

CENTER OF EXCELLENCE

The National Transportation Security Center of Excellence (NTSCOE) was established in accordance with HR1, Implementing the Recommendations of the 9/11 Commission Act of 2007, in August 2007. The National Transportation Security Center of Excellence (NTSCOE) is made up of seven institutions: Connecticut Transportation Institute at the University of Connecticut, Tougaloo College, Texas Southern University, National Transit Institute at Rutgers, the State University of New Jersey, Homeland Security Management Institute at Long Island University, Mack Blackwell National Rural Transportation Study Center at the University of Arkansas and the Mineta Transportation Institute at San José State University.

MISSION

The NTSCOE will develop new technologies, tools and advanced methods to defend, protect and increase the resilience of the nation's multi-modal transportation infrastructure and education and training base lines for transportation security geared towards transit employees and professionals. NTSCOE has three primary focus areas: Research, Education and Training, and Petrochemical Transportation Security.

RESEARCH

The NTSCOE research co-lead is the University of Connecticut and includes the Mack-Blackwell Rural Transportation Center at the University of Arkansas and the Mineta Transportation Institute at San José University.

The research projects focus on the Nation's infrastructure of the future. The U.S transportation infrastructure is aging, complex, interdependent with other critical infrastructure sectors and increasingly vulnerable to terrorist attacks.

NTSCOE research projects address 4 major challenges:

- Identification of most likely targets through threat analysis and other assessments
- Development of technology and implementation strategies aimed at enhancing the security and monitoring of the most likely targets
- Development of advanced multi-functional material technologies that will be ductile, blast resistant, self-healing and self-energetic
- Development of coordination and effective communications networks for Emergency Response and Crisis Management

UNIVERSITY OF CONNECTICUT (UConn)

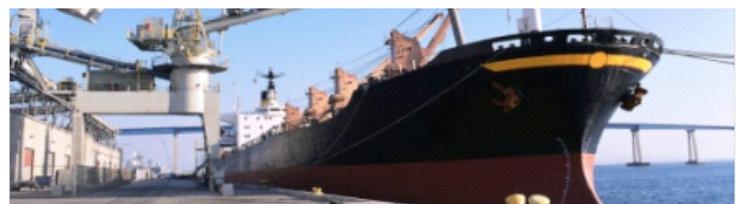
The University of Connecticut's effort is named TRANSIT (Technology and Research for Advanced National Security of Inter-modal Transportation). The TRANSIT research and education program is working toward seeding the transportation security industry with a new way of thinking and educating a new generation of technologist, engineers, and practitioners. UConn brings unique research capabilities, plus demonstrated expertise in relevant transportation security application to install, maintain and enhance a holistic, multi-disciplinary approach to our nation's transportation security needs.

MACK-BLACKWELL RURAL TRANSPORTATION CENTER (MBTC), UNIVERSITY OF ARKANSAS

MBTC has developed a research and education roadmap that focuses on the security of the multi-modal transportation systems of the US at the local, state, regional, and national levels. The goal is to develop comprehensive, cost effective, and imminently implementable solutions to critical security issues facing the transportation systems of the nation and to prepare transportation professionals for leadership roles in professional and research careers in support of securing the nation's transportation systems. MBTC employs a "systems-of-systems" approach to identify and define critical technology and system needs related to the security of transportation infrastructure and systems- and ultimately to provide engineering solutions to those needs.

MINETA TRANSPORTATION INSTITUTE (MTI), SAN JOSÉ UNIVERSITY

MTI NTSCOE is the leading university policy center for the analysis of terrorist threats, trends, and best practices involving surface transportation. MTI's NTSCOE research efforts are guided by the actual information needs of decision makers and transportation policy and planning professionals. The goal is to maintain an ongoing program that produces advanced research, the product of which are judged by expert academic and industry peers to advance the body of useable transportation security knowledge.





EDUCATION & TRAINING

To ensure that education programs are given sufficient attention and resources DHS established separate research and education budgets for the NTSCOE. The NTSCOE research co-lead is Tougaloo College and includes Rutgers University, National Transit Institute (NTI) and Long Island University Homeland Security Management Institute (HSMI). The three major deliverables for the Education and Training programs are:

- A national training program tailored for the needs of DHS customers with the flexibility to respond to changing needs with training provided for local implementation
- Associate degrees, major emphasis, undergraduate majors, and graduate degree programs to train future employee for DHS and other federal, state and local agencies involved in surface transportation security
- A national awareness program for the general population as well as program for classroom

TOUGALOO COLLEGE

At Tougaloo College, the Department of Homeland Security National Transportation Security Center of Excellence (NTSCOE) resides within their National Institute for Education and Training in Transportation Security (NIETTS) and is designed to have the capacity and flexibility to address a wide range of educational and training needs for the Department of Homeland Security's customers. Activities of the Institute will be leveraged by the integration of complementary National Laboratories and federal, state, and local agencies and programs.

LONG ISLAND UNIVERSITY

The Homeland Security Management Institute (HSMI) at Long Island University is designed and delivered by professionals, for professionals with the goal of creating the practitioner-scholar: the highly experienced professional who understands the on-the-ground realities of homeland security practice as well as the academic theories and principles which impact the safety and security of our Nation and its people. HSMI offers a fully accredited 15-credit graduate level Advanced Certificate in Homeland Security Management and a 36-credit Masters of Science in Homeland Security Management as well as a series of training courses and professional development seminars.

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

The NTSCOE at Rutgers is focusing on transportation security education and associated research within two priority areas: Developing and providing professional security training for transportation employees and transportation employees and a master's level curriculum. NTSCOE at Rutgers will focus its educational-oriented programs on the intersections of risk analysis, infrastructure, and human factors as a means of bringing together their wide range of expertise in transportation security – in training, engineering, modeling, and risk assessment. Focusing at NTSCOE Rutgers on prevention of dangerous good hazards through training and resource deployment, the educational and research programs will emphasize issues of resource allocation, and resilience in infrastructure, economic systems, and public health, as related to disruptions and recovery potential in highly urbanized metropolitan area transportation systems.

PETROCHEMICAL

TEXAS SOUTHERN UNIVERSITY

Texas Southern University's (TSU) National Transportation Security Center of Excellence for Petrochemicals (NTSCOE—P) investigates and advances the methods and strategies that will increase the resilience of the Nation's multimodal infrastructure to terrorist attack on the movement of petrochemicals.

NTSCOE-P will deliver ultimate research products in a phased strategy through a multi-year approach. The research focus is on the overlaid issues related to the commodity flows, vulnerability assessment, and impact analysis involved in the design of a more secured transportation system for transporting petrochemicals. The approach involves key researchers with diverse backgrounds in such areas as traffic and transportation engineering, urban planning, chemistry, operations research, large network modeling, statistics, computer science and engineering. The research will be collaborated by an interdisciplinary team at TSU and selected partners from other institutions, internal and external to this COE, which are expected to complement TSU's technical strengths.

