



**United States Department of Homeland Security
Science and Technology Directorate**

**Long Range Broad Agency Announcement 24-01
AMENDMENT 04**

TABLE OF CONTENTS

SECTION	LINKED TITLE
1	LRBAA INTRODUCTION
2	PROCESS OVERVIEW
3	ELIGIBILITY
4	RESEARCH TOPICS
5	PROCESS DETAIL
6	OTHER INFORMATION
7	CONTACTS
8	LRBAA ATTACHMENTS

The United States Department of Homeland Security's (DHS), Science and Technology Directorate (S&T) announces a modernized Long Range Broad Agency Announcement (LRBAA) featuring improved communications, transparent needs, submission options, and a faster response to your submissions. The LRBAA's purpose is to fund scientific and technical projects across a spectrum of science and engineering disciplines that significantly improve or increase a capability to the Department's operational environment and the Homeland Security Enterprise (HSE).

S&T is interested in receiving research concept material(s) that meet one of the following three (3) types (see "Topic Research Sought" field under Section 4 Research Topics for each specific Topic):

- Type I (Near-Term Component): Includes projects/activities that focus on gaps or needs that have been identified by DHS components;
- Type II (Foundational Science): Enduring research that results in better and more actionable data sets, knowledge products, standards, and peer-reviewed publications to support scientific endeavors; and
- Type III (Future Needs and Emerging Threats): Exploring solutions to problems presented by emerging science and technology areas and their potential threat or application to future DHS missions.

LRBAA awards may consist of research and development contracts, grants, cooperative agreements and/or other transactions agreements (OTAs), to include technology development and demonstration. This LRBAA will **NOT** pursue the following solutions:

- Technical, engineering, or other types of support services, inclusive of "contracting"- type services;
- Evaluation of another contractor's performance/program;
- Research consortia, association, partnership or a combination, as of businesses or investors, for the purpose of engaging in a joint research and development venture in a general area; and
- Mature products.

The DHS S&T LRBAA 24-01 is a five (5) year announcement and will remain open until May 31, 2029 at 11:59 PM, Eastern Time (ET). This announcement may also contain topics with a limited open submission period. Industry Engagement material(s) are to be submitted via the DHS S&T Office of Industry Partnerships (OIP) portal to be further considered for an invitation to participate in the LRBAA's Virtual Pitch and Written Proposal steps.

Please be advised that the response dates associated with the Virtual Pitch and Written Proposal steps will be the date and time specified in the notification letter provided to you and not the LRBAA response closing date of May 31, 2029 at 11:59 PM, ET as referenced above.

Technical and cost proposal (or any other material) development costs will not be reimbursed.

Technical and cost proposals (or any other material) submitted in response to this LRBAAs will not be returned; however, depending on the markings on the materials, DHS S&T will adhere to Federal Acquisition Regulation (FAR) policy on handling source selection and proprietary information.

It is the policy of DHS to treat all materials as proprietary information and to disclose their contents only for the purposes of evaluation.

Please note only unclassified materials may be submitted. Classified information must not be transmitted.

Awards under the LRBAAs will depend on the quality of proposals received and the availability of funds. The Government reserves the right to select all, some, one or none of the invited proposals received, and/or to accept proposals in their entirety or to select only portions of proposals for award.

The Government reserves the right to award without exchanges or discussions. Award decisions will result from technical and scientific merit and the contribution to the technical and scientific needs of DHS as further detailed in this announcement.

The applicable laws and regulations governing a particular award will depend on the selected award type as referenced in the paragraph above. In many cases, other elements of the U.S. Government are pursuing related technologies. In such cases, DHS S&T will leverage those technology development efforts wherever practicable and efficient.

Also, if appropriate, DHS S&T may also facilitate access to laboratory and operationally relevant test and evaluation facilities, where reasonably available and in the Government's interest. If an offeror or offeror's subcontractor is a Federally Funded Research and Development Centers (FFRDC), Department of Energy National Laboratory, or other Federal entity, DHS S&T may work with the appropriate sponsoring agency to issue an interagency agreement.

