

# Nonresidential Building Fire Trends (2009-2018)

Fire estimate summaries present basic data on the size and status of the fire problem in the United States as depicted through data reported to the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System (NFIRS). Each Fire Estimate Summary addresses the size of the specific fire or fire-related issue and highlights important trends in the data. Note: Fire estimate summaries are based on the USFA's "National Estimates Methodology for Building Fires and Losses" ([https://www.usfa.fema.gov/downloads/pdf/statistics/national\\_estimate\\_methodology.pdf](https://www.usfa.fema.gov/downloads/pdf/statistics/national_estimate_methodology.pdf)). The USFA is committed to providing the best and most current information on the U.S. fire problem and, as a result, continually examines its data and methodology. Because of this commitment, changes to data collection strategies and estimate methodologies occur, causing estimates to change slightly over time. Previous estimates on specific issues (or similar issues) may have been a result of different methodologies or data definitions used and may not be directly comparable to current estimates.

National estimates for nonresidential building fires and losses in 2018, the most recent year for which data are available, are as follows:

- ❶ Fires: 103,600.
- ❷ Deaths: 85.
- ❸ Injuries: 1,025.
- ❹ Dollar loss: \$2,656,600,000.

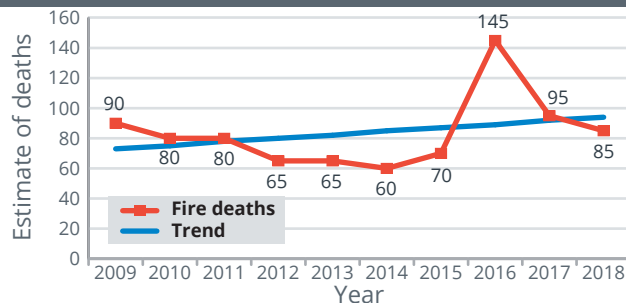
Overall trends for nonresidential building fires and losses for the 10-year period of 2009 to 2018 show the following:

- ❶ A 26% increase in fires.
- ❷ A 30% increase in deaths. In 2016, in Oakland, California, a fire at a former warehouse that had been converted to mixed-use properties with an assembly area contributed to the peak in fire deaths. Thirty-five fire deaths were reported to the NFIRS as a result of this incident. Excluding these 35 deaths from the 10-year trend analysis results in an overall 16% increase in nonresidential building fire deaths.
- ❸ A 15% decrease in injuries.
- ❹ A 6% decrease in dollar loss. (Note: This overall constant dollar-loss trend takes inflation into account by adjusting each year's dollar loss to its equivalent 2018 value.)

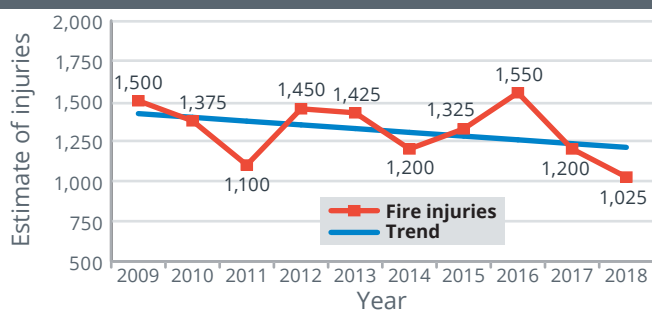
### Nonresidential building fires



### Nonresidential building fire deaths

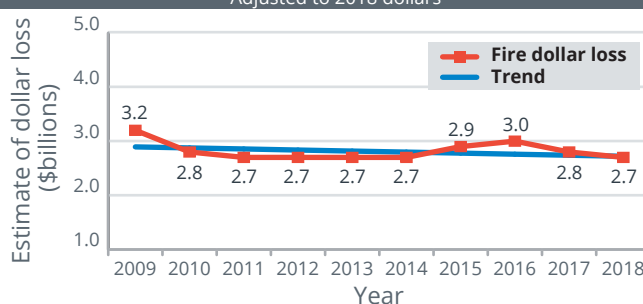


### Nonresidential building fire injuries



### Nonresidential building fire dollar loss

Adjusted to 2018 dollars



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# Nonresidential Building Fire Causes (2009-2018)

Fire estimate summaries present basic data on the size and status of the fire problem in the United States as depicted through data reported to the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System (NFIRS). Each Fire Estimate Summary addresses the size of the specific fire or fire-related issue and highlights important trends in the data. Note: Fire estimate summaries are based on the USFA's "National Estimates Methodology for Building Fires and Losses" ([https://www.usfa.fema.gov/downloads/pdf/statistics/national\\_estimate\\_methodology.pdf](https://www.usfa.fema.gov/downloads/pdf/statistics/national_estimate_methodology.pdf)). The USFA is committed to providing the best and most current information on the U.S. fire problem and, as a result, continually examines its data and methodology. Because of this commitment, changes to data collection strategies and estimate methodologies occur, causing estimates to change slightly over time. Previous estimates on specific issues (or similar issues) may have been a result of different methodologies or data definitions used and may not be directly comparable to current estimates.

