

# OSAC RESEARCH NEEDS ASSESSMENT FORM



**Title of research need:**

**Describe the need:**

Fire investigators need to understand the type of information that might be available and how to access that information from electronic sources and systems. Investigators need to understand the issue of protection and preservation of this information as it is likely to be considered evidence. Aside from a brief mention, there is no information on this topic currently in NFPA 921. Research is needed to develop awareness of methods for collecting, extracting, and analyzing data from the variety of electronic sources available in residential and commercial buildings. Fire investigators must also recognize the importance of information from security cameras and alarm systems. Data from “internet-of-things” devices that might be stored within devices, at some remote storage location, or in the cloud can provide significant insight into fire origin.

**Keyword(s):**

**Submitting subcommittee(s):**  **Date Approved:**

*(If SAC review identifies additional subcommittees, add them to the box above.)*

**Background Information:**

1. Does this research need address a gap(s) in a current or planned standard? (ex.: Field identification system for on scene opioid detection and confirmation)

2. Are you aware of any ongoing research that may address this research need that has not yet been published (e.g., research presented in conference proceedings, studies that you or a colleague have participated in but have yet to be published)?

3. Key bibliographic references relating to this research need: (ex.: Toll, L., Standifer, K. M., Massotte, D., eds. (2019). Current Topics in Opioid Research. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88963-180-3)

4. Review the annual operational/research needs published by the National Institute of Justice (NIJ) at <https://nij.ojp.gov/topics/articles/forensic-science-research-and-development-technology-working-group-operational#latest>? Is your research need identified by NIJ?

5. In what ways would the research results improve current laboratory capabilities?

This research need is targeted to improve current fire investigation field work rather than laboratory analyses. This research will serve to better inform fire investigators as to how to approach the gathering and interpretation of fire event relevant data from electronic sources.

6. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

See Number 5.

7. In what ways would the research results improve services to the criminal justice system?

This research will help the fire investigation community to apply a more systematic approach the analysis of electronic data. This more systematic approach will improve expert opinions and testimony related to data from these sources.

8. Status assessment (I, II, III, or IV):

I

	Major gap in current knowledge	Minor gap in current knowledge
No or limited current research is being conducted	I	III
Existing current research is being conducted	II	IV

*This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.*