

OSAC RESEARCH NEEDS ASSESSMENT FORM



Title of research need: Prevalence/yield of footwear impressions from crime scenes

Describe the need:

Footwear impressions are massively underutilized in the United States. Crime scenes are generally not preserved with the collection of footwear impressions in mind, and impressions are either not collected and/or poorly recovered. The first step in addressing this issue is to determine how often a usable footwear impression could be collected at various scenes. This would be especially useful if broken down by crime type (property crime vs. major crime). Once baseline data is collected and prevalence/yield is characterized, agencies can articulate needs and formulate plans to ensure that this type of evidence is sought, preserved and appropriately collected.

Keyword(s): Footwear impressions, prevalence, yield, crime scenes

Submitting subcommittee(s): Footwear and Tire Tread **Date Approved:** 10/24/2022

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)

This research supports best practice documents for scene preservation, recovery, collection and footwear intelligence.

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)?

Some research of this type may have been collected but not published in Europe; the FW/TT subcommittee is not aware of any comparable data from the United States.

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)

N/A.

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?

No.

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

This research is a necessary first step in demonstrating the prevalence and subsequent importance of collecting this evidence type. Having this information will ultimately increase awareness, collection rates and evidence quality.

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

Research results would inform the scientific community as to the prevalence of footwear impressions.

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

This research is a necessary first step in demonstrating the prevalence and subsequent importance of collecting this evidence type. Having this information will ultimately increase awareness, collection rates and evidence quality.

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.