



RESEARCH FOUNDATION

RESEARCH FOR THE NFPA MISSION

PROJECT SUMMARY

Fire Safety in the United States

13 April 2020

Background: Data shows that there has been little change in the overall fire safety in the United States over the last 40 years. Every 24 seconds in the U.S., a fire department responds to a fire, a civilian dies in a fire every 2 hours and 34 minutes, and a civilian dies in a home fire every 3 hours and 20 minutes. Overall, the fire safety community has had success but there is still work to do.

Improvement in fire safety can be documented through data, but it is more difficult to pinpoint what caused these improvements. Smoke alarms, sprinklers, construction materials and methods, public education, improvement in consumer goods, etc. have all been given credit but a holistic analysis of the current status of fire safety and the various impacts has not been attempted.

The [NFPA Fire & Life Safety Ecosystem](#) is a framework for safety made up of eight key elements that play a critical role in fire, life, and electrical safety. Based on available data, this project will use the Ecosystem framework to identify successes and failures in the cogs including the role of the interaction of the cogs. Increasing the understanding of what has impacted fire safety will help identify what needs to be done to continue improving all aspects of fire and life safety.

The result of this holistic analysis will be discussed with stakeholders during a workshop and the outcome of this will be reflected in the final report.

Research Goal: Using the eight key elements of the NFPA Fire & Life Safety Ecosystem, document the progress in fire safety in the U.S., assess the drivers of this progress, and identify holistic recommendations to effect additional progress toward fire and life safety.

Project Tasks:

Task 1 - Form Project Technical Panel – The Foundation will form and administer an advisory project technical panel of 8 to 10 technical experts to provide feedback to the work during its entire duration including review of draft deliverables. Meetings of the panel will be by conference call on an as needed basis.

Task 2 – Identify Factors of Change – NFPA Applied Research will develop a timeline of significant events in fire and life safety, which could include policy changes, widespread education campaigns, watershed reports such as America Burning, and any other relevant events.

Task 3 – Data Analysis – Using the Fire & Life Safety Ecosystem as a framework, NFPA Applied Research will conduct a benchmarking exercise with the goal to examine the progress that the fire safety community has made in the past 40 years. This analysis will be based on available data from NFIRS as well as data gathered by NFPA. Based on the results of the data analysis and the timeline from Task 2, suggest links between these events and any changes that are shown in the data. The findings from this exercise will serve as input for the workshop as well as the basis for any recommendations.

Task 4 – Draft Interim Report – Based on the findings from Task 2 and Task 3, NFPA Applied Research will develop a comprehensive draft interim report to review with the panel ahead of the workshop.

Task 5 - Workshop - The materials developed in the previous tasks will be further evaluated, discussed, and refined at three stages: (1) Pre-Workshop, (2) During the Workshop, and (3) Post-Workshop.

- Pre-Workshop Review - All baseline materials, including the draft interim report, established in the previous tasks shall be reviewed by the project technical panel via conference call in preparation for the workshop. Any feedback received from the panel shall be modified or further refined prior to the stakeholder workshop.
- Workshop - With input from NFPA staff, project technical panel, and constituent groups, the Foundation will plan and conduct a face-to-face workshop with the goal to obtain feedback from a group of diverse stakeholders. The logistical details for the workshop include identifying and coordinating representatives from the constituent groups and other stakeholder participants from relevant backgrounds, the workshop venue, and overall workshop facilitation will be directly handled by the Foundation. During the workshop the findings from previous tasks will be discussed and the participants will have an opportunity to provide feedback, which will be used as input into the project recommendations.
- Post-Workshop: The Foundation will document the workshop activity and publish the workshop proceedings as part of the final report.

Task 6 - Final Report – NFPA Applied Research will develop a draft final report that includes the content from all tasks, feedback from the workshop, as well as recommendations for actions to further effect fire and life safety in the U.S. The draft final report will be reviewed with the project technical panel and feedback will be addressed as necessary in the final report. In addition to the full technical report, a shorter summary report(s) or articles will be developed for appropriate stakeholder groups. The final report and any summary reports will be made publicly available on the Foundation’s website.

Implementation: This research program will be conducted under the auspices of the Research Foundation in accordance with Foundation Policies and will be guided by a Project Technical Panel who will provide input to the project, review periodic reports of progress and research results, and review the final project report.

Schedule: A final report is estimated to be available in Spring 2021.

About us:

About the Fire Protection Research Foundation

The [Fire Protection Research Foundation](#) plans, manages, and communicates research on a broad range of fire safety issues in collaboration with scientists and laboratories around the world. The Foundation is an affiliate of NFPA.



About the National Fire Protection Association (NFPA)

Founded in 1896, NFPA is a global, nonprofit organization devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards. The association delivers information and knowledge through more than 300 consensus codes and standards, research, training, education, outreach and advocacy; and by partnering with others who share an interest in furthering the NFPA mission. [All NFPA codes and standards can be viewed online for free.](#) NFPA's [membership](#) totals more than 65,000 individuals around the world.

