

## Best Practice Recommendation for the Detection and Collection of Footwear and Tire Impression Evidence



### WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy-to-understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

### WHAT IS THE PURPOSE OF THIS STANDARD?

This Best Practice Recommendation (BPR) provides recommendations for forensic science practitioners (FSPs) responsible for detecting and collecting footwear and tire impressions. These recommendations optimize the detection of impressions for:

- future examination and comparison to a known source(s) or a manufacturer and model of footwear or tire
- comparison with questioned impressions collected from other scenes
- determination of position and orientation of tire impressions, direction of travel, tire track width, wheelbase, turning radius, and other information

This BPR is to be used before and in conjunction with ANSI/ASB 050, 1st Ed., 2021, a BPR on photographic documentation of footwear and tire impression evidence.

### WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

The recommendations and requirements in this BPR provide a foundation to optimize the detection of impressions.

The BPR recognizes the potential value of partial impressions and evidence at a scene that may have been contaminated or disturbed prior to a scene being properly protected. The standard supports personnel trying to detect, preserve and subsequently collect these impressions, protecting potential impression evidence from further contamination.



### HOW IS THIS STANDARD USED, AND WHAT ARE THE KEY ELEMENTS?

This BPR can be used by any FSP responsible for detecting and collecting footwear and tire impressions who has completed a relevant training program and has experience in the essential skills required to understand and apply the principles outlined in this BPR. It does not replace a formalized training program for detecting and collecting footwear and tire track evidence.

Methods covered in the standard can be used both in the field and at the forensic science service provider's location, progressing in a sequential process from least destructive to most destructive. The determination of which methods are utilized will be dictated by the substrate and the suspected matrix. When the standard is followed, both patent and latent impressions may be detected and collected.

Sections in the standard include visual search, electrostatic detection and lifting, physical and chemical development of impressions, and photography and collection.

The methods included in this standard may not cover all aspects of unusual or uncommon conditions.

