



RESEARCH

Service or Gas Station Fires Supporting Tables

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Fires in or at Service or Gas Stations: Supporting Tables

The tables in this document are a companion to the [report of the same name](#). Estimates are provided of reported fires, associated civilian deaths and injuries, and direct property damage resulting from these fires. Because deaths are rare, they are only included in the overview table.

Most tables, except for trend tables, show estimates of 2014 through 2018 annual averages. Estimates were derived from the US Fire Administration's National Fire Incident Reporting System (NFIRS) and the NFPA annual fire department experience survey and include proportional shares of unknown or missing data.

Fires are rounded to the nearest 10, injuries are rounded to the nearest 1, and property loss is rounded to the nearest hundred thousand dollars. Inflation adjustments were made only for the trend tables. Percentages were calculated on unrounded estimates.

Please refer to "[How NFPA's national estimates are calculated for home structure fires](#)" and "[NFPA's Methodology and Definitions Used in 'Leading Causes of Structure Fires' Tables](#)" for explanatory details.

This analysis examines structure fires, vehicle fires, and non-rubbish outside and other fires in some detail. Less detail is provided about outside rubbish fires. NFIRS has six structure fire incident types (NFIRS incident type codes 113–118), collectively called confined fires, that describe specific scenarios. Although causal information is not required for these fires, it is sometimes provided. The “non-confined fires” simply have different incident types; the description has nothing to do with extent of fire spread. Table A shows the six confined fire incident types and their share of the service station structure fire problem. Confined and non-confined fires are analyzed separately for causal information and the results are summed.

As with the confined structure fires, causal information is not required for outside rubbish fires but is sometimes provided.

Acknowledgements

The National Fire Protection Association thanks all the fire departments and state fire authorities who participate in the NFIRS and the annual NFPA Fire Experience Survey. These firefighters are the original sources of the detailed data that make this analysis possible. Their contributions allow us to estimate the size of the fire problem.

We are also grateful to the US Fire Administration for its work in developing, coordinating, and maintaining NFIRS. To learn more about research at NFPA, visit [nfpa.org/research](https://www.nfpa.org/research).

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List of Tables

Table		Page
Table A.	Confined and Non-Confined Reported Structure Fires in Service Station or Gas Station Properties	3
Fires in Service or Gas Station Properties by:		
Table 1.	Incident Type	3
Table 2.	Year	4
Table 3.	Incident Type and Year	6
Structure Fires in Service or Gas Station Properties by:		
Table 4.	Leading Cause (pulled from several NFIRS data elements, including incident type and those with asterisks below)	8
Table 5.	Cause of Ignition* (a specific NFIRS data element)	9
Table 6.	Equipment Involved in Ignition*	10
Table 7.	Factors Contributing to Ignition*	11
Table 8.	Heat Source*	13
Table 9.	Item First Ignited	14
Table 10.	Type of Material First Ignited	16
Table 11.	Area of Origin	18
Vehicle Fires in or on Service or Gas Station Properties by:		
Table 12.	Cause of Ignition	20
Table 13.	Factors Contributing to Ignition	21
Table 14.	Heat Source	22
Table 15.	Item First Ignited	23
Table 16.	Type of Material First Ignited	24
Table 17.	Area of Origin	25
Non-Rubbish Outside and Other Fires in or on Service Station Properties by		
Table 18.	Incident Type	26
Table 19.	Cause of Ignition	27
Table 20.	Equipment Involved in Ignition	28
Table 21.	Factors Contributing to Ignition	29
Table 22.	Heat Source	30
Table 23.	Item First Ignited	31
Table 24.	Type of Material First Ignited	32
Table 25.	Area of Origin	33
Outside Rubbish or Trash Fires on Service Station Properties by:		
Table 26.	Cause of Ignition	34

Table A. Confined and Non-Confined Reported Structure Fires in Service Station or Gas Station Properties, 2014–2018 Annual Averages

Incident Type	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
All Confined Fires	230	(41%)	1	(14%)	\$0.1	(1%)
Contained trash or rubbish fire	110	(20%)	0	(0%)	\$0.0	(0%)
Confined cooking fire	80	(14%)	1	(14%)	\$0.0	(0%)
Confined fuel burner or boiler fire	20	(4%)	0	(0%)	\$0.0	(0%)
Confined chimney or flue fire	10	(2%)	0	(0%)	\$0.0	(0%)
Confined commercial compactor fire	0	(0%)	0	(0%)	\$0.0	(0%)
Confined incinerator overload or malfunction fire	0	(0%)	0	(0%)	\$0.0	(0%)
Non-Confined Fires	330	(59%)	8	(86%)	\$11.1	(99%)
Total	550	(100%)	9	(100%)	\$11.1	(100%)

Note: Sums may not equal totals due to rounding errors.
Sources: NFIRS and NFPA’s Fire Experience Survey.

Table 1. Fires in Service or Gas Station Properties by Incident Type, 2014–2018 Annual Averages

Occupancy	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Structure fires	550	(13%)	1	(19%)	9	(21%)	\$11.1	(37%)
Vehicle fires	2,340	(56%)	1	(50%)	26	(61%)	\$11.0	(37%)
Outside fires	1,260	(30%)	1	(31%)	8	(18%)	\$7.8	(26%)
<i>Outside and other fires (excluding trash fires)</i>	<i>670</i>	<i>(16%)</i>	<i>1</i>	<i>(25%)</i>	<i>4</i>	<i>(10%)</i>	<i>\$7.6</i>	<i>(25%)</i>
<i>Outside trash or rubbish fires</i>	<i>590</i>	<i>(14%)</i>	<i>0</i>	<i>(5%)</i>	<i>3</i>	<i>(7%)</i>	<i>\$0.2</i>	<i>(1%)</i>
Total	4,150	(100%)	3	(100%)	43	(100%)	\$30.0	(100%)

Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA’s Fire Experience Survey.

