



RESEARCH

Trends and Patterns of U.S. Fire Loss

January 2017

Marty Ahrens

© January 2017 National Fire Protection Association

Abstract

This report provides a broader context and historical perspective for the results from NFPA's annual fire department experience survey that were published in NFPA's annual report, *Fire Loss in the United States*. Over the past three decades, the number of fire department incident responses has nearly tripled. The largest increase was in medical aid and rescue calls. Fire calls have fallen markedly.

In 2015, only 4% of all fire department responses were to fires. Almost two-thirds (64%) were medical aid or rescue responses. Fire departments responded to more than three times as many medical aid or rescue calls in 2015 as in 1985.

While total reported fires have generally declined over the past 15 years, this is primarily due to a drop in the number of vehicle fires and outside and unclassified fires. The decline in structure fires has been much smaller. In 2015, structure fires accounted for 37% of reported fires, with home structure fires representing 27% of the total. Home structure fires caused 78% of all civilian fire deaths, 71% of civilian fire injuries, and 49% of total direct property damage. Vehicle fires accounted for 15% of the reported fires. Almost half (48%) of the reported fires were outside, non-structure, non-vehicle fires or other unclassified fires.

While today's fire departments do much more than fight fires, home structure fires are still a serious problem. Home fires still cause the majority of all civilian fire deaths, civilian injuries and property loss due to fire.

Keywords: fire statistics, fires, fire deaths, fire loss, fire injuries, fire department calls

Acknowledgements

The National Fire Protection Association thanks all the fire departments who participate in the annual NFPA fire experience survey. These fire departments are the original sources of the data that make this analysis possible. Their contributions allow us to estimate the size of the fire problem.

For more information about the National Fire Protection Association, visit www.nfpa.org or call 617-770-3000.

Copies of this analysis are available from:

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471
www.nfpa.org
e-mail: osds@nfpa.org
phone: 617-984-7451

NFPA No. USS47

Copyright © 2016, National Fire Protection Association, Quincy, MA

Table of Contents

	Page
Table of Contents	i
List of Figures	ii
List of Tables	iii
Fire Department Responses to Fires	1
Fires and Losses Overall	1
Structure Fires	4
Vehicle Fires	6
Outside and Other Fires	7
U.S. Fire Department Responses by Incident Type	8

List of Figures

	Page
Fire Department Responses to Fires	
<i>Fires and Losses Overall</i>	
Figure 1. U.S. Fire Incident Trends (in Thousands): 1977-2015	1
Figure 2. Trend in Reported Fire Rates per Thousand Population: 1977-2015	2
Figure 3. Reported Fire Incidents by Major Property Class: 2015	2
Figure 4. All Civilian Fire Deaths and Home Fire Deaths by Year: 1977-2015	3
Figure 5. Trend in Civilian Fire Death Rates per Million Population: 1977-2015	4
Figure 6. Direct Property Damage Trend: 1977-2015	4
<i>Structure Fires</i>	
Figure 7. All Structure Fires and Home Structure Fires by Year: 1977-2015	5
Figure 8. Home Fire Deaths per Thousand Reported Fires: 1977-2015	6
Figure 9. Average Direct Loss per Structure Fire: 1977-2015	6
<i>Vehicle Fires</i>	
Figure 10. Vehicle Fires by Year: 1980-2015	7
Figure 11. Outside and Other Fires by Year: 1980-2015	8
U.S. Fire Department Responses by Incident Type	
Figure 12. Fire Department Responses by Incident Type in 1984, 1994, 2004 & 2015	8
Figure 13. Fire Department Responses by Incident Type: 2015	9
Figure 14. Fire Incidents, Medical Aid or Rescue, and Mutual Aid Responses as Percentages of Fire Department Responses by Community Size 2014-2015	10

List Tables

	Page
Table 1. The U.S. Fire Problem in 2015 Compared to 2014, 2005, 1995, & 1985	11
Table 2. U.S. Fires and Losses by Incident Type in 2015	12
Table 3. U.S. Fire Department Responses in 2015 Compared to 2014, 2005, 1995 & 1985	13
Table 4. U.S. Fire Department Responses by Call Type as Percentage of Calls in 2015, 2014, 2005, 1995, & 1985	14
Table 5. Fires by Type of Fire and Year: 1980-2015	15
Table 6. Fire Department Calls, by Type of Incident and Year	16

Fire Department Responses to Fires

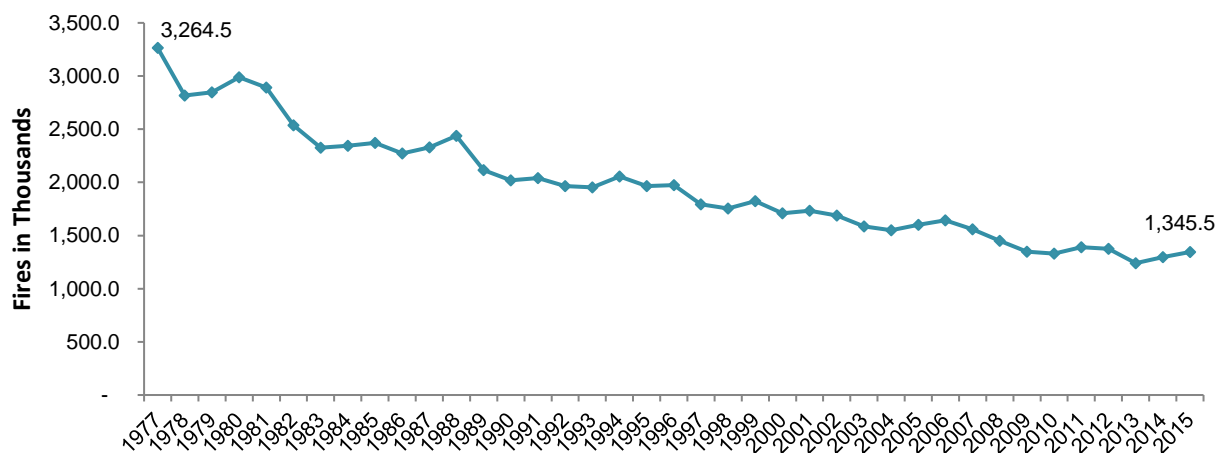
The estimates in this report were extracted from NFPA's 2016 report, [Fire Loss in the United States during 2015](#), by Hylton J.G. Haynes and earlier reports in the series by Haynes and Michael J. Karter, Jr. These estimates are based on the results of NFPA's annual U.S. fire department experience survey. Only fires reported to municipal fire departments are included. Fires handled without fire department involvement, by private fire brigades or exclusively by state or federal firefighting authorities are generally not included in these statistics.

FIRES AND LOSSES OVERALL

Local U.S. fire departments responded to an estimated 1,345,000 fires in 2015. These fires killed 3,280 civilians (non-firefighters) and caused 15,700 reported civilian fire injuries. Direct property damage was estimated at \$14.3 billion dollars. Sixty-eight firefighters died while on duty or of injuries incurred while on duty.¹ The 501,500 structure fires accounted for 37% of all reported fires.

Figure 1 shows that reported fires fell 59% from 3,264,500 in 1977 to 1,345,000 in 2015. Table 1 shows that fires rose 4% from 2014 (1,298,000 fires) to 2015.

