Featured Project: Participatory Operational Assessment

The Borders, Trade and Immigration Institute (BTI) has successfully concluded two years of the project titled “Participatory Operational Assessment (POA): Evaluating and predicting the operational effectiveness of Cargo Security Process at Ports of Entry (POEs)”.

Each year the U.S. imports and exports over two billion metric tons of cargo, including fifteen million TEU (Twenty Foot Equivalent Unit) Containers. This number grows annually due to population growth and new trade agreements. These cargoes are handled both by the DHS including Customs and Border Protection (CBP), Customs-Trade Partnership Against Terrorism (C-TPAT), and other agencies and industry stakeholders, including port authorities, vessel, rail and motor carrier operators, importers/exporters, freight forwarders, customs brokers, energy majors, manufacturers, etc. While these entities represent diverse institutional, geographical and industrial interests, their synergistic approach would be mutually beneficial in the development of a multi-leveled risk management protocol, for the identification, prevention, mitigation, and forecasting of security risks.

The research led by Prof. Maria Burns (UH) has developed a strategic process that helps minimize POE delays, identify risks beyond the borders, and propose improved efficiencies. The testbed for the first research year was the Port of Houston, TX and that for the second year in the southern U.S. borders included the land ports of Laredo, Eagle Pass, El Paso, Brownsville, and Hidalgo in Texas and Calexico in California. The deliverables provide ample findings that can be applied to other sea and land ports.

The Participatory Operational Assessment (POA) protocol represents a new component of the security risk management that not only strengthens Public/Private Partnerships beyond the US. Border, but also enhances the DHS mission and goals for optimizing the performance of our national 325 POEs.

Two approaches were used in this project:
A. the empirical process testing approach, i.e. baseline measurements in specific testbeds;
B. the STEM research approach, where statistical and econometric tools process the testbed findings.

An advisory board consisting of DHS Champions and industry stakeholders that evaluates the research findings driven through baseline measurements and statistical analysis while recommending best practices would be developed.

Novelties, Benefits & Capabilities

There are many benefits and capabilities involved with the Participatory Operational & Security Assessment Methodology, including but not limited to:

1. Bridging homeland security / border crossing agencies and industry stakeholders to identify risk areas and develop mutual strategies for alleviating the border threats;
2. Expanding beyond the physical borders and promoting a unified, collaborative environment that extends its risk assessment protocols way beyond the border and the national territorial risks;

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Message from the Director: Ioannis A. Kakadiaris

The Institute team extends our deepest sympathies to our fellow Houstonians affected by Hurricane Harvey. We are grateful to the first responders and fellow volunteers who worked tirelessly to care for those who needed assistance. There is no other place the BTI Institute would want to call home and we are proud of our fellow Houstonians. We know that while we remain #HoustonStrong, our city will recover and we will be a stronger Houston.

In the past few months, The BTI Institute has preparing both our Annual Report and Biennial Review portfolio for the Office of University Programs under the Department of Homeland Security Science and Technology. It was through these activities that we were able to hone in on our transition strategy.

The strategy we developed is one that focuses on the customer, our end-user, who will take the results of our extensive research and apply it every day to ensure we are meeting our multipronged mission of enhancing the nation’s ability to secure our borders, facilitating legitimate trade and travel, and ensuring the integrity of our immigration policies.

It is with this end-user mindset that we share our recent news and updates through this newsletter. Our research portfolio has expanded and five new projects have been awarded. In addition, the BTI Institute has been awarded a DHS grant to Prepare Communities for Complex Coordinated Terrorist Attacks (CCTA Program). You can read about this and much more in the rest of the newsletter.

Finally, we ask that each of you mark your calendars and spread the word about our Performers’ Showcase currently scheduled December 4-5, 2017, at American University in Washington, D.C.

