

System Assessment and Validation for Emergency Responders (SAVER)



Homeland Security

Science and Technology

EMERGENCY RESPONDER EQUIPMENT

The National Urban Security Technology Laboratory (NUSTL) is a federal laboratory within the Department of Homeland Security's (DHS) Science and Technology Directorate (S&T). NUSTL supports responders by focusing on technologies that help prevent, protect against, and respond to homeland security threats.

Having the right tools provides a safer work environment for responders and a safer community for those they serve. NUSTL's SAVER program provides information on commercially available equipment that federal, state, local, tribal and territorial response agencies use in making selection and procurement decisions. Through a variety of reports, SAVER answers the questions, "What equipment is available?" and "How does it perform?"

TECHNOTES AND MARKET SURVEYS

SAVER assists strategic decision makers who might not have the technical background or time required to narrow down choices from marketing materials in order to find equipment that meets their needs. SAVER's two-page **TechNotes** explain the basics of a technology and its use by responders. Comprehensive **Market Survey Reports** describe currently available products – distilling key features through the filter of responder missions and operations – and outline applicable regulations, standards or certifications. Because agencies' requirements and priorities vary, SAVER reports do not recommend products.

RESPONDER ASSESSMENTS

SAVER conducts assessments that are complementary to other tests for compliance with industry standards, which may have been performed in lab settings. At a multi-day **SAVER Assessment**, responders test products in various operational scenarios, evaluating them against criteria and providing candid feedback. SAVER assessments focus on users' hands-on experiences with equipment in five categories: **usability, capability, deployability, maintainability, and affordability**. Prior to an assessment, a **Focus Group** of responders identifies the evaluation criteria, operational use cases, and requirements for products to be included in the assessment.



Assessment Reports include a summary of each product's advantages and disadvantages, a graphical comparison of the evaluations for each criterion, numerical scores in each category, and overall scores.

BROAD SCOPE OF THREATS

Since its start in 2004, the SAVER program has worked with thousands of responders to assess hundreds of products across the categories of the DHS [Authorized Equipment List](#) (AEL), that address the gamut of threats they face. Recent projects include:

- *Handheld Raman Spectrometers* – ruggedized devices for identifying drugs, explosives, or chemical warfare agents without coming into contact with the suspect material
- *Radio Repeaters for Indoor and Subterranean Environments* – deployable systems to boost radio signals where communications are degraded
- *Tactical Eyewear* – spectacles and goggles that protect from hazards while allowing visual clarity
- *Particulate Respiratory Protection* – disposable and reusable passive devices that reduce inhalation of hazardous dust and airborne biohazards

More than 1,000 SAVER knowledge products spanning over 300 AEL categories are available online at <https://www.dhs.gov/science-and-technology/saver-documents-library>.