**Figure 1. U.S. Fire Incident Trends
1977-2015**



Rates of reported fires per 1,000 population fell even more sharply than total fires over the past three decades. According to the U.S. Census, the resident population of the US grew 46% from 1977 to 2015. Figure 2 shows that the rate of reported fires per 1,000 population fell 72% from 14.8 in 1977 to 4.2 in 2015.

Loss patterns vary by type of fire. Table 2 and Figure 3 show the breakdown of fires by major property class or incident type for fires and losses in 2015.

¹ Rita F. Fahy, Paul R. LeBlanc, and Joseph L. Molis, [Firefighter Fatalities in the United States – 2015](#), Quincy, MA: National Fire Protection Association, June 2016.

Figure 2. Trend in Reported Fire Rates per Thousand Population 1977-2015

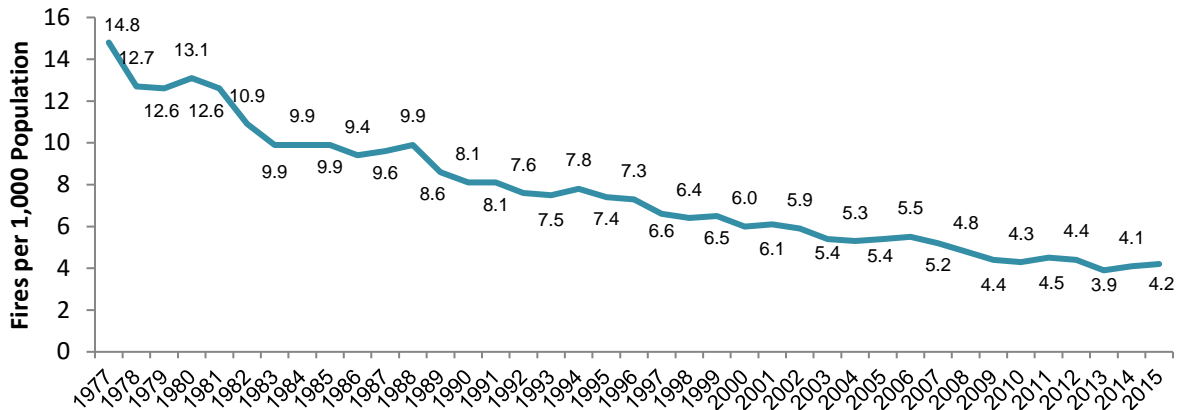
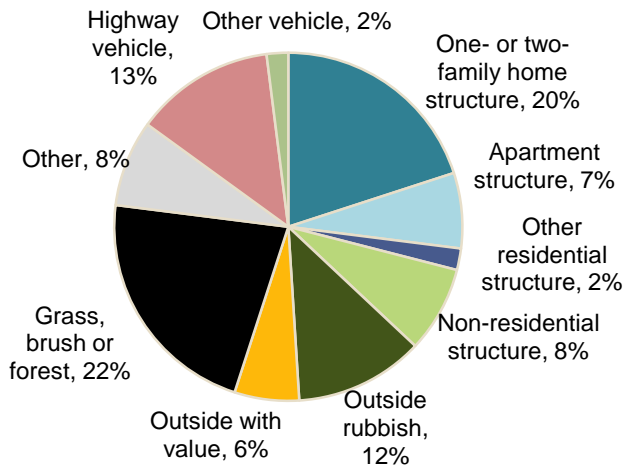
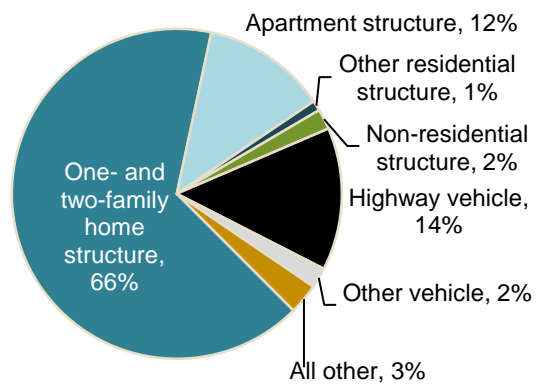


Figure 3. Reported Fire Incidents in 2015 by Major Property Class or Incident Type

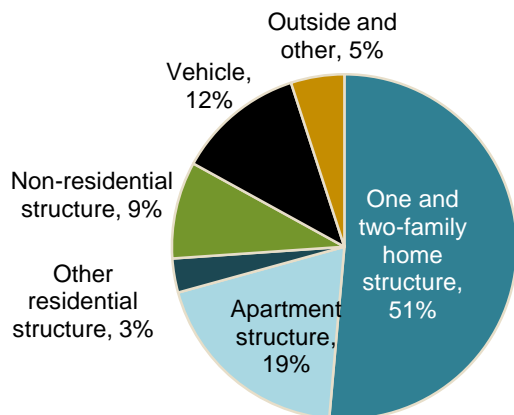
A. Fires



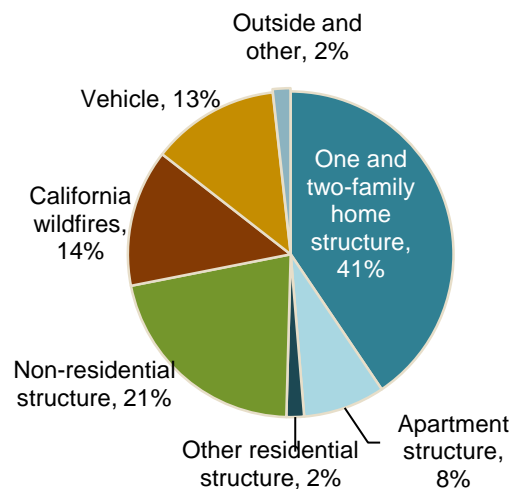
B. Civilian Deaths



C. Civilian Injuries



D. Direct Property Damage



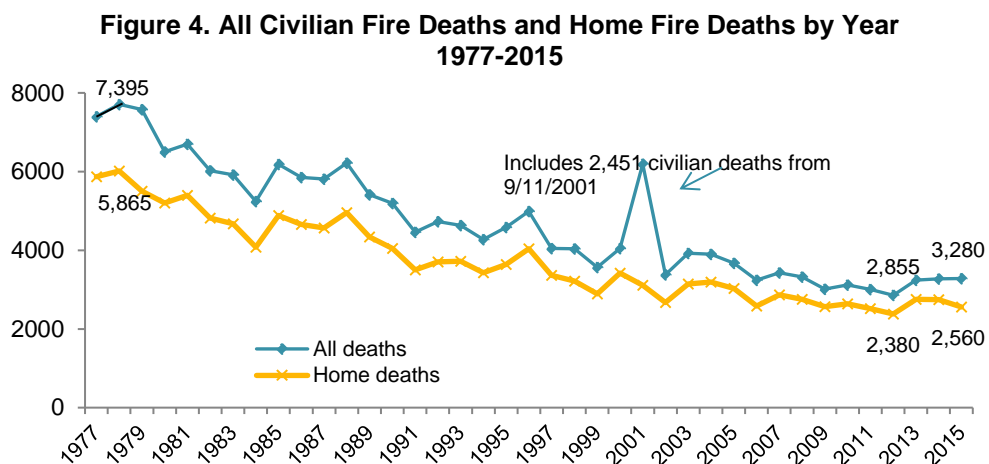
Home structure fires caused 78% of the civilian fire deaths. In NFPA’s statistical analyses, the term “home” encompasses two types of properties: 1) one- or two-family homes, including manufactured housing, and 2) apartments or other multi-family housing. Other residential properties include hotels and motels, dormitories, rooming houses, etc.

