Passenger-based Surface Transportation Security Case Study

SOFT TARGET ENGINEERING TO NEUTRALIZE THE THREAT REALITY (SENTRY)

A DEPARTMENT OF HOMELAND SECURITY (DHS) CENTER OF EXCELLENCE LED BY NORTHEASTERN UNIVERSITY

SENTRY
Soft Target Engineering to Neutralize the Threat Reality

Our Goal

The Passenger-based Surface Transportation Security Case Study aims to identify and provide research-based solutions to security challenges within the passenger-based subway, light rail, heavy rail, bus, and ferry systems. The SENTRY Team of researchers, security experts, and industry partners directly engage with surface transportation stakeholders to develop and field technologies to prevent, detect, and mitigate security threats, at no cost to the stakeholder.

About SENTRY

SENTRY is a university-based Center of Excellence funded in 2021 by the Department of Homeland Security, Directorate of Science and Technology to address the security challenges inherent in protecting soft targets and crowded places, such as schools, stadiums, places of worship, and surface transportation. Northeastern University, located in Boston, Massachusetts, leads a consortium of universities, known collectively as SENTRY, that is dedicated to this mission.

Working to Build Safe Surface Transportation Environments

Envisioning what a safe, efficient environment looks like in the surface transportation space is what drives our Surface Transportation Case Study. The program seeks to:

- Understand day-to-day operations, needs, and priorities through site visits and observation of security drills and tabletop exercises
- Work directly with stakeholders to develop an informed roadmap for SENTRY research in the surface transportation space
- Perform market analyses on current tools, technologies, and methods used in surface transportation security
- Inform and train those responsible for surface transportation security on best practices and effective security techniques

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Led and Backed by Expertise

SENTRY offers a diverse team of researchers, technologists, government agencies, and subject matter experts with decades of experience and knowledge specific to surface transportation security needs. However, to realistically fulfill the SENTRY mission of protecting soft targets and crowded places, it is critical that up-to-date, real-time information is obtained from daily operators and transit authority stakeholders to identify and prioritize the security challenges faced by passenger-based surface transportation and to provide solutions.

Several surface transportation authorities and DHS components are supporting SENTRY in this effort. Partnering with these stakeholders throughout the development process assures that the center develops useful and valuable tools and technologies for surface transportation venues. Stakeholders and DHS components have participated in our case study events and have been generous in sharing relevant resources to facilitate our work.

By hosting site visits and observation of drills, our surface transportation security partners have provided SENTRY with critical security information and understanding. We look forward to our continued engagement with our partners as we advance surface transportation specific Virtual Sentry Framework solutions.

Our Case Study Event

SENTRY Surface Transportation Security Listening Sessions

To launch our case study, SENTRY hosted two Surface Transportation Listening Sessions to facilitate open discussion between SENTRY researchers and surface transportation stakeholders from various transit authority agencies. The discussion provided the SENTRY researchers with timely and accurate data about the day-to-day security challenges and future security needs for surface transportation security. The key takeaways from the session will be utilized to inform SENTRY's work.

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SENTRY Case Study Contacts

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Partnerships & Alliances

Industry Partners

Leaders and experts in their fields, who provide guidance and introduce cutting-edge technology to augment SENTRY research and expedite the transition of solutions. *Scan for a complete list of SENTRY Industry Partners.*

Academic Partners

A diverse network of students and faculty, who engage with ongoing research, expand knowledge and scope, and contribute to the center's success. *Scan for a complete list of SENTRY Partner Institutions.*

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