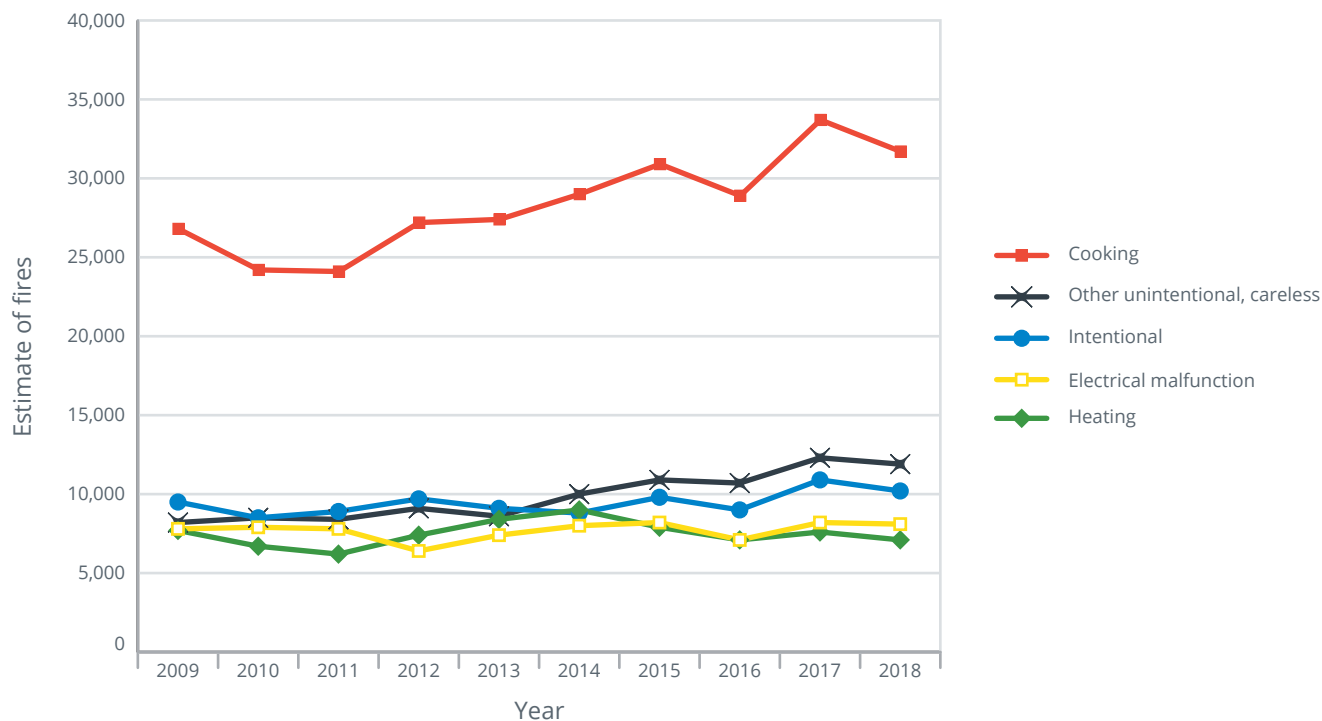
National estimates for the leading causes of fires in nonresidential buildings for 2018, the most recent year for which data are available, are as follows:

1. Cooking: 31,700 fires.
2. Other unintentional, careless: 11,900 fires.
3. Intentional: 10,200 fires.

Overall trends in the leading fire causes for the 10-year period of 2009 to 2018 show the following:

- Cooking as the leading cause of nonresidential building fires for the 10-year period.
- A 33% increase in nonresidential cooking fires. This increase may be due to an NFIRS coding edit implemented in 2012.
- A 55% increase in nonresidential other unintentionally or carelessly set fires.
- A 15% increase in nonresidential intentionally set fires.

