



RESEARCH

Non-Home Electrical Fires **Supporting Tables**

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Non-Home Electrical Fires: Supporting Tables

The tables in this document are a companion to the report of the same name. Firefighter deaths and injuries are excluded from this analysis.

Most tables, with the exception of fires by year, show estimates of 2012-2016 annual averages. Estimates were derived from the U.S. Fire Administration’s [National Fire Incident Reporting System \(NFIRS\)](#) and NFPA’s annual fire department experience survey and include proportional shares of unknown or missing data. Fires are rounded to the nearest 100, deaths and injuries are rounded to the nearest ten, and property loss is rounded to the nearest million dollars. Inflation adjustments were made only for the trend table. Percentages were calculated on unrounded estimates.

NFIRS 5.0 includes a category of structure fires collectively referred to as “confined fires,” identified by NFIRS incident type codes 113-118. These include confined cooking fires, confined chimney or flue fires, confined trash fires, and confined fuel burner or boiler fires. Losses are generally minimal in these fires, which by definition, are assumed to have been limited to the object of origin. Although causal data is not required for these fires, it is sometimes present. To obtain estimates of fires, unknown data for confined and non-confined fires were analyzed separately and the results summed.

For more information on how these estimates were calculated, please see full report and [How NFPA’s National Estimates Are Calculated for Home Structure Fires](#)

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Table 1.
Non-Home Fires Involving Electrical Distribution and Lighting Equipment, by Year
Structure Fires Reported to U.S. Fire Departments

Year	Fires	Civilian Deaths	Civilian Injuries	Direct Property Damage (in Millions)	
				As Reported	In 2016 Dollars
2012	14,520	19	180	\$667	\$697
2013	16,850	12	250	\$770	\$792
2014	18,950	25	210	\$918	\$929
2015	18,410	34	170	\$746	\$755
2016	15,610	19	230	\$413	\$413

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported to only federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of a small number of unusually serious fires. Fires are rounded to the nearest hundred, civilian deaths to the nearest one, civilian injuries to the nearest ten, and direct property damage to the nearest million dollars. Inflation adjustment to 2016 dollars is calculated using the Consumer Price Index.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

Table 2.
Non-Home Fires Involving Electrical Distribution or Lighting Equipment, by Month
2012-2016 Annual Averages

Month	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
January	1,720	(10%)	4	(18%)	20	(10%)	\$60	(8%)
February	1,720	(10%)	2	(9%)	20	(9%)	\$117	(16%)
March	1,530	(9%)	2	(10%)	10	(7%)	\$67	(9%)
April	1,280	(8%)	2	(7%)	10	(6%)	\$68	(9%)
May	1,350	(8%)	0	(0%)	20	(8%)	\$62	(9%)
June	1,400	(8%)	1	(4%)	10	(6%)	\$67	(9%)
July	1,580	(9%)	0	(0%)	20	(8%)	\$57	(8%)
August	1,270	(8%)	5	(24%)	20	(8%)	\$53	(7%)
September	1,150	(7%)	3	(12%)	20	(9%)	\$47	(7%)
October	1,230	(7%)	2	(10%)	20	(9%)	\$28	(4%)
November	1,320	(8%)	0	(0%)	20	(8%)	\$49	(7%)
December	1,370	(8%)	2	(7%)	30	(12%)	\$42	(6%)
Total	16,930	(100%)	22	(100%)	210	(100%)	\$718	(100%)

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. Fires and injuries are rounded to the nearest ten and direct property damage to the nearest million dollars. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

Table 3.
Non-Home Fires Involving Electrical Distribution or Lighting Equipment, by Day of Week
2012-2016 Annual Averages

Day of Week	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Sunday	2,150	(13%)	2	(10%)	20	(10%)	\$108	(15%)
Monday	2,590	(15%)	4	(16%)	40	(20%)	\$95	(13%)
Tuesday	2,480	(15%)	2	(7%)	30	(13%)	\$103	(14%)
Wednesday	2,570	(15%)	5	(22%)	30	(15%)	\$180	(25%)
Thursday	2,480	(15%)	0	(0%)	30	(16%)	\$80	(11%)
Friday	2,390	(14%)	6	(26%)	30	(15%)	\$76	(11%)
Saturday	2,270	(13%)	4	(18%)	20	(12%)	\$76	(11%)
Total	16,930	(100%)	22	(100%)	210	(100%)	\$718	(100%)

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. Fires and injuries are rounded to the nearest ten and direct property damage to the nearest million dollars. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

Table 4.
Non-Home Fires Involving Electrical Distribution or Lighting Equipment, by Time of Day
2012-2016 Annual Averages