Calendar of Upcoming Events

External Advisory Board Meeting
Borders, Trade and Immigration Institute
University of Houston, TX
November 13–14, 2017

BTI Institute’s Performers’ Showcase
American University, Washington, D.C.
December 4–5, 2017

Featured Project: Participatory Operational Assessment (cont’d from page 1)

3. Knowledge sharing that encompasses Risk Management applications through its main stages of (i) Risk Identification; (ii) Contingency Planning; and (iii) Emergency Response & Recovery;
4. Testing team efficiency, participation, and confidentiality prior to committing to Public/Private partnerships.

The POA protocol is easy and fast to adopt, and its effectiveness can be tested promptly. Once the effectiveness of this synergistic strategy is tested, Public/Private partnerships are formed and strategic action can lead to the facilitation of border processing times. Recommendations and best practices are herewith offered to help improve turnaround times and increase efficiency of cargo operations. Hence, the findings will facilitate the DHS/CBP need to diligently process inbound containers and enhance security.

Maria G. Burns has been a valued Performer with the BTI Institute since 2015. She has numerous publications and authored books on logistics, transportation and port management and operations. Burns is a Ph.D. candidate in Environmental Studies at Vrije Universiteit Brussels, Belgium and earned a Masters in Science in International Trade & Transportation from London Metropolitan University, England. She currently serves as the director of the Center for Logistics & Transportation Policy in the College of Technology at the University of Houston.
Cyber attacks from foreign countries are serious issues that incur damage and loss worldwide. Existing cyber-attack academic research, reports, and investigations have typically focused on the continents of Europe and Asia. As the use of Information Communication Technologies (ICT) spread, more attacks are expected to originate from the sub-Saharan African region. While these attacks are not currently being tracked, Dr. Samuel Olatunbosun and two students, Nathaniel Edwards and Cytyra Martineau, have participated in a DHS Summer Research Team Program (SRT) at BTI Institute to tackle the problem of cyber security awareness in sub-Sahara African zone.

As part of the summer 2017 research, the team collected and organized existing evidence, artifacts, data, and reports available on the sub-Saharan African cyber-attacks and cyber-crimes into one central data repository. This repository makes it easy to manage, analyze, assess, predict, and prevent the occurrence of a major large-scale attack on the U.S. homeland.

Dr. Olatunbosun was enthusiastic about the future use of this research. In addition to furthering research on cyberattacks by academics, he would like to see this data repository used “to provide answer to several cyber threat questions that may originate from the African continent in future.”

Weidong “Larry” Shi, Ph.D, BTI Lead for Strategic Partnerships, was Dr. Olatunbosun’s primary research mentor. Dr. Olatunbosun conducted research with BTI Institute for 10 weeks, meeting weekly with Shi to discuss research methods and analysis approach.

Olatunbosun visited University of Houston from Norfolk State University where he is an Associate Professor and Undergraduate program Director. He earned his D.Sc. in Information Systems and Communications from Robert Morris University; M. Sc. in Electronic Systems Engineering from the University of Bolton, United Kingdom.

This research has led to an increased interest in cyber security and risk management for Hsu who will be joining the Master of Science program in Information Systems Security at University of Houston this fall. “With my J.D. and prior legal experience, I was able to combine my knowledge of law and cybersecurity,” said Hsu.

Dr. deWitte earned her Ph.D. in Computer Science from Texas A&M University; J.D., Law from St. Mary’s University School of Law; and Masters in Education from Purdue University. She is the current Assistant Director of the Texas A&M Cybersecurity Center, In-House Counsel for Cyber-Fisma, LLC, Co-Founder and In-House Counsel for Mud Labs LLC and Particle Size Engineering, LLC., and practicing attorney.

BTI Institute launched, with funding from UH, the Student Research Fellows program this summer with the first the Student Research Fellow, Bobby Hsu. Through the summer Hsu worked directly under Dr. Paula deWitte to develop course materials, syllabus, slides, and reference materials for workshops targeting small businesses. Three courses were developed for small businesses including Cyber Security 101: Everything you wanted to know about Cybersecurity but were afraid to ask; Risk Assessment and Management for Small Businesses, and Critical Infrastructure.

