fires. Eleven (11), or 17% were motor vehicle fires; and 36, or 45%, were outside or other fires. Because so many fires are under investigation or undetermined after investigation, the true arson number might actually be higher in Fitchburg in 2012.

ALL INCIDENTS

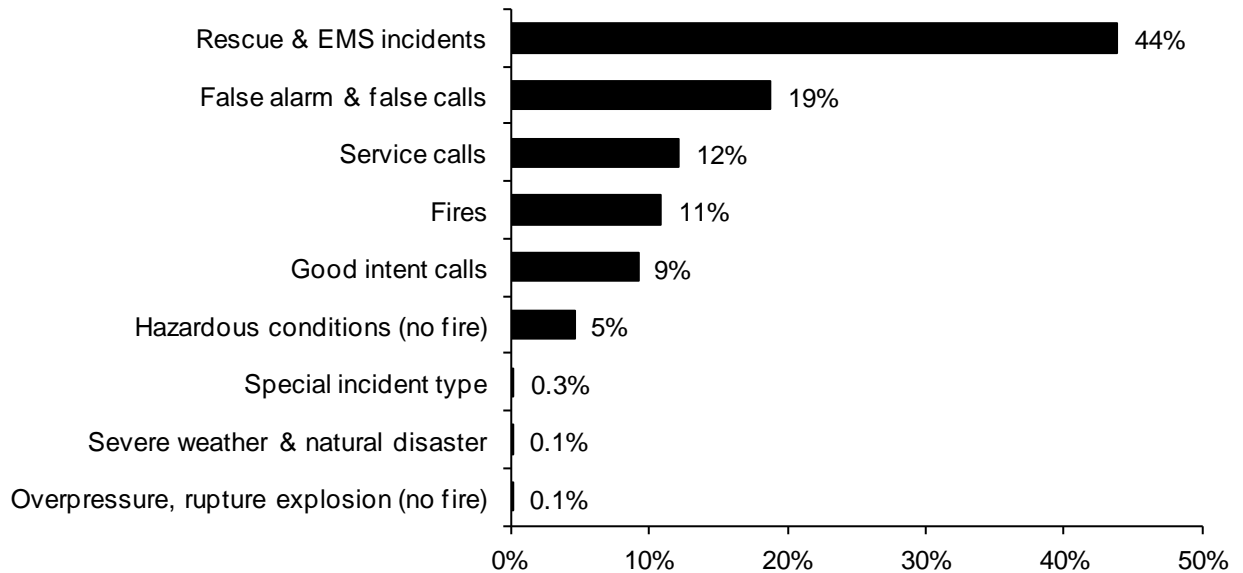
Rescue & EMS Calls Are 44% of All Reported Incidents

In 2012, Fitchburg voluntarily reported 4,279 incidents to MFIRS. Of these 4,279 incidents, 3,813, or 89%, were non-fire incidents.

Of these 3,813 non-fire incidents 1,874, or 44% of all reported incidents in 2012, were reported rescue and emergency medical services (EMS) calls; 803, or 19%, were reported false alarm or false calls; 520, or 12%, were reported service calls such as lock-outs, water or smoke problems, unauthorized burning or public service assistance; 394, or 9%, were reported good intent calls; 199, or 5%, were reported hazardous condition calls with no fire; 11, or 0.3%, were special type incidents; six, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; and another six, or 0.1%, were calls related to severe weather.

In 2012, Fitchburg reported 466 fires, accounting for 11% of all reported incidents.

2012 Incidents by Incident Type



Fitchburg Gave Mutual Aid in 32 Incidents

In 2012, Fitchburg reported giving mutual aid to other surrounding fire departments in 32 incidents. Thirteen (13), or 41%, of these incidents were fires; 12, or 38%, were service calls for station coverage; three, or 9%, were rescue or EMS calls; another three, or 9%, were good intent calls; and one, or 3%, was a false alarm or false call.

Fitchburg Received Mutual Aid in 15 Incidents

In 2012, Fitchburg reported 15 incidents in which they received mutual aid from another fire department. Nine (9), or 60%, were for fires; two, or 13%, were for false alarms; another two, or 13%, were for rescue or EMS calls, and two more, or 13%, were for service calls.