Time of Day	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Midnight–12:59 a.m.	500	(3%)	0	(0%)	10	(5%)	\$19	(3%)
1:00–1:59 a.m.	500	(3%)	2	(9%)	0	(1%)	\$35	(5%)
2:00–2:59 a.m.	380	(2%)	2	(10%)	10	(3%)	\$33	(5%)
3:00–3:59 a.m.	370	(2%)	7	(34%)	0	(0%)	\$19	(3%)
4:00–4:59 a.m.	370	(2%)	0	(0%)	0	(1%)	\$40	(6%)
5:00–5:59 a.m.	430	(3%)	0	(0%)	10	(5%)	\$31	(4%)
6:00–6:59 a.m.	550	(3%)	0	(0%)	0	(2%)	\$15	(2%)
7:00–7:59 a.m.	650	(4%)	0	(0%)	10	(4%)	\$92	(13%)
8:00–8:59 a.m.	770	(5%)	0	(0%)	10	(3%)	\$21	(3%)
9:00–9:59 a.m.	750	(4%)	0	(0%)	20	(10%)	\$15	(2%)
10:00–10:59 a.m.	850	(5%)	0	(0%)	10	(6%)	\$21	(3%)
11:00–11:59 a.m.	910	(5%)	0	(0%)	20	(9%)	\$36	(5%)
12:00–12:59 p.m.	870	(5%)	0	(0%)	10	(6%)	\$27	(4%)
1:00–1:59 p.m.	960	(6%)	0	(0%)	10	(5%)	\$35	(5%)
2:00–2:59 p.m.	900	(5%)	0	(0%)	10	(4%)	\$23	(3%)
3:00–3:59 p.m.	870	(5%)	2	(7%)	10	(4%)	\$25	(3%)
4:00–4:59 p.m.	850	(5%)	0	(0%)	20	(7%)	\$27	(4%)
5:00–5:59 p.m.	880	(5%)	2	(9%)	10	(3%)	\$21	(3%)
6:00–6:59 p.m.	850	(5%)	0	(0%)	0	(2%)	\$62	(9%)
7:00–7:59 p.m.	890	(5%)	0	(0%)	10	(4%)	\$31	(4%)
8:00–8:59 p.m.	850	(5%)	2	(7%)	10	(3%)	\$23	(3%)
9:00–9:59 p.m.	780	(5%)	2	(11%)	10	(4%)	\$20	(3%)
10:00–10:59 p.m.	710	(4%)	1	(4%)	10	(5%)	\$23	(3%)
11:00–11:59 p.m.	520	(3%)	2	(10%)	10	(3%)	\$21	(3%)
Total	16,930	(100%)	22	(100%)	210	(100%)	\$718	(100%)

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. Fires and injuries are rounded to the nearest ten and direct property damage to the nearest million dollars. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 5. Non-Home Fires Involving Electrical Distribution or Lighting Equipment, by Property Use
2012-2016 Annual Averages**

Property Use	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Mercantile or business	3,820	(23%)	3	(12%)	50	(23%)	\$169	(24%)
Grocery or convenience store	820	(5%)	0	(0%)	10	(3%)	\$26	(4%)
Office, bank or mail facility	730	(4%)	0	(0%)	10	(4%)	\$35	(5%)
Unclassified or unknown-type mercantile or business	600	(4%)	1	(4%)	10	(2%)	\$18	(3%)
Service station or vehicle sales, service or repair	470	(3%)	2	(7%)	10	(6%)	\$22	(3%)
Department store or unclassified general retail	340	(2%)	0	(0%)	10	(3%)	\$28	(4%)
Specialty shop	300	(2%)	0	(0%)	10	(3%)	\$18	(2%)
Personal service, recreational or home repair	200	(1%)	0	(0%)	0	(1%)	\$6	(1%)
Laundry, drycleaning, professional supplies or services	180	(1%)	0	(0%)	0	(0%)	\$6	(1%)
Textile, or apparel sales	110	(1%)	0	(0%)	0	(1%)	\$5	(1%)
Household goods sales or repairs	90	(1%)	0	(0%)	0	(0%)	\$6	(1%)
Storage	3,120	(18%)	1	(4%)	30	(15%)	\$88	(12%)
Unclassified storage	1,550	(9%)	0	(0%)	10	(5%)	\$35	(5%)
Vehicle storage, garage or fire station	980	(6%)	0	(0%)	20	(8%)	\$30	(4%)
Warehouse, residential or self-storage	340	(2%)	0	(0%)	10	(3%)	\$16	(2%)
Grain or livestock storage	230	(1%)	0	(0%)	0	(0%)	\$5	(1%)
Residential	2,260	(13%)	14	(64%)	40	(20%)	\$97	(13%)
Unclassified or unknown-type residential	1,530	(9%)	12	(54%)	20	(11%)	\$50	(7%)
Hotel or motel	420	(2%)	0	(0%)	10	(3%)	\$36	(5%)
Boarding house, or residential hotel	130	(1%)	0	(0%)	0	(2%)	\$6	(1%)
Dormitory, fraternity, sorority or barracks	110	(1%)	0	(0%)	0	(2%)	\$1	(0%)
Residential boarding and care	70	(0%)	2	(10%)	0	(2%)	\$2	(0%)
Outside or special property	2,890	(17%)	0	(0%)	20	(8%)	\$21	(3%)
Highway, street, or parking area	2,110	(12%)	0	(0%)	10	(4%)	\$3	(0%)
Bridge, tunnel or outbuilding	290	(2%)	0	(0%)	0	(2%)	\$3	(0%)
Open land, beach or campsite	200	(1%)	0	(0%)	0	(2%)	\$2	(0%)
Construction site, oil/gas field,	150	(1%)	0	(0%)	0	(0%)	\$4	(1%)
Unclassified or unknown-type special property	110	(1%)	0	(0%)	0	(0%)	\$2	(0%)

