SAFEGUARDING
OUR NATION

The Department of Homeland Security's (DHS) highest priority is to safeguard the American people. DHS is committed to a relentless resilience, striving to prevent attacks, responding decisively to natural and man-made disasters, and advancing our prosperity and economic security long into the future.

MITRE shares this priority by operating the Homeland Security Systems Engineering and Development Institute™ (HSSEDI), a federally funded research and development center of the U.S. Department of Homeland Security. HSSEDI brings systems thinking to countering terrorist threats and protecting our borders, securing our infrastructure while enabling travel and trade, and strengthening the cybersecurity of federal civilian networks.

To reduce our nation's risk of terrorism and catastrophic incidents, HSSEDI takes on challenges that cut across the Homeland Security Enterprise, which includes DHS, other government agencies, academia, and the private and public sectors. We help DHS strengthen aviation and rail security. Combat human trafficking. Protect the nation against cyberattacks. React quickly to disasters. Secure our elections—and far more.

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We are continually evolving to ensure that we stay ahead of threats and are prepared to address DHS' current and future mission challenges.

Yosry A. Barsoum, VP and Director of HSSEDI

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MITRE

Strengthen Preparedness and Resilience Through Social Media

When natural disasters such as hurricanes and floods strike, HSSEDI's data analytics team is ready. Within hours they are monitoring social media posts around the clock for requests for help, issues with critical infrastructure facilities, and public health concerns. The team forwards urgent requests for help made by victims to federal and state government agencies. It also alerts agencies to potential situations such as plant explosions due to loss of power.

Counter Terrorism and Homeland Threats via Data Analytics

HSSEDI's data analytics team has developed a dashboard tool that government, law enforcement agencies, and non-governmental organizations can deploy to thwart transnational organized crime such as the trafficking of humans, drugs, and weapons. In Ohio, these analytics, which came out of our Hermes Research project, led to the arrest of an opioid dealer. During the weeks before and after the 2020 Super Bowl, they directly resulted in the rescue of 23 human trafficking victims (including minors) and the arrest of a trafficker.

Secure U.S. Borders and Sovereignty with New Surveillance Solution

HSSEDI collaborated with the U.S. Border Patrol (USBP) to develop a new common operating picture (COP) solution for border surveillance. The COP will be deployed in Integrated Surveillance Towers along the Southwest Border by the end of FY21. This will significantly improve detection and tracking of southern border crossings and decrease response times for USBP agents.

Protect Cyberspace and Critical Infrastructure from DNS Hijacking

During the government shutdown in January 2019, DHS was alerted to a suspected state-sponsored Domain Name Service (DNS) hijacking campaign. DHS' Cybersecurity and Infrastructure Security Agency contacted HSSEDI's advanced analytics team to determine how U.S. government networks and domains might be impacted. DHS used the team's data and analysis to inform its reporting about this campaign.

Fight Misinformation about Elections and COVID-19

Disinformation on social media can negatively impact our elections and COVID-19 response. A free, MITRE-developed application helps counter election and COVID-19 related misinformation. "Social See Something, Say Something," or SQUINT™, offers a fast, reliable way for election and healthcare officials to report and correct bad information that appears on social media.

FOUR WAYS HSSEDI PROTECTS OUR NATION

Countering Human Trafficking

Defending Air, Land, and Maritime Domains

Strengthening Election Security and Other Critical Infrastructure

Preventing Attacks on Soft Targets and Crowds

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.

MITRE | SOLVING PROBLEMS FOR A SAFER WORLD®