DHS S&T OIP portal: <http://oip.dhs.gov/baa/public>

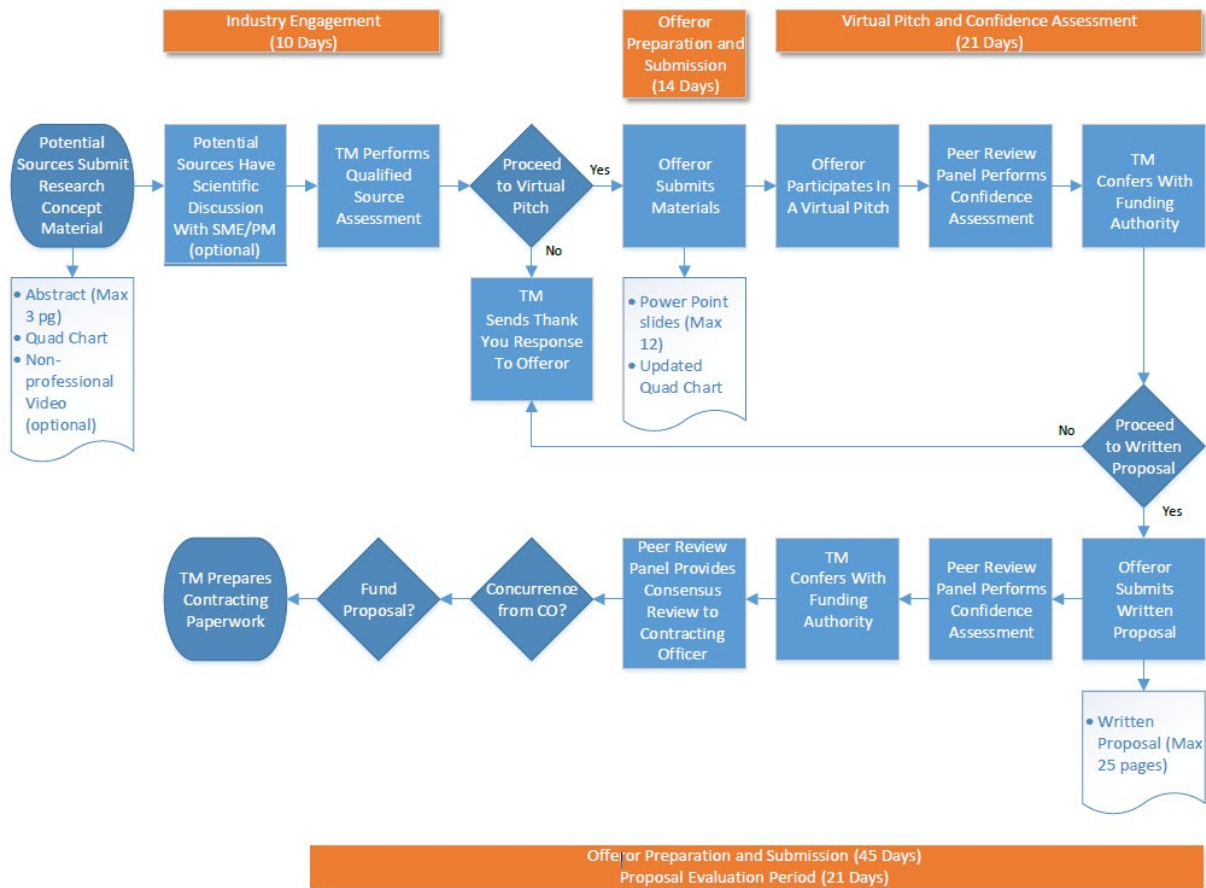
The LRBAA is a 3-step submission and evaluation process that begins with an Industry Engagement submission. During the Industry Engagement step, Scientific/Component Subject Matter Experts (SME) and Program Managers (PM) evaluate submissions to the DHS S&T OIP portal from interested sources in the scientific and industrial community to identify a broad range of qualified offerors. When merited, submitters may be invited by DHS S&T to participate in future steps of the proposal process consisting of a Virtual Pitch step and a Written Proposal step. Submission requirements and details will be provided in the invitation and are generally described below.

The second step of the LRBAA process consists of a Virtual Pitch for each submitter invited after the Industry Engagement Step. Only those submitters which are invited will be eligible to continue through the last step. Submissions will not be accepted from any offeror that has not been invited to submit.

Offerors that submit to and participate in the Virtual Pitch step may be invited by DHS S&T to participate in the Third Step, i.e., the Written Proposal step. Importantly, understand that the selection process will be affected by the availability of funds. Submissions to the Virtual Pitch step may have merit but would exceed available funding. In such cases, those submitters may not be immediately invited to participate in the Written Proposal step. Also, understand that Written Proposal submissions will not be accepted from an offeror that has not been invited to submit a written proposal.

The chart below maps the DHS S&T LRBAA proposal process from the initial submission to award. The three primary submission and evaluation steps in the process are indicated in orange.

Long Range Broad Agency Announcement Process Flow Chart



Submission and Evaluation Timeframes

The following timeframes represent a “best guess” regarding the time from receipt of proposal and any initial awards; however, those timeframes are subject to significant change. DHS S&T will provide updates as appropriate to inform participants of their submission and assessment status.

