

A Department of Homeland Security Center of Excellence

2024-2025 CBTS General Research Request for Proposals

Issue Date:

May 30, 2024

Proposal Due Date:

July 26, 2024, 10:00 PM (Central DST)

Proposal Submission Address:

CBTS@ag.tamu.edu

RFP General Q & A Session:

June 18, 2024, Noon (Eastern DST)

Join the meeting now

Meeting ID: 287 230 175 200

Passcode: JffoaF

CBTS

The Cross-Border Threat Screening and Supply Chain Defense (CBTS) funds research and education projects. Our goal is to support the development of innovative technologies and capacities to detect and respond to biological threats moving through global supply chains. CBTS funds projects within current interest areas designed to achieve the following objectives:

- Enhance current capabilities to detect biological threats.
- Advance novel analytics for timely decision-making through meaningful data integration and representation from disparate sources.
- Reduce the risk of biological threats by **developing new operational methods** to assess the national supply chain network as an integral part of a global system by leveraging academic and industry partners.
- Use academic initiatives, industry partnerships, and enhanced workforce development to **educate and train current and future personnel** throughout the homeland security enterprise to prevent, prepare for, detect, respond to, and recover from evolving biological threats; and
- Provide unique capabilities and capacities to **support time critical response** for the Department of Homeland Security through implementation of next-generation threat identification approaches.

RFP Notice

This request for information does not commit the Cross-Border Threat Screening and Supply Chain Defense DHS Center of Excellence (CBTS) or the Government to contract for any supply or service. Responders are solely responsible for any preparation, information or administrative costs incurred in response to this RFP.

Deadline and Submission Information

Submit proposals no later than July 26, 2024, at 10:00 PM (Central DST). Submit proposals via email to CBTS at <u>CBTS@ag.tamu.edu</u> in PDF format. Direct all questions regarding this RFP to the main CBTS email address at <u>CBTS@ag.tamu.edu</u>.

RFP Research Interest Areas

Latin American Supply Chains Public Health Information Port Capacity

Latin American Supply Chains

Background

Latin America is uniquely positioned to benefit from supply chain disruptions that affected and continue to affect the North American economy. As firms and nations seek to adapt to the uncertainty related to extended supply chains, many are investing in or considering investments in Mexico and Latin America.

- How can the value of supply chain, environmental, health, social media, financial, and intelligence data sets be assessed quantitatively for inclusion in tools focused on providing insights into the economic health status of our Nation?
- How do different supply chains work and where are the critical nodes within a supply chain where opportunities exist for mitigating risk?

Topics of Interest

- Identification of barriers to increased economic development and industrial or agricultural production in Latin America, and approaches to overcoming these barriers.
- Mapping and likelihood of the expansion of activities of select industrial/economic sectors in Latin America
- Illumination of trade and capital flows and trends over time into and out of Latin America, relative to the US and North America, and the rest of the world
- Relation of economic development to potential decrease in northward migration pressure from Latin American countries- consider growth over time and impact/opportunity for local or national population

Public Health Information

Background: The importance of data and information sharing for the prevention and control of infectious diseases is known. The absence of a systematic framework or operational guidelines for sharing public health data is a challenge.

- What are the current barriers that limit exchanges and are there examples of effective data sharing approaches?
- What policy changes would encourage data owners to share data depending on level of granularity, and under what legal protections?

Topics of Interest

- Development of secondary de-identified health data sharing case studies. Examples should describe lessons learned and best practices that affect quality of responsible data sharing with a focus on improved public health outcomes.
- Identify case studies of barriers and opportunities for responsible sharing of de-identified health data across national, state, regional, and municipal boundaries.
 - Data quality issues definitions, standardization, discontinuities, and differences in management systems, and frameworks
 - Confidentiality concerns data ownership and trust
 - Regulatory compliance data use agreements, and statutory and regulatory requirements

Port Capacity

Background: More than 360 ports across the U.S. contribute to the country's economic growth and employment. These ports vary in size, operational capacity, intermodal connectivity, and ownership. Most ports have limited or no ability to expand the footprint of their facilities including the number of lanes entering and exiting the port, and the area available for inspection and storage. In short, space is a major constraint making changes in the movement, inspection, retention, and mitigation of suspect shipments especially difficult. However, operational capacity can be affected by staffing levels, automation, and the adoption of more efficient detection and inspection technologies.

- How can technology support the identification of response to biological and cyber threats accurately and quickly?
- How can public and private enterprises establish effective detection-based deployment schemas that balance cost, capability, flexibility, and mitigation capacity?

