

# SECURING OUR HOMELAND WITH SCIENCE AND TECHNOLOGY

**63% IMPROVEMENT**

FOR BORDER AGENT PERFORMANCE

(SIGN CUTTING AND TRACKING TRAINING)



**OVER 18,000**

GARMENTS

MADE AVAILABLE

(WILDLAND FIREFIGHTER GEAR)



**1,173 ACCOUNTS**

RECEIVING FREE VIRTUAL

ACTIVE SHOOTER

TRAINING (EDGE)

**\$1.55**

MILLION

OPIOID DETECTION GLOBAL PRIZE COMPETITION HELD



**211 EXPLOSIVE**

CANINE TEAMS' PERFORMANCE

EVALUATED (REDDI)



**90-MINUTE**

TURNAROUND

FOR IDENTITY

VERIFICATION (RAPID DNA)

**475 VICTIMS**

SAVED

FROM CHILD SEX

TRAFFICKING (CHEXIA)

**140 ASSESSMENTS**

CONDUCTED FOR

732 COMMERCIAL

PRODUCTS (SAVER)



**15% INCREASE**

IN IMPOSTER DETECTION

(EYE-IDENTIFY)



**1,050**

SAFETY ACT

APPLICATIONS APPROVED



**\$2.3 MILLION AWARDED**

THROUGH U.S. AND ISRAELI

COLLABORATION (BIRD)



**Homeland Security**

Science and Technology



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## CLICK ON EACH BOX FOR MORE DETAILS ON EACH PROGRAM OR INITIATIVE

<p><b>Sign Cutting and Tracking Training</b> combines 2D and 3D training videos, a 90-minute computer-based training course, and commercial-off-the-shelf augmented reality technologies. It was transitioned to U.S. Border Patrol in 2018.</p>	<p><b>Wildland Firefighters Advanced Personal Protection System</b> has been reducing heat stress injuries through improved form, fit, and function since 2012.</p>	<p><b>The Enhanced Dynamic Geo-Social Environment (EDGE)</b> is a virtual training tool that helps officials coordinate response to critical incidents. It was transitioned in 2017.</p>	<p>The interagency challenge called for rapid, nonintrusive detection tools that will help find illicit opioids in international mail. Winners were announced in December 2019.</p>
<p>The <b>Regional Explosives Detection Dog Initiative (REDDI)</b> brings classroom instruction, exercises, and training aids to explosive detection canine teams. It started in 2017.</p>	<p><b>Rapid DNA</b> is a low-cost system for quick verification of identity and familial relationships. It has been helping secure our border since 2014 and was used in 2019 to identify victims of a tragic boat fire.</p>	<p>In 2016, <b>Child Exploitation Image Analytics (CHEXIA)</b> helped law enforcement agencies analyze images more quickly and efficiently.</p>	<p>The <b>System Assessment and Validation for Emergency Responders (SAVER) Program</b> conducts assessments and validations on commercial equipment and systems, and provides those results to the emergency responder community.</p>
<p><b>Eye-Dentify's</b> imposter identification training leverages eye tracking software based upon the ScreenADAPT platform. It was transitioned to U.S. Customs and Border Protection in 2017.</p>	<p>The <b>Support Anti-Terrorism by Fostering Effective Technologies (SAFETY) Act</b> helps incentivize development and deployment of anti-terrorism technologies by creating systems of risk and litigation management. The program launched in 2003.</p>	<p><b>The Israel – U.S. Binational Industrial Research and Development (BIRD) Foundation</b> is supporting international development of advanced technologies for the homeland security mission.</p>	