Table 2. Fires in Service or Gas Station Properties by Year, 1980–2018

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions)	
			As Reported	In 2018 Dollars
1980	7,860	119	\$12	\$37
1981	7,090	81	\$9	\$25
1982	6,620	126	\$10	\$26
1983	5,940	114	\$11	\$28
1984	5,620	119	\$8	\$19
1985	6,540	120	\$12	\$28
1986	6,720	145	\$9	\$21
1987	6,870	80	\$10	\$22
1988	7,040	109	\$17	\$36
1989	6,930	107	\$13	\$26
1990	6,690	68	\$17	\$33
1991	6,790	68	\$17	\$31
1992	6,660	65	\$20	\$36
1993	6,800	67	\$15	\$26
1994	7,410	71	\$14	\$24
1995	7,500	62	\$18	\$30
1996	7,350	68	\$15	\$24
1997	7,630	82	\$24	\$38
1998	7,100	68	\$19	\$29
1999	8,600	190	\$10	\$15
2000	8,290	41	\$18	\$26
2001	7,860	107	\$31	\$44
2002	6,960	94	\$37	\$52
2003	5,890	58	\$28	\$38
2004	5,700	82	\$17	\$23
2005	5,350	48	\$19	\$24
2006	4,920	49	\$15	\$19
2007	4,940	38	\$23	\$28
2008	4,280	25	\$28	\$33

Table 2. Fires in Service or Gas Station Properties by Year, 1980–2018 (Continued)

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions)	
			As Reported	In 2018 Dollars
2009	3,830	47	\$28	\$33
2010	3,940	28	\$21	\$24
2011	3,930	47	\$33	\$37
2012	3,980	27	\$18	\$20
2013	3,720	40	\$20	\$22
2014	3,850	32	\$22	\$23
2015	4,180	56	\$33	\$35
2016	4,190	29	\$46	\$48
2017	4,180	53	\$28	\$29
2018	4,370	44	\$21	\$21

NFIRS 5.0 was first introduced in 1999, although participation was low. Estimates for 1999 through 2001 are considered particularly unstable and should be used with caution.

Note: Due to the small number, annual estimates of civilian deaths are highly unstable and are therefore not shown.

Inflation adjustments were based on the consumer price index purchasing power of the dollar.

Sources: NFIRS and NFPA's Fire Experience Surveys.

Table 3. Fires in Service or Gas Station Properties by Incident Type and Year, 1980–2018

Year	Structure Fires	Vehicle Fires	Outside and Other Fire, Including Rubbish Fires
1980	1,910	1,940	4,010
1981	1,660	1,990	3,450
1982	1,550	1,960	3,110
1983	1,320	1,890	2,740
1984	1,170	2,000	2,460
1985	1,420	2,510	2,600
1986	1,150	2,840	2,740
1987	1,000	3,280	2,590
1988	940	3,460	2,650
1989	840	3,660	2,430
1990	1,000	3,510	2,180
1991	1,140	3,560	2,090
1992	1,200	3,630	1,830
1993	940	4,100	1,760
1994	1,010	4,420	1,990
1995	870	4,650	1,980
1996	1,030	4,560	1,760
1997	820	4,930	1,880
1998	810	4,540	1,750
1999	810	5,170	2,620
2000	900	5,540	1,850
2001	860	4,800	2,200
2002	680	4,330	1,950
2003	630	3,690	1,580
2004	640	3,580	1,470
2005	630	3,350	1,350
2006	560	3,010	1,340
2007	590	2,820	1,520
2008	580	2,510	1,200

**Table 3. Fires in Service or Gas Station Properties by Incident Type and Year, 1980–2018
(Continued)**

Year	Structure Fires	Vehicle Fires	Outside and Other Fire, Including Rubbish Fires
2009	460	2,290	1,080
2010	470	2,370	1,110
2011	460	2,450	1,020
2012	440	2,330	1,210
2013	470	2,280	970
2014	530	2,290	1,020
2015	540	2,340	1,300
2016	510	2,260	1,430
2017	590	2,350	1,240
2018	590	2,470	1,300

Sources: NFIRS and NFPA’s Fire Experience Survey.

Table 4. Structure Fires in Service or Gas Station Properties by Leading Cause, 2014–2018 Annual Averages

Leading cause	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Electrical distribution and lighting equipment	120	(21%)	1	(14%)	\$6.1	(55%)
Cooking	110	(19%)	3	(28%)	\$0.8	(7%)
Heating equipment	60	(10%)	0	(0%)	\$0.4	(4%)
Intentional	50	(10%)	1	(7%)	\$0.8	(7%)
Smoking materials	40	(8%)	0	(0%)	\$0.2	(2%)
Fan or air conditioner	40	(7%)	0	(0%)	\$0.4	(3%)
Shop tools and industrial equipment, including torches, burners, and soldering irons	30	(5%)	0	(0%)	\$1.6	(14%)
Exposure	20	(4%)	0	(0%)	\$1.6	(15%)

Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

Table 5. Structure Fires in Service or Gas Station Properties by Cause of Ignition, 2014–2018 Annual Averages

Cause of Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unintentional	330	(59%)	6	(68%)	\$5.1	(46%)
Non-confined	160	(30%)	5	(54%)	\$5.1	(46%)
Confined	160	(29%)	1	(14%)	\$0.0	(0%)
Failure of equipment or heat source	150	(27%)	2	(25%)	\$3.8	(34%)
Non-confined	110	(20%)	2	(25%)	\$3.7	(33%)
Confined	40	(6%)	0	(0%)	\$0.1	(0%)
Intentional	50	(10%)	1	(7%)	\$0.8	(7%)
Non-confined	30	(5%)	1	(7%)	\$0.8	(7%)
Confined	30	(5%)	0	(0%)	\$0.0	(0%)
Unclassified cause	20	(3%)	0	(0%)	\$1.4	(13%)
Non-confined	20	(3%)	0	(0%)	\$1.4	(13%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Act of nature	10	(1%)	0	(0%)	\$0.0	(0%)
Non-confined	10	(1%)	0	(0%)	\$0.0	(0%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Total	550	(100%)	9	(100%)	\$11.1	(100%)
Non-confined	330	(59%)	8	(86%)	\$11.1	(99%)
Confined	230	(41%)	1	(14%)	\$0.1	(1%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS 5.0 and NFPA's Fire Experience Survey.