Fitchburg**Population: 40,318****11.24 Fires/1,000 Population****Total Fires: 453 \$1,001,950**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	321	71%	\$896,350
Vehicle Fires	25	6%	80,050
Other Fires	107	24%	25,550

10 Civilian Injuries 4 Fire Service Injuries

Building Fires: 321**Residential Structure Fires: 271****Residential Structure Fires Confined to Non-Combustible Containers: 240****Unconfined Residential Structure Fires: 31**

9 Civilian Injuries 2 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	150	55%	Operated	177	65%
1- & 2-Family homes	88	32%	Didn't operate	2	1%
Dormitories	17	6%	None	1	0.4%
Rooming houses	9	3%	Fire too small	8	3%
Residential, other	5	2%	Didn't Alert (confined)	20	8%
			Undetermined	63	23%

Area of Origin³	%	Heat Source	%	%Unconfined⁴
Kitchen	78%	Cigarettes	3%	26%
Heating room or area	8%	Heat from operating equip.	1%	10%
Chimney or flue	3%	Hot or smoldering object	1%	6%
Bedroom	1%			
Bathroom	1%			

³ This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

⁴ 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.

Item First Ignited⁵	%	Factor Contrib. to Ignition	%	%Unconfined⁶
Cooking materials	77%	Misuse of mater. or prod.	1%	6%
Flammable or combustible liq.	9%	Too close to combustibles	1%	6%
Film, residue (creosote)	2%	Rekindle	0.4%	3%
Rubbish, trash, waste	1%			
Structural component/finish	1%			
Exterior sidewall covering	1%			

Equipment⁷	%	Cause of Ignition	%	%Unconfined⁸
Cooking equipment	76%	Unintentional	5%	42%
None	9%	Intentional	1%	10%
Boiler, furnace, cent. heat. unit	8%	Failure of eq./heat source	1%	13%
Chimney or flue	3%	Cause Under Investigation	1%	6%
		Undetermined	3%	29%
		Act of nature	0%	0%

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

Alerted Occupants	68%
Didn't Alert Occupants	8%
Undetermined	24%

All Reported Incidents	# of Incidents	% of Incidents
Rescue & EMS incidents	1,874	44%
False alarms & false calls	803	19%
Service calls	520	12%
Fires	466	11%
Good intent calls	394	9%
Hazardous conditions (no fire)	199	5%
Special Incident Types	11	0.3%
Overpressure rupture, explosion or overheat calls (no fire)	6	0.1%
Severe weather & natural disaster	6	0.1%

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

⁶ 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.

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

⁸ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	34	29	0	5
February	34	29	1	4
March	42	28	4	10
April	55	27	0	28
May	32	24	1	7
June	33	23	6	4
July	50	23	4	23
August	30	21	1	8
September	30	21	2	7
October	36	33	0	3
November	35	27	2	6
December	42	6	4	2

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	63	47	2	14
Monday	48	36	3	9
Tuesday	79	58	0	21
Wednesday	74	53	5	16
Thursday	56	40	4	12
Friday	65	42	6	17
Saturday	68	45	5	18

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	25	13	3	9
04:01 - 08:00	31	24	2	5
08:01 - 12:00	94	74	4	16
12:01 - 16:00	110	69	5	36
16:01 - 20:00	122	89	6	27
20:01 - 24:00	71	52	5	14

Motor Vehicle Fires

Total: 25

Automobiles: 21 (84%)

1 (5%) of the automobile fires considered intentionally set.

Arson Fires

Total Arsons: 10

Dollar loss: \$68,150

0.25 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	3	1%	30%	\$65,150
Vehicle Arsons	2	8%	20%	3,000
Other Arsons	5	5%	50%	0

0.07 Structure arsons/1,000 population

0.05 Vehicle arsons/1,000 population

0.12 Other arsons/1,000 population

Peak Times of Day for:

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

Other Arsons	#	%
00:01 - 04:00	1	20%
04:01 - 08:00	1	20%
12:01 - 16:00	1	20%
16:01 - 20:00	1	20%
20:01 - 00:00	1	20%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	1	33%
Single-family home	1	33%
Rooming house	1	33%

Worcester Fires in 2012

1,587 Total Fires — 813 Structures, 99 Vehicles & 675 Other Fires

The Worcester Fire Department reported 1,587 fires to the Massachusetts Fire Incident Reporting System (MFIRS) in 2012. The 813 structure fires, 99 motor vehicle fires, 148 brush fires, 514 outside rubbish fires, and 13 special outside fires caused one civilian injury, 39 fire service injuries and an estimated dollar loss of \$4.7 million.

No Fire Deaths in Worcester in 2012

For the third time in the past 10 years Worcester did not have a civilian fire death.