In 2015, 2,560, or 78%, of the 3,280 civilian fire deaths resulted from home structure fires. Only one of every five (20%) reported fires occurred in one- or two-family homes, but these fires caused two-thirds (66%) of the civilian fire deaths. (See [Figure 3B](#)) Apartment or other multi-family housing fires accounted for only 7% of all reported fires but caused 12% of the deaths. Home fires also account for the largest share of civilian fire injuries (71%) and direct property damage (49%).

One- or two-family home structure fires accounted for half (51%) of civilian fire injuries and 41% of direct property damage (50%). Although non-residential structure fires accounted for only 8% of all reported fires, [Figure 3D](#) shows that these incidents caused 21% of the direct property damage.

For information on causes and circumstances of home fires, see NFPA’s 2016 report, [Home Structure Fires](#). For information about deaths and injuries caused by home fires, see NFPA’s 2014 report, [Characteristics of Home Fire Victims](#).

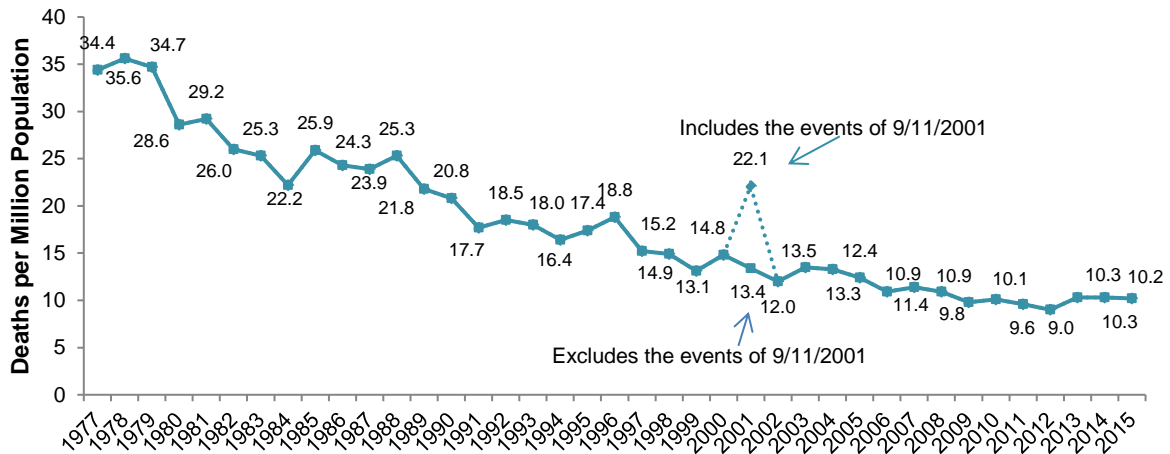
Home fire deaths fell 7% from 2014 to 2015. The 2015 civilian fire death toll of 3,280 was almost unchanged from the estimated 3,275 in 2014 and 56% lower than the 7,395 reported in 1977. [Figure 4](#) shows that the 2012 total and home civilian fire death tolls were the lowest since NFPA started using its current survey methodology in 1977.



Home structure fire deaths fell 56% from 5,865 in 1977 and decreased by 185, or 7%, from 2,745 in 2014 to 2,560 in 2015. Because home fire deaths account for such a large share of total fire deaths, the trend lines for both home fire deaths and all fire deaths tend to be very similar.

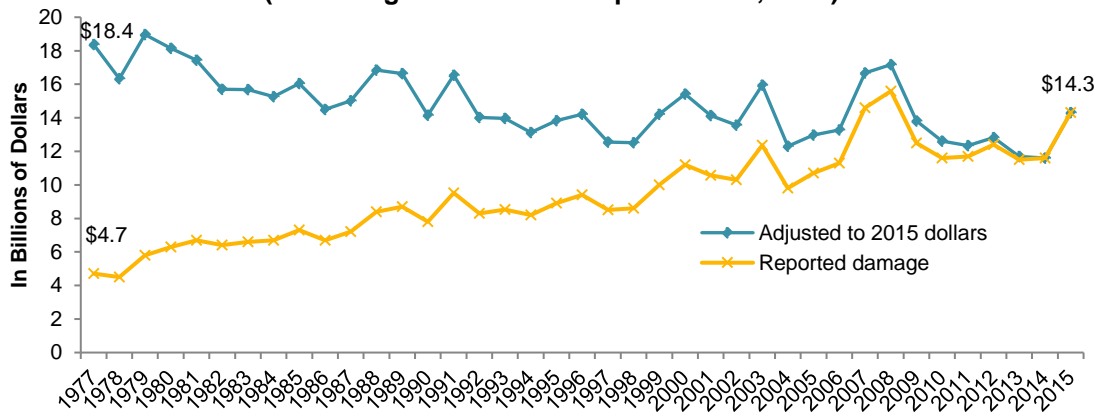
The fire death rate per million population fell 70% from 34.4 in 1977 to 10.2 in 2015. Even though the estimated number of deaths rose very slightly, the death rate dropped from 10.3 per million population in 2013 and 2014 to 10.2 in 2015. See [Figure 5](#).

Figure 5. Trend in Civilian Fire Death Rates per Million Population, 1977-2015



Total property damage, adjusted for inflation, was lower in 2015 than in 1977. Figure 6 shows that direct property damage from fire (excluding the events of September 11, 2001), as reported, has generally been rising despite a dip from 2008 to 2014. When adjusted for inflation, however, total fire damages were 22% lower in 2015 than in 1977.

Figure 6. Direct Property Damage Trend: 1977-2015 (Excluding the Events of September 11, 2001)



STRUCTURE FIRES

In 2015, the 501,500 reported structure fires caused 2,685 civilian fire deaths, 13,000 civilian fire injuries, and \$10.3 billion in direct property damage. Structure fires accounted for 37% of the reported fires, 82% of the civilian fire deaths, and 83% of the civilian fire injuries and 72% of the direct property loss.

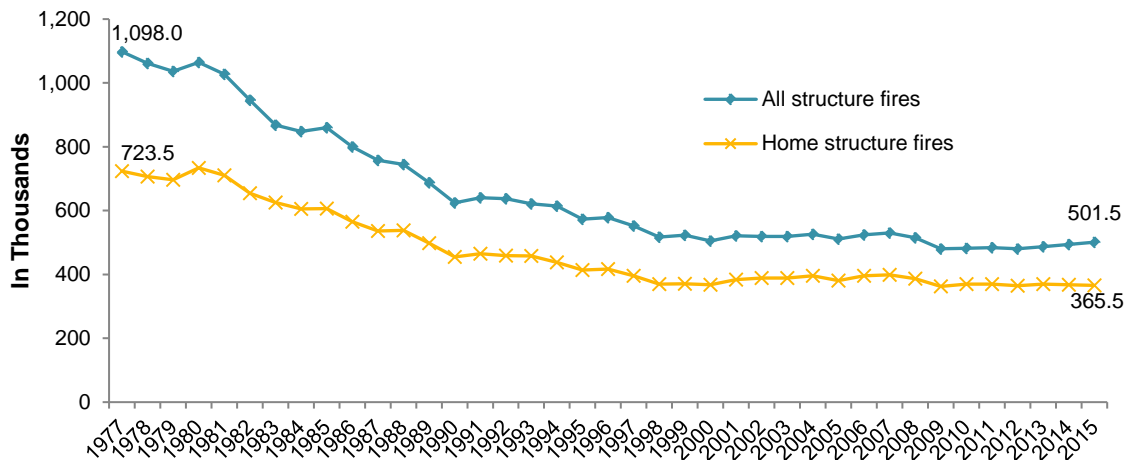
The number of reported structure fires in 2015 was 54% lower than the 1,098,000 reported in 1977. From 2014 (494,000 structure fires) to 2015, they rose 2%. Generally speaking, any fire

in or on a structure is considered a structure fire, even if only the contents were involved and there was no structural damage.