Table 6. Structure Fires in Service or Gas Station Properties by Equipment Involved in Ignition, 2014–2018 Annual Averages

Equipment Involved	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Electrical distribution and lighting equipment	120	(21%)	1	(14%)	\$6.1	(55%)
Contained trash or rubbish fire	110	(20%)	0	(0%)	\$0.0	(0%)
Cooking equipment	110	(19%)	3	(28%)	\$0.8	(7%)
Heating equipment	60	(10%)	0	(0%)	\$0.4	(4%)
No equipment involved in ignition	40	(8%)	3	(27%)	\$1.2	(10%)
Fan	30	(5%)	0	(0%)	\$0.4	(3%)
Clothes dryer	10	(2%)	0	(0%)	\$0.0	(0%)
Refrigerator or refrigerator/freezer	10	(2%)	0	(0%)	\$0.1	(1%)
Torch, burner, or soldering iron	10	(2%)	3	(31%)	\$0.9	(8%)
Unclassified equipment involved in ignition	10	(2%)	0	(0%)	\$0.0	(0%)
Air conditioner	10	(1%)	0	(0%)	\$0.0	(0%)
Pump	10	(1%)	0	(0%)	\$0.1	(1%)
Other known equipment	40	(7%)	0	(0%)	\$1.1	(10%)
Total	550	(100%)	11	(100%)	\$11.1	(100%)

The estimates for equipment involved in ignition did not break out the confined fires further.

Note: Non-confined fires in which the equipment involved in ignition was unknown or not reported have been allocated proportionally among fires with known equipment involved. Fires in which the equipment involved in ignition was entered as none, but the heat source indicated equipment involvement or the heat source was unknown, were also treated as unknown and allocated proportionally among fires with known equipment involved. Non-confined fires in which the equipment was partially unclassified (i.e., unclassified kitchen or cooking equipment, unclassified heating, cooling or air conditioning equipment) were allocated proportionally among fires in that grouping (kitchen or cooking equipment; heating, cooling or air conditioning equipment, etc.).

Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA’s Fire Experience Survey.

Table 7. Structure Fires in Service or Gas Station Properties by Factor Contributing to Ignition, 2014–2018 Annual Averages

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Electrical failure or malfunction	140	(25%)	2	(20%)	\$3.0	(27%)
Non-confined	130	(23%)	2	(20%)	\$3.0	(27%)
Confined	10	(3%)	0	(0%)	\$0.0	(0%)
Mechanical failure or malfunction	80	(14%)	2	(19%)	\$1.0	(9%)
Non-confined	50	(9%)	1	(11%)	\$1.0	(9%)
Confined	30	(5%)	1	(8%)	\$0.0	(0%)
Abandoned or discarded material or product	60	(11%)	0	(0%)	\$0.0	(0%)
Non-confined	20	(3%)	0	(0%)	\$0.0	(0%)
Confined	40	(8%)	0	(0%)	\$0.0	(0%)
Failure to clean	50	(10%)	0	(0%)	\$0.1	(1%)
Non-confined	10	(1%)	0	(0%)	\$0.0	(0%)
Confined	50	(8%)	0	(0%)	\$0.1	(1%)
Heat source too close to combustibles	40	(8%)	0	(5%)	\$3.1	(27%)
Non-confined	30	(5%)	0	(5%)	\$3.1	(27%)
Confined	20	(3%)	0	(0%)	\$0.0	(0%)
Unclassified misuse of material or product	40	(6%)	1	(6%)	\$0.3	(3%)
Non-confined	10	(2%)	0	(0%)	\$0.3	(3%)
Confined	20	(4%)	1	(6%)	\$0.0	(0%)
Equipment unattended	20	(4%)	1	(6%)	\$0.6	(5%)
Non-confined	10	(1%)	1	(6%)	\$0.6	(5%)
Confined	20	(3%)	0	(0%)	\$0.0	(0%)
Exposure fire	20	(4%)	0	(0%)	\$1.6	(15%)
Non-confined	20	(4%)	0	(0%)	\$1.6	(15%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Unclassified factor contributed to ignition	20	(3%)	0	(0%)	\$0.3	(3%)
Non-confined	10	(2%)	0	(0%)	\$0.3	(2%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Cutting or welding too close to combustibles	10	(2%)	1	(10%)	\$0.1	(1%)
Non-confined	10	(2%)	1	(10%)	\$0.1	(1%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Flammable liquid or gas spilled	10	(2%)	1	(8%)	\$0.4	(3%)
Non-confined	10	(1%)	1	(8%)	\$0.4	(3%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Equipment overloaded	10	(2%)	0	(0%)	\$0.1	(1%)
Non-confined	0	(1%)	0	(0%)	\$0.1	(1%)
Confined	10	(1%)	0	(0%)	\$0.1	(0%)
Outside/open fire for debris or waste disposal	10	(2%)	0	(0%)	\$0.0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0.0	(0%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Other known factor contributing to ignition	60	(12%)	0	(27%)	\$3.1	(28%)
Non-confined	40	(7%)	0	(27%)	\$3.1	(28%)
Confined	30	(5%)	0	(0%)	\$0.0	(0%)

Table 7. Structure Fires in Service or Gas Station Properties by Factor Contributing to Ignition, 2014–2018 Annual Averages (Continued)

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Total Fires	550	(100%)	9	(100%)	\$11.1	(100%)
Non-confined	330	(59%)	8	(86%)	\$11.1	(99%)
Confined	230	(41%)	1	(14%)	\$0.1	(1%)
			0			
Total Factors*	580	(105%)	9	(100%)	\$13.7	(123%)
Non-confined	340	(62%)	8	(87%)	\$13.6	(122%)
Confined	240	(43%)	1	(14%)	\$0.1	(1%)

Note: Sums may not equal totals due to rounding errors. Confined structure fires (NFIRS incident type 113–118) were analyzed separately from non-confined structure fires (incident type 110–129, except 113–118).

*More than one factor can be reported per fire.

Sources: NFIRS and NFPA’s Fire Experience Survey.

Table 8. Structure Fires in Service or Gas Station Properties by Heat Source, 2014–2018 Annual Averages