Process	Timeframe
Industry Engagement Assessment	Response and follow-up by DHS S&T within 10 business days
Virtual Pitch material(s)	Must be submitted to the DHS S&T OIP portal within 14 business days of written notification
Virtual Pitch and Evaluation	Completed by DHS S&T within 21 business days of the presentation material’s due date
Written Proposal material(s)	Must be submitted to the DHS S&T OIP portal within 45 business days of written notification
Written Proposal Evaluation	Completed by DHS S&T within 21 business days of the written proposals due date

Note: The Government may obtain support from both Federal subject matter experts and support contractors when completing LRBAAs proposal evaluations. Support contractors may be used to provide administrative assistance to federal employees who are involved in the evaluation of full proposals. Administrative assistance would include tracking the proposals through the review process and assigning proposals by system assigned number or proposal title.

As the activities typically carried out under the LRBAAs do not involve Advisory and Assistance Services (A&AS) contractors evaluating or analyzing proposals, the limitation in FAR 37.203(d) will not apply. If the conflict described in FAR 9.505-4 is found to exist, DHS S&T will ensure that the contractors have executed the necessary Non-Disclosure Agreements before proprietary information is shared.

Foreign or foreign-owned sources are advised that their participation is subject to foreign disclosure review procedures, applicable export control laws, and other applicable federal laws, regulations, and policies pertaining to U.S. Government business with foreign entities. Potential sources may include independent organizations, single entities, or teams from private sector organizations, Government laboratories, airport authorities, FFRDCs, and academic institutions. FFRDCs, including the Department of Energy National Laboratories and Centers, are eligible to respond to this LRBAAs individually or as team members with eligible principal sources, if they are permitted to respond to such announcements by their sponsoring agency.

DHS S&T particularly encourages submissions from small businesses; however, no set aside of any kind will be made. Historically Black Colleges and Universities (HBCUs), Minority Institutions (MIs), small businesses, small-disadvantaged businesses, women-owned small businesses, service-disabled veteran owned small businesses, and HUBZone small businesses are encouraged to participate in the process or to join other entities as team members.

Protecting our nation can be complex – from rapidly evolving threats to longer-term efforts that require our attention. The current six key mission areas are:

1. Counter Terrorism and Homeland Security Threats; (CTHOM)
2. Secure U.S. Borders and Approaches (BORAP);
3. Secure Cyberspace and Critical Infrastructure (CYBCI);
4. Preserve and Uphold the Nation’s Prosperity and Economic Security (PROES);
5. Strengthen Preparedness and Resilience (PRRES); and
6. Champion the DHS Workforce and Strengthen the Department (WORDT).

To fully understand the needs of our operational Components, DHS S&T routinely identifies priority needs that require Research, Development, Test and Evaluation (RDT&E) solutions. These priority needs drive DHS’s RDT&E investments. DHS S&T and Components look for the following Types of solutions:

Type I: Projects/activities that focus on gaps or needs that have been identified by DHS components;

Type II: Enduring research that results in better and more actionable data sets, knowledge products, standards, and peer-reviewed publications to support scientific endeavors; and

Type III: Exploring emerging science and technology areas and their potential threat or application to future DHS missions.

For more information about how DHS compiles these needs, visit our website at <https://www.dhs.gov/science-and-technology/our-needs> and <https://www.dhs.gov/science-and-technology/publication/st-partnership-guide> to download our *DHS S&T Partnership Guide* that lays out DHS technology needs and describes DHS S&T’s technical focus areas in further detail.

Learn more about the Department’s research challenge areas, specific to DHS S&T’s LRBA topics, and how to use the LRBA to work with DHS S&T by viewing our videos from the *LRBA Today* webinar series at <https://www.dhs.gov/science-and-technology/lrbaa-today-webinar-series>.

Note: Additional details for each topic listed below can be found on the DHS S&T OIP portal located at <https://oip.dhs.gov/baa/public>.

Counter Terrorism and Homeland Security Threats (CTHOM)

DHS S&T works to identify individuals or groups that intend to conduct terrorist attacks and/or illicitly move weapons, dangerous goods, and contraband. It also provides assessments of high-consequence attack methods such as CBE threats that terrorists may use to attack the United States.

Priority RDT&E needs and topics are:

CTHOM 01: Development of Tools for Test and Evaluation of Machine Learning Algorithms

TOPIC DESCRIPTION: DHS S&T seeks development of cost-effective methodologies and tools for training and testing of Machine Learning-based (ML-based) algorithms for detecting explosives and contraband in Computed Tomography (CT) and Millimeter Wave (MMW) images. This includes methods to synthesize training and testing data, methods to perturb empirical data in order to explore and explain algorithm performance characteristics, and tools to assess the completeness and diversity of training and test data sets. Methods and tools should be capable of acting upon CT x-ray images or images produced by current or emerging MMW passenger inspection systems. (A small number of such images will be provided on request.)

TOPIC RESEARCH SOUGHT: Type I and Type II

END OBJECTIVE: The objective of this task is to develop user-friendly software tools for verifying ML-based algorithms for explosives and contraband detection. These tools should allow the user (tester) to explore potential vulnerabilities of the ML-based algorithm with regard to threat features, concealment features, or sensor degradation (system noise).