Structure & Outside & Other Fires Up 2012

Total fires increased by 213 from the 1,374 incidents reported in 2011. Reported structure fires increased by 90 from the 723 reported during the previous year. Motor vehicle fires decreased by 23 from 122 the year before. Outside and other fires increased by 146 from the 529 reported the year before.

WORCESTER FIRES FROM 2008 TO 2012

	Total Fires	Structure Fires	Vehicle Fires	Other Fires	Total Arsons	Structure Arsons	Vehicle Arsons	Other Arsons
2008	1,445	807	117	521	53	18	12	23
2009	1,232	696	111	425	56	13	12	31
2010	1,430	730	95	605	58	13	6	39
2011	1,374	723	122	675	48	15	7	26
2012	1,587	813	99	675	63	25	8	30

BUILDING FIRES

There were 813 building fires of different types in Worcester in 2012. These 813 building fires accounted for 100% of all structure fires in Worcester.

88% of Building Fires in Homes

The 813 building fires that occurred in Worcester in 2012 can be broken down by fixed property use as follows: 702, or 86% of all building fires, were in residential properties; 31 fires took place in institutional properties; 24 fires happened in educational properties; 19 fires occurred in mercantile or business properties; 18 fires took place in public assembly properties; 10 fires occurred at manufacturing or processing facilities; seven fires occurred in storage facilities; one fire happened at an industrial facility; and another fire happened in a special property.

RESIDENTIAL FIRES

Apartments Accounted for 57% of Residential Building Fires

The peak fixed property uses for residential building fires were apartments, accounting for 57% of the building fires in Worcester. Sixteen percent (16%) occurred in one- or

two-family homes; 15% occurred in rooming houses; 9% occurred in dormitories; 2% happened in residential board and care properties; less than 1% occurred in hotels and motels; and 1% occurred in unclassified residential properties.

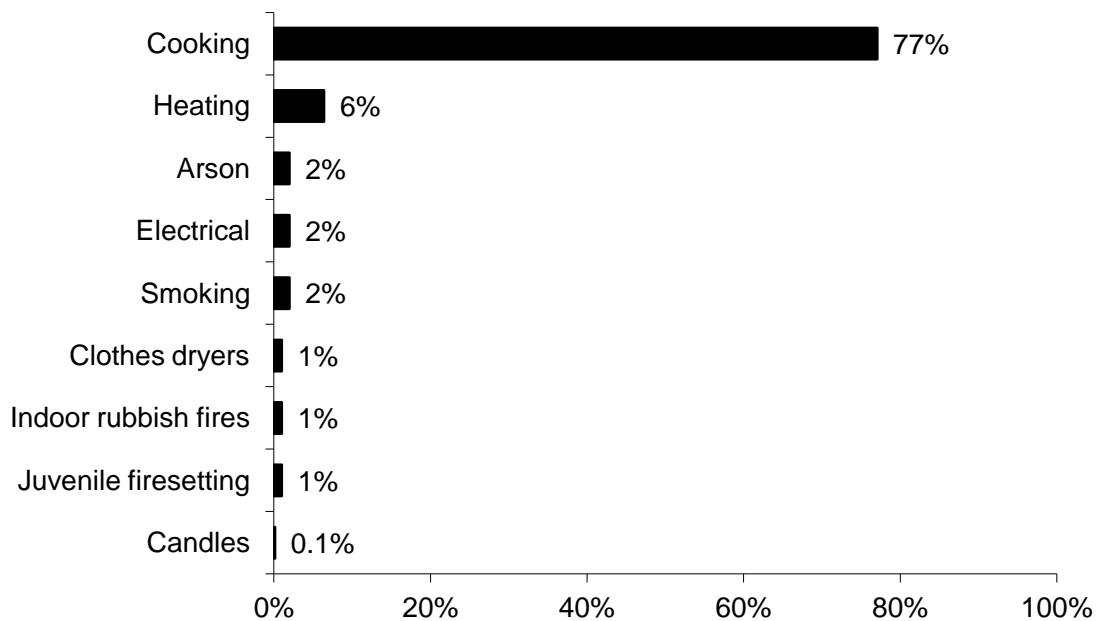
Residential Building Fires Were Up

There were 702 reported residential building fires in Worcester in 2012. These 702 fires were an increase of 70, or 11%, from the 632 residential building fires reported in 2011.