**Table 5. Non-Home Fires Involving Electrical Distribution or Lighting Equipment, by Property Use
2012-2016 Annual Averages (Continued)**

Property Use	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Assembly	2,000	(12%)	0	(0%)	20	(12%)	\$82	(11%)
Eating or drinking places	1,130	(7%)	0	(0%)	10	(4%)	\$43	(6%)
Place of worship or funeral property	320	(2%)	0	(0%)	10	(6%)	\$15	(2%)
Club	140	(1%)	0	(0%)	0	(1%)	\$7	(1%)
Library, museum, courthouse or other public property	90	(1%)	0	(0%)	0	(0%)	\$9	(1%)
Variable use or amusement or recreation	90	(1%)	0	(0%)	0	(1%)	\$2	(0%)
Fixed use amusement or recreation	70	(0%)	0	(0%)	0	(0%)	\$3	(0%)
Unclassified or unknown public assembly property	60	(0%)	0	(0%)	0	(0%)	\$1	(0%)
Studio or theatre	60	(0%)	0	(0%)	0	(0%)	\$2	(0%)
Health care, detention, or correction	750	(4%)	3	(13%)	20	(9%)	\$15	(2%)
Nursing home or residential board and care facility	290	(2%)	2	(7%)	20	(7%)	\$3	(0%)
Hospital or hospice	170	(1%)	0	(0%)	0	(0%)	\$7	(1%)
Clinic or doctor's office	150	(1%)	0	(0%)	0	(1%)	\$4	(1%)
Prison, jail or police station	60	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Mental retardation or substance abuse	50	(0%)	1	(6%)	0	(1%)	\$1	(0%)
Industrial, utility, defense, agriculture, mining	670	(4%)	2	(7%)	0	(1%)	\$173	(24%)
Utility or distribution system	270	(2%)	2	(7%)	0	(0%)	\$50	(7%)
Agriculture	170	(1%)	0	(0%)	0	(0%)	\$10	(1%)
Utility, Defense, Agriculture, Mining, Other	80	(0%)	0	(0%)	0	(1%)	\$6	(1%)
Energy production plant	60	(0%)	0	(0%)	0	(0%)	\$102	(14%)
Defense, computer or communications center	50	(0%)	0	(0%)	0	(0%)	\$5	(1%)
Educational	550	(3%)	0	(0%)	10	(5%)	\$13	(2%)
Preschool through grade 12	370	(2%)	0	(0%)	10	(5%)	\$7	(1%)
Adult education or college classroom	90	(1%)	0	(0%)	0	(0%)	\$1	(0%)
Day care	60	(0%)	0	(0%)	0	(0%)	\$2	(0%)
Manufacturing or processing	550	(3%)	0	(0%)	10	(7%)	\$53	(7%)
Unclassified or unknown property use	320	(2%)	0	(0%)	0	(1%)	\$6	(1%)
Total	16,930	(100%)	22	(100%)	210	(100%)	\$718	(100%)

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. Fires and injuries are rounded to the nearest ten and direct property damage to the nearest million dollars. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 6. Non-Home Fires Involving Electrical Distribution or Lighting Equipment, by Type of Equipment
2012-2016 Annual Averages**

