DHS Science and Technology Directorate
Mobile Biometrics

Why it’s Needed
Of the 584 officers killed in the line of duty between 2000 and 2009, 82 percent of the people responsible for their deaths had prior criminal records or a current warrant out for their arrest (Federal Bureau of Investigation Criminal Justice Information Services Division). During day-to-day operations, agents and first responders are presented with potentially dangerous situations in which they encounter individuals with no identification. In some cases, they are forced to decide whether to take a person’s word for who they are or take the individual into custody to ascertain their true identity and background. Mobile biometric devices—such as iris, face, and fingerprint readers—assist agents and first responders in obtaining accurate near real-time identifications in the field if a person has a past criminal record or an active warrant.

What it Does
In 2008, the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) brought together federal, state, local, and tribal agents and first responders along with the Department of Defense, Department of Justice, and the intelligence community, to determine critical upgrades needed in mobile biometric devices and additional uses of mobile biometric devices in the field. Through this partnership, multiple DHS pilots were launched and many are still ongoing. Various state and local agencies are piloting mobile devices in the field to identify suspects who lack proper identification and to capture latent prints at active crime scenes, providing database matches back to the agents in near real-time. S&T is piloting mobile devices with the U.S. Coast Guard that are capable of obtaining 10-fingerprints and face and iris images, which may one day replace their current 2-finger-print system. Using the 10-print mobile system has doubled their “hit rate.” Vital data such as this is being used to determine system capabilities and compatibility with authoritative databases. Additional partners include the Federal Protective Service, Office of Border Patrol, U.S. Immigration and Customs Enforcement, U.S. Secret Service, and U.S. Visitor and Immigrant Status Indicator Technology program.

The Value
Mobile biometrics devices are saving lives and allowing agents and first responders to solve crimes that would otherwise go unsolved. These devices give officers and agents the edge over terrorists and criminals in the field. No longer can a suspect lie to an agent about their identity and previous criminal record and get away with it.

Next Steps
New technologies are continuously being developed that allow these mobile devices to become better, faster, and cheaper. S&T remains vigilant in driving mobile device systems development to meet DHS mission needs. S&T also provides input for the next generation of the National Institute of Standards and Technology’s Special Publication 500-280, Mobile ID Device Best Practice Recommendation, which directly impacts the performance of mobile devices and their interaction with federal, state, and local databases. S&T remains committed to providing DHS operational and technical requirements to developers and manufacturers and testing current systems in laboratory environments to verify that they meet best practices and standards. By pilot testing current and emerging mobile devices in new and innovative ways, S&T helps agents and first responders gain the leading edge against terrorists and criminals.

Mock Prison Riot.