

NFPA[®]

551

Guide for the Evaluation of Fire Risk Assessments

2019



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NFPA® 551

Guide for the

Evaluation of Fire Risk Assessments

2019 Edition

This edition of NFPA 551, *Guide for the Evaluation of Fire Risk Assessments*, was prepared by the Technical Committee on Fire Risk Assessment Methods. It was issued by the Standards Council on March 15, 2018, with an effective date of April 4, 2018, and supersedes all previous editions.

This edition of NFPA 551 was approved as an American National Standard on April 4, 2018.

Origin and Development of NFPA 551

In the mid-1990s, it was recognized that the application of fire risk assessment methods in developing fire and life safety solutions continued to increase. However, a set of rules or a framework that described the properties of an acceptable fire risk assessment method was lacking. Additionally, there were no guidance documents available to those responsible for approving or evaluating fire and life safety solutions that were based on a fire risk assessment. In response, NFPA established a new project and technical committee on fire risk assessment methods in 1999. NFPA 551, 2004 edition, was the first document prepared by the committee in response to the growing need for guidance documents on fire risk assessment methods.

The 2007 edition included a number of enhancements, and new information on the subject. Certain terms were revised for consistency with other documents that address performance-based design and fire risk assessment methods, and further guidance was provided on applying risk-informed decision making for various fire safety goals, including the preservation of cultural resources. More detail on selecting fire scenarios; identifying and grouping representative challenging scenarios into clusters for conducting more effective consequence analysis; addressing uncertainty; and the impact of the changing effectiveness of fire protection equipment, features, programs, and procedures were added. The capabilities of those conducting a fire risk assessment, the key factors to consider when conducting or reviewing a fire risk assessment, and the role of an operations and maintenance manual were addressed. An expanded discussion on the role of qualitative, semiquantitative likelihood, semiquantitative consequence, and quantitative methods in a fire risk assessment and cost-benefit analysis was included, as was more detail on proper documentation and elements of a fire risk assessment, and the importance of using checklists that address both likelihood and consequence.

The 2010 edition contained a reorganization of Chapter 7 to provide further guidance on documentation requirements for the fire risk assessment concept report.

The 2013 edition included minor updates to add explosions to the list of fire stimuli in Chapter 4.

The 2016 edition was a reconfirmation of the 2013 edition, with minor updates. It introduced a new definition of the term *hazard*, used throughout the document, as well as updates to other definitions and referenced publications.

The 2019 edition is a reconfirmation of the 2016 edition, with minor additions. Explanatory material is added to refer the user to documents that provide additional guidance. These documents are added to Annex B.