Type of Equipment	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wiring and related equipment	10,140	(60%)	13	(57%)	110	(50%)	\$361	(50%)
Electrical power (utility) line	1,360	(8%)	0	(0%)	0	(1%)	\$23	(3%)
Outlet, receptacle	1,120	(7%)	2	(7%)	10	(6%)	\$37	(5%)
Electrical service supply wires from utility	980	(6%)	0	(0%)	10	(4%)	\$17	(2%)
Panel board, switchboard, circuit breaker board	730	(4%)	2	(7%)	20	(11%)	\$33	(5%)
Electrical branch circuit	720	(4%)	0	(0%)	10	(4%)	\$42	(6%)
Electric meter, meter box	390	(2%)	0	(0%)	0	(2%)	\$24	(3%)
Wiring from meter box to circuit breaker	260	(2%)	2	(9%)	10	(3%)	\$11	(1%)
Unclassified electrical wiring	4,460	(26%)	7	(34%)	40	(20%)	\$170	(24%)
Other known wiring and related equipment	120	(1%)	0	(0%)	0	(1%)	\$5	(1%)
Lamp, bulb or lighting	3,530	(21%)	4	(17%)	50	(22%)	\$107	(15%)
Fluorescent lighting fixture, ballast	960	(6%)	2	(10%)	10	(3%)	\$25	(3%)
Sign	370	(2%)	0	(0%)	0	(1%)	\$6	(1%)
Incandescent lighting fixture	320	(2%)	0	(0%)	0	(2%)	\$9	(1%)
Halogen lighting fixture or lamp	250	(1%)	2	(7%)	0	(0%)	\$8	(1%)
Light bulb	190	(1%)	0	(0%)	0	(1%)	\$2	(0%)
Decorative lights, line voltage	170	(1%)	0	(0%)	0	(1%)	\$6	(1%)
Work light, trouble light	130	(1%)	0	(0%)	10	(5%)	\$8	(1%)
Lamp (tabletop, floor, or desk)	130	(1%)	0	(0%)	10	(3%)	\$5	(1%)
Other known lamp, bulb, or lighting	120	(1%)	0	(0%)	0	(1%)	\$5	(1%)
Unclassified lamp, bulb, or lighting	890	(5%)	0	(0%)	10	(5%)	\$33	(5%)
Transformers and power supplies	2,180	(13%)	1	(4%)	40	(18%)	212	(30%)
Transformer, distribution type	770	(5%)	0	(0%)	10	(2%)	\$28	(4%)
Generator	440	(3%)	1	(4%)	10	(4%)	\$90	(13%)
Battery charger, rectifier	330	(2%)	0	(0%)	0	(2%)	\$16	(2%)
Surge protector	170	(1%)	0	(0%)	0	(2%)	\$19	(3%)
Battery	160	(1%)	0	(0%)	10	(5%)	\$9	(1%)
Low voltage transformer	150	(1%)	0	(0%)	0	(1%)	\$27	(4%)
Other known transformers and power supplies	160	(1%)	0	(0%)	0	(2%)	\$23	(3%)

**Table 6. Non-Home Fires Involving Electrical Distribution or Lighting Equipment, by Type of Equipment
2012-2016 Annual Averages (Continued)**

Type of Equipment	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Cord or plug	1,060	(6%)	5	(22%)	20	(9%)	\$31	(4%)
Extension cord	590	(3%)	3	(13%)	10	(3%)	\$17	(2%)
Unclassified cord or plug	190	(1%)	2	(9%)	0	(1%)	\$7	(1%)
Power cord, plug - detachable from appliance	150	(1%)	0	(0%)	0	(2%)	\$4	(1%)
Power cord, plug - permanently attached	120	(1%)	0	(0%)	10	(3%)	\$3	(0%)
Electric fence	20	(0%)	0	(0%)	0	(0%)	\$6	(1%)
Total	16,930	(100%)	22	(100%)	210	(100%)	\$718	(100%)

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. Fires and injuries are rounded to the nearest ten and direct property damage to the nearest million dollars. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 7. Non-Home Fires Involving Electrical Distribution or Lighting Equipment
by Factor Contributing to Ignition, 2012-2016 Annual Averages**

Factor Contributing to Ignition	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Electrical failure or malfunction	12,780	(75%)	17	(76%)	132	(63%)	\$504	(70%)
Mechanical failure or malfunction	1,600	(9%)	4	(19%)	11	(5%)	\$146	(20%)
Heat source too close to combustibles	950	(6%)	0	(0%)	20	(10%)	\$26	(4%)
Equipment overloaded	260	(2%)	0	(0%)	3	(1%)	\$6	(1%)
Other known factor contributing to ignition	2,190	(13%)	3	(13%)	60	(30%)	\$75	(10%)
Total fires	16,930	(100%)	22	(100%)	211	(100%)	\$718	(100%)
Total factors	17,780	(105%)	24	(107%)	229	(109%)	\$757	(105%)

Note: Fires, deaths, and injuries are rounded to the nearest ten, and direct property damage to the nearest million dollars. Figures reflect a proportional share of home fires with factor contributing to ignition listed as unknown, unreported, none, or blank. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 8. Non-Home Fires Involving Electrical Distribution or Lighting Equipment
by Item First Ignited, 2012-2016**