Unattended Cooking Caused Over 3/4 of All Residential Fires

The leading cause of residential building fires in Worcester was unattended cooking and other unsafe cooking practices, accounting for 77% of these fires. Heating fires accounted for 6% of these fires. Arson, electrical problems and smoking each caused 2% of the fires in Worcester homes. Clothes dryers, indoor rubbish fires and juvenile-set fires were each responsible for 1% of these fires. Candles were responsible for less than 1% of the residential building fires in Worcester in 2012.

2012 Leading Causes of Fire In Worcester Homes



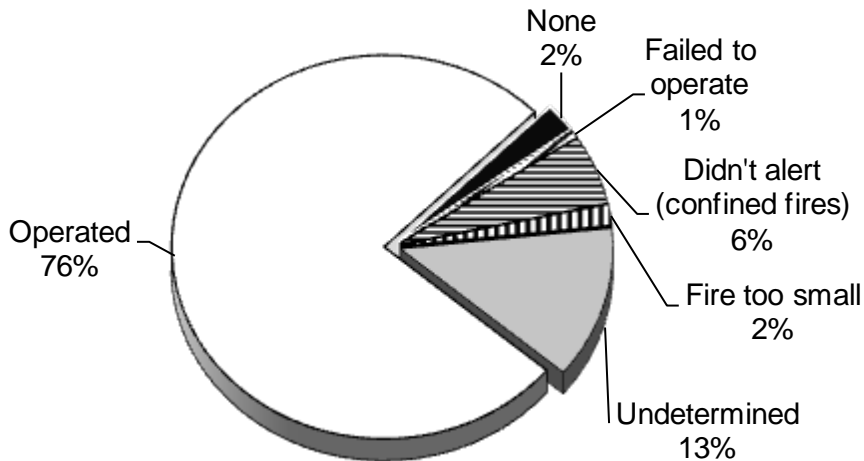
79% of Residential Building Fires Are Confined to Non-Combustible Containers¹

Five hundred and fifty-eight (558), or 79% of all residential building fires were confined to non-combustible containers in 2012. Five hundred and thirteen (513), or 73%, of all residential building fires reported in 2012 were cooking fires contained to a non-combustible container. Twenty-nine (29), or 4%, of all residential building fires were fuel burner or boiler malfunctions. Nine (9) of the reported fires were confined to a chimney, accounting for 1% of residential building fires in Worcester in 2012. Five (5) rubbish fires contained to a non-combustible container caused 1% of these fires and two commercial compactor fires caused less than 1%, of these Worcester's residential fires.

Detectors Alerted Occupants in Over 3/4 of Fires

Smoke or heat detectors operated and alerted the occupants in 537, or 76%, of the residential building fires. In 6% of these fires², the detectors did not alert the occupants. Detectors were present but did not operate in 1% of these incidents. In another 2% of these fires, no detectors were present at all. The fire was too small to trigger the detector in 2% of the residential fires. Smoke detector performance was undetermined in 90 incidents, or 13% of Worcester's residential building fires.

Detector Status in Worcester Residential Fires 2012



1 of the Failed Detectors Had Missing Batteries

Of the five fires where smoke detectors were present but failed to operate, one, or 20%, failed because the batteries were missing. Improper installation or placement caused

¹ 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.

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

another, or 20%, of the detectors to fail. It was undetermined in the other three cases why the detectors failed to operate.

VACANT BUILDINGS

1% of Building Fires Occurred in Vacant Buildings

Worcester reported 12 fires that occurred in buildings that were vacant, under construction or demolition. This represented 1% of the total 813 building fires reported to MFIRS in 2012. Six (6) apartment buildings, four one- or two-family homes, one unclassified storage facility, and one manufacturing or processing facility were reported as vacant building fire incidents.

These 12 vacant building fires caused 11 fire service injuries. That is almost one firefighter injury for every vacant building fire in Worcester in 2012.

JUVENILE-SET FIRES

9 Juvenile-set Fires

There were nine juvenile-set fires in Worcester in 2012. The four structure fires and five brush fires caused \$301,550 in estimated damages.

ARSONS

63 Total Arsons — 25 Structures, 8 Motor Vehicles, & 30 Other

Sixty-three (63), or 4%, of Worcester's 1,587 fires were considered intentionally set, or, for purposes of this analysis, arson. The 25 structure arsons, eight motor vehicle arsons and 30 outside and other arsons caused 13 fire service injuries and an estimated dollar loss of \$1 million.

All Arsons Increase

The total number of arsons increased by 15. This is a 31% increase from the 48 arsons reported in 2011. Reported structure arsons increased by 10 from the 15 reported in 2011. Motor vehicle arsons increased by one from seven in 2011. Outside and other arsons increased by four from the 26 reported the year before.