CTHOM 03: Novel Approaches and Locations for Explosive Performance Characterization and Testing

TOPIC DESCRIPTION: Enabling research for the characterization and testing of explosives poses a unique challenge for threat characterization. Innovative tools and methods are needed to provide improvements in evaluating legacy approaches to characterization, adapting state of the art technologies in related disciplines, and integrating emerging innovations.

These innovations will improve both the safety and efficacy of equipment and procedures considered by the Department. This research topic will likely include novel experimental design approaches, development of innovative test articles, development of new technologies for modeling or physical measurement of explosives performance, new research analyses appropriate for test and evaluation, and new testing site locations suitable for conducting explosives performance testing.

TOPIC RESEARCH SOUGHT: Type II and Type III

END OBJECTIVE: The desired technology solutions should improve on DHS S&T's existing capabilities to gather explosives performance data and provide higher fidelity metrics for risk assessments and analysis by adapting and/or developing innovative technologies in related disciplines. Outcomes may include procedures, technologies, or standards.

Physical testing solutions should demonstrate comparable or improved characteristics, such as resolution, repeatability, reliability, and affordability, relative to existing instrumentation, or offer novel approaches to obtaining the desired data.

Secure U.S. Borders and Approaches (BORAP)

DHS secures U.S. borders, territorial waters, ports, terminals, waterways, and air, land, and sea transportation systems. DHS S&T invests in border security research and development for technologies and solutions to prevent illicit movement and the illegal entry or exit of people, weapons, dangerous goods, and contraband; and provides solutions that help manage risks posed by people and goods in transit.

Priority RDT&E needs and topics are:

BORAP 01: Screening at Speed

TOPIC DESCRIPTION: Screening at Speed seeks to mature transformative technologies that increase aviation security effectiveness from curb-to-gate while dramatically reducing wait times and improving passenger experiences.

TOPIC RESEARCH SOUGHT: Type II

END OBJECTIVE: The end objective is a prototype solution capable of improving the security, throughput, and/or passenger experience at the airport checkpoint or similar environments. Capabilities of particular interest include accessible property (carry-on baggage) screening systems, components, and algorithms; on-person screening systems, components, and algorithms; curb-to-gate screening capabilities and integration architectures; cyber secure architecture and capabilities; and passenger facing technologies to improve the overall user experience.

BORAP 04: Countering Unmanned Aircraft Systems

TOPIC DESCRIPTION: The primary objective of this LRBA is to develop enhanced technologies and methods that allow for the detection, tracking, identification, and mitigation of unmanned aircraft systems under varied terrains and environmental conditions such as, but not limited to:

- Dense urban environments;
- Mass Gatherings (i.e. sporting events);
- Critical Infrastructure (i.e. bridges, power plants, reservoirs);

- Mobile platforms (i.e. moving vehicles, boats, aircraft); and
- Remote desert and mountainous terrain.

New technologies and enhanced methods should be able to detect, track, identify and mitigate an array of unmanned aircraft threats and flight modalities that include, but are not limited to:

- Remote manual flight control using radio frequency-based transmissions;
- Remote flight control using commercial networks (i.e. cellular, satellite), particularly 5G;
- Global Navigation Satellite System (GNSS) supported pre-programmed flights; and
- Autonomously pre-programmed flights that are unsupported by GNSS:
 - Unmanned Aircraft System (UAS) not emitting or receiving RF signals (operating autonomously via alternative navigation); and
 - Detect, Track and ID of multiple, simultaneous UAS with selective mitigation and low or no collateral effects.

TOPIC RESEARCH SOUGHT: Type II and Type III

END OBJECTIVE: The end objective is to transfer the advancement of Counter-Unmanned Aircraft System (C-UAS) technologies to enhance the mission capability of the DHS Operational Components and the extended HSE.

The enhancement must be operationally relevant, measurable, beneficial, and consistent with the documented priorities and needs of the mission partner.

BORAP 07: Detection Canine Technologies

TOPIC DESCRIPTION: Detection Canine's development interests are focused on three areas:

1. Canine Research and Development (R&D) Structure and Function - understanding of canine behavior, genetics, olfaction, and cognition to improve operational efficiencies and training methods;
2. Development and Testing of Canine Training Aids - targeting the creation of low cost, non-hazardous emerging threat and conventional explosive training aids, with state-of-the-art laboratory technology for odor validation to the level of canine detection and odor generalization analysis studies to reduce requisite numbers of trained odors:

- Revisiting and further evaluating explosives detection canine generalization capability. This includes focusing on three areas¹: (1) "canine factors," (2) "contaminated" explosives vs "clean" training aids, (3) and the number of training aids required for ideal generalization; and
3. Independent Operational Test and Evaluation - Technologies and methodologies that advance detection canine performance in controlled and operational environments representative of the HSE at the Federal, state, and local level, that facilitate scientifically significant data capture through independent operational test and evaluation.