Leading causes of nonresidential building fires (2009-2018)



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# Nonresidential Building Fire Dollar-Loss Causes (2009-2018)

Fire estimate summaries present basic data on the size and status of the fire problem in the United States as depicted through data reported to the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System. Each Fire Estimate Summary addresses the size of the specific fire or fire-related issue and highlights important trends in the data. Note: Fire estimate summaries are based on the USFA's "National Estimates Methodology for Building Fires and Losses" ([https://www.usfa.fema.gov/downloads/pdf/statistics/national\\_estimate\\_methodology.pdf](https://www.usfa.fema.gov/downloads/pdf/statistics/national_estimate_methodology.pdf)). The USFA is committed to providing the best and most current information on the U.S. fire problem and, as a result, continually examines its data and methodology. Because of this commitment, changes to data collection strategies and estimate methodologies occur, causing estimates to change slightly over time. Previous estimates on specific issues (or similar issues) may have been a result of different methodologies or data definitions used and may not be directly comparable to current estimates.

National estimates for the leading causes of nonresidential building fire dollar loss for 2018, the most recent year for which data are available, are as follows:

1. Other unintentional, careless: \$505,900,000.
2. Electrical malfunction: \$373,400,000.
3. Other equipment: \$350,600,000.

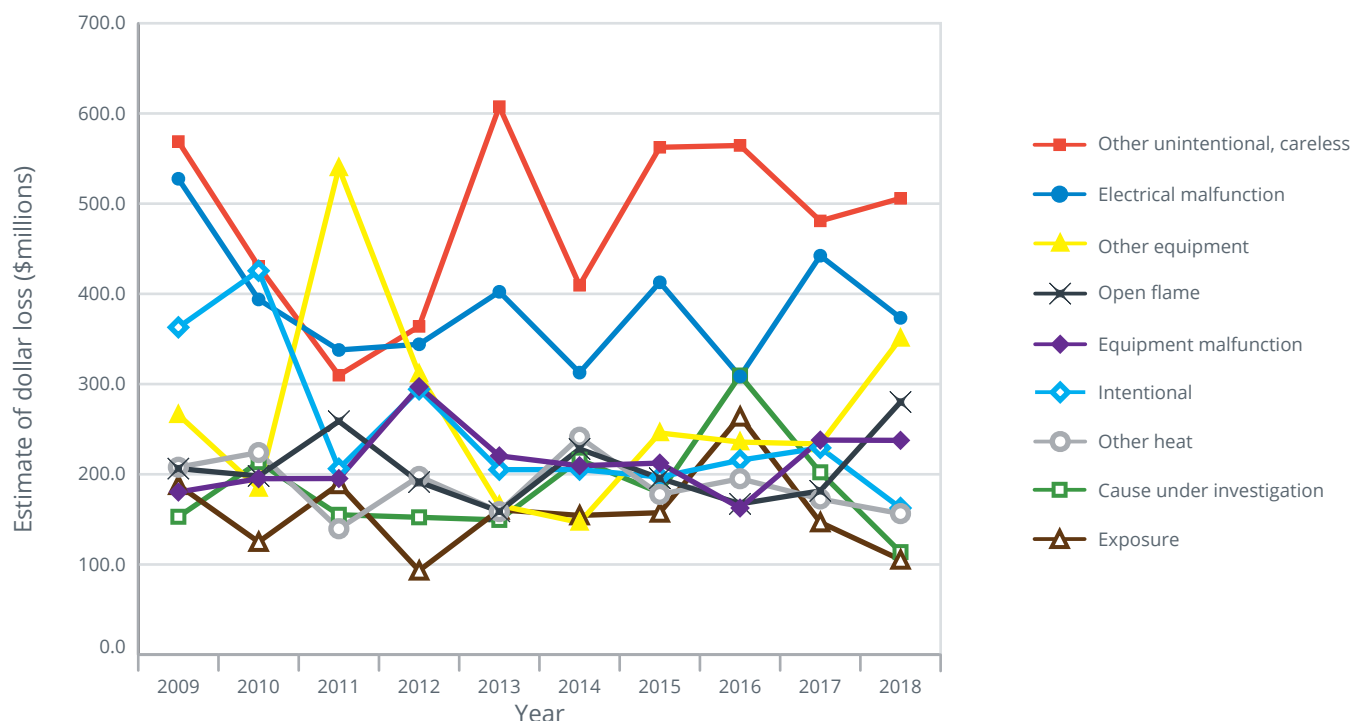
Overall trends in the leading causes of fire dollar loss for the 10-year period of 2009 to 2018 show the following:

- An 18% increase in nonresidential other unintentionally or carelessly set fire dollar loss.
- A 14% decrease in nonresidential electrical malfunction fire dollar loss.
- A 12% decrease in nonresidential other equipment fire dollar loss.

Note: The overall constant dollar-loss trends take inflation into account by adjusting each year's dollar loss to its equivalent 2018 value.

