



RESEARCH FOUNDATION

RESEARCH FOR THE NFPA MISSION

NFPA 1700 Training Materials

Full Title: Development of Training Materials to Support the Implementation of NFPA 1700, Guide for Structural Fire Fighting

PROJECT SUMMARY

Last Updated: 28 March 2019

Background:

Over the years, significant amounts of time, effort, and resources have been allocated to provide a science-based understanding of the effects & impacts of firefighting strategy and tactics on fire dynamics in structures. There is a high importance to get firefighters the knowledge to perform their lifesaving and critical role in fire safety. Today, fire fighters are facing greater challenges with respect to modern building construction and common furnishings found in most structures, and the research compiled is critical to save lives and encourage safe and efficient structural firefighting tactics and strategies.

To help bring this information together for local fire departments fire service leaders proposed the development of a new NFPA guide to consolidate the science-based research on structural firefighting strategy, tactics, and tasks. The document being developed is the NFPA 1700, Guide on Structural Fire Fighting, and has a proposed issue date of 2020. Once the Guide is issued there will be a demand for both class room and on-line training as fire departments across the United States work to implement the guidance provided by NFPA 1700.

Online training has the ability to reach everyone, at all levels, in all corners of the fire service. Making the materials readily accessible and customizable for entire fire departments, individual firefighters (including volunteers), instructors, etc. The development of a 3-D immersive training tool that will provide an interactive training experience to reinforce concepts, techniques, and methods from the NFPA 1700 could provide a key educational background for first responders.

Implementation and Schedule:

The project is funded by a DHS/FEMA Assistance to Firefighters Grant (AFG) Program. This research project is led by the Fire Protection Research Foundation (FPRF) with collaborative support from others, including the UL Firefighter Safety Research Institute (UL FSRI) and the National Fire Protection Association (NFPA). The project is scheduled to be completed by August 2021.



Project Goal:

The overall goal of this project is to develop a digital training tool-kit to support the implementation of NFPA 1700, Guide for Structural Fire Fighting. These training materials are intended to supplement the first edition of NFPA 1700 and help local fire departments adapt and implement the information into their standard operating procedures and guidelines.

- Objective 1: identify, package, and develop as needed the fundamental materials for an online tool-kit (e.g., using presentations, videos, multimedia, and other educational approaches) that

provide the primary knowledge to support the implementation of NFPA 1700 in local fire departments.

- Objective 2: utilize emerging technology to provide an interactive and immersive educational experience that reinforces the fundamental materials.
- Objective 3: make the training materials openly available to the entire fire service in the United States and beyond.

Project Tasks:

This project will be comprised of *six* primary tasks. These tasks are outlined as follows:

Task 1: Project Initiation. Led by the Fire Protection Research Foundation (FPRF), an advisory panel will be established with key stakeholders for this project. The project team will convene to confirm all pertinent details, including timeline, project tasks, scope, project goal and anticipated deliverables.

Task 2: Work Plan. Create an overview and outline of a digital training tool-kit (e.g. following organization and layout of NFPA 1700) with UL Firefighter Safety Research Institute (UL FSRI) and the National Fire Protection Association (NFPA).

Task 3: Content Development. Generate a digital training tool-kit template based on the following: (1) fundamental online tools led by UL FSRI; and (2) interactive digital training tool development led by NFPA. In parallel with both of these subtasks, NFPA will develop the web-platform to host and support the dissemination of the training materials.

- Fundamental Online Tools. UL FSRI will lead this effort to develop the baseline materials for the online tools that follows each chapter of NFPA 1700
- Interactive Digital Training Tool. NFPA's Technical Services Division will lead this effort to develop a free mobile (e.g. iOS, Android) and web-based immersive 3D fire service training tool to reinforce educational curriculum developed via this project. Specifically, NFPA will enhance (build out) an existing interactive residential home model to support the demonstration of NFPA 1700 concepts.

Task 4: Evaluation Workshop. Plan, implement, and document a workshop with members of the fire service (including the project advisory panel and additional stakeholders) to review the draft content developed in Task 3.

Task 5: Finalize Project Deliverables. Based on the feedback and guidance from the workshop, the project partners will further revise and update their project deliverables and generated enhanced versions. Final training materials will be reviewed and confirmed with the panel.

Task 6: Final Reporting and Outreach. The final project deliverables will include the digital training toolkit that includes the fundamental online tools and the interactive digital training tool. All of this will be available on a web platform. In addition, an executive summary report will be generated that documents the overall effort, and this will be led by the Foundation with the primary content provided by UL FSRI and NFPA. Materials will be broadly circulated through the extensive outreach venues.

Project Deliverables:

The anticipated outcomes from this 2-year effort is to establish training materials outlining practices and protocols of the NFPA 1700, Guide for Structural Fire Fighting. Further, this project will provide an interactive mobile/online training platform in order make the training materials openly available to the entire fire service in United States and beyond.