These courses are consistent with BTI Institute’s mission by providing education material that better ensures our national security, including legitimate trade and developing a cybersecurity-ready workforce. This benefits the nation by improving our overall security posture, the individual students by building cybersecurity skills, and BTI by developing useful services and products.
BTI Institute-Sponsored Student Campaign Wins Third Place in DHS Sponsored Social Media Campaign Competition

BTI Institute Communication Advisor, Dr. Lan Ni, led a student team that won third place in the DHS sponsored Peer to Peer: Challenging Extremism competition, managed by EdVenture Partners and supported by Facebook. This social media campaign, Me to We, focused on dispelling extremism through engaging in dialogue and civil conversations despite differences of opinion.

Forty nine teams participated in this competition. According to the organizer, the UH team is the first team that has ever made top three on its very first try in the competition.

The students presented their project in front of policy makers, senior leaders, and guests in Washington D.C. on July 18, 2017. The judges included officials from DHS, the National Counterterrorism Center, the Countering Violent Extremism Task Force and Facebook.

The team was then invited by the past head of the National Association of Government Communicators (NAGC) to deliver a webinar later in 2017 to their members, who are communicators in the federal, state, and local government, on how government agencies may implement similar programs to help combat hate, intolerance and extremism.

The first and second place winners are National Consortium for the Study of Terrorism and Responses to Terrorism (START) minor program students and the University of Massachusetts Lowell students.

New Project | Missed Detections: From Data to Actionable Estimates

**Synopsis:** Rutgers University will extend formal tools of data science, adapting techniques from ecology and operations research. The resulting insights into missed detections will help CBP and other agencies assess and document performance; get early warning of change; assess trends in a timely fashion; and understand the effect of specific resource allocations on deterrence and detection.

**Approach:** The research will use synthetic data on interdictions, recidivism, and on effort, by station. The two novel methods proposed to exploit these data are: Extended/multi-type models of the Capture-Recapture concept (ECR), both passive and active, and the optimization techniques of Data Envelopment Analysis (DEA).

**Needs:** Simple capture-recapture models have already been applied in this context, and underlie some Border Patrol metrics. The currently employed “naïve” Capture-Recapture models assume that all apprehended persons try again, and are as likely to be caught as any other person. This project will develop more sophisticated ECR models of this complex process, define the data needed to apply it, and validate it with both simulated and actual data.

**Benefits:** The DEA method arose in governmental and non-profit settings where multiple “Decision Making Units” (DMUs) deal with similar problems. DEA recognizes that each DMU, such as a border station or sector, differs from other DMUs. Using mathematical techniques including Linear Programming, DEA provides a principled way to assess resources and their relations to impacts. The management benefit of DEA is that each unit can be considered in its own context and with its own specific mix of resources and impacts. The engineering and scientific challenges lie in adapting models to the peculiarities of the border security problem, and in dealing with practical operational limits on the data that are, or can be, available to decision-makers.

**Dennis Egan**
Research Professor
Assistant Director; Command, Control, and Interoperability Center for Advanced Data Analysis (CCICADA)
Rutgers University

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1 This initiative is resourced using funding provided by the University of Houston to the BTI Institute: A DHS Center of Excellence.
New Project | Secure and Transparent Cargo Supply Chain: Enabling Chain-of-Custody with Economical and Privacy Respecting Biometrics and Blockchain Technology

**Synopsis:** The project addresses the needs of maritime supply chain transparency: improve supply chain security, prevent cargo fraud/theft, and strengthen resilience against cyber exploits/insider threats through secure chain-of-custody. It leverages the recent advance of blockchain as a tool to achieve its goal and implement supply chain best practices recommended by the stakeholder community.