TOPIC RESEARCH SOUGHT: Type I

END OBJECTIVE: The goal of this effort is to provide greater insight to detection canine's capabilities through sound scientific evaluation of training and deployment. By conducting research in the above areas, optimizations in training can be discovered and employed to augment DHS components detection canine programs for improved detection efficiency and effectiveness.

- The goal of canine factors is to produce scientifically validated guidance to improve the detection canine capability;
- The goal of the contaminated versus clean area is to determine if there is a point or range in which the detection canine will no longer detect the explosive having only been exposed to their training aid inventory. Once this point or range is known, a follow-on would be to determine how to mitigate this point; and
- The goal of the optimization of the number of training aids for generalization is to provide guidance on the minimum number of different forms of the same base explosive to have a canine that can detect any range of explosives they would be exposed to in an operational setting.

The canine factors area is similar to human factors in which the time between training aid exposures, number of blanks, impact on performance of hits in training scenarios versus operational scenarios, and target density are evaluated. Evaluation of contaminated explosives versus clean training aids focuses on the crux of canine generalization, is there a point (or range) at which the canine no longer detects the explosive due to contamination. Unlike traditional definition, in this sense, contamination is any compound (wrappings, fuels, shrapnel, etc.) that imparts an odor on the bomb. The last area is an optimization of the number of training aids with a similar base explosive required for the canine to generalize to potential finds in operations.

¹

- (1) The canine factors area is similar to human factors in which the time between training aid exposures, number of blanks, impact on performance of hits in training scenarios versus operational scenarios, and target density are evaluated.
- (2) Evaluation of contaminated explosives versus clean training aids focuses on the crux of canine generalization, is there a point (or range) at which the canine no longer detects the explosive due to contamination. Unlike traditional definition, in this sense, contamination is any compound (wrappings, fuels, shrapnel, etc.) that imparts an odor on the bomb.
- (3) The last area is an optimization of the number of training aids with a similar base explosive required for the canine to generalize to potential finds in operations. Historical generalization work has shown that training on a single compound is insufficient for proper generalization, but research into determining the ideal number of training aids for generalization has not been completed.

Historical generalization work has shown that training on a single compound is insufficient for proper generalization, but research into determining the ideal number of training aids for generalization has not been completed.

Secure Cyberspace and Critical Infrastructure (CYBCI)

The increasing reliance on complex data, technology, communication, and interconnectivity has expanded arenas of potential vulnerabilities and increased potential risk to governmental, citizen services, and critical infrastructure continuity. Protecting individuals and organizations from cyber attacks requires RDT&E, test and evaluation, and the technology transition of advanced cybersecurity and information assurance technology solutions to secure current and future critical cyber infrastructure.

Priority RDT&E needs and topics are:

CYBCI 02: Shared Cyber Resilience

TOPIC DESCRIPTION: The research and development of improved models of resilience across networked hardware and software systems and organizations. The research includes concepts of data-centric security, software and hardware assurance, security of cyber physical systems and secure computing. Areas of interest include: automated cyber attack design and mitigation technologies; automated mechanisms for sharing mitigation policies and technical solutions across systems and organizational boundaries; resilient machine learning approaches; privacy preservation techniques; secure multi-party computing; distributed learning techniques and human-machine teaming for cybersecurity; cyber insurance technologies; and integration with traditional cyber technologies.

TOPIC RESEARCH SOUGHT: Type I

END OBJECTIVE: Secure federal civilian networks and critical infrastructure/cyber physical systems by incentivizing and enabling increased sharing of techniques to identify, prevent, mitigate, and remediate cyber attacks without sharing underlying sensitive data across agencies and partners. Increased ability to independently and collaboratively assess, prevent, and counter cybersecurity risks by automating solution sharing capabilities across systems and organizations. Solution space may address one or more of the following domains: traditional fixed and mobile IT; cloud environments; and Operational Technologies (OT).

CYBCI 03: Software and Hardware Supply Chain Assurance

TOPIC DESCRIPTION: The research and development of tools and techniques to ensure the resilience of the data, software, and hardware used to execute homeland security mission functions. Areas of interest include: novel applications of post quantum cryptography; homomorphic encryption, augmented/virtual/cross reality technologies, and secure-by-design programming languages and architectures; secure implementations of sensors and Internet of Things (IoT), Operational Technologies (OT), Cyber Physical Systems (CPS); High Performance Computers (HPC); microelectronics; edge, cloud, fog, mobile, and quantum computing; civil space systems; and supply chain assurance techniques such as software and hardware bill of materials, static and dynamic analysis tools for commercial and open source software, automated secure code development and vulnerability remediation, and integration into DevSecOps pipelines.