Leading causes of nonresidential building fire dollar loss (2009-2018)

Adjusted to 2018 dollars



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# Nonresidential Building Cooking Fire Trends (2009-2018)

Fire estimate summaries present basic data on the size and status of the fire problem in the United States as depicted through data reported to the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System (NFIRS). Each Fire Estimate Summary addresses the size of the specific fire or fire-related issue and highlights important trends in the data. Note: Fire estimate summaries are based on the USFA's "National Estimates Methodology for Building Fires and Losses" ([https://www.usfa.fema.gov/downloads/pdf/statistics/national\\_estimate\\_methodology.pdf](https://www.usfa.fema.gov/downloads/pdf/statistics/national_estimate_methodology.pdf)). The USFA is committed to providing the best and most current information on the U.S. fire problem and, as a result, continually examines its data and methodology. Because of this commitment, changes to data collection strategies and estimate methodologies occur, causing estimates to change slightly over time. Previous estimates on specific issues (or similar issues) may have been a result of different methodologies or data definitions used and may not be directly comparable to current estimates.

National estimates for nonresidential building cooking fires and loss for 2018, the most recent year for which data are available, are as follows:

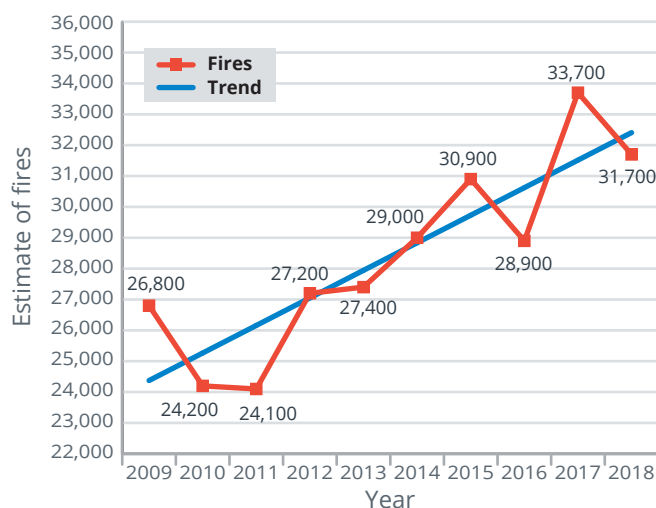
- 🔥 Fires: 31,700.
- 💰 Dollar loss: \$51,700,000.

Overall trends for nonresidential building cooking fires and loss for the 10-year period of 2009 to 2018 show the following:

- 🔥 A 33% increase in fires. This increase may be due to an NFIRS coding edit implemented in 2012.
- 💰 A 6% decrease in dollar loss. (Note: This overall constant dollar-loss trend takes inflation into account by adjusting each year's dollar loss to its equivalent 2018 value.)

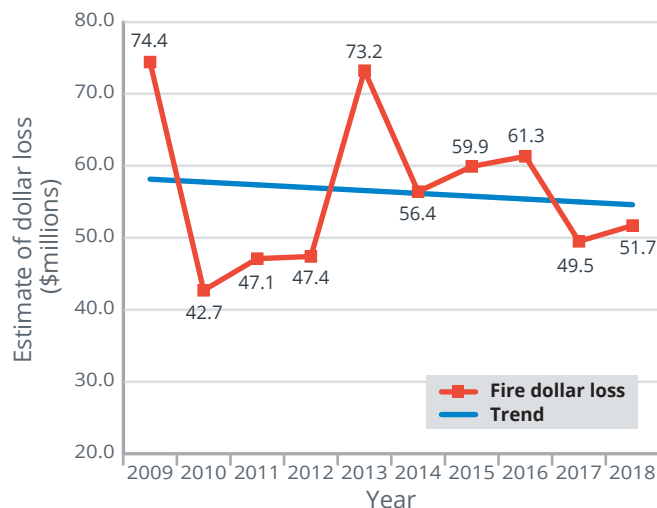
Deaths and injuries by individual causes are not shown, as small numbers of nonresidential building casualties are reported to the NFIRS, and a large number of the fires that caused these casualties have insufficient information to determine fire cause.