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Arcing	110	(20%)	1	(8%)	\$4.2	(38%)
Non-confined	90	(17%)	1	(8%)	\$4.1	(37%)
Confined	20	(3%)	0	(0%)	\$0.0	(0%)
Unclassified heat from powered equipment	100	(17%)	1	(8%)	\$0.8	(7%)
Non-confined	50	(9%)	1	(8%)	\$0.8	(7%)
Confined	40	(8%)	0	(0%)	\$0.0	(0%)
Radiated or conducted heat from operating equipment	70	(12%)	0	(0%)	\$0.5	(5%)
Non-confined	30	(6%)	0	(0%)	\$0.5	(5%)
Confined	40	(7%)	0	(0%)	\$0.0	(0%)
Smoking materials	40	(8%)	0	(0%)	\$0.2	(2%)
Non-confined	20	(3%)	0	(0%)	\$0.2	(2%)
Confined	30	(5%)	0	(0%)	\$0.0	(0%)
Unclassified heat source	40	(8%)	1	(8%)	\$1.1	(10%)
Non-confined	20	(4%)	0	(0%)	\$1.1	(10%)
Confined	20	(4%)	1	(8%)	\$0.0	(0%)
Spark, ember or flame from operating equipment	40	(7%)	2	(18%)	\$2.3	(20%)
Non-confined	30	(5%)	2	(18%)	\$2.3	(20%)
Confined	10	(2%)	0	(0%)	\$0.0	(0%)
Unclassified hot or smoldering object	30	(5%)	0	(0%)	\$0.4	(4%)
Non-confined	20	(3%)	0	(0%)	\$0.4	(4%)
Confined	10	(2%)	0	(0%)	\$0.0	(0%)
Lighter	20	(4%)	2	(17%)	\$0.5	(5%)
Non-confined	10	(2%)	2	(17%)	\$0.5	(5%)
Confined	20	(3%)	0	(0%)	\$0.0	(0%)
Hot ember or ash	20	(4%)	1	(8%)	\$0.1	(1%)
Non-confined	10	(2%)	1	(8%)	\$0.1	(1%)
Confined	10	(3%)	0	(0%)	\$0.0	(0%)
Heat from direct flame or convection currents	20	(3%)	0	(0%)	\$0.3	(3%)
Non-confined	10	(2%)	0	(0%)	\$0.3	(3%)
Confined	10	(2%)	0	(0%)	\$0.0	(0%)
Heat or spark from friction	10	(2%)	2	(20%)	\$0.1	(1%)
Non-confined	10	(2%)	2	(20%)	\$0.1	(1%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Other known heat source	50	(9%)	1	(13%)	\$0.7	(6%)
Non-confined	40	(6%)	1	(7%)	\$0.7	(6%)
Confined	20	(3%)	1	(6%)	\$0.0	(0%)
Total	550	(100%)	9	(100%)	\$11.1	(100%)
Non-confined	330	(59%)	8	(86%)	\$11.1	(99%)
Confined	230	(41%)	1	(14%)	\$0.1	(1%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

Table 9. Structure Fires in Service or Gas Station Properties by Item First Ignited, 2014–2018 Annual Averages

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)
Electrical wire or cable insulation	80	(14%)	1	(6%)	\$2.6	(23%)
Non-confined	60	(12%)	1	(6%)	\$2.5	(23%)
Confined	10	(2%)	0	(0%)	\$0.0	(0%)
Cooking materials, including food	70	(13%)	1	(6%)	\$0.4	(4%)
Non-confined	10	(1%)	1	(6%)	\$0.4	(4%)
Confined	60	(12%)	0	(0%)	\$0.0	(0%)
Rubbish, trash, or waste	70	(12%)	0	(0%)	\$0.7	(6%)
Non-confined	10	(3%)	0	(0%)	\$0.7	(6%)
Confined	50	(10%)	0	(0%)	\$0.0	(0%)
Flammable or combustible liquids or gases, piping, or filter	60	(11%)	5	(60%)	\$2.3	(21%)
Non-confined	40	(7%)	5	(54%)	\$2.3	(21%)
Confined	20	(4%)	1	(6%)	\$0.0	(0%)
Unclassified item first ignited	40	(7%)	1	(8%)	\$0.2	(2%)
Non-confined	20	(4%)	0	(0%)	\$0.2	(2%)
Confined	10	(3%)	1	(8%)	\$0.0	(0%)
Exterior wall covering or finish	20	(4%)	0	(0%)	\$0.2	(2%)
Non-confined	20	(4%)	0	(0%)	\$0.2	(2%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Multiple items first ignited	20	(3%)	1	(11%)	\$0.4	(4%)
Non-confined	10	(2%)	1	(11%)	\$0.4	(4%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Appliance housing or casing	20	(3%)	0	(0%)	\$0.0	(0%)
Non-confined	10	(1%)	0	(0%)	\$0.0	(0%)
Confined	10	(2%)	0	(0%)	\$0.0	(0%)
Structural member or framing	20	(3%)	0	(0%)	\$0.2	(2%)
Non-confined	20	(3%)	0	(0%)	\$0.2	(2%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Unclassified structural component or finish	10	(2%)	0	(0%)	\$0.5	(4%)
Non-confined	10	(2%)	0	(0%)	\$0.5	(4%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Exterior roof covering or finish	10	(2%)	0	(5%)	\$0.1	(1%)
Non-confined	10	(2%)	0	(5%)	\$0.1	(1%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)

Table 9. Structure Fires in Service or Gas Station Properties by Item First Ignited, 2014–2018 Annual Averages (continued)

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Box, carton, bag, basket, or barrel	10	(2%)	0	(5%)	\$0.3	(3%)
Non-confined	0	(1%)	0	(5%)	\$0.3	(3%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Interior wall covering, excluding drapes	10	(2%)	0	(0%)	\$0.7	(6%)
Non-confined	10	(2%)	0	(0%)	\$0.7	(6%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Magazine, newspaper, or writing paper	10	(2%)	0	(0%)	\$0.0	(0%)
Non-confined	0	(1%)	0	(0%)	\$0.0	(0%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Oily rags	10	(2%)	0	(0%)	\$0.1	(1%)
Non-confined	0	(0%)	0	(0%)	\$0.1	(1%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Other known item first ignited	100	(18%)	0	(0%)	\$2.2	(20%)
Non-confined	80	(14%)	0	(0%)	\$2.2	(20%)
Confined	20	(4%)	0	(0%)	\$0.0	(0%)
Total	550	(100%)	9	(100%)	\$11.1	(100%)
Non-confined	330	(59%)	8	(86%)	\$11.1	(99%)
Confined	230	(41%)	1	(14%)	\$0.1	(1%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

Table 10. Structure Fires in Service or Gas Station Properties by Type of Material First Ignited, 2014–2018 Annual Averages

