

Lost Person Locator: Locating Missing Persons in Wilderness, Rural, and Urban Locations

Standardizing search and rescue protocols

On any given day across the United States, as many as 100,000 missing person cases are reported that result in thousands of searches. The missing include people from all ages, walks of life, and geographic regions.

Steps taken at the very start, in those precious first minutes, are critical to achieving positive outcomes. Search efforts, usually coordinated among multiple agencies and volunteers, can easily go awry as responders first on the scene may not have access to authoritative, comprehensive guidelines to conduct lost person searches. The Department of Homeland Security Science and Technology Directorate (S&T) has a solution that puts decades of actual case data in the palm of searchers' hands.

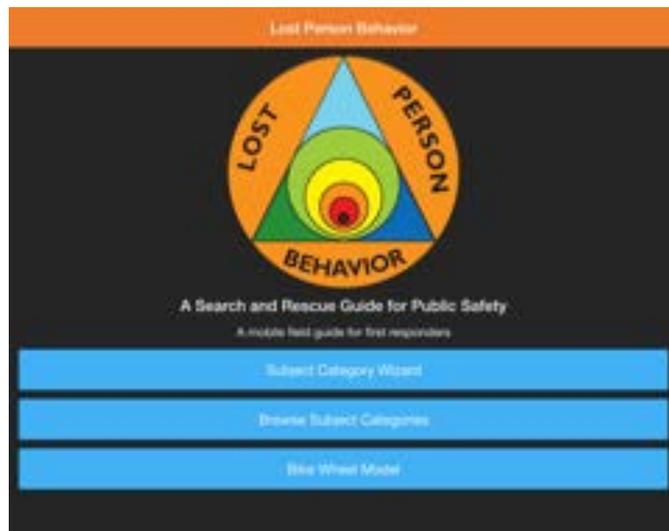
S&T's First Responders Group (FRG) and dbS Productions — a leader in search and rescue (SAR) research, publications, and training — are developing a suite of tools that display historical, geographical, and statistical search data in easy-to-use formats, including mobile apps.

Leveraging decades of SAR expertise

The Lost Person Locator project was initiated via the Small Business Innovation Research program. Early on, dbS Productions developed a search wheel prototype and entered field operations guidelines into the International Search and Rescue Incident Database (ISRID), which details more than 150,000 local, state, federal, and international SAR cases compiled over 30 years.

ISRID data serves as the platform for the Lost Person Behavior app, a tool that helps first responders determine where to search and what questions to ask when they first arrive at the search scene. The app provides responders with limited search and rescue experience with knowledge gained from similar searches conducted in the past.

Lost Person Behavior provides step-by-step search guidance, investigative questions, and statistics and behavioral profiles for more than 40 scenarios — including lost hikers, children, and dementia patients. It also identifies high probability areas where an individual may be found and has filters for ecoregion and terrain. The app does not require an Internet connection and can be deployed in wilderness, rural, and urban settings. It is now available for download on Apple iTunes, Google Play and Amazon.com.



The Lost Person Behavior app allows those first on scene to rapidly initiate searches using step-by-step checklists, behavior profiles, and investigative questions.

Additional search tools on the horizon in 2016

In coming months, FRG and dbS Productions will continue to refine the Lost Person Locator suite of SAR products through user testing and evaluation. The next phase of the project will focus on creating and perfecting enhanced search capabilities software, training, publications, and additional mobile apps.

Development has already begun for a second mobile tool, called FIND, which is designed to improve a search team's decision-making by predicting the subject's location for land incidents. Like Lost Person Behavior, this app will allow first responders to quickly calculate where a lost person is most likely located based on vast amounts of interpreted data.

The apps will be easily downloaded onto mobile data computers (such as those found in police and fire/rescue vehicles) as well as on laptops, tablets, and smart phones. Printed field guides will also be available for first responders and SAR agencies that do not have access to the electronic tools.

