



RESEARCH FOUNDATION

RESEARCH FOR THE NFPA MISSION

2019 RESEARCH PRIORITIES FOR THE FIRE PROTECTION RESEARCH FOUNDATION

Issued: 1 August 2018

The 2019 Research Priorities are summarized in Figure 1: 2019 FPRF Research Priorities.

Of the six identified 2019 Research Priorities, numbers 1, 3, and 5 do not presently have a deep project portfolio of activity behind them, and represent targeted new opportunities where we will seek to provide extra emphasis in the coming year.

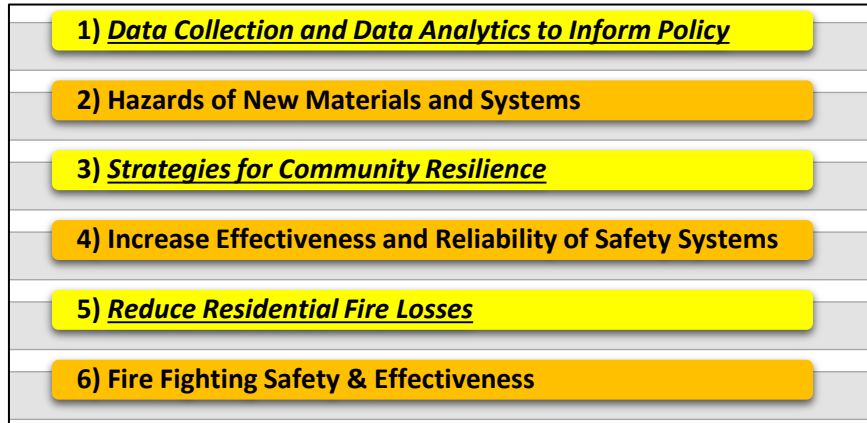


Figure 1: 2019 FPRF Research Priorities

The 2019 Research Priorities will be used for 2019 calendar year to guide specific research needs, projects, and stakeholder engagement. The Foundation will revisit these Research Priorities annually to ensure they adequately address the Foundation’s [mission, vision, and other guidance criteria](#). A predominant use of these Research Priorities include the [vetting and prioritizing](#) of research project, as well as assisting with the direction on emerging issues and targeted opportunities.

As background, The Foundations’ Research Priorities were first established in 2008. The goal was to identify key emerging challenges in support of the NFPA mission, and how the Foundation might structure itself to develop research information to help address those challenges. When the Research Priorities were first developed, it was looking ahead to the next 25 years.

The fast changing world and the increasing challenges to the fire safety in the built environment resulted in updating the Research Priorities in 2013 through a series of meetings and a conference titled “The Next Five Years in Fire and Electrical Safety”. This resulted in the Foundation’s second set of five-year Research Priorities starting in 2014.

In 2017, the approach to address and update the Research Priorities was re-initiated. The Foundation staff and leadership including the Research Advisory Committee and Board of Trustees reviewed multiple inputs and revised the process to shape both near-term and long-term Research Priorities. Most noteworthy among the changes was a new annual process to review and possibly update the Research Priorities. This recognizes the fast pacing rate of today’s world, and uses a process that first identifies the short-term reactionary focus through emerging issues and key example projects, and then establishes a long-term strategic focus that results in the Research Priorities for that calendar year.

When reviewing the latest Research Priorities a question that is often asked is what is new and what remains from the previous Research Priorities. This is summarized in Figure 2: Comparison of Prior and Current FPRF Research Priorities. The color coding in Figure 2 simply indicates the uniqueness and consistency of the Research Priorities between the three sets.

2008 Priorities >>	>> 2014 Priorities >>	>> 2019 Priorities
Contents/Configuration Hazards		Hazards of New Materials and Systems
Advanced Fire Protection Systems	Fire Protection System Effectiveness	Increase Effectiveness and Reliability of Safety Systems
Aging Systems		
Advanced Fire Fighting Equipment and Tactics	Emerging Technologies for Fire Fighter Tactics	Fire Fighting Safety & Effectiveness
Fire safety Strategies for Aging/Disabled Population	Changing Social Demographics	Fire Safety Strategies for Vulnerable Populations
Alternative Fuels and Energy		
Fire Safety in the Context of Environmental Considerations		Impact of Fire Safety on Environmental Sustainability
	Reduce Residential Fire Losses	Reduce Residential Fire Losses
	Sustainable Resilient Communities	Strategies for Community Resilience
	Cyber Physical Systems	Smart Cities and Cyber Physical Systems
	Emerging Health and Safety Cultures	
		Data Collection and Data Analytics to Inform Policy

Figure 2: Comparison of Prior and Current FPRF Research Priorities

Going forward, it is envisioned that the annual process of updating the Research Priorities will be relatively simplified, to provide a straight-forward yet balanced review of the applicable material, resulting in relevant and applicable Research Priorities to help guide Foundation activities.

###