



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 22 university, private industry, and national laboratory partners

EXPERTISE ▶

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

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 border management
- 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:

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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 is 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

AECOM
Cross-Border Institute
Migration Policy Institute
MITRE Inc.
Oak Ridge National Laboratories
SAS Federal LLC
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
hsuniversityprograms.org



Impacts



Developing improved identification technology for border crossings

BTI Institute researchers are developing software solutions based on biometric identifiers that are effective in a variety of operational environments to enable more accurate and timely identification of people crossing the border.



Facilitating legitimate flows across U.S. borders

More than 42 million pedestrians and nearly 105 million vehicles per year cross U.S. Ports of Entry. Border security officials work to facilitate the flow of traffic without compromising security. BTI Institute researchers are working with leadership at Ports of Entry to model scenarios to develop congestion reduction strategies to shorten wait times and more effectively resource U.S. inspection personnel.



Securing trade into U.S. seaports through risk and operational assessments

Each year, more than 11 million maritime containers arrive at U.S. seaports. BTI Institute researchers are developing a risk assessment tool and an operational assessment of seaports to evaluate current security risk management and cargo screening processes.



Improving resourcing decisions for border security

To better understand migration flow impacts, BTI Institute researchers are collecting data directly related to push and pull factors. Researchers are building forecasting and estimated flow models to allow multiple DHS component agencies to make better informed decisions on allocating resources and personnel.