Type of Material First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)
Plastic	100	(18%)	0	(0%)	\$0.7	(6%)
Non-confined	80	(14%)	0	(0%)	\$0.6	(5%)
Confined	20	(4%)	0	(0%)	\$0.0	(0%)
Multiple types of material	60	(10%)	2	(19%)	\$1.1	(10%)
Non-confined	30	(5%)	2	(19%)	\$1.1	(10%)
Confined	30	(5%)	0	(0%)	\$0.0	(0%)
Sawn wood, including finished lumber	40	(7%)	0	(0%)	\$1.9	(17%)
Non-confined	40	(6%)	0	(0%)	\$1.9	(17%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Unclassified type of material	40	(8%)	1	(6%)	\$0.4	(3%)
Non-confined	30	(5%)	1	(6%)	\$0.4	(3%)
Confined	20	(3%)	0	(0%)	\$0.0	(0%)
Cooking oil, transformer, or lubricating oil	30	(6%)	0	(0%)	\$0.3	(3%)
Non-confined	10	(1%)	0	(0%)	\$0.3	(3%)
Confined	30	(5%)	0	(0%)	\$0.0	(0%)
Paper, including cellulose and waxed paper	30	(6%)	0	(5%)	\$0.2	(2%)
Non-confined	10	(2%)	0	(5%)	\$0.2	(2%)
Confined	20	(4%)	0	(0%)	\$0.0	(0%)
Gas, including natural, LP-gas, etc.	30	(5%)	3	(28%)	\$1.5	(13%)
Non-confined	20	(3%)	1	(15%)	\$1.5	(13%)
Confined	10	(2%)	1	(14%)	\$0.0	(0%)
Cardboard	30	(5%)	0	(0%)	\$0.2	(2%)
Non-confined	10	(1%)	0	(0%)	\$0.2	(2%)
Confined	20	(3%)	0	(0%)	\$0.0	(0%)
Unclassified processed wood or paper	30	(5%)	0	(0%)	\$0.8	(7%)
Non-confined	20	(3%)	0	(0%)	\$0.8	(7%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Gasoline	20	(4%)	1	(7%)	\$1.9	(17%)
Non-confined	20	(4%)	1	(7%)	\$1.9	(17%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Fat, grease, butter, margarine, or lard	20	(4%)	0	(0%)	\$0.1	(1%)
Non-confined	0	(0%)	0	(0%)	\$0.1	(1%)
Confined	20	(4%)	0	(0%)	\$0.0	(0%)
Fabric, fiber, cotton, blends, rayon, or wool	20	(4%)	0	(0%)	\$0.3	(3%)
Non-confined	20	(3%)	0	(0%)	\$0.3	(3%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Plywood	20	(3%)	0	(0%)	\$0.6	(5%)
Non-confined	20	(3%)	0	(0%)	\$0.6	(5%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Food or starch, excluding fat and grease	10	(3%)	0	(0%)	\$0.0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0.0	(0%)
Confined	10	(3%)	0	(0%)	\$0.0	(0%)

Table 10. Structure Fires in Service or Gas Station Properties by Type of Material First Ignited, 2014–2018 Annual Averages (Continued)

Type of Material First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unclassified flammable or combustible liquid	10	(2%)	2	(23%)	\$0.3	(3%)
Non-confined	10	(1%)	2	(23%)	\$0.3	(3%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Kerosene, Nos. 1 and 2 fuel oil, diesel type	10	(2%)	0	(0%)	\$0.3	(3%)
Non-confined	0	(0%)	0	(0%)	\$0.3	(3%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Other known type of material	40	(8%)	1	(10%)	\$0.4	(4%)
Non-confined	30	(6%)	1	(10%)	\$0.4	(4%)
Confined	10	(2%)	0	(0%)	\$0.0	(0%)
Total	550	(100%)	9	(100%)	\$11.1	(100%)
Non-confined	330	(59%)	8	(86%)	\$11.1	(99%)
Confined	230	(41%)	1	(14%)	\$0.1	(1%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

Table 11. Structure Fires in Service or Gas Station Properties by Area of Origin, 2014–2018 Annual Averages

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Kitchen or cooking area	90	(16%)	1	(13%)	\$0.5	(5%)
Non-confined	20	(3%)	0	(5%)	\$0.5	(4%)
Confined	70	(13%)	1	(8%)	\$0.0	(0%)
Unclassified outside area	50	(9%)	0	(0%)	\$0.1	(1%)
Non-confined	10	(3%)	0	(0%)	\$0.1	(1%)
Confined	30	(6%)	0	(0%)	\$0.0	(0%)
Lavatory	30	(6%)	0	(0%)	\$0.1	(1%)
Non-confined	20	(4%)	0	(0%)	\$0.1	(1%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Unclassified area of origin	30	(5%)	0	(0%)	\$0.1	(1%)
Non-confined	10	(1%)	0	(0%)	\$0.1	(1%)
Confined	20	(3%)	0	(0%)	\$0.0	(0%)
Trash or rubbish chute, area, or container	20	(4%)	0	(4%)	\$0.0	(0%)
Non-confined	0	(0%)	0	(4%)	\$0.0	(0%)
Confined	20	(4%)	0	(0%)	\$0.0	(0%)
Unclassified equipment or service area	20	(4%)	1	(9%)	\$0.8	(7%)
Non-confined	20	(3%)	1	(9%)	\$0.8	(7%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Exterior wall surface	20	(3%)	0	(5%)	\$1.1	(10%)
Non-confined	20	(3%)	0	(5%)	\$1.1	(10%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Maintenance or paint shop area	20	(3%)	0	(4%)	\$1.2	(11%)
Non-confined	20	(3%)	0	(4%)	\$1.2	(11%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Garage or vehicle storage area	10	(3%)	2	(19%)	\$0.7	(6%)
Non-confined	10	(3%)	2	(19%)	\$0.7	(6%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Storage room, area, tank, or bin	10	(3%)	0	(4%)	\$0.2	(2%)
Non-confined	10	(2%)	0	(4%)	\$0.2	(2%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Unclassified storage area	10	(3%)	1	(15%)	\$0.3	(3%)
Non-confined	10	(2%)	1	(9%)	\$0.3	(3%)
Confined	0	(0%)	1	(6%)	\$0.0	(0%)
Storage of supplies or tools or dead storage	10	(3%)	0	(4%)	\$0.4	(4%)
Non-confined	10	(2%)	0	(4%)	\$0.4	(4%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Awning	10	(2%)	0	(0%)	\$0.0	(0%)
Non-confined	10	(2%)	0	(0%)	\$0.0	(0%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)

Table 11. Structure Fires in Service or Gas Station Properties by Area of Origin, 2014–2018 Annual Averages (Continued)