TOPIC RESEARCH SOUGHT: Type I

END OBJECTIVE: Ensure advanced computing software and hardware applications are designed to rapidly adapt to the evolving security environment of future technologies, leverage advances in emerging technologies to increase cybersecurity across operations and increase assurance across the supply chain and life cycle of key hardware and software employed in cybersecurity functions and critical infrastructure.

CYBCI 04: Trustworthy and Responsible Artificial Intelligence

TOPIC DESCRIPTION: The research and development of creating or enhancing technologies to enable DHS to effectively assess the performance of Artificial Intelligence/Machine Learning (AI/ML) systems against technical and mission metrics, provide operators making critical decisions an appropriate level of trust and confidence, inspire trust in the general public towards AI/ML systems deployed by DHS. Areas of interest include: develop methods, processes and technologies for explainable AI for mapping AI and ML decision process reasoning to human-understandable terms; develop risk analysis framework for malicious or unintentional misuse, accidents, or other errors and failures of AI technology; identifying and managing bias in AI; develop methods for AI robustness, including techniques such as uncertainty quantification for AI and ML applications, Generative Adversarial Networks (GANS), and robust control techniques, etc.

TOPIC RESEARCH SOUGHT: Type I

END OBJECTIVE: The end objective is applied research and development for establishing some parameters for consideration of explainability, including discussion about the tradeoffs between performance and explainability, study of risk evaluation of AI/ML with focus on their impact on specific DHS use cases; development of recommendations for best practice for reducing AI/ML risk associated with use case important for DSH components operations.

CYBCI 05: Advanced and Emerging Data Computation and Analytics

TOPIC DESCRIPTION: This topic focuses on novel computational and analytic methods and capabilities for large-scale data sets for DHS missions. DHS must keep pace with rapidly evolving and emerging computing techniques and environments by experimenting with growing number and size of data sets and next generation technologies, including real-time analytics, privacy enhancing technologies such as secure multi-party computation, high performance computing, edge computing, blockchain, and cloud environments to inform program planning, avoid technical obsolescence, accelerate transition, and prevent mission surprise. DHS S&T research addresses scaling automation and computation for efficient, timely analytics and methods and tools that increase mission effectiveness with security and privacy built in. Beyond technology, the research includes understanding how humans make decisions using technology, tasks humans can/should do rather than machines, new methods for validating analytics for reliability and trustworthiness in operations, bias in data, and other factors that are important considerations in applying data analytics successfully in operations.

Future Computing Architectures: Research and evaluation on data storage and infrastructure to improve real-time, efficient computation with built-in privacy and security.

Media and Augmented Analytics: Interdisciplinary research that develops methods and evaluates and applies advanced/emerging capabilities to leverage public, government, and commercial data sets. Media refers to both text and binary data types. Augmented analytics are capabilities that aid human decision making.

Analytic Concepts and Capabilities: Exploration of capabilities and concepts that have yet to be well-defined or matured for DHS. Past examples of work in this area include game theory applications for airport screening, model drift and bias detection, and others.

Particular interests near-term: Quickly producing high fidelity digital twins for critical-infrastructure applications (e.g., power, chemical, water, etc.); new capabilities in privacy enhancing computations that are scalable to DHS operations; new capabilities that support individual and organizational control over data over the life of the data; third-party model validation; novel reinforcement learning applications for homeland security problems; analytic solutions for infrastructure security and cybersecurity, including mobile device; increasing quality of synthetic data images for machine learning in high consequence decision-making particularly when data is scarce and collection is challenging.

TOPIC RESEARCH SOUGHT: Type I, Type II, and Type III

END OBJECTIVE: The objective is to deliver methods and capabilities that increase DHS's ability to leverage value from increasing growth in data set volume for enhancing mission effectiveness and efficiency.

Preserve and Uphold the Nation's Prosperity and Economic Security (PROES)

America's prosperity and economic security are integral to DHS's homeland security operations, which affect international trade, national transportation systems, maritime activities and resources, and financial systems.

No current topics.

Strengthen Preparedness and Resilience (PRRES)

Improving the United States' ability to withstand, respond to, and recover from disasters and hazardous situations of all kinds, regardless of the cause, is becoming increasingly important due to the increase of possible threats from foreign adversaries, our eroding infrastructure, rising inter-community hostility, and fragile environments.

DHS's goals in this area include reducing the vulnerability of critical infrastructure to terrorist attacks and other hazards by working with State, Local, Tribal, and Territorial (SLTT) and local governments to secure their information systems and identify hazards and assess vulnerabilities; by developing strategies to manage risks, increase the level of disaster preparedness of SLTT partners, nongovernmental organizations, the private sector, and the general public; by improving emergency and interoperable communications capabilities; and by improving the emergency management and leadership capabilities of DHS and its components.