### Nonresidential building cooking fires



### Nonresidential building cooking fire dollar loss

Adjusted to 2018 dollars



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# Nonresidential Building Other Unintentional, Careless Fire Trends (2009-2018)

Fire estimate summaries present basic data on the size and status of the fire problem in the United States as depicted through data reported to the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System (NFIRS). Each Fire Estimate Summary addresses the size of the specific fire or fire-related issue and highlights important trends in the data. Note: Fire estimate summaries are based on the USFA's "National Estimates Methodology for Building Fires and Losses" ([https://www.usfa.fema.gov/downloads/pdf/statistics/national\\_estimate\\_methodology.pdf](https://www.usfa.fema.gov/downloads/pdf/statistics/national_estimate_methodology.pdf)). The USFA is committed to providing the best and most current information on the U.S. fire problem and, as a result, continually examines its data and methodology. Because of this commitment, changes to data collection strategies and estimate methodologies occur, causing estimates to change slightly over time. Previous estimates on specific issues (or similar issues) may have been a result of different methodologies or data definitions used and may not be directly comparable to current estimates.

National estimates for nonresidential building other unintentional, careless fires and loss for 2018, the most recent year for which data are available, are as follows:

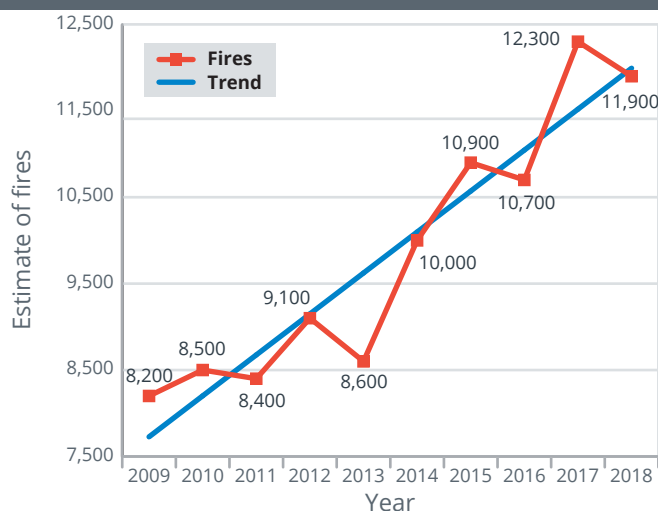
- 🔥 Fires: 11,900.
- 🔥 Dollar loss: \$505,900,000.

Overall trends for nonresidential building other unintentional, careless fires and loss for the 10-year period of 2009 to 2018 show the following:

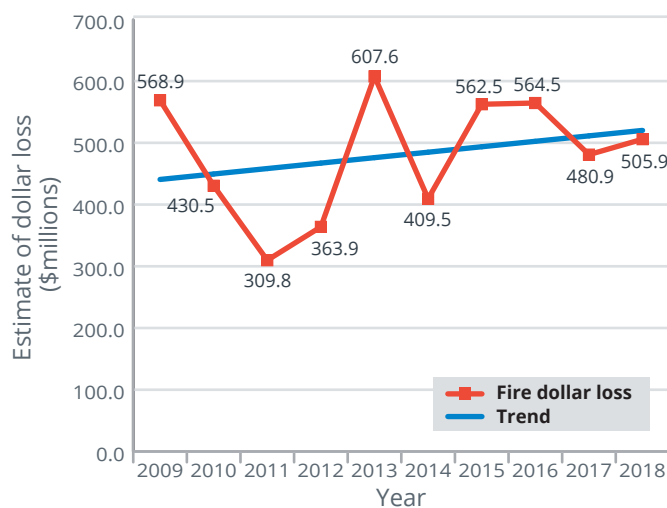
- 🔥 A 55% increase in fires.
- 🔥 An 18% increase in dollar loss. A \$100,000,000 West, Texas, fertilizer plant fire and a \$40,000,000 Burlington, Wisconsin, manufacturing plant fire contributed to the 2013 dollar-loss peak. A \$31,000,000 reported fire in a Los Angeles, California, religious property and a \$25,250,000 reported warehouse fire in Hopkins, Minnesota, contributed to the 2015 and 2016 dollar-loss peaks, respectively. (Note: This overall constant dollar-loss trend takes inflation into account by adjusting each year's dollar loss to its equivalent 2018 value.)

Deaths and injuries by individual causes are not shown, as small numbers of nonresidential building casualties are reported to the NFIRS, and a large number of the fires that caused these casualties have insufficient information to determine fire cause.