Home fires dominate the structure fire problem. Seventy-seven percent (388,000) of the 501,500 structure fires reported in 2015 occurred in residential properties, including homes, hotels, motels, rooming houses and dormitories; 73% (365,500) occurred in homes. (NFPA uses the term “home” to include one- and two-family homes, including manufactured housing, and apartments or other multi-family housing.) Home structure fires fell 49% from the 723,500 reported in 1977, and fell by less than 1% from the 367,000 reported in 2014.

Figure 7 shows that the trend line for all structure fires resembles the trend for home fires in part because home fires comprise the largest share of structure fires. In the late 1970s, roughly two-thirds of reported structure fires occurred in homes. In more recent years, home structure-fires have accounted for roughly three-quarters of reported structure fires. Figure 7 also shows that the steepest drop in structure fires occurred in the 1980s, continuing at a slower pace in the 1990s, with little improvement since.

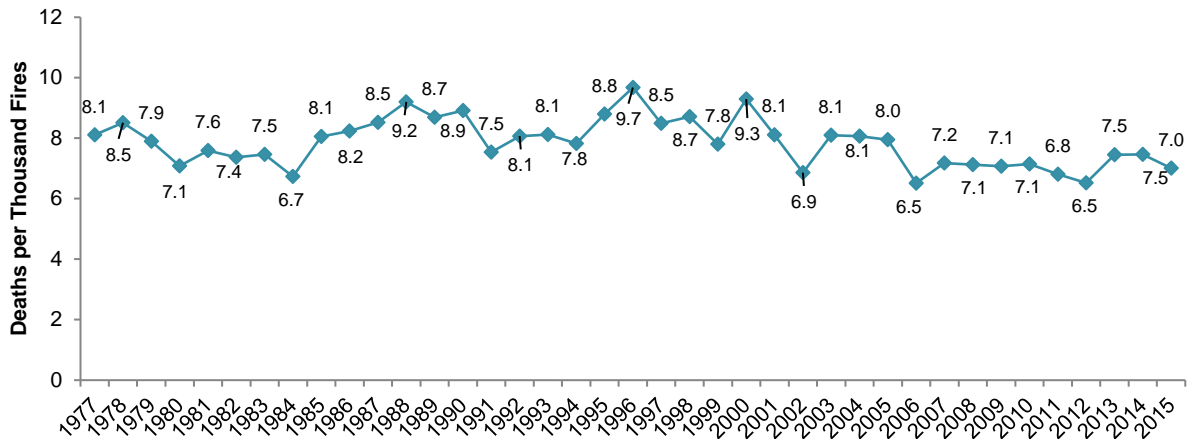
Figure 7. All Structure Fires and Home Structure Fires by Year 1977-2015



Fifty-four percent (270,500) of all reported structure fires occurred in one- and two-family homes, including manufactured homes; 19% (95,000) occurred in apartments. NFPA produces a variety of reports about general and specific causes and circumstances of home fires. A general overview, [Home Structure Fires](#), by Marty Ahrens, is available at www.nfpa.org.

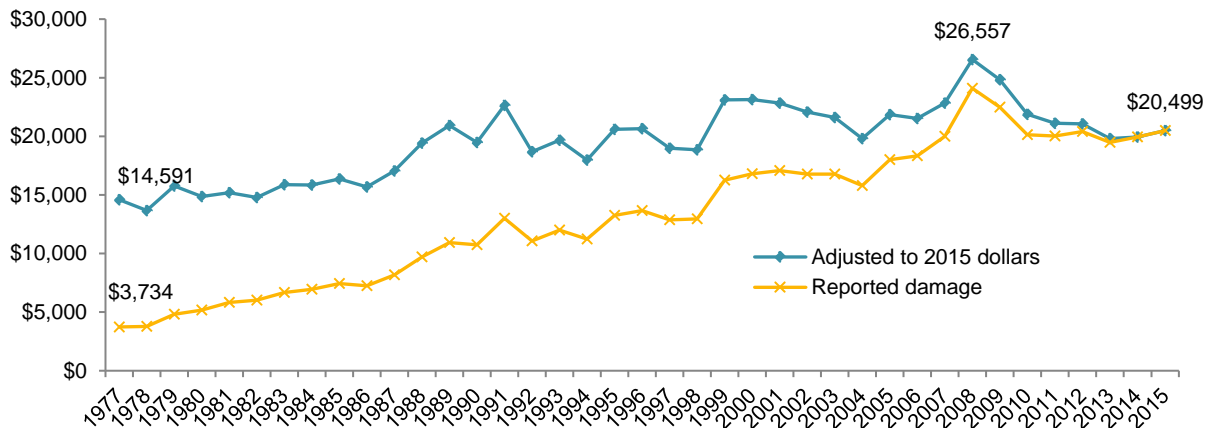
Far less progress has been made in reducing the rate of fire deaths per thousand reported home structure fires. This suggests greater success in reducing the number of ignitions and/or the number of fires requiring a fire department response than in preventing death once a fire has grown. In many fatal fires, the victim was fatally injured before the fire department arrived at the scene.

Figure 8. Home Deaths per Thousand Reported Fires 1977-2015



When adjusted for inflation, the average adjusted loss per structure fire was higher in 2015 than in 1977. Figure 9 shows that the adjusted loss per structure fire was 40% higher in 2015 than it was in 1977, although still 23% lower than the 2008 peak.