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)
Unclassified service facility	10	(2%)	1	(6%)	\$0.9	(8%)
Non-confined	10	(2%)	1	(6%)	\$0.9	(8%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Exterior roof surface	10	(2%)	0	(4%)	\$0.1	(1%)
Non-confined	10	(2%)	0	(4%)	\$0.1	(1%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Office	10	(2%)	0	(0%)	\$0.2	(2%)
Non-confined	10	(2%)	0	(0%)	\$0.2	(2%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Sales or showroom area	10	(2%)	0	(0%)	\$0.2	(2%)
Non-confined	10	(2%)	0	(0%)	\$0.2	(2%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Duct for HVAC, cable, exhaust, heating, or AC	10	(2%)	0	(0%)	\$0.1	(1%)
Non-confined	10	(1%)	0	(0%)	\$0.0	(0%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Unclassified vehicle area	10	(2%)	0	(0%)	\$0.2	(2%)
Non-confined	10	(1%)	0	(0%)	\$0.2	(2%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
Heating equipment room	10	(2%)	0	(0%)	\$0.0	(0%)
Non-confined	10	(1%)	0	(0%)	\$0.0	(0%)
Confined	0	(1%)	0	(0%)	\$0.0	(0%)
On or near highway, public way, or street	10	(2%)	0	(0%)	\$0.0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0.0	(0%)
Confined	10	(1%)	0	(0%)	\$0.0	(0%)
Confined chimney or flue fire	10	(2%)	0	(0%)	\$0.0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0.0	(0%)
Confined	10	(2%)	0	(0%)	\$0.0	(0%)
Wall assembly or concealed space	10	(2%)	0	(0%)	\$0.3	(3%)
Non-confined	10	(1%)	0	(0%)	\$0.3	(3%)
Confined	0	(0%)	0	(0%)	\$0.0	(0%)
Other known area of origin	100	(18%)	1	(10%)	\$3.4	(31%)
Non-confined	80	(14%)	1	(10%)	\$3.4	(31%)
Confined	20	(3%)	0	(0%)	\$0.0	(0%)
Total	550	(100%)	9	(100%)	\$11.1	(100%)
Non-confined	330	(59%)	8	(86%)	\$11.1	(99%)
Confined	230	(41%)	1	(14%)	\$0.1	(1%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

**Table 12. Vehicle Fires at Service or Gas Station Properties by Cause of Ignition,
2014–2018 Annual Averages**

Cause of Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unintentional	1,390	(59%)	17	(66%)	\$6.2	(56%)
Failure of equipment or heat source	870	(37%)	7	(27%)	\$3.9	(35%)
Unclassified cause	50	(2%)	0	(0%)	\$0.6	(5%)
Intentional	30	(1%)	2	(7%)	\$0.2	(2%)
Act of nature	10	(0%)	0	(0%)	\$0.1	(1%)
Total	2,340	(100%)	26	(100%)	\$11.0	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA’s Fire Experience Survey.

Table 13. Vehicle Fires at Service or Gas Station Properties by Factor Contributing to Ignition, 2014–2018 Annual Averages

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Mechanical failure or malfunction	1,220	(52%)	6	(25%)	\$4.8	(44%)
Electrical failure or malfunction	570	(24%)	1	(5%)	\$2.2	(20%)
Unclassified factor contributed to ignition	110	(5%)	4	(17%)	\$0.4	(3%)
Heat source too close to combustibles	80	(4%)	3	(11%)	\$0.7	(7%)
Flammable liquid or gas spilled	80	(3%)	0	(0%)	\$0.4	(4%)
Exposure fire	60	(2%)	0	(0%)	\$1.0	(9%)
Unclassified misuse of material or product	40	(2%)	1	(6%)	\$0.1	(1%)
Unclassified operational deficiency	40	(2%)	0	(0%)	\$0.2	(2%)
Other known factor contributing to ignition	230	(10%)	10	(42%)	\$1.6	(14%)
Total Fires	2,340	(100%)	26	(100%)	\$11.0	(100%)
Total Factors*	2,420	(103%)	28	(105%)	\$11.4	(103%)

*More than one factor can be reported per fire.

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS 5.0 and NFPA’s Fire Experience Survey.

Table 14. Vehicle Fires at Service or Gas Station Properties by Heat Source, 2014–2018 Annual Averages

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unclassified heat from powered equipment	540	(23%)	4	(14%)	\$2.8	(25%)
Radiated or conducted heat from operating equipment	520	(22%)	2	(7%)	\$2.1	(19%)
Arcing	410	(18%)	2	(6%)	\$1.6	(14%)
Unclassified heat source	180	(8%)	0	(0%)	\$0.9	(8%)
Spark, ember, or flame from operating equipment	170	(7%)	4	(14%)	\$1.0	(9%)
Unclassified hot or smoldering object	150	(6%)	4	(14%)	\$0.4	(3%)
Heat or spark from friction	140	(6%)	1	(3%)	\$0.5	(4%)
Other known heat source	220	(9%)	11	(41%)	\$1.8	(16%)
Total	2,340	(100%)	26	(100%)	\$11.0	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS 5.0 and NFPA’s Fire Experience Survey.

**Table 15. Vehicle Fires at Service or Gas Station Properties by Item First Ignited,
2014–2018 Annual Averages**

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Flammable or combustible liquids or gases, piping, or filter	760	(32%)	16	(62%)	\$4.2	(38%)
Electrical wire or cable insulation	720	(31%)	2	(6%)	\$2.5	(23%)
Unclassified item first ignited	340	(14%)	2	(6%)	\$1.4	(12%)
Tire	160	(7%)	0	(0%)	\$1.0	(9%)
Multiple items first ignited	110	(5%)	0	(0%)	\$0.7	(7%)
Upholstered furniture or vehicle seat	50	(2%)	4	(16%)	\$0.4	(3%)
Other known item first ignited	210	(9%)	2	(9%)	\$0.9	(8%)
Total	2,340	(100%)	26	(100%)	\$11.0	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS 5.0 and NFPA’s Fire Experience Survey.

Table 16. Vehicle Fires at Service or Gas Station Properties by Type of Material First Ignited, 2014–2018 Annual Averages

Type of Material First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Plastic	510	(22%)	2	(9%)	\$2.1	(19%)
Gasoline	480	(20%)	10	(37%)	\$2.7	(25%)
Unclassified type of material first ignited	290	(12%)	0	(0%)	\$0.6	(6%)
Unclassified flammable or combustible liquid	230	(10%)	2	(9%)	\$0.9	(8%)
Multiple types of material	210	(9%)	2	(9%)	\$1.4	(13%)
Gas, including natural, LP-gas, etc.	140	(6%)	3	(10%)	\$1.1	(10%)
Cooking oil, transformer oil, or lubricating oil	120	(5%)	1	(3%)	\$0.2	(2%)
Fabric, fiber, cotton, blends, rayon, or wool	90	(4%)	3	(13%)	\$0.2	(2%)
Rubber, excluding synthetic rubbers	70	(3%)	1	(3%)	\$0.3	(3%)
Unclassified material compounded with oil	40	(2%)	0	(0%)	\$0.7	(7%)
Other known type of material	160	(7%)	2	(6%)	\$0.6	(6%)
Total	2,340	(100%)	26	(100%)	\$11.0	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS 5.0 and NFPA’s Fire Experience Survey.