**Needs:** International trade has been and continues to be a powerful engine of United States and global economic growth. To secure the U.S.’s economic prosperity and protect the welfare and interests of the American people, it is necessary to strengthen the global supply chain. As a critical part of the global trade, the maritime supply chain is a complex system involving multiple parties (e.g., owners, buyers, sellers, shippers, carriers, port authorities, different logistic parties, and insurance companies). Because the number of parties involved is large, sometimes more than 20 for shipping goods from A to B and they are geographically distributed over the world, the industry has been facing long persistent challenges in lack of transparency and visibility. This creates information silos and exposes maritime supply chain and cargo transportation to potential frauds (defraud shippers and carriers at multiple points of supply chain), thefts (e.g., fictitious pickup of cargos), and risks of smuggling illegal goods (e.g., ghost containers). Exposure to cyberattacks and insider threats also increases as the industry (shippers, carriers, logistics providers, and freight forwarders) grows in reliance on IT and electronic trading platforms. A recent study by CyberKeel mapped the flow of usual information exchanges from the point of booking a container until delivery at the endpoint. The mapping showed more than 50 possible attack points against which a cyberattack could be targeted. Often, penetration at one to two such points would be sufficient to allow or facilitate unauthorized movement of goods and cargo.

**Approach:** The team proposes to leverage the unique characteristics of blockchain, which is proven to be effective, robust and secure for managing custody of digital assets or digitalized assets, to improve the maritime supply chain information flow to support better visibility of goods (transparency) and connect cargo to people by integrating identity management with blockchain and achieving holistic chain-of-custody in both physical world and supply chain information space. Our strategy is to forge a **global alliance involving stakeholders** – early adopters, government agencies, academia, supply chain stakeholders, and solution providers.

**Benefits:** Each legitimate party involved in maritime supply chain can benefit from the system because: (i) Cargo supply chain transparency and visibility are greatly improved (buyers, sellers, and logistic brokers are offered with holistic chain-of-custody during cargo transportation) (ii) Compliance documentation is made easier for C-TPAT partners and participants (iii) No one can manipulate or alter chain-of-custody records stored in the blockchain and government agencies (e.g., CBP) can easily audit any trade compliance issues (immutable and auditable chain-of-custody).

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**Boedeker is BTI Institute’s new Manager of Communications/Operations**

Philip Boedeker joined the institute as the new Manager, Communications/Operations for the BTI Institute. A graduate of Texas A&M University with a law degree from the University of Houston, Boedeker is an experienced manager and adept communicator who has developed and led communication efforts in the medical industry for the past year and a half. Boedeker is a member of the U.S. Army Reserve, serving with the 211th Mobile Public Affairs Detachment based in Bryan, Texas. Previously, he served in the U.S. Army for over six years as a leader and technical expert. He will begin work at the BTI Institute on October 2nd.
Award of DHS Grant for FY 2016 Program to Prepare Communities for Complex Coordinated Terrorist Attacks (CCTA Program)

In July 2017, the South East Texas Regional Planning Commission (SETRPC) was awarded a Department of Homeland Security (DHS) grant to improve its ability to prepare for, prevent, and respond to complex coordinated terrorist attacks in collaboration with the whole community. Work on this initiative began in September 2017. The SETRPC was one of 29 programs in the nation and one of only four in Texas selected to receive over $1,000,000 in CCTA Program grant funds from DHS to prepare for a complex coordinated terrorist attack.

In January 2017, the SETRPC requested the BTI Institute’s assistance in its application for a DHS grant for development of a Unified Regional Response Plan for a Coordinated Complex Terrorist Attack in the Beaumont-Port Arthur-Orange region of South Texas. In turn, the BTI Institute solicited the inclusion of the National Consortium for the Study of Terrorism and Responses to Terrorism (START) at the University of Maryland, another DHS Center of Excellence, for research in completing a comprehensive review of threat tactics and development of a compendium and presentation of possible threat tactics based on terrorist publications, statements, past attacks, and online chats.

The initiative focuses on enhancing preparedness for local jurisdictions in the Southeast Texas region of Hardin, Jefferson, and Orange Counties. The Centers of Excellence will provide comprehensive research, plans, training, and drills for fire, police, emergency medical services, and emergency management on preventing and responding to a multi-modal terrorist event such as one involving a firearm, explosives, and fire as a weapon.