Figure 9. Average Direct Loss per Structure Fire: 1977-2015 (Excluding the Events of September 11, 2001)

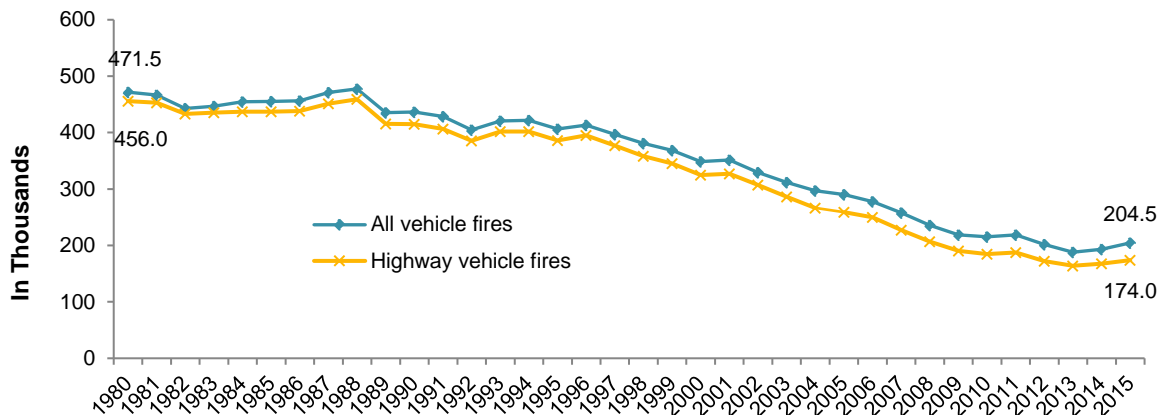


VEHICLE FIRES

Vehicle fires caused 15% of fire deaths and 12% of civilian fire injuries. During 2015, the 204,500 reported vehicle fires caused an estimated 500 civilian deaths, 1,875 civilian injuries, and \$1.8 billion in direct property loss. Vehicle fires accounted for 15% of the reported fires and civilian fire deaths, 12% of civilian fire injuries, and 13% of the total direct property damage.

The estimate of 500 vehicle fire deaths was six times the 80 civilian deaths reported in non-residential structure fires. Figure 10 shows that all vehicle fires fell 57% from 471,500 in 1980 to the 204,500 in 2015. From 2014 to 2015, total vehicle fires rose 6%. The decline had been quite consistent from the late 1980s until the last two years.

**Figure 10. Vehicle Fires by Year
1980-2015**



Eighty-five percent (174,000) of the vehicle fires in 2015 involved highway vehicles, that is vehicles intended for use on roads or highways. Highway vehicle fires caused an estimated 445 civilian fire deaths, 1,550 civilian fire injuries, and \$1.2 billion in direct property damage. Highway vehicle fires accounted for 13% of the reported fires, 14% of the civilian fire deaths, 10% of civilian fire injuries, and 9% of the total direct property damage.

From 1980 to 2015, highway vehicle fires fell 62%, while non-highway vehicle fires involving vehicles such as water, air, rail, construction, lawn, garden and agricultural vehicles nearly doubled. From 2014 to 2015, highway vehicle fires rose 4% while other vehicle fires rose 17%.

NFPA’s 2010 report, [U.S. Vehicle Fire Trends and Patterns](#), by Marty Ahrens, provides more information about highway vehicle fires and a breakdown of all vehicle fires by type of vehicle.

OUTSIDE AND OTHER FIRES

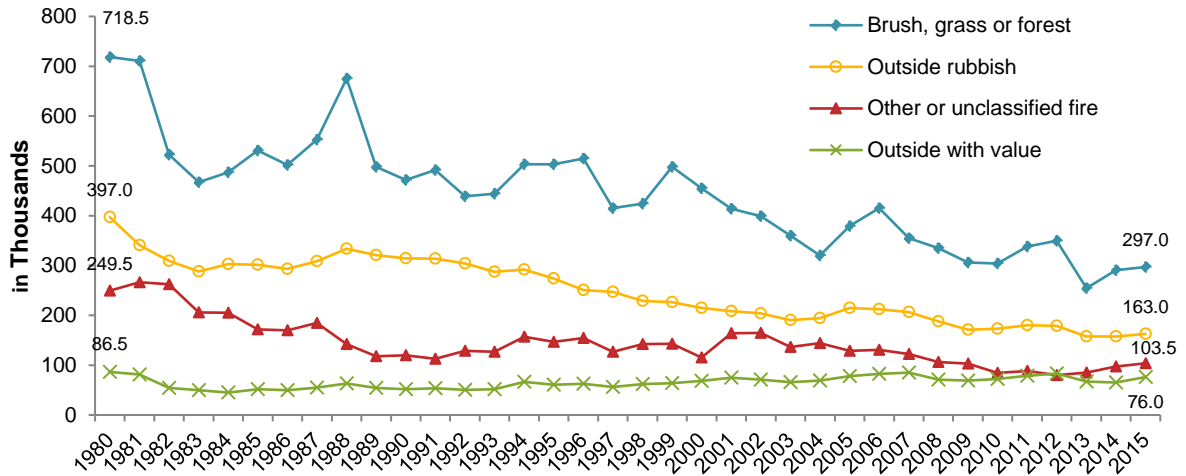
Almost half of the reported fires were reported as “outside or other.” Figure 3 showed that 48% (639,500) of the 1,345,500 total reported fires were outside fires or fires other than structure or vehicle fires. These fires caused 3% (95) of the civilian deaths and 5% (825), of the civilian injuries. These fires rose 5% from the 610,500 reported in 2014.

Outside and other fires reported in 2015 included:

- 297,000 (22% of reported fires) brush, grass, or wildland fires; (fires handled exclusively by state or federal agencies are generally not included)
- 163,000 (12%) outside rubbish fires;
- 76,000 (6%) outside fires involving property of value; and
- 103,500 (8%) other fires including outside spills or leaks with ensuing fires, outside gas or vapor combustion explosions with no after-fire, and unclassified or unknown-type fires.

Total outside and other fires fell 56% from 1,451,500 in 1980 to 639,500. Figure 11 shows that the 2015 estimates of brush, grass and forest fires; of outside rubbish fires reported to local fire departments, and of other or unclassified fires were all 59% lower than in 1980. Although the estimate of outside fires involving property of value was 12% lower than in 1980, there is no clear trend.

**Figure 11. Outside and Other Fires by Year
1980-2015**

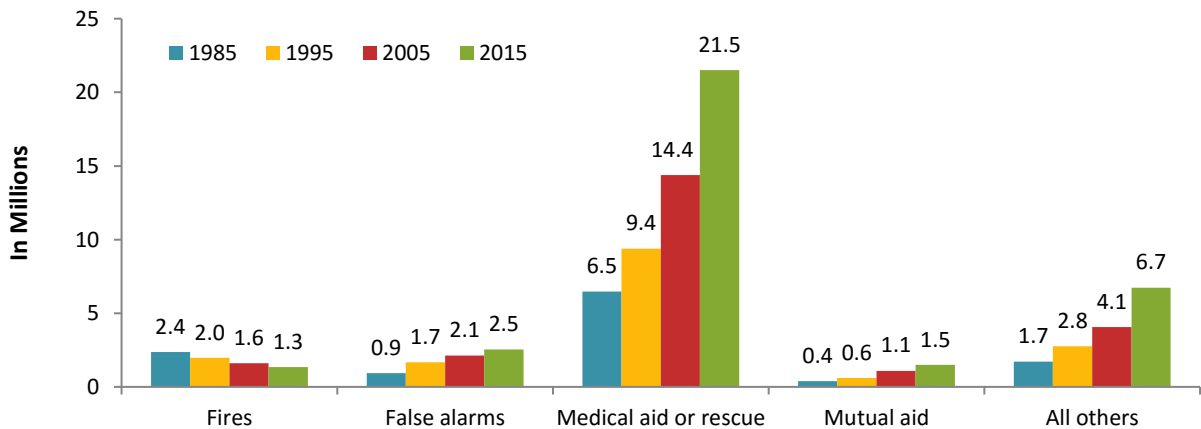


U.S. Fire Department Responses by Incident Type

Fire department responses have almost tripled since 1985.

