



Homeland
Security

Science and Technology

Borders, Trade, and Immigration (BTI) Institute

A DHS Center of Excellence

BTI's mission is to enhance the Nation's ability to secure its borders, facilitate legitimate trade and travel, and ensure the integrity of the immigration system.

LAUNCH ▶

2015

PARTNERS ▶

More than 20 university, private industry, and national laboratory partners

EXPERTISE ▶

Biometrics and identity science, port security, supply chain security, migration trends and analysis, export control, data/video analytics, systems modeling and simulation, economic analysis

DHS ALIGNMENT ▶

U.S. Customs and Border Protection, U.S. Immigration and Customs Enforcement, DHS Office of Policy

Research and Education Capabilities

- Transnational flows analysis for legitimate trade facilitation
- Border security technology development
- Policy-informing knowledge products
- Education and training for the current and future homeland security workforce

BTI Institute

Borders • Trade • Immigration

A Department of Homeland Security Center of Excellence

A nationwide consortium led by:

University of Houston

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Feedback from Our Partners

*"The BTI Institute provides us access to a cadre of world-class universities. BTI Institute's academic partners at this Center of Excellence are at **the cutting edge of their fields and supply us with innovative resources to assist us in advancing our mission** to safeguard America's borders while enabling legitimate trade and travel."*

Siobhan Chambers, Operations Research Analyst
U.S. Customs and Border Protection, 2018

*"The BTI Institute has **been instrumental in crafting innovative, solutions-driven projects and programs that enhance security in the Southeast Texas region**. The resources BTI Institute brings to bear are far beyond the scope of what a local or regional agency could garner."*

Sue Landry, Director of Homeland Security
South East Texas Regional Planning Commission, 2018



University Partners

American University, DC
Middlebury Institute of International
Studies at Monterey, CA
Rutgers University, Newark
and New Brunswick, NJ
Texas A&M Engineering Experiment
Station, TX
Texas A&M International University, TX*
Texas A&M Transportation Institute, TX
University of Arizona, AZ
University of Minnesota, MN
University of North Carolina,
Charlotte, NC
University of Texas at El Paso, TX*
University of Virginia, VA
West Virginia University, WV

**Minority Serving Institution (MSI)*

Enterprise Partners

Analytical Services, Inc.
Cross-Border Institute
Lantern UAS
Migration Policy Institute
Oak Ridge Institute for Science and
Education
Oak Ridge National Laboratories
South East Texas Regional Planning
Commission
South West Border Sherriff's
Coalition
Voir Dire International, LLC



For a complete list of partners
and more information, please visit
www.uh.edu/bti/

For more information on DHS
Centers of Excellence, please visit
[www.dhs.gov/science-and-
technology/centers-excellence](http://www.dhs.gov/science-and-technology/centers-excellence)



Impacts



Forecasting migration trends to inform policy

To help Customs and Border Protection prepare for a potential migration crisis, BTI Institute researchers are exploring the dimensions of the Venezuelan and Nicaraguan migration outflow. The results will help inform policies to prevent a broader hemispheric crisis.



Evaluating the use of blockchain to facilitate legitimate trade

Because of the significant cost of supply chain disruption, BTI Institute researchers are exploring innovative opportunities provided by blockchain and other relevant technologies for transforming the entry data collection process in order to facilitate the timely analysis of supply chain risk and to ensure trade compliance.



Securing trade into U.S. seaports with sensors deployed via UAS

Each year, more than 11 million maritime containers arrive at U.S. seaports. BTI Institute researchers are evaluating the feasibility of using unmanned autonomous systems (UAS) mounted with cameras, thermal imaging cameras, or other potential sensors to enhance cargo container screening.



Provide DHS personnel educational opportunities for career advancement

Through university-based education systems and online certificates, the BTI Institute is developing new degrees in Border Management, Trade, and Transport Security and new certificate programs in Border Operations Management and Security.