

**TECHNOLOGY DEPLOYED IN MATC**

# HANDHELD X-RAY FLUORESCENCE (XRF)

*Measure elemental composition of a broad range of material*

## HOW IT WORKS

Apply a versatile handheld spectroscopy technology to analyze the elemental composition of asphalt binders, pavement markings, limestone aggregates, bridge decks, and more. The XRF excites your material sample with a primary X-ray source, then every element present in the sample will produce a set of unique characteristic fluorescent X-rays. Because of XRF's broad range of capabilities, it is important to ensure your sample is representative of the actual source and that the preparation, accessories, and calibration files you use are matched to your unique needs.

**XRF can identify most chemical elements, giving it a wide range of applications in transportation materials.**



Image Source: FHWA  
Handheld X-Ray  
Fluorescence Device

## XRF FEATURES

Highly  
**VERSATILE**

**QUICK**  
preparation time

Forensic & QC  
**APPLICABLE**

Tests at least  
**THREE REPLICATES**  
for each sample

Generates data in  
**<2 MINUTES**

Current evaluations of XRF in: Alabama, Maine, Tennessee, Texas