Topics of Interest

- Identify ways processes and facilities could be implemented to minimize operational and commercial disruptions caused by cargo that might otherwise need to be seized, re-exported, or destroyed while minimizing risk and limiting economic damage to firms and the economy.
- Examine alternative approaches to adopting novel processes, procedures, and tools designed to enhance detection of threats while facilitating the movement of legal goods through U.S. air, sea, and land ports.

Proposal Format and Submission Deadline Requirements

The proposals must meet specific content, formatting, deadlines, and page limit requirements. All proposals must be single-spaced, use an 11-point or greater font, use 1-inch margins, and include page numbers. CBTS will reject proposals that do not address project requirements, or do not follow formatting, and page limit requirements. Proposals arriving after the submission deadline will not receive funding consideration.

Note: This is a broad request for proposals investigators are not expected to prepare proposals spanning the three research areas of interest.

Proposal Format (12-page maximum)

- 1. Proposal coversheet (1-page)
 - a) List key personnel with contact information.
 - b) Identify the research interest area
 - c) List primary objectives
 - d) Provide an abstract with expected objectives, expected outcomes, and value proposition

2. Proposal body (10-pages)

- a) Briefly describe the issue (half a page maximum)
- b) Describe the methodology and include supporting citations
- c) Describe data requirements and the availability of data to accomplish the research
- d) Identify major project deliverables and the means for assessing the success of the research using the SMART framework
- e) Describe any risks to access and necessary facilities or other critical equipment and data.
- f) Describe the role of students and facilities on the project.

3. Budget with brief narrative by category (1-page) (max. \$250,000/per year for up to two years)

- a) Salaries and benefits
- b) Data and related contracts
- c) Equipment
- d) Travel
- e) Indirect costs (negotiated rate)
- 4. In a separate appendix that does not count against the proposal's page limit include biosketches (2-page maximum per person). Bio-sketches should highlight experience and relevant publications.

Scientific Merit Reviews

CBTS and DHS reviewers will assess the merits of each proposal. CBTS will screen potential reviewers for conflicts of interest prior to the initiation of reviews. Reviewers will evaluate proposals based on the following criteria and apply the weighting factors as indicated to determine their overall ranking of each proposal.

1. Scientific Merit, Methods, and Risks (65%)

- a) Does the proposal outline a path to meet the research objectives and deliverables within an appropriate timeline?
- b) Does the proposal use appropriate approaches/methodologies, specify the data required, and highlight and significant risks associated with the proposed approaches or data availability?
- c) Has the team defined metrics and milestones appropriate for the stated goals?

2. Qualification of Personnel (20%)

- a) Does the team have the qualifications to conduct and complete the proposed work?
- b) Does the team demonstrate the ability to deliver products that meet the proposed objectives and deliverables within their proposed budget and schedule?

3. Budget and Schedule (10%)

a) Are the anticipated costs reasonable based on the one-page budget?

4. Facilities and Equipment (5%)

a) Do the necessary facilities and information systems exist and are they adequate to achieve proposed research objectives?

Conversion of Proposals into Project Work Plans and Budgets

If CBTS selects a proposal for funding, CBTS will ask the authors to prepare a project work plan and detailed budget justification. CBTS will share workplan and budget requirements with the authors. As needed, CBTS may seek additional scientific merit reviews for workplans.

Funding and Agreement Terms and Conditions

If funding is available, CBTS will fund up to six projects through cooperative agreements with CBTS. Successful projects may be **funded up to \$250,000 per year** (including indirect charges) per project (2-year maximum period of performance). All awardees and sub-awardees must meet all current DHS – TAMU Cooperative Agreement Terms and Conditions.

Data Considerations

Prior to initiating work on any research project researchers will need to provide a plan for acquiring and securing the data they need. Please consider your data needs as you develop your proposal.

Researchers and their institutions need to agree that they intend to produce publicly releasable results. Projects funded under this RFP may use non-DHS, third-party, public, and synthetic or simulated data. However, no classified data, controlled unclassified information (CUI), or sensitive but unclassified (SBU) data may be used. As with any project, data collected from human subjects may be used only after the appropriate IRB and DHS Compliance offices complete their reviews. Please consider adding an additional eight to ten weeks of funded activities at the start of the project to accommodate completion of compliance requirements.

Proposals that advance to the workplan stage must submit a formal data management plan that describes the acquisition, processing, storage, protection, and disposition of data prior to final approval.

Questions

If you have any questions, please send them to <u>cbts@ag.tamu.edu</u>.