



Soft Target Engineering to Neutralize the Threat Reality (SENTRY)

A Nationwide Consortium Led by Northeastern University

A DHS Center of Excellence

Led by Northeastern University, SENTRY develops strategies and innovative solutions to secure soft targets and crowded places from attacks that inflict grave injury to human life and property. These soft target environments, such as schools, surface transportation, sports arenas, places of worship, large outdoor events, and retail facilities, often have limited security or protective measures, making them vulnerable to attack. SENTRY is developing next-generation tools and methodologies to predict and mitigate these threats.

Research Capabilities

- Real-time management of threat detection and mitigation
- Advanced sensing technologies for threat awareness
- Threat risk assessment, prediction, and deterrence
- Layered security architectural design and simulation

Workforce and Professional Development

- Community college engagement
- Student leadership
- Stakeholder engagement

About SENTRY

LAUNCH	2021
PARTNERS	More than 22 university and industry partners
MISSION & VISION	SENTRY works to ensure the existence of safe, secure public spaces by creating functional and adaptable solutions to detect and mitigate potential threats.
DHS ALIGNMENT	U.S. Customs and Border Protection (CBP), Cybersecurity and Infrastructure Security Agency (CISA), Countering Weapons and Mass Destruction Office (CWMD), Federal Emergency Management Agency (FEMA), Federal Law Enforcement Training Center (FLETC), DHS Science and Technology (S&T), Transportation Security Administration (TSA), U.S. Coast Guard (USCG), U.S. Secret Service (USSS)

University Partners

Boston University
Florida International University
Mississippi State University
Rensselaer Polytechnic Institute
Rutgers University
University at Buffalo, SUNY
University of Florida
University of Notre Dame
University of Puerto Rico-Mayagüez
University of Rhode Island
University of Southern California
University of Tennessee, Knoxville



Industry Partners

Astrophysics Inc.
BLOCK Engineering
Cambridge Consultants
EVOLV
Guardian Centers
Lauretta AI
Leidos
MatrixSpace
PENDAR Technologies
Raytheon Technologies

Impacts



Virtual Sentry Framework

The Center is aiming to provide real-time decision support systems, enabling actionable situational awareness leading to more effective threat assessment, preparedness, mitigation, and response for soft targets and crowded places. The framework strives to lessen the security response burden on venue personnel and to provide essential security information in an effective, timely, and actionable way.



Developing Venue-Specific Solutions

SENTRY has launched a series of case studies to assess the security requirements of various types of soft targets and crowded places. These studies focus on education institutions, sports arenas, surface transportation sites, and retail spaces to identify their unique security challenges and translate these needs into tailored implementations of the Virtual Sentry Framework. SENTRY also maintains a Practitioner Advisory Board which connects stakeholders across DHS components, academic research, and facility managers.



Workforce and Professional Development

SENTRY workshops, conferences, and events provide professional development for students, faculty, and researchers while sharing the Center's latest research with government and industry professionals. Additionally, SENTRY is developing a curriculum for community colleges to promote hands-on learning in line with the DHS mission.



For more information on SENTRY,
please visit
<https://sentry.northeastern.edu>

For more information on DHS
Centers of Excellence, please visit
<https://www.dhs.gov/science-and-technology/centers-excellence>