**Nonresidential building other unintentional,  
careless fires**



**Nonresidential building other unintentional,  
careless fire dollar loss**  
Adjusted to 2018 dollars



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# Nonresidential Building Heating Fire Trends (2009-2018)

Fire estimate summaries present basic data on the size and status of the fire problem in the United States as depicted through data reported to the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System (NFIRS). Each Fire Estimate Summary addresses the size of the specific fire or fire-related issue and highlights important trends in the data. Note: Fire estimate summaries are based on the USFA's "National Estimates Methodology for Building Fires and Losses" ([https://www.usfa.fema.gov/downloads/pdf/statistics/national\\_estimate\\_methodology.pdf](https://www.usfa.fema.gov/downloads/pdf/statistics/national_estimate_methodology.pdf)). The USFA is committed to providing the best and most current information on the U.S. fire problem and, as a result, continually examines its data and methodology. Because of this commitment, changes to data collection strategies and estimate methodologies occur, causing estimates to change slightly over time. Previous estimates on specific issues (or similar issues) may have been a result of different methodologies or data definitions used and may not be directly comparable to current estimates.

National estimates for nonresidential building heating fires and loss for 2018, the most recent year for which data are available, are as follows:

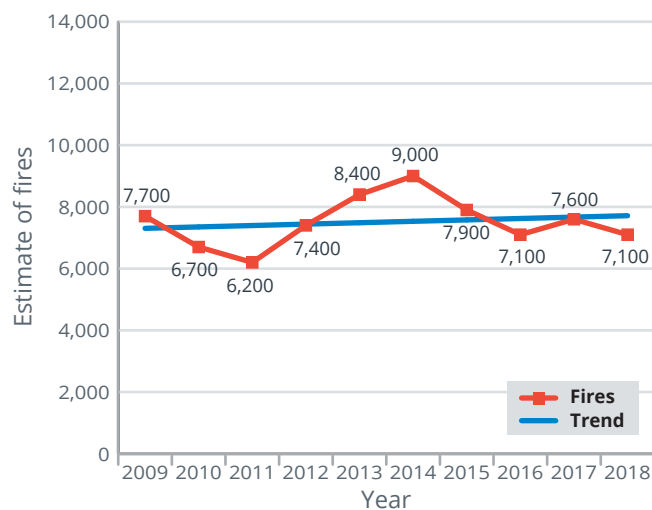
- 🔍 Fires: 7,100.
- 🔍 Dollar loss: \$79,900,000.

Overall trends for nonresidential building heating fires and loss for the 10-year period of 2009 to 2018 show the following:

- 🔍 A 6% increase in fires.
- 🔍 A 3% decrease in dollar loss. (Note: This overall constant dollar-loss trend takes inflation into account by adjusting each year's dollar loss to its equivalent 2018 value.)

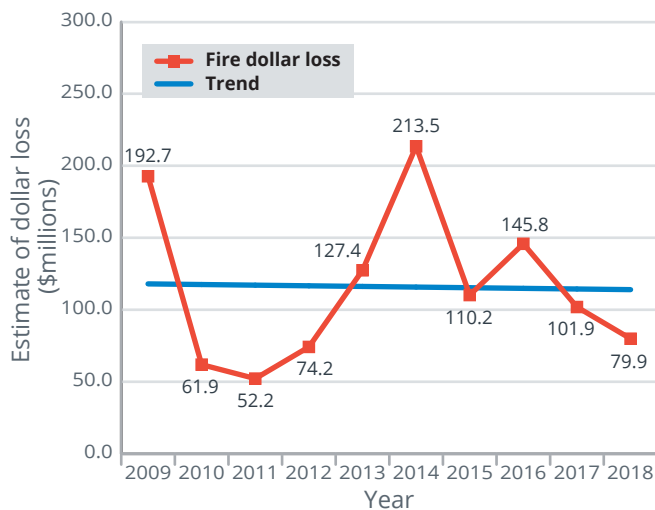
Deaths and injuries by individual causes are not shown, as small numbers of nonresidential building casualties are reported to the NFIRS, and a large number of the fires that caused these casualties have insufficient information to determine fire cause.

### Nonresidential building heating fires



### Nonresidential building heating fire dollar loss

Adjusted to 2018 dollars



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# Nonresidential Building Intentional Fire Trends (2009-2018)

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National estimates for nonresidential building intentional fires and loss for 2018, the most recent year for which data are available, are as follows:

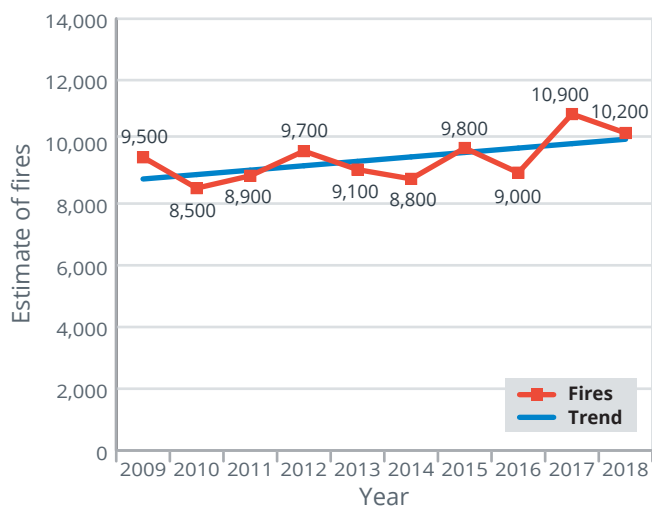
- 🔥 Fires: 10,200.
- 💰 Dollar loss: \$162,600,000.