Worcester reported 142 fires that are still under investigation or undetermined after investigation. Sixty (60) of these fires were reported as under investigation and 82 were classified as undetermined.

ALL INCIDENTS

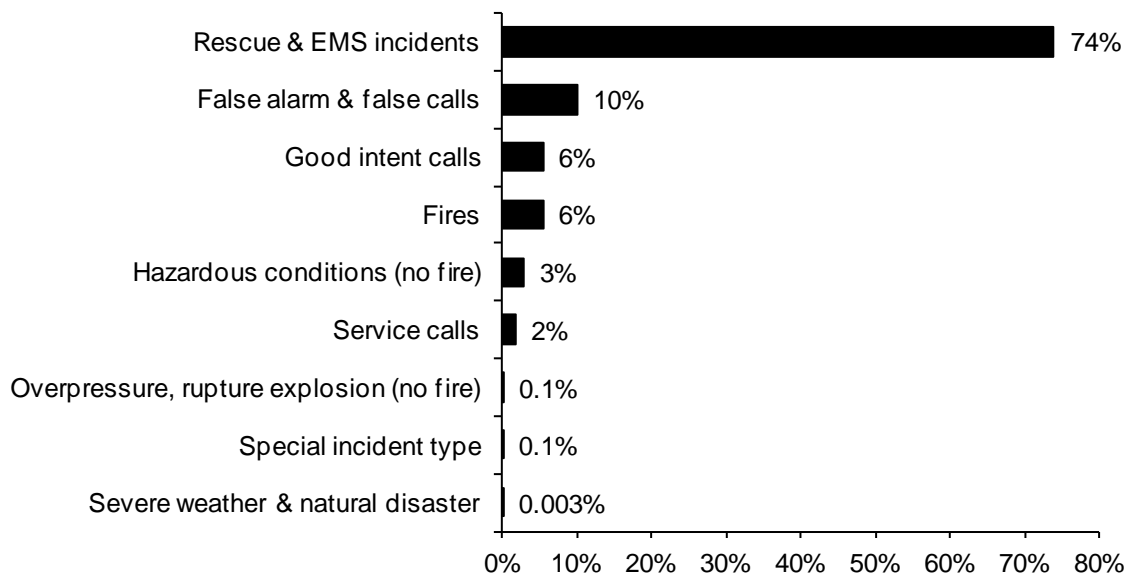
Rescue & EMS Calls Are Almost 3/4 of All Reported Incidents

In 2012, Worcester voluntarily reported 28,657 incidents to MFIRS. Of these 28,657 incidents, 27,069, or 94%, were non-fire incidents.

Of these 27,069 non-fire incidents 21,171, or 74% of all reported incidents in 2012, were reported rescue and emergency medical services (EMS) calls; 2,868, or 10%, were reported false alarm or false calls; 1,588, or 6%, were reported good intent calls; 862, or 3%, were reported hazardous condition calls with no fire; 536, or 2%, were reported service calls such as lock-outs, water or smoke problem, unauthorized burning or public service assistance; 27, or 0.1%, were reported overpressure, rupture, explosion or overheat calls with no fire; 17, or 0.1%, were special type incidents; and one, or 0.003%, was a response to an incident caused by severe weather.

In 2012, Worcester reported 1,587 fires, accounting for 6% of all reported incidents.

2012 Incidents by Incident Type



Worcester Gave Mutual Aid in 3 Incidents

In 2012, Worcester did not report giving mutual aid to any other surrounding fire departments.

Worcester Received Mutual Aid in 1 Incident

In 2012, Worcester reported one incident in which they received mutual aid from another fire department.

Worcester**Population: 181,045****8.8 Fires/1,000 Population****Total Fires: 1,587 \$4,709,930**

Situation	Fires	% of Fires	Dollar Loss
Structure Fires	813	51%	\$4,242,660
Vehicle Fires	99	6%	153,900
Other Fires	675	43%	313,370

No Civilian Deaths

1 Civilian Injury 39 Fire Service Injuries

Building Fires: 813**Residential Structure Fires: 702****Residential Structure Fires Confined to Non-Combustible Containers: 558****Unconfined Residential Structure Fires: 144**

1 Civilian Injury 34 Fire Service Injuries

Occupancy	Fires	%	Detector Status	Fires	%
Apartments	399	57%	Operated	537	76%
1- & 2-Family homes	113	16%	Didn't operate	5	1%
Boarding house	107	15%	None	17	2%
Dormitories	60	9%	Fire too small	12	2%
Residential board & care	16	2%	Didn't Alert (confined)	41	6%
			Undetermined	90	13%

Area of Origin³	%	Heat Source	%	%Unconfined⁴
Kitchen	79%	Heat from operating eq.	3%	13%
Heating room or area	4%	Radiated heat from op. eq.	3%	13%
Bedroom	2%	Hot ember or ash	1%	6%
Exterior stairway	2%	Hot or smoldering obj. other	1%	6%
Chimney or flue	1%	Cigarette	1%	6%

³ This field does not need to be completed for confined fires. Certain codes are inferred from the Incident Type.