Item First Ignited	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Electrical wire or cable insulation	6,380	(38%)	0	(0%)	56	(27%)	\$197	(27%)
Structural member or framing	1,680	(10%)	3	(14%)	12	(6%)	\$89	(12%)
Unclassified item first ignited	910	(5%)	0	(0%)	13	(6%)	\$112	(16%)
Exterior wall covering or finish	820	(5%)	0	(0%)	1	(1%)	\$35	(5%)
Flammable or combustible liquids or gases, piping or filter	700	(4%)	4	(18%)	38	(18%)	\$26	(4%)
Unclassified structural component or finish	590	(3%)	5	(22%)	11	(5%)	\$44	(6%)
Interior wall covering, excluding drapes	570	(3%)	2	(10%)	8	(4%)	\$26	(4%)
Insulation within structural area	540	(3%)	0	(0%)	1	(1%)	\$14	(2%)
Transformer or transformer fluids	530	(3%)	0	(0%)	8	(4%)	\$5	(1%)
Exterior roof covering or finish	410	(2%)	0	(0%)	1	(1%)	\$21	(3%)
Interior ceiling cover or finish	360	(2%)	0	(0%)	1	(1%)	\$22	(3%)
Light vegetation including grass	260	(2%)	0	(0%)	0	(0%)	\$2	(0%)
Appliance housing or casing	260	(2%)	0	(0%)	5	(2%)	\$2	(0%)
Other known item first ignited	2,920	(17%)	8	(37%)	55	(26%)	\$123	(17%)
Total	16,930	(100%)	22	(100%)	211	(100%)	\$718	(100%)

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. Fires and injuries are rounded to the nearest ten and direct property damage to the nearest million dollars. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 9. Non-Home Fires Involving Electrical Distribution or Lighting Equipment
by Area of Origin, 2012-2016 Annual Averages**

Area of Origin	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Switchgear area or transformer vault	920	(5%)	0	(0%)	19	(9%)	\$84	(12%)
Exterior wall surface	890	(5%)	0	(0%)	6	(3%)	\$27	(4%)
Wall assembly or concealed space	880	(5%)	1	(4%)	6	(3%)	\$25	(4%)
Garage or vehicle storage area	880	(5%)	2	(7%)	16	(8%)	\$32	(4%)
Unclassified outside area	860	(5%)	0	(0%)	1	(0%)	\$7	(1%)
Unclassified storage area	780	(5%)	0	(0%)	4	(2%)	\$29	(4%)
Attic or ceiling/roof assembly or concealed space	690	(4%)	0	(0%)	2	(1%)	\$39	(5%)
Unclassified equipment or service area	660	(4%)	2	(7%)	6	(3%)	\$31	(4%)
Conduit, pipe, utility, or ventilation shaft	600	(4%)	0	(0%)	2	(1%)	\$8	(1%)
Bedroom	560	(3%)	7	(33%)	17	(8%)	\$11	(2%)
Storage of supplies or tools or dead storage	550	(3%)	0	(0%)	1	(1%)	\$18	(2%)
Kitchen or cooking area	530	(3%)	2	(10%)	4	(2%)	\$18	(2%)
Unclassified area of origin	500	(3%)	0	(0%)	1	(1%)	\$7	(1%)
Exterior roof surface	500	(3%)	0	(0%)	1	(1%)	\$20	(3%)
Ceiling/floor assembly or concealed space	470	(3%)	0	(0%)	7	(4%)	\$31	(4%)
Office	470	(3%)	0	(0%)	8	(4%)	\$31	(4%)
Storage room, area, tank, or bin	430	(3%)	0	(0%)	8	(4%)	\$22	(3%)
Unclassified structural area	420	(3%)	0	(0%)	7	(3%)	\$15	(2%)
Lavatory, bathroom, locker room or check room	340	(2%)	1	(6%)	7	(3%)	\$5	(1%)
Unclassified function area	330	(2%)	2	(9%)	7	(3%)	\$7	(1%)
Sales or showroom area	320	(2%)	0	(0%)	5	(2%)	\$14	(2%)
Crawl space or substructure space	280	(2%)	0	(0%)	2	(1%)	\$11	(2%)
On or near highway, public way or street	270	(2%)	0	(0%)	0	(0%)	\$0	(0%)
Machinery room or area or elevator machinery room	260	(2%)	1	(4%)	5	(2%)	\$7	(1%)
Other known area of origin	3,540	(21%)	4	(18%)	68	(32%)	\$219	(30%)
Total	16,930	(100%)	22	(100%)	211	(100%)	\$718	(100%)

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. Fires and injuries are rounded to the nearest ten and direct property damage to the nearest million dollars. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 10. Non-Home Fires Involving Electrical Distribution or Lighting Equipment
by Heat Source, 2012-2016**