Table 17. Vehicle Fires at Service or Gas Station Properties by Area of Origin, 2014–2018 Annual Averages

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Engine area, running gear, or wheel area of vehicle	1,670	(71%)	13	(49%)	\$7.3	(66%)
Passenger area of vehicle	170	(7%)	6	(22%)	\$1.2	(11%)
Unclassified vehicle area	160	(7%)	1	(2%)	\$0.7	(6%)
Cargo or trunk area of vehicle	100	(4%)	2	(8%)	\$0.4	(4%)
Exterior surface of vehicle	70	(3%)	0	(0%)	\$0.3	(3%)
Fuel tank or fuel line of vehicle	50	(2%)	2	(9%)	\$0.4	(4%)
Unclassified area of origin	40	(2%)	1	(2%)	\$0.1	(1%)
Other known area of origin	80	(4%)	2	(8%)	\$0.6	(5%)
Total	2,340	(100%)	26	(100%)	\$11.0	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA’s Fire Experience Survey.

Table 18. Non-Rubbish Outside and Other Fires in or on Service Station Properties by Incident Type, 2014–2018 Annual Averages

Incident Type	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Natural vegetation fire	360	(54%)	0	(0%)	0	(0%)	\$0.0	(0%)
Brush, or brush and grass mixture fire	170	(25%)	0	(0%)	0	(0%)	\$0.0	(0%)
Grass fire	70	(11%)	0	(0%)	0	(0%)	\$0.0	(0%)
Forest, woods, or wildland fire	10	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Unclassified natural vegetation fire	110	(16%)	0	(0%)	0	(0%)	\$0.0	(0%)
Cultivated vegetation or crop fire	10	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Special outside fire	170	(25%)	1	(75%)	4	(79%)	\$1.6	(21%)
Outside equipment fire	80	(12%)	0	(0%)	1	(13%)	\$1.0	(13%)
Outside gas or vapor combustion explosion	20	(4%)	1	(75%)	3	(58%)	\$0.2	(2%)
Outside storage fire	10	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Outside mailbox fire	0	(0%)	0	(0%)	0	(0%)	\$0.0	(0%)
Unclassified special outside fire	60	(9%)	0	(0%)	0	(9%)	\$0.4	(6%)
Other fire	130	(19%)	0	(25%)	1	(21%)	\$6.0	(79%)
Total	670	(100%)	1	(100%)	4	(100%)	\$7.6	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA’s Fire Experience Survey.

Table 19. Non-Rubbish Outside and Other Fires in or on Service Station Properties by Cause of Ignition, 2014–2018 Annual Averages

Cause of Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unintentional	480	(72%)	4	(85%)	\$3.4	(45%)
Failure of equipment or heat source	80	(12%)	0	(0%)	\$4.0	(52%)
Intentional	60	(9%)	1	(15%)	\$0.1	(1%)
Act of nature	30	(5%)	0	(0%)	\$0.1	(1%)
Unclassified cause	20	(3%)	0	(0%)	\$0.2	(2%)
Total	670	(100%)	4	(100%)	\$7.6	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

**Table 20. Non-Rubbish Outside and Other Fires in or on Service Station Properties
by Equipment Involved in Ignition, 2014–2018 Annual Averages**

Equipment Involved	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
No equipment involved in ignition	230	(35%)	2	(54%)	\$0.1	(2%)
Electrical distribution and lighting equipment	150	(23%)	0	(0%)	\$0.3	(4%)
Unclassified equipment involved in ignition	70	(11%)	1	(15%)	\$2.2	(29%)
Pump	40	(7%)	0	(0%)	\$1.4	(18%)
Cooking equipment	20	(2%)	0	(0%)	\$2.4	(32%)
Clothes dryer	10	(1%)	0	(0%)	\$0.0	(0%)
Air conditioner	10	(1%)	0	(0%)	\$0.0	(0%)
Heating equipment	10	(1%)	0	(0%)	\$0.0	(0%)
Car washing equipment	10	(1%)	0	(0%)	\$0.0	(0%)
Freezer when separate from refrigerator	10	(1%)	0	(0%)	\$0.0	(0%)
Vending machine	10	(1%)	0	(0%)	\$0.0	(0%)
Refrigerator or refrigerator/freezer	10	(1%)	0	(0%)	\$0.0	(0%)
Lawn mower	10	(1%)	1	(15%)	\$0.3	(4%)
Gas regulator	10	(1%)	0	(0%)	\$0.3	(4%)
Torcher, burner, or soldering iron	10	(1%)	0	(0%)	\$0.0	(0%)
Wet/dry vacuum (shop vacuum)	10	(1%)	0	(0%)	\$0.0	(0%)
Fan	10	(1%)	0	(0%)	\$0.0	(0%)
Air compressor	10	(1%)	0	(0%)	\$0.0	(0%)
Other known equipment involved in ignition	40	(6%)	1	(17%)	\$0.4	(5%)
Total	670	(100%)	4	(100%)	\$7.6	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

**Table 21. Non-Rubbish Outside and Other Fires in or on Service Station Properties
by Factor Contributing to Ignition, 2014–2018 Annual Averages**

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Abandoned or discarded material or product	170	(25%)	0	(0%)	\$0.0	(0%)
Electrical failure or malfunction	90	(14%)	0	(7%)	\$0.1	(2%)
Unclassified factor contributed to ignition	60	(8%)	0	(0%)	\$0.6	(7%)
Unclassified misuse of material or product	50	(8%)	1	(29%)	\$0.0	(0%)
Unclassified natural condition	50	(7%)	0	(0%)	\$0.0	(0%)
Collision, knock down, run over, or turn over	40	(7%)	0	(7%)	\$1.2	(16%)
Mechanical failure or malfunction	40	(6%)	0	(0%)	\$0.2	(3%)
Heat source too close to combustibles	40	(6%)	2	(37%)	\$0.2	(2%)
High wind	30	(4%)	0	(0%)	\$0.0	(0%)
Flammable liquid or gas spilled	20	(3%)	1	(11%)	\$4.2	(55%)
Exposure fire	20	(3%)	0	(0%)	\$0.2	(2%)
Outside/open fire for debris or waste disposal	10	(2%)	0	(0%)	\$0.0	(0%)
Improper fueling technique	10	(2%)	0	(7%)	\$0.2	(2%)
Other known factor contributing to ignition	70	(10%)	0	(22%)	\$0.9	(12%)
Total Fires	670	(100%)	4	(100%)	\$7.6	(100%)
Total Factors*	690	(104%)	5	(120%)	\$7.8	(102%)

*More than one factor can be reported per fire.