The project’s impact will extend far beyond the Southeast Texas region. Through this initiative, the BTI Institute will develop replicable planning and response tools for cities and jurisdictions to prepare for and respond to a Complex Coordinated Terrorist Attack.

These tools will include:

- Review of After Action Review recommendations, best practices, and lessons learned from terrorist attacks and active shooter incidents;
- Planning and conduct of workshops for the areas of Intelligence, Operational Communications, Tactical Response, Medical Response, Victim and Family Services, and Public Information;
- Creation of a template for Unified Regional Response Plans for CCTA;
- Development of the South East Texas Regional Planning Commission’s Unified Regional Response Plan for a Coordinated Complex Terrorist Attack;
- Formulation of an associated Action Plan identifying actions needed to fully implement the plan;
- Creation of a template Synchronization Matrix - a decision support tool used to clearly identify mission, tasks and capabilities by jurisdiction, Emergency Support or Organizational Functions, organizations, and teams;
- Biometric Enhancement of a Mass Witness App – a Award of technological application for tablets and smartphones to assist law enforcement officers that allows for the rapid interview, photograph/video, and information gathering of multiple witnesses at the incident scene. The enhancement would introduce biometrics for facial recognition and fingerprinting to help verify witness identification;
- Creation of a “One File System” for victims of attacks;
- Training Seminars on Regional CCTA plans and actions in response;
- A Webinar on the CCTA.

For more information, contact Kevin Clement, BTI Institute’s Executive Director, Strategic Partnerships at KClement@uh.edu.
Tunnel Detection Working Group Visit to USBP San Diego Sector

Kevin Clement, BTI Institute, and representatives from U.S. Border Patrol Headquarters visited tunnels in the San Diego Sector from August 7-10, 2017. The visit was an exceptional opportunity for the BTI Institute to meet with U.S Border Patrol leaders and program managers to discuss the issues and challenges faced by U. S. Border Patrol agents in their attempts to detect and counter illegal tunneling activities. The terrain walk served to:

- Explore the opportunity to create a Tunnel Detection Working Group to enhance border security;
- Review current and existing tunnel detection capabilities and efforts to identify gaps in tactics, techniques, and procedures and potential areas for research;
- Through research, promote the development of technology to detect tunnels currently in existence and the construction of new tunnels so as to prevent their use by terrorist elements and criminal organizations;
- Conduct a relevant line tour to familiarize participants with the unique terrain and operational challenges in the San Diego Sector;
- Obtain operational and intelligence briefings regarding current smuggling trends related to tunneling activities conducted by Transnational Criminal Organizations.

The briefings and line tour of several tunnels and storm drains were led by Border Patrol Agent Robert (Lance) LeNoir, Operations Officer, San Diego Sector.

U.S. Border Patrol participants included ten representatives from USBP Headquarters’ Strategic Plans and Analysis Division; SPAD, Operational Requirements Management Division; Operations Programs Division; Program Management Office Directorate (PMOD); and CBP Laboratories and Scientific Services Directorate.

The BTI Institute will work with stakeholders to determine the priority of each potential project and the level of interest for developing a proposal.

Border Security UAS Working Group

On Wednesday, July 19th the BTI Institute hosted a teleconference of the Border Security Unmanned Aerial Systems (UAS) Working Group. Representatives from the National Consortium for the Study of Terrorism and Responses to Terrorism (START), University of Maryland), Critical Infrastructure Resilience Institute (University of Illinois), the Texas State Guard, The Texas Governor’s Protective Detail, the Lone Star UAS Center of Excellence, the Combating Terrorist Center (U.S. Military Academy) and the MITRE Corporation were in attendance.

Presentations were provided on Nonstate Actor Use of UAS – Lessons Learned from the Terrorism Studies Field by Don Rassler and Sensor Placement and Optimization for Low-Flying Aircraft Detection and Surveillance by Dr. Weiqun Shi.