Heat Source	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Arcing	11,500	(68%)	10	(45%)	120	(57%)	\$380	(53%)
Unclassified heat from powered equipment	2,500	(15%)	6	(27%)	40	(19%)	\$218	(30%)
Radiated or conducted heat from operating equipment	1,500	(9%)	0	(0%)	20	(9%)	\$43	(6%)
Spark, ember or flame from operating equipment	700	(4%)	3	(13%)	20	(10%)	\$39	(5%)
Unclassified heat source	300	(2%)	0	(0%)	0	(0%)	\$6	(1%)
Other known heat source	500	(3%)	2	(10%)	10	(5%)	\$32	(4%)
Total	16,930	100%	22	100%	211	100%	\$718	100%

Note: Figures exclude confined fires, which are fires reported as confined to fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. Fires and injuries are rounded to the nearest ten and direct property damage to the nearest million dollars. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 11. Non-Home Fires Involving Electrical Failure or Malfunction
by Month, 2012-2016**

Month	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
January	1,670	(10%)	4	(17%)	19	(9%)	\$68	(11%)
February	1,600	(10%)	2	(8%)	17	(8%)	\$43	(7%)
March	1,490	(9%)	1	(5%)	17	(8%)	\$61	(10%)
April	1,290	(8%)	1	(3%)	15	(7%)	\$51	(8%)
May	1,330	(8%)	2	(9%)	21	(11%)	\$55	(9%)
June	1,330	(8%)	5	(20%)	14	(7%)	\$40	(6%)
July	1,410	(9%)	1	(4%)	16	(8%)	\$55	(9%)
August	1,240	(7%)	1	(6%)	13	(7%)	\$51	(8%)
September	1,200	(7%)	2	(9%)	23	(12%)	\$39	(6%)
October	1,240	(8%)	2	(9%)	13	(6%)	\$44	(7%)
November	1,310	(8%)	1	(4%)	19	(9%)	\$73	(11%)
December	1,430	(9%)	2	(7%)	14	(7%)	\$57	(9%)
Total	16,540	(100%)	23	(100%)	201	(100%)	\$637	(100%)

Note: Fires, deaths, and injuries are rounded to the nearest ten, and direct property damage to the nearest million dollars. Figures reflect a proportional share of home fires with factor contributing to ignition listed as unknown, unreported, none, or blank. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 12. Non-Home Fires Involving Electrical Failure or Malfunction
by Day of Week, 2012-2016 Annual Averages**

Day of Week	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Sunday	2,150	(13%)	2	(8%)	23	(11%)	\$108	(17%)
Monday	2,410	(15%)	1	(4%)	34	(17%)	\$82	(13%)
Tuesday	2,430	(15%)	4	(16%)	29	(14%)	\$97	(15%)
Wednesday	2,470	(15%)	2	(7%)	24	(12%)	\$109	(17%)
Thursday	2,440	(15%)	3	(12%)	30	(15%)	\$78	(12%)
Friday	2,380	(14%)	5	(20%)	22	(11%)	\$76	(12%)
Saturday	2,250	(14%)	7	(31%)	39	(20%)	\$87	(14%)
Totals	16,540	(100%)	23	(100%)	201	(100%)	\$637	(100%)

Note: Fires, deaths, and injuries are rounded to the nearest ten, and direct property damage to the nearest million dollars. Figures reflect a proportional share of home fires with factor contributing to ignition listed as unknown, unreported, none, or blank. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 13. Non-Home Fires Involving Electrical Failure or Malfunction
by Time of Day, 2012-2016 Annual Averages**