During 2015, U.S. fire departments responded to a total of 33,602,500 calls, nearly three times the 11,888,000 responses in 1985. Figure 12 shows more than times as many medical aid or rescue responses in 2015 as in 1985. Mutual aid responses almost quadrupled. False alarms nearly tripled over the same period.

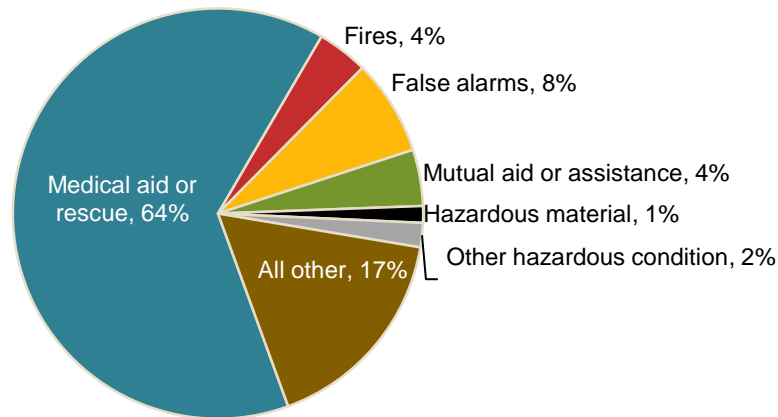
Figure 12. Fire Department Responses by Incident Type in 1985, 1995, 2005, and 2015



Almost two-thirds of fire department responses were medical aid or rescue calls.

During 2015, U.S. fire departments responded to 21,500,000 calls involving emergency medical services (EMS), medical assistance, and non-fire rescue. Figure 13 shows that these incidents accounted for 64% of fire department responses. In 2012-2014, the majority of U.S. fire departments provided at least some EMS services. Forty-six percent of the departments provided EMS without advanced life support and 16% provided both EMS and advanced life support (ALS) in addition. The percentage of departments providing any EMS, and more specifically both EMS and ALS, increased with the size of the population protected.²

Figure 13. Fire Department Responses by Incident Type 2015



Fires account for a larger percentage of fire department responses in small communities.

Figure 14 shows fire incidents accounted for 14% of the responses by departments protecting populations under 2,500. The percentage of fire calls fell as population grew, dropping to 4% in localities with populations between 10,000 and 24,999, to 3% for jurisdictions protecting 25,000 to 999,999 and to 2% for fire department serving 1 million or more residents. These estimates are for 2014 and 2015 combined.

Medical aid or rescues accounted for slightly more than half (53%) of responses made by departments in communities of less than 2,500 and for communities with more than 1 million residents. In communities with populations of at least 10,000 and less than 1,000,000, roughly two-thirds or more of the responses were for medical aid or rescues.

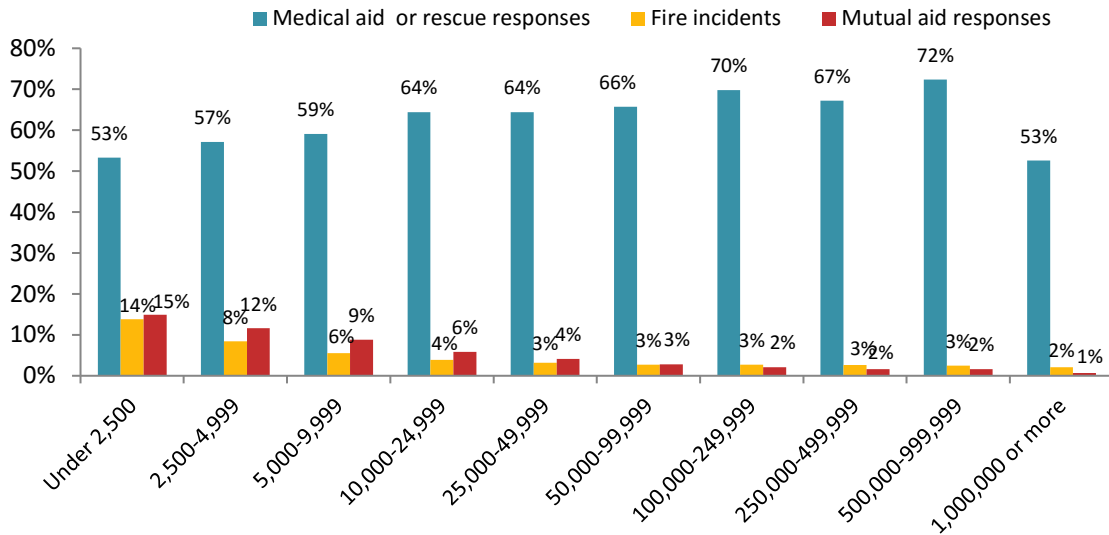
Mutual aid responses also accounted for larger percentages of the incidents in localities with smaller populations. Fifteen percent of the responses in communities with populations under 2,500 were mutual aid. The percentage fell to 1% for departments protecting populations of 1 million or more.

Interestingly, departments protecting populations of 1,000,000 or more had the smallest percentage of responses in any of the specific categories. Twenty-eight percent of responses

² Hylton Haynes and Gary P. Stein. [U.S. Fire Department Profile - 2014](#), Quincy, MA: NFPA 2016, p. 30

made by these very large fire departments were classified as “all other.” For other strata, “all other” responses ranged from 9% to 20%.

Figure 14. Fire Incidents, Medical Aid or Rescue, and Mutual Aid Responses as Percentages of Fire Department Responses by Community Size 2014-2015



Other comparative data is found in supporting tables.

Table 1 compares 2015 fire estimates with estimates from 2014, 2005, 1995, and 1985. Most measures show steady improvement over time. Table 2 provides a numeric summary of 2015 fires and associated losses by incident type. Table 3 shows a breakdown of all fire department responses by incident type for 2015 and the percent change from the 2014, 2005, 1995, and 1985. Table 4 shows the percentage breakdown of incident types for the same years as in Table 3. Table 5 shows fires by incident type by year for 1980-2015, while Table 6 shows trends for broad categories of incidents.

These statistics were extracted from *Fire Loss in the United States during 2015*, by Hylton J. G. Haynes, and earlier annual reports in the series by Haynes and his predecessor, Michael J. Karter, Jr. Please refer to these reports for a description of the methodology used. Summaries of these reports are published each year in *NFPA Journal*®. The full reports may be downloaded from the website. Copies of this and other NFPA reports can be obtained from NFPA’s Research Group by calling (617) 984-7451 or emailing research@nfpa.org. Trend tables for all fire department calls, all fires, structure fires, home structure fires, non-home fires, and all fires by incident type are also available on the website or from NFPA’s Research Group.