The presentation Nonstate Actor Use of UAS – Lessons Learned from the Terrorism Studies Field was a historical view of the linkages between terrorist organizations and their uses of UAS. The briefing covered the threat posed by international and domestic terrorist groups, identified distinctions between individual cases and established programs, and a discussion of different mission for UASs, group types, and organizational dynamics.

One of the key observations was that criminal drug cartels could rapidly increase their capabilities to smuggle narcotics by incorporating lessons learned and best practices of the uses of drones by international terrorists and acquire new state-of-the-art equipment for increased effectiveness.

The second presentation was given by Dr. Weiqun Shi from the MITRE Corporation. This study was in support of the Department of Homeland Security, Science and Technology Directorate.

The Sensor Placement and Optimization for Low-Flying Aircraft Detection and Surveillance briefing was developed to present a possible tactical solution for the US Border Patrol’s requirement to detect and track low flying “small dark aircraft” in the valleys of mountainous terrain in US Northern Borders areas. These “small dark aircraft” could be light aircraft, helicopters, gyrocopters, or hang gliders. Another problem in establishing autonomous systems to detect, track, and report low-flying aircraft in this area are the harsh weather conditions and the lack of both an available electrical power and communication architecture.

The MITRE team developed a network of autonomous standalone detection stations that integrated acoustic, radar, and electro-optical/ infrared detection systems powered by a solar – battery power which used a mesh communications architecture. Another key factor in the success of this system was site location because each individual station must be capable of detecting and tracking an aircraft traffic as well as communicating that information with at least one other station.

Mac Sikes, BTI Fellow, was named as the Chair for the BTI Institute’s Border Security Unmanned Aerial Systems Working Group. In coordination with the BTI Institute Director, he will plan, coordinate, and conduct future meetings of the Border Security UAS Working Group over the course of the next performance year.
BTI Institute Conducts COOP Training for Border and Coastal Regions

On July 24-28, 2017, the BTI Institute, working in coordination with the FEMA Region VI Continuity Program Manager, conducted COOP Program Management Train-the-Trainer and COOP Planning Train-The-Trainer Courses in El Paso, Texas, to expand capabilities and enhance preparedness of jurisdictions in the Rio Grande Council of Governments.

Maureen Clement, BTI Institute Fellow and Master Continuity Practitioner, instructs a FEMA Continuity of Operations Course.

There are significant areas within U.S. border regions that have requested COOP training but for which trainers were not available. The BTI Institute, with funding from UH, responded to the requests of the South East Texas Regional Planning Commission (Beaumont, Texas), the Rio Grande Council of Governments (El Paso, Texas), and the South Texas Development Council (Zapata, Texas) to provide the FEMA L-550 COOP Planner Train-the-Trainer Course and L-548 Continuity Program Manager Train-the-Trainer Course.

The BTI Institute dispatched a two-person Mobile Training Team (MTT) to El Paso in order to:

- Provide Continuity of Operation training to qualified trainers from counties and municipalities in the border regions;
- Provide the knowledge and planning tools needed to develop operational Continuity of Operations plans for regional, county, and local municipalities in the border and coastal regions;
- Establish a core group of Continuity of Operations trainers within each requesting border and coastal region;
- Preclude the loss of DHS and FEMA funding by jurisdictions that currently do not have operational Continuity of Operations plans;
- Contribute to increased readiness and enhance the Protection, Response and Mitigation missions of border and coastal communities Educate trainers for counties, cities, and tribes in the specified regions.

All training sessions were scheduled in coordination with the FEMA Region VI Continuity Manager and the Texas Division of Emergency Management (TDEM) Training Section.

- Training scheduled for June 23-27, for the South East Texas Regional Planning Commission in Beaumont, Texas was curtailed as the impending landfall of Tropical Storm Cindy resulted in call backs of emergency management personnel attending the course. The L-548 Continuity Program Manager Course was conducted as scheduled on June 23-24. The L-550 Course will be rescheduled in November-December, 2017.
- The BTI Institute is scheduled to conduct COOP training for the South Texas Development Council in Zapata, Texas, from September 25-29, 2017.