Time of Day	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Midnight–12:59 a.m.	480	(3%)	2	(9%)	10	(5%)	\$23	(4%)
1:00–1:59 a.m.	450	(3%)	2	(9%)	4	(2%)	\$32	(5%)
2:00–2:59 a.m.	400	(2%)	2	(10%)	7	(4%)	\$30	(5%)
3:00–3:59 a.m.	400	(2%)	3	(12%)	3	(2%)	\$37	(6%)
4:00–4:59 a.m.	410	(2%)	0	(0%)	5	(2%)	\$35	(6%)
5:00–5:59 a.m.	440	(3%)	4	(17%)	8	(4%)	\$19	(3%)
6:00–6:59 a.m.	570	(3%)	0	(0%)	7	(3%)	\$23	(4%)
7:00–7:59 a.m.	650	(4%)	0	(0%)	9	(5%)	\$25	(4%)
8:00–8:59 a.m.	770	(5%)	0	(0%)	8	(4%)	\$20	(3%)
9:00–9:59 a.m.	830	(5%)	0	(0%)	12	(6%)	\$18	(3%)
10:00–10:59 a.m.	850	(5%)	0	(0%)	12	(6%)	\$25	(4%)
11:00–11:59 a.m.	890	(5%)	0	(0%)	14	(7%)	\$31	(5%)
12:00–12:59 p.m.	890	(5%)	1	(3%)	11	(5%)	\$27	(4%)
1:00–1:59 p.m.	910	(5%)	0	(0%)	14	(7%)	\$19	(3%)
2:00–2:59 p.m.	930	(6%)	1	(4%)	15	(8%)	\$37	(6%)
3:00–3:59 p.m.	850	(5%)	0	(0%)	5	(3%)	\$25	(4%)
4:00–4:59 p.m.	830	(5%)	0	(0%)	12	(6%)	\$19	(3%)
5:00–5:59 p.m.	800	(5%)	3	(13%)	9	(4%)	\$18	(3%)
6:00–6:59 p.m.	800	(5%)	0	(0%)	5	(2%)	\$42	(7%)
7:00–7:59 p.m.	820	(5%)	0	(0%)	10	(5%)	\$25	(4%)
8:00–8:59 p.m.	790	(5%)	1	(3%)	5	(2%)	\$25	(4%)
9:00–9:59 p.m.	680	(4%)	1	(3%)	8	(4%)	\$22	(3%)
10:00–10:59 p.m.	590	(4%)	2	(7%)	5	(3%)	\$29	(4%)
11:00–11:59 p.m.	520	(3%)	2	(11%)	3	(2%)	\$29	(4%)
Total	16,540	(100%)	23	(100%)	201	(100%)	\$637	(100%)

Note: Fires, deaths, and injuries are rounded to the nearest ten, and direct property damage to the nearest million dollars. Figures reflect a proportional share of home fires with factor contributing to ignition listed as unknown, unreported, none, or blank. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 14. Non-Home Fires Involving Electrical Failure or Malfunction, by Property Use
2012-2016 Annual Averages**

Property Use	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Mercantile or business	3,850	(23%)	1	(2%)	42	(21%)	\$164	(26%)
Residential	3,030	(18%)	19	(82%)	46	(23%)	\$98	(15%)
Storage	2,800	(17%)	1	(4%)	30	(15%)	\$92	(14%)
Public assembly	2,060	(12%)	0	(0%)	19	(9%)	\$82	(13%)
Outside or special property	1,730	(10%)	1	(4%)	8	(4%)	\$20	(3%)
Health care, detention, or correction	870	(5%)	2	(7%)	25	(13%)	\$19	(3%)
Manufacturing or processing	810	(5%)	1	(3%)	19	(9%)	\$71	(11%)
Educational	670	(4%)	0	(0%)	12	(6%)	\$12	(2%)
Industrial, utility, defense, agriculture, mining	580	(4%)	1	(4%)	4	(2%)	\$87	(14%)
Other or unclassified	470	(3%)	1	(3%)	7	(3%)	\$10	(2%)
Total	16,540	(100%)	23	(100%)	201	(100%)	\$637	(100%)

Note: Fires, deaths, and injuries are rounded to the nearest ten, and direct property damage to the nearest million dollars. Figures reflect a proportional share of home fires with factor contributing to ignition listed as unknown, unreported, none, or blank. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 15. Non-Home Fires Involving Electrical Failure or Malfunction
by Equipment Involved in Ignition, 2012-2016**