No current topics.

Champion the DHS Workforce and Strengthen the Department (WORDT)

Strengthening the integrated relationships between and among Headquarters Offices and Operational Components to optimize the Department's efficiency and effectiveness by increasing integration, clarifying roles and responsibilities, championing its workforce, advancing risk-based decision-making, and promoting transparency and accountability before the American people.

No current topics.

Source Registration

Potential sources must register on the DHS S&T OIP portal before submitting research concept material(s) to the Industry Engagement process.

The portal uses a simple step by step procedure to register your entity and submit required research concept material(s). Should you encounter any issues, a help desk is available to assist you.

OIP Portal Technical Support

Email: oiportalhelpdesk@hq.dhs.gov

Phone: (571) 446-4869

Support Hours: Monday through Friday, 9:00 AM to 5:00 PM ET

Sources should carefully review the current priority RDT&E needs and topics listed in this announcement and on the DHS S&T OIP portal for the topic that most closely aligns with your research concept. Review the topic's details and prepare to submit research concept material(s) using the Topic Number and Name located on the portal. The "Submit Industry Engagement" button located next to the topic of interest will guide sources through the submission process.

INDUSTRY ENGAGEMENT

Potential sources must participate in the industry engagement phase to be invited to participate in the proposal process. Industry engagement begins with the submission of research concept material(s) as described below. Industry Engagement procedures are time and cost-efficient methods for industry to market their resources, the Government to make meaningful contacts in the industry, and to identify relevant technology and technically qualified offerors that can perform a LRBA topic. Limitations to the Government's engagement with potential sources includes:

- The Government will not be obligated by any discussion with a potential source;
- Cannot guide the potential source;
- Cannot provide additional topic information or details beyond those publicly available;
- Cannot provide responses to specific questions posed by a potential source that is not already publicly available. In most cases additional time and coordination with a Contracting Officer is required;
- Cannot attempt to replace the potential source's original ideas with his or her own; and
- Cannot share ideas or technical solutions that were provided to him or her by another potential source.

Research Concept Material Submission Information

Potential sources must submit research concept material(s) to the DHS S&T OIP portal consisting of:

- 3-page abstract describing the technology or research, why it is unique, and an overview of the company, its capabilities, and relevant experience.
- Quad Chart depicting: (See instructions in Attachment 1):
 - Projected total cost;
 - Impact and relevance to DHS;
 - Project highlights; and
 - Technical and milestone bullets.
- **Optional Short Video:** Potential sources have the option of submitting a link to a non-professionally prepared video of not greater than 4 minutes demonstrating research and/or technology concepts discussed in the 3-page abstract (see instructions in Attachment 2).

Note: Do not include proprietary information in any of your research concept material(s) in this phase.

Evaluation Panel Assessment

The evaluation process for Industry Engagement submissions is 10 business days in length from the date of submission. Research concept material(s) submitted to the DHS S&T OIP portal will be assigned by the LRBA program office to the topic's evaluation panel. The panel will complete an assessment of the submitted research concept material(s) and generally considers the following:

- Relevance and Operational Requirements;
- Technical Merit;
- Unique and Innovative;
- Strategic Outcomes;
- Affordability and Transition;
- Timeframe; and
- Entity's ability to understand the problem and perform the work.

At the conclusion of the evaluation process for Industry Engagement submissions, unique research concept(s) that meet DHS needs, priorities, strategy, and funding may be invited by a TM to participate in the next step in proposal process, Virtual Pitch. Notification(s) of decisions are emailed through the DHS S&T OIP portal.

VIRTUAL PITCH

Submissions will only be accepted from offerors that have been invited by a TM following the completion and assessment of the Industry Engagement.

The Virtual Pitch phase is 35 business days in length, consisting of 14 business days for the offeror to prepare and submit the required material(s) (referenced further below) to the DHS S&T OIP portal and 21 business days for the Government to conduct the virtual pitch and confidence assessment.

Virtual Pitch-Submission Information

1. 12 PowerPoint Slides (title page does not count in the 12-slide total); and
2. Updated quad chart.

Note: Material(s) may contain proprietary information and must be appropriately marked.

DHS will set the virtual pitch date, time, conference line, and Uniform Resource Locator (URL) for offerors invited to the Virtual Pitch process. The virtual pitch will be conducted via online web conference. Offerors may opt, but are not required, to project a video image of the presenter(s).

Evaluation Process and Assessment

DHS S&T will utilize the following standardized format for the virtual pitch web conference:

- Segment 1: 20-minute uninterrupted pitch from the potential offeror;
- Segment 2: 10-minute Government-only to discuss potential questions; and
- Segment 3: 15 minutes of questions and answers.