Overall trends for nonresidential building intentional fires and loss for the 10-year period of 2009 to 2018 show the following:

- 🔥 A 15% increase in fires.
- 💰 A 54% decrease in dollar loss. (Note: This overall constant dollar-loss trend takes inflation into account by adjusting each year's dollar loss to its equivalent 2018 value.)

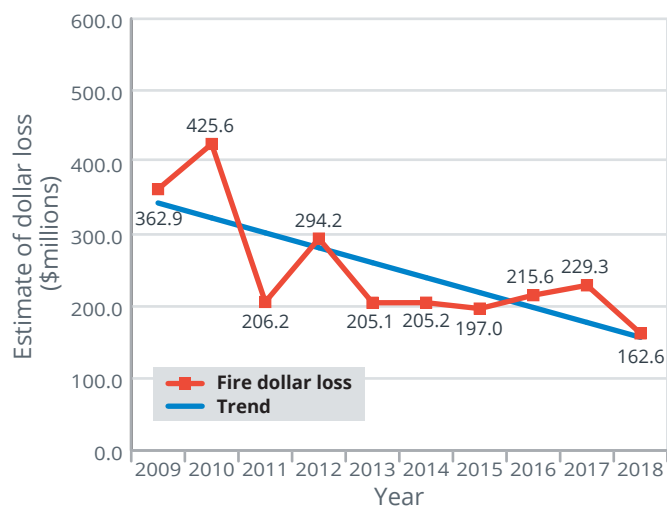
Deaths and injuries by individual causes are not shown, as small numbers of nonresidential building casualties are reported to the NFIRS, and a large number of the fires that caused these casualties have insufficient information to determine fire cause.

**Nonresidential building intentional fires**



**Nonresidential building intentional fire dollar loss**

Adjusted to 2018 dollars



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# Nonresidential Building Other Equipment Fire Trends (2009-2018)

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National estimates for nonresidential building other equipment fires and loss for 2018, the most recent year for which data are available, are as follows:

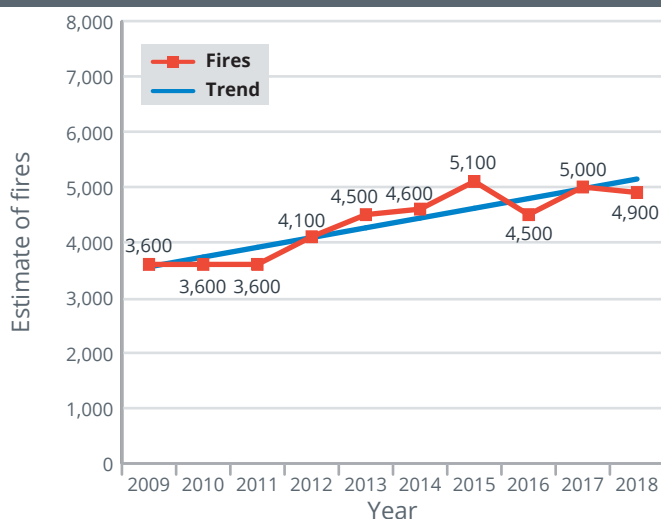
- 🔥 Fires: 4,900.
- 💰 Dollar loss: \$350,600,000.

Overall trends for nonresidential building other equipment fires and loss for the 10-year period of 2009 to 2018 show the following:

- 🔥 A 45% increase in fires.
- 💰 A 12% decrease in dollar loss. Multiple high dollar-loss fires, including a \$110,000,000 reported Arkansas manufacturing fire, contributed to the 2011 dollar-loss peak. A \$100,500,000 transmitter building fire in Tustin, Michigan, contributed to the 2018 dollar-loss increase. (Note: This overall constant dollar-loss trend takes inflation into account by adjusting each year's dollar loss to its equivalent 2018 value.)