Table 1.
The U.S. Fire Problem in 2015 Compared to 2014, 2005, 1995, and 1985

Reported To Fire Departments	2015	Compared To			
		2014	2005	1995	1985
Fire Incidents	1,345,500	Up 4%	Down 16%	Down 32%	Down 43%
Civilian Deaths	3,280	Up less than 1%	Down 11%	Down 28%	Down 47%
Firefighter Deaths	68	Up 6%	Down 22%	Down 31%	Down 47%
Civilian Injuries	15,700	Down less than 1%	Down 12%	Down 39%	Down 45%
Direct Property Damage in Billions As Reported	\$14.3	Up 23%	Up 34%	Up 61%	Up 96%
Adjusted for Inflation	\$14.3	Up 23%	Up 10%	Up 4%	Down 11%
Civilian Deaths per Million Population	10.2	Down 1%	Down 18%	Down 41%	Down 61%
Civilian Deaths per Thousand Reported Home Structure Fires	7.0	Down 7%	Down 13%	Down 20%	Down 14%
Property Damage per Structure Fire	\$20,499	Up 3%	Up 14%	Down 54%	Up 174%
Adjusted for Inflation	\$20,499	Up 3%	Down 6%	Down less than 1%	Up 25%

Sources: [Fire Loss in the United States 2015](#) by Hylton J.G. Haynes, NFPA, September 2016 and previous reports in the series by Haynes and Michael J. Karter, Jr.

Rita F. Fahy, Paul R. LeBlanc, and Joe Molis, [Firefighter Fatalities in the United States – 2015](#), Quincy, MA:

U.S. Census Bureau.

Inflation calculations were made with the Bureau of Labor Statistics Inflation Consumer Price Index Purchasing Power of the Dollar.

Table 2.
U.S. Fires and Losses by Incident Type in 2015

Incident Type	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
California wildfires 2015*							\$1,950	(14%)
Structure Fire	501,500	(37%)	2,685	(82%)	13,000	(83%)	\$10,280	(72%)
Residential structure fire	388,000	(29%)	2,605	(79%)	11,575	(74%)	\$7,210	(50%)
Home structure fire	365,500	(27%)	2,560	(78%)	11,075	(71%)	\$6,960	(49%)
<i>One- and two-family homes, including manufactured homes</i>	270,500	(20%)	2,155	(66%)	8,050	(51%)	\$5,799	(41%)
<i>Apartments</i>	95,000	(7%)	405	(12%)	3,025	(19%)	\$1,161	(8%)
Other residential structure fire	22,500	(2%)	45	(1%)	500	(3%)	\$250	(2%)
Non-residential structure fire	113,500	(8%)	80	(2%)	1,425	(9%)	\$3,070	(21%)
Vehicle Fire	204,500	(15%)	500	(15%)	1,875	(12%)	\$1,816	(13%)
Highway vehicle fire	174,000	(13%)	445	(14%)	1,550	(10%)	\$1,237	(9%)
Other vehicle fire	30,500	(2%)	55	(2%)	325	(2%)	\$579	(4%)
Outside and Other Fire	639,500	(48%)	95	(3%)	825	(5%)	\$252	(2%)
Brush, grass and wildland fire with no value or loss involved	297,000	(22%)	**	(**)	**	(**)	**	(**)
Outside rubbish fire	163,000	(12%)	**	(**)	**	(**)	**	(**)
Outside fire involving property of value	76,000	(6%)	**	(**)	**	(**)	\$151	(1%)
All other fire	103,500	(8%)	**	(**)	**	(**)	\$101	(1%)
Total	1,345,500	(100%)	3,280	(100%)	15,700	(100%)	\$14,298	(100%)

* Includes total property loss resulting from the Valley and Butte wildfires. Loss by specific incident or property type was not available for these fires.

** NFPA survey does not collect specific incident types for fire deaths and injuries caused by outside and other fires. Nor does it collect any dollar loss data for burhs, grass and wildland fires with no value or loss or for outside rubbish fires.

Source: Hylton J.G. Haynes, [Fire Loss in the United States during 2015](#), Quincy, MA: NFPA, 2016.

Table 3.
U.S. Fire Department Responses in 2015 Compared to 2014, 2005, 1995 and 1985

Reported To Fire Departments	2015	Compared To			
		2014	2005	1995	1985
Total calls	33,602,500	Up 6%	Up 45%	Up 105%	Up 183%
Fire calls	1,345,500	Up 4%	Down 16%	Down 32%	Down 43%
Medical aid or rescue responses	21,500,000	Up 7%	Up 50%	Up 129%	Up 232%
False alarms	2,533,500	Up 2%	Up 19%	Up 51%	Up 171%
Mutual aid or assistance calls	1,492,500	Up 2%	Up 37%	Up 142%	Up 283%
Hazardous materials responses – spills, leaks, etc.	442,000	Up 9%	Up 18%	Up 74%	NA
Other hazard responses (arcing wires, bomb removal, etc.)	643,000	Up 5%	Down 4%	UP 37%	NA
All other responses (Smoke scares, lock-outs, etc.)	5,646,000	Up 8%	Up 88%	Up 178%	NA
All other plus hazardous material and other hazard responses	6,731,000	Up 8%	Up 66%	Up 144%	Up 290%

NA - Hazardous material and hazardous condition calls were captured under “All other” until 1986.

Source: [Fire Loss in the United States 2015](#) by Hylton J.G. Haynes, NFPA, September 2016 and previous reports in the series by Haynes and Michael J. Karter, Jr.

Table 4.
U.S. Fire Department Responses by Call Type
As Percentage of Calls in 2015, 2014, 2005, 1995 and 1985

Reported to Fire Departments	2015	IN			
		2014	2005	1995	1985
Fire calls	4%	4%	7%	12%	20%
Medical aid or rescue responses	64%	64%	62%	57%	54%
False alarms	8%	8%	9%	10%	8%
Mutual aid or assistance calls	4%	5%	5%	4%	3%
Hazardous materials responses – spills, leaks, etc.	1%	1%	2%	2%	NA
Other hazard responses (arcing wires, bomb removal, etc.)	2%	2%	3%	3%	NA
All other responses (Smoke scares, lock-outs, etc.)	17%	16%	13%	12%	NA
All other plus hazardous material and other hazard responses	20%	20%	17%	17%	15%
Total	100%	100%	100%	100%	100%

NA - Hazardous material and hazardous condition calls were captured under “All other” until 1986.

Source: [Fire Loss in the United States 2015](#) by Hylton J.G. Haynes, NFPA, September 2016 and previous reports in the series by Haynes and Michael J. Karter, Jr.