Equipment Involved	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Electrical distribution and lighting equipment	9,020	(55%)	13	(56%)	90	(46%)	\$395	(62%)
Wiring and related equipment	5,940	(36%)	7	(28%)	50	(27%)	\$220	(34%)
Lamp, bulb or lighting	1,580	(10%)	2	(8%)	10	(7%)	\$58	(9%)
Transformers and power supplies	840	(5%)	0	(0%)	10	(7%)	\$91	(14%)
Cord or plug	650	(4%)	4	(19%)	10	(5%)	\$21	(3%)
Other known electrical distribution or lighting equipment	10	(0%)	0	(0%)	0	(0%)	\$5	(1%)
Heating equipment	1,210	(7%)	2	(10%)	10	(6%)	\$39	(6%)
Fixed or portable space heater	380	(2%)	2	(10%)	10	(4%)	\$33	(5%)
Confined fuel burner or boiler fire	290	(2%)	0	(0%)	0	(2%)	\$1	(0%)
Water heater	170	(1%)	0	(0%)	0	(1%)	\$2	(0%)
Heat lamp	150	(1%)	0	(0%)	0	(0%)	\$2	(0%)
Other known heating equipment	200	(1%)	0	(0%)	0	(0%)	\$2	(0%)
Cooking equipment	1,200	(7%)	0	(0%)	10	(6%)	\$6	(1%)
Confined cooking fire	880	(5%)	0	(0%)	0	(2%)	\$1	(0%)
Other known cooking equipment	330	(2%)	0	(0%)	10	(4%)	\$5	(1%)
Fan	880	(5%)	0	(0%)	10	(5%)	\$26	(4%)
Air conditioner	520	(3%)	5	(19%)	10	(7%)	\$15	(2%)
Unclassified equipment involved in ignition	470	(3%)	0	(0%)	10	(5%)	\$19	(3%)
Refrigerator or refrigerator/freezer	400	(2%)	2	(9%)	0	(1%)	\$15	(2%)
Contained trash or rubbish fire	260	(2%)	0	(0%)	0	(1%)	\$0	(0%)
No equipment involved in ignition	240	(1%)	1	(6%)	0	(1%)	\$9	(1%)
Clothes dryer	190	(1%)	0	(0%)	0	(1%)	\$2	(0%)
Confined incinerator overload or malfunction fire	140	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Computer	120	(1%)	0	(0%)	0	(0%)	\$2	(0%)
Freezer when separate from refrigerator	110	(1%)	0	(0%)	0	(2%)	\$2	(0%)
Torch, burner or soldering iron	100	(1%)	0	(0%)	0	(1%)	\$3	(1%)
Air compressor	90	(1%)	0	(0%)	0	(0%)	\$6	(1%)
Other known equipment involved in ignition	1,610	(10%)	0	(0%)	40	(19%)	\$97	(15%)
Total	16,540	(100%)	23	(100%)	200	(100%)	\$637	(100%)

Note: Fires, deaths, and injuries are rounded to the nearest ten, and direct property damage to the nearest million dollars. Figures reflect a proportional share of home fires with factor contributing to ignition listed as unknown, unreported, none, or blank. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

**Table 16. Non-Home Fires Involving Electrical Failure or Malfunction
by Factor Contributing to Ignition, 2012-2016 Annual Averages**

Factor Contributing to Ignition	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Unclassified electrical failure or malfunction	8,930	(54%)	15	(63%)	80	(39%)	\$369	(58%)
Non-confined	7,960	(48%)	15	(63%)	70	(37%)	\$368	(58%)
Confined	980	(6%)	0	(0%)	0	(2%)	\$1	(0%)
Water caused short-circuit arc	410	(2%)	0	(0%)	0	(1%)	\$8	(1%)
Non-confined	370	(2%)	0	(0%)	0	(1%)	\$8	(1%)
Confined	30	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Short circuit arc from mechanical damage	570	(3%)	0	(0%)	10	(3%)	\$23	(4%)
Non-confined	500	(3%)	0	(0%)	10	(3%)	\$23	(4%)
Confined	70	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Short circuit arc from defective or worn insulation	1,220	(7%)	3	(12%)	20	(8%)	\$28	(4%)
Non-confined	1,140	(7%)	3	(12%)	20	(8%)	\$28	(4%)
Confined	80	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Unspecified short-circuit arc	3,500	(21%)	7	(30%)	70	(34%)	\$152	(24%)
Non-confined	3,280	(20%)	7	(30%)	60	(32%)	\$152	(24%)
Confined	220	(1%)	0	(0%)	0	(2%)	\$0	(0%)
Arc from faulty contact or broken conductor	640	(4%)	0	(0%)	10	(5%)	\$14	(2%)
Non-confined	590	(4%)	0	(0%)	10	(5%)	\$14	(2%)
Confined	40	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Arc or spark from operating equipment	1,270	(8%)	1	(3%)	20	(12%)	\$46	(7%)
Non-confined	980	(6%)	1	(3%)	20	(11%)	\$46	(7%)
Confined	280	(2%)	0	(0%)	0	(2%)	\$0	(0%)
Fluorescent light ballast	330	(2%)	0	(0%)	0	(1%)	\$15	(2%)
Non-confined	330	(2%)	0	(0%)	0	(1%)	\$15	(2%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Total fires	16,540	(100%)	23	(100%)	200	(100%)	637	(100%)
Non-confined	14,840	(90%)	23	(100%)	190	(94%)	635	(100%)
Confined	1,700	(10%)	0	(0%)	10	(6%)	2	(0%)
Total factors	16,860	(102%)	25	(108%)	210	(104%)	\$656	(103%)
Non-confined	15,150	(92%)	25	(108%)	200	(98%)	\$654	(103%)
Confined	1,710	(10%)	0	(0%)	10	(6%)	\$2	(0%)

Note: Fires, deaths, and injuries are rounded to the nearest ten, and direct property damage to the nearest million dollars. Figures reflect a proportional share of home fires with factor contributing to ignition listed as unknown, unreported, none, or blank. Totals may not equal sums because of rounding error.

Source: Data from NFIRS Version 5.0 and NFPA Fire Experience Survey.

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