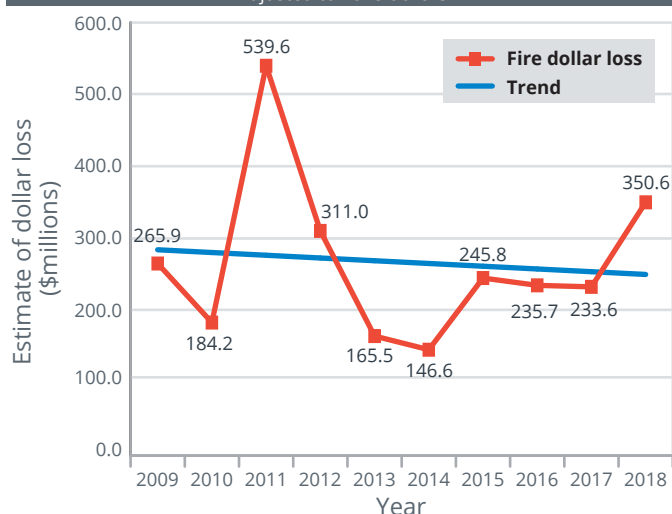
Deaths and injuries by individual causes are not shown, as small numbers of nonresidential building casualties are reported to the NFIRS, and a large number of the fires that caused these casualties have insufficient information to determine fire cause.

Nonresidential building other equipment fires



Nonresidential building other equipment  
fire dollar loss

Adjusted to 2018 dollars



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# Nonresidential Building Electrical Malfunction Fire Trends (2009-2018)

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National estimates for nonresidential building electrical malfunction fires and loss for 2018, the most recent year for which data are available, are as follows:

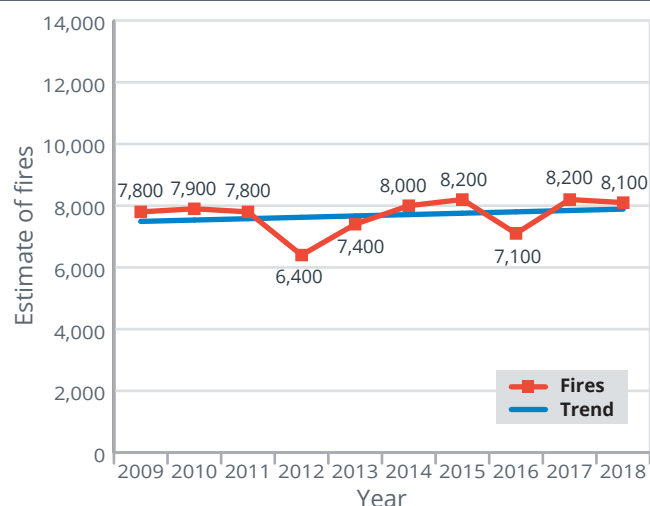
- 🔦 Fires: 8,100.
- 💰 Dollar loss: \$373,400,000.

Overall trends for nonresidential building electrical malfunction fires and loss for the 10-year period of 2009 to 2018 show the following:

- 🔦 A 5% increase in fires.
- 💰 A continued decline from 2009 to 2011 and the 2014 and 2016 lows contributing to an overall 14% decrease in dollar loss. (Note: This overall constant dollar-loss trend takes inflation into account by adjusting each year's dollar loss to its equivalent 2018 value.)

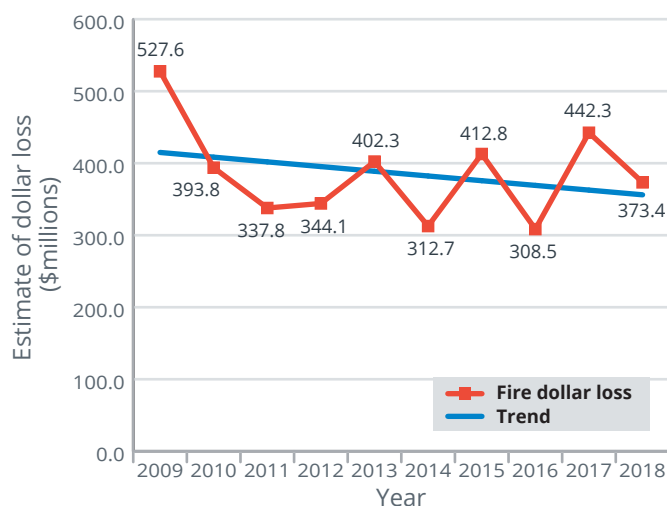
Deaths and injuries by individual causes are not shown, as small numbers of nonresidential building casualties are reported to the NFIRS, and a large number of the fires that caused these casualties have insufficient information to determine fire cause.

**Nonresidential building electrical malfunction fires**



**Nonresidential building electrical malfunction fire dollar loss**

Adjusted to 2018 dollars



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