**Table 5.
Fires by Type of Fire and Year**

Year	Total	Structures	Outside of Structures with Value	Highway Vehicles	Other Vehicles	Brush, Grass, Wildland (excluding crops and timber), with no value	Rubbish Including dumpsters (outside of structures)	All Other Fires
1980	2,988,000	1,065,000	86,500	456,000	15,500	718,500	397,000	249,500
1981	2,893,500	1,027,500	81,000	453,000	13,500	711,000	341,000	266,500
1982	2,538,000	946,500	54,000	433,000	10,000	522,500	309,500	262,500
1983	2,326,500	868,500	49,500	435,500	11,500	467,500	288,000	206,000
1984	2,343,000	848,000	45,000	437,000	17,500	487,500	303,000	205,000
1985	2,371,000	859,500	51,500	437,000	18,500	531,000	301,500	172,000
1986	2,271,500	800,000	50,000	438,000	18,500	502,000	293,000	170,000
1987	2,330,000	758,000	55,000	451,000	20,000	553,000	308,500	184,500
1988	2,436,500	745,000	63,000	459,000	18,500	675,500	333,500	142,000
1989	2,115,000	688,000	54,500	415,500	20,000	498,000	321,000	118,000
1990	2,019,000	624,000	52,000	415,000	21,500	472,000	314,500	120,000
1991	2,041,500	640,500	53,500	406,500	22,000	492,000	314,000	113,000
1992	1,964,500	637,500	50,500	385,500	19,500	439,000	304,000	128,500
1993	1,952,500	621,500	52,000	402,000	18,500	444,000	287,500	127,000
1994	2,054,500	614,000	66,500	402,000	20,000	503,000	292,000	157,000
1995	1,965,500	573,500	61,000	386,000	20,500	503,500	274,000	147,000
1996	1,975,000	578,500	62,500	395,000	18,500	515,000	251,000	154,500
1997	1,795,000	552,000	56,500	377,000	20,000	415,500	247,000	127,000
1998	1,755,500	517,500	62,000	358,500	22,500	424,000	229,000	142,000
1999	1,823,000	523,000	64,000	345,000	23,500	498,000	226,500	143,000
2000	1,708,000	505,500	68,500	325,000	23,500	455,000	215,000	115,500
2001	1,734,500	521,500	75,000	327,000	24,500	414,000	208,500	164,000
2002	1,687,500	519,000	71,000	307,000	22,500	399,000	204,000	165,000
2003	1,584,500	519,500	66,000	286,000	26,000	360,000	190,500	136,500
2004	1,550,500	526,000	69,000	266,500	30,500	320,000	194,000	144,500
2005	1,602,000	511,000	78,000	259,000	31,000	379,500	215,000	128,500
2006	1,642,500	524,000	82,500	250,000	28,000	415,500	212,000	130,500
2007	1,557,500	530,500	85,000	227,500	30,500	355,000	206,500	122,500
2008	1,451,500	515,000	71,000	207,000	29,000	335,000	188,000	106,500
2009	1,348,500	480,500	69,000	190,500	28,500	306,000	171,000	103,000
2010	1,331,500	482,000	72,500	184,500	31,000	304,000	173,000	84,500
2011	1,389,500	484,000	79,000	187,500	31,500	338,000	180,500	88,500
2012	1,375,000	480,500	83,000	172,000	30,000	350,000	179,000	80,000
2013	1,240,000	487,500	67,000	164,000	24,000	254,500	158,000	85,000
2014	1,298,000	494,000	65,000	167,500	26,000	290,500	157,500	97,500
2015	1,345,500	501,500	76,000	174,000	30,500	297,000	163,000	103,500

These estimates are based on data reported to the NFPA by fire departments that responded to the 1980-2015 National Fire Experience Survey. "Outside of structures with value" excludes structure and vehicle fires. Highway vehicles are intended for road use. Other vehicles include, planes, boats, trains, construction, agricultural, industrial and lawn vehicles.

Source: *Fire Loss in the United States 2015* by Hylton J.G. Haynes, NFPA, September 2016 and previous reports in the series by Michael J. Karter, Jr. and Hylton J.G. Haynes.

Table 6.
Fire Department Calls, by Type of Incident and Year

Year	Total	Fires	Medical Aid	False Alarms	Mutual Aid	Other		
1980	10,819,000	2,988,000	5,045,000	896,500	274,000	1,615,500*		
1981	10,594,500	2,893,500	5,019,000	788,000	349,500	1,544,500*		
1982	10,548,000	2,538,000	5,258,000	853,500	346,500	1,552,000*		
1983	10,933,000	2,326,500	5,660,000	979,500	353,000	1,614,000*		
1984	11,070,000	2,343,000	5,735,000	972,000	413,500	1,606,000*		
1985	11,888,000	2,371,000	6,467,000	936,500	389,500	1,724,000*		
			Medical Aid	False Alarms	Mutual Aid	Hazardous Material	Other Hazardous Condition	Other
1986	11,890,000	2,271,500	6,437,500	992,500	441,000	171,500	318,000	1,258,000
1987	12,237,500	2,330,000	6,405,000	1,238,500	428,000	193,000	315,000	1,328,000
1988	13,308,000	2,436,500	7,169,500	1,404,500	490,500	204,000	333,000	1,270,000
1989	13,409,500	2,115,000	7,337,000	1,467,000	500,000	207,000	381,500	1,402,000
1990	13,707,500	2,019,000	7,650,000	1,476,000	486,500	210,000	423,000	1,443,000
1991	14,556,500	2,041,500	8,176,000	1,578,500	494,000	221,000	428,500	1,617,000
1992	14,684,500	1,964,500	8,263,000	1,598,000	514,000	220,500	400,000	1,724,500
1993	15,318,500	1,952,500	8,743,500	1,646,500	542,000	245,000	432,500	1,756,500
1994	16,127,000	2,054,500	9,189,000	1,666,000	586,500	250,000	432,500	1,948,500
1995	16,391,500	1,965,500	9,381,000	1,672,500	615,500	254,500	469,500	2,033,000
1996	17,503,000	1,975,000	9,841,500	1,816,500	688,000	285,000	536,500	2,360,500
1997	17,957,500	1,795,000	10,483,000	1,814,500	705,500	271,500	498,500	2,389,500
1998	18,753,000	1,755,500	10,936,000	1,956,000	707,500	301,000	559,000	2,538,000
1999	19,667,000	1,823,000	11,484,000	2,039,000	824,000	297,500	560,000	2,639,500
2000	20,520,000	1,708,000	12,251,000	2,126,500	864,000	319,000	543,500	2,708,000
2001	20,965,500	1,734,500	12,331,000	2,157,500	838,500	381,500	605,000	2,917,500
2002	21,303,500	1,687,500	12,903,000	2,116,000	888,500	361,000	603,500	2,744,000
2003	22,406,000	1,584,500	13,631,500	2,189,500	987,000	349,500	660,500	3,003,500
2004	22,616,500	1,550,500	14,100,000	2,106,000	984,000	354,000	671,000	2,851,000
2005	23,251,500	1,602,000	14,373,500	2,134,000	1,091,000	375,000	667,000	3,009,000
2006	24,470,000	1,642,500	15,062,500	2,119,500	1,159,500	388,500	659,000	3,438,500
2007	25,334,500	1,557,500	15,784,000	2,208,500	1,109,500	395,500	686,500	3,593,000
2008	25,252,500	1,451,500	15,767,500	2,241,500	1,214,500	394,500	697,500	3,485,500
2009	26,534,500	1,348,500	17,104,000	2,177,000	1,296,000	397,000	625,500	3,586,500
2010	28,205,000	1,331,500	18,522,000	2,187,000	1,189,500	402,000	660,000	3,913,000
2011	30,098,000	1,389,500	19,803,000	2,383,000	1,252,000	379,000	720,000	4,171,500
2012	31,854,000	1,375,000	21,705,500	2,238,000	1,326,500	360,000	694,000	4,155,000
2013	31,644,500	1,240,000	21,372,000	2,343,000	1,298,000	366,500	678,000	4,347,000
2014	31,644,500	1,298,000	20,178,000	2,488,000	1,446,500	405,000	615,000	5,214,000
2015	33,602,500	1,345,500	21,500,000	2,533,500	1,492,500	442,000	643,000	5,646,000

* Includes hazardous material, other hazardous condition and other.

These estimates are based on data reported to the NFPA by fire departments that responded to the 1980-2015 National Experience Survey.

Source: [Fire Loss in the United States 2015](#) by Hylton J.G. Haynes, NFPA, September 2016 and previous reports in the series by Michael J. Karter, Jr. and Hylton J.G. Haynes..