Homeland Security Symposium

The Homeland Security Symposium series is now in its second year. Check out the schedule below for new topics in the series.

December 2017

**Topic:** Border Financial Sector Review  
**University Affiliation:** UTEP (Hunt Institute) and the Department of Treasury

February 2018

**Topic:** Domestic Terrorism and the Role of Intelligence  
**University Affiliation:** Naval Postgraduate School

April 2018

**Topic:** Drug Violence in Mexico: Data and Analysis through 2016  
**University Affiliation:** University of San Diego

For more information, please contact BTI Institute Performer Victor M. Manjarrez at vmmanjarrez@utep.edu.
The Naval Postgraduate School (NPS) Center for Homeland Defense and Security (CHDS) University and Agency Partnership

The BTI Institute has coordinated with CHDS Director Steve Recca to participate in the CHDS University and Agency Partnership (UAPI, www.uapi.us). This initiative brings together institutions dedicated to advancing homeland security education. This effort seeks to increase the number and diversity of students receiving homeland security education beyond the NPS campus, accelerates the establishment of high-quality academic programs nationwide, and provides opportunities for collaboration that create an intellectual multiplier effect to further the study of homeland security.

The program aims to:

• Support CHDS' mission to provide graduate-level homeland security education programs and services to strengthen the nation’s security;
• Provide a way for UAPI partners to prevent redundant curriculum development and associated costs;
• Facilitate nationwide collaboration among educational institutions and agencies as they develop or expand their homeland security programs;
• Create synergy to address critical national security and defense research issues.

Program benefits include:

• Access to homeland security course syllabi, content, and educational resources at no cost;
• Use of the Homeland Security Digital Library (www.hsdl.org), the nation’s premier collection of homeland security documents;
• Communication and discussions with CHDS instructors and staff regarding homeland security education and issues;
• Use of an interactive simulation environment where strategies and policies can be tested;
• Continuous CHDS review and scrutiny of all Center content to ensure currency and relevance to the advancement of homeland security as an educational discipline.

Specific to the BTI Institute, researchers will be able to use the Homeland Security Digital Library to archive their research. Additionally, the CHDS will assist in posting future BTI Institute Requests for Proposal through its listing of 340 institutional partners and 1,330 individual researchers.

Partnership with the National Maritime Law Enforcement Academy

In June 2017, the BTI Institute began a partnership with the National Maritime Law Enforcement Academy (http://nmlea.org/) in initiatives to expand the Institute’s footprint in the maritime and port security areas.

The National Maritime Law Enforcement Academy provides education and training for law enforcement personnel as well as for the critical infrastructure industries located on or near the maritime environment. Besides improved tactical operations within an agency, this education also covers coordination among applicable agencies at times of catastrophic events exercising the National Incident Management System (NIMS).

The NMLEA will work with the BTI Institute in the development of an annual Border Security Special Response Team Conference (February – March, 2018) in developing conference tracks for Maritime Units and Public Safety Dive Teams.

Summer Internship Program with U. S. Military Academy

The BTI Institute and the U. S. Military Academy (West Point, NY) have agreed to a student internship program beginning in summer 2018. Through this program, the BTI Institute will host junior and senior cadets at the University of Houston for three to four week homeland security internships.

Each cadet, in coordination with their BTI Institute faculty/staff advisor, will select one topic of research in the areas of homeland security, border security, or counter-terrorism. At the conclusion of their internships, each participating cadet will submit a paper on their research.

Cadets will be afforded a line tour of a U.S. Mexico border sector and will be invited to participate in meetings, presentations, and discussions of current border, trade, and immigration issues during their stay.

Participating cadets will be lodged at the University of Houston. Their travel and per diem (minus lodging) will be paid for by the U.S. Military Academy.