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

Table 22. Non-Rubbish Outside and Other Fires in or on Service Station Properties by Heat Source, 2014–2018 Annual Averages

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)
Smoking materials	160	(24%)	1	(23%)	\$0.0	(0%)
Arcing	90	(14%)	0	(0%)	\$0.7	(9%)
Hot ember or ash	70	(11%)	0	(0%)	\$0.0	(0%)
Unclassified hot or smoldering object	60	(10%)	0	(0%)	\$0.0	(0%)
Unclassified heat source	50	(8%)	1	(31%)	\$4.6	(60%)
Unclassified heat from powered equipment	50	(8%)	0	(6%)	\$0.4	(5%)
Lighter	40	(5%)	1	(19%)	\$0.0	(0%)
Spark, ember, or flame from operating equipment	40	(5%)	0	(5%)	\$0.6	(7%)
Radiated or conducted heat from operating equipment	20	(3%)	0	(0%)	\$1.0	(13%)
Heat or spark from friction	20	(2%)	0	(6%)	\$0.1	(1%)
Spontaneous combustion or chemical reaction	20	(2%)	0	(0%)	\$0.0	(0%)
Other known heat source	60	(9%)	0	(10%)	\$0.3	(4%)
Total	670	(100%)	0	(100%)	\$7.6	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

**Table 23. Non-Rubbish Outside and Other Fires in or on Service Station Properties
by Item First Ignited, 2014–2018 Annual Averages**

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Light vegetation, including grass	200	(30%)	0	(0%)	\$0.1	(1%)
Flammable or combustible liquids or gases, piping, or filter	120	(18%)	4	(81%)	\$2.7	(36%)
Unclassified organic materials	100	(15%)	0	(0%)	\$0.0	(0%)
Unclassified item first ignited	50	(8%)	0	(0%)	\$3.5	(46%)
Chips, including wood chips	50	(8%)	0	(0%)	\$0.0	(0%)
Electrical wire or cable insulation	40	(6%)	0	(0%)	\$0.4	(5%)
Rubbish, trash, or waste	10	(2%)	0	(0%)	\$0.0	(0%)
Heavy vegetation, including trees	10	(2%)	0	(0%)	\$0.0	(0%)
Other known item first ignited	80	(12%)	1	(19%)	\$0.9	(12%)
Total	670	(100%)	4	(100%)	\$7.6	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA’s Fire Experience Survey.

**Table 24. Non-Rubbish Outside and Other Fires in or on Service Station Properties
by Type of Material First Ignited, 2014–2018 Annual Averages**

Type of Material First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)
Wood chips, sawdust, or shavings	160	(24%)	0	(0%)	\$0.0	(0%)
Gasoline	150	(22%)	3	(65%)	\$2.2	(28%)
Plastic	70	(11%)	0	(6%)	\$0.1	(2%)
Unclassified natural product	50	(8%)	0	(0%)	\$0.0	(0%)
Unclassified type of material first ignited	50	(8%)	0	(0%)	\$0.0	(1%)
Gas, including natural, LP-gas, etc.	40	(5%)	0	(8%)	\$3.9	(51%)
Unclassified flammable or combustible liquid	20	(3%)	0	(0%)	\$0.5	(6%)
Fabric, fiber, cotton, blends, rayon, or wool	20	(3%)	0	(8%)	\$0.0	(0%)
Hay or straw	20	(3%)	0	(0%)	\$0.0	(0%)
Multiple types of material	10	(2%)	0	(0%)	\$0.0	(0%)
Wood pulp	10	(2%)	0	(0%)	\$0.0	(0%)
Other known type of material	60	(10%)	1	(14%)	\$0.8	(11%)
Total	670	(100%)	4	(100%)	\$7.6	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

**Table 25. Non-Rubbish Outside and Other Fires in or on Service Station Properties
by Area of Origin, 2014–2018 Annual Averages**

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unclassified outside area	200	(31%)	1	(23%)	\$0.4	(5%)
On or near highway, public way, or street	100	(15%)	1	(17%)	\$0.2	(2%)
Unspecified vegetation area from wildland module	90	(14%)	0	(0%)	\$0.0	(0%)
Lawn, field, or open area	50	(8%)	0	(0%)	\$0.0	(0%)
Unclassified area of origin	30	(5%)	0	(0%)	\$0.0	(0%)
Unclassified equipment or service area	30	(4%)	1	(13%)	\$0.5	(7%)
Fuel tank or fuel line of vehicle	10	(2%)	0	(5%)	\$1.9	(25%)
Unclassified vehicle area	10	(2%)	0	(6%)	\$0.0	(0%)
Wildland area or woods	10	(2%)	0	(0%)	\$0.0	(0%)
Engine area, running gear, or wheel area of vehicle	10	(2%)	0	(0%)	\$0.1	(1%)
Other known area	110	(17%)	2	(37%)	\$4.5	(59%)
Total	670	(100%)	4	(100%)	\$7.6	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA's Fire Experience Survey.

Table 26. Outside Trash or Rubbish Fires on Service or Gas Station Properties by Cause of Ignition, 2014–2018 Annual Averages

Cause of Ignition	Fires		Property Damage (in Millions)	
Unintentional	350	(59%)	\$0.0	(17%)
Intentional	220	(38%)	\$0.1	(81%)
Act of nature	10	(1%)	\$0.0	(0%)
Failure of equipment or heat source	10	(1%)	\$0.0	(0%)
Unclassified cause	0	(1%)	\$0.0	(2%)
Total	590	(100%)	\$0.2	(100%)

Note: Sums may not equal totals due to rounding errors.

Sources: NFIRS and NFPA’s Fire Experience Survey.