⁴ 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.

Item First Ignited⁵	%	Factor Contrib. to Ignition	%	%Unconfined⁶
Cooking materials	75%	Misuse of material or prod.	3%	15%
Flammable or combust. liquid	4%	Abandoned materials	2%	8%
Structural member, framing	2%	Too close to combustibles	1%	6%
Film or residue (creosote)	1%	Equipment unattended	1%	6%
Rubbish, trash, waste	1%	Accident. turned on, not off	1%	5%
Structural component, finish	1%			

Equipment⁷	%	Cause of Ignition	%	%Unconfined⁸
Cooking equipment	76%	Unintentional	11%	54%
None	14%	Failure of eq./heat source	1%	6%
Boiler, furnace, cent. heat. unit	4%	Intentional	2%	12%
Chimney or flue	1%	Act of Nature	0.1%	1%
Clothes dryer	1%	Undetermined	2%	10%
		Cause under investigation	3%	17%

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

Alerted Occupants	84%
Didn't Alert Occupants	7%
Undetermined	9%

All Reported Incidents	# of Incidents	% of Incidents
Rescue & EMS incidents	21,171	74%
False alarms & false calls	2,868	10%
Good intent calls	1,588	6%
Fires	1,587	6%
Hazardous conditions (no fire)	862	3%
Service calls	536	2%
Overpressure rupture, explosion or overheat calls (no fire)	27	0.1%
Special Incident Types	17	0.1%
Severe weather & natural disaster	1	0.003%

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

⁶ 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.

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

⁸ 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.

Month	Total Fires	Structure Fires	Vehicle Fires	Other Fires
January	101	77	5	19
February	93	61	7	25
March	179	92	9	78
April	236	67	12	157
May	115	43	8	64
June	137	68	11	58
July	158	49	8	101
August	104	59	8	37
September	99	53	4	42
October	117	83	9	25
November	124	85	6	33
December	124	76	12	36

Day	Total Fires	Structure Fires	Vehicle Fires	Other Fires
Sunday	269	127	11	131
Monday	221	112	7	102
Tuesday	204	108	17	79
Wednesday	218	104	18	96
Thursday	232	142	16	74
Friday	214	107	16	91
Saturday	229	113	14	102

Time	Total Fires	Structure Fires	Vehicle Fires	Other Fires
00:01 - 04:00	149	64	26	59
04:01 - 08:00	136	63	12	61
08:01 - 12:00	192	132	8	52
12:01 - 16:00	365	193	23	149
16:01 - 20:00	418	222	14	182
20:01 - 24:00	327	139	16	172

Motor Vehicle Fires

Total: 99

Automobiles: 97 (98%)

8 (8%) of the automobile fires considered intentionally set.

Arson Fires

Total Arsons: 63

Dollar loss: \$1,041,000

0.3 Arson Fires/1,000 Population

Situation	Arsons	% Situation	% Arson	Dollar Loss
Structure Arsons	25	4%	40%	\$1,012,450
Vehicle Arsons	8	5%	13%	23,550
Other Arsons	30	8%	48%	5,000

0.14 Structure arsons/1,000 population

0.04 Vehicle arsons/1,000 population

0.17 Other arsons/1,000 population

Peak Times of Day for:

Structure Arsons	#	%	Vehicle Arsons	#	%
04:01 - 08:00	8	32%	00:01 - 04:00	5	63%
12:01 - 16:00	6	24%	20:01 - 00:00	2	25%
20:01 - 00:00	5	20%	04:01 - 08:00	1	13%
16:01 - 20:00	4	16%			

Other Arsons	#	%
16:01 - 20:00	13	43%
12:01 - 16:00	8	27%
20:01 - 00:00	5	17%

Peak Fixed Property Uses for Structure Arsons	#	%
Apartments	7	28%
1- or 2-Family homes	4	16%
Manufacturing or processing facilities	3	12%