The Virtual Pitch will be presented to a Peer Review Panel consisting of a TM and at least two additional subject matter panelists. Following the pitch, the Peer Review Panel will complete their evaluation assessment based upon the following two (2) criteria:

- **Criterion I:** Technical Topic Suitability. Includes consideration of issues such as: relevance to technical topic; the degree of innovation and potential to offer a significant increase in capability; and the ability to offer a significant reduction in cost over current technologies or processes.
- **Criterion II:** Topic Strategic Outcome. Includes consideration of issues such as: meets DHS S&T and/or Component objectives; benefits strategic outcomes; and the ability to demonstrate outcome in an operational environment.

Once this assessment is complete, offerors will receive a notification of their decision via an email through the DHS S&T OIP portal.

WRITTEN PROPOSAL

Proposals will only be accepted from offerors that have been invited by a TM following the completion and assessment of the Virtual Pitch.

The Written Proposal phase is 66 business days in length, consisting of 45 business days for the offeror to prepare and submit their written proposal to the DHS S&T OIP portal; and 21 business days for the Government's Peer Review Panel to conduct a confidence assessment and subsequent award recommendation. The required material(s) for the Written Proposal phase include a Technical Proposal and a Cost Proposal.

Written Proposal-Submission Information

Invited offerors are advised of the following written proposal submission information and format:

- Technical proposals may not exceed 25 single-sided pages;
- Cost proposals do not have a page limitation;
- Paper size - 8.5 x 11-inch paper;
- Margins - 1 inch;
- Spacing-single or double spaced;
- Font-Times New Roman, 12-point; and
- Convert the original document into a Portable Document Format (*.PDF) file.

Technical Proposal Format

- Cover Page (not included in the page count) including the following:
 - LRBAAs number 24-01;
 - Title of proposal;
 - Topic Research Area and its Topic Number;
 - Identity of the prime offeror, including name and address, and complete list of subcontractors, including name and address, if applicable;
 - Technical contact (name, address, phone, electronic mail address);
 - Administrative/business contact (name, address, phone, electronic mail address);
 - Duration of effort (separately identify the basic effort and any options);
 - DHS S&T point of contact, if applicable;
 - SAM.gov Unique Entity Identifier (UEI);
 - Acknowledgement that the offeror is registered in the System for Award Management (SAM) website at <https://SAM.gov/>; and
 - Statement specifying compliance with FAR Clause 52.222-54 "Employment Eligibility Verification."
- Confirmation of U.S. Citizenship for those participating in the project, and the identity of any proposed personnel or subcontractors who are not U.S. citizens.
- Official Transmittal Letter with authorizing official signature. For an electronic submission, the letter can be scanned and incorporated into the electronic proposal. The letter of transmittal shall state whether this proposal has been submitted to another Government agency other than DHS and, if so, which one and when.

- Table of Contents (Not included in the page count).
- Landscape Assessment or Brief Literature Review. Explain why your proposal is different and superior to similar solutions already available or to the efforts of others who have been researching similar issues. For instance, answer the questions: What is unique about your solution and what advantages might it afford compared to alternative approaches that others have taken? What has been the extent of the principal investigator's experience in, and qualifications or educational background for, developing the technologies in your proposal?
- Operational Concept. A detailed explanation of how the proposed product(s) supports the targeted end user, its operational use and how it will improve operational performance or outcomes. Describe the proposed technical solution and operational concept for accomplishing the stated objectives, explain how the performance of your proposed solution can be expected to meet or exceed and be measured against each of the specific technical attributes and/or performance enhancements. For instance, answer the questions: What are the key scientific, technical, or engineering challenges and the timing for each that must be met to successfully complete this project? Describe all required material and information, which must be provided by the Government to support the proposed work.
- Technical Concept. In developing your technical concept, please:
 - Provide a description of the technical concept, including anticipated risks and approaches to mitigate the risks;
 - Describe the basic scientific or technical concepts that will be used in each component or subsystem comprising your proposed solution to the problem described above; and
 - Explain your view of the requirements gap to be filled, what capability will be provided upon successful completion of the proposed effort, and what are the technical risks associated with successful maturation of the proposed effort to achieve operational utility and what scientific, technical or engineering issues need to be addressed and resolved to demonstrate feasibility.
- Operational Utility Assessment Plan. A detailed plan for demonstrating and evaluating the operational effectiveness of the offeror's products in exercises, including evaluation metrics. Explain your concept of how you will develop and demonstrate a system or system component. Identify and explain the critical path technologies or key technical challenges you will face when building this system or component and your plans for meeting these challenges. Explain how you will demonstrate the system or component performance relative to the performance or enhancement goals described in the proposal.
- Statement of Work. A Statement of Work (SOW) and a Work Breakdown Structure (WBS) that clearly detail the scope and objectives of the effort, the technical approach, and the performance goals. The SOW and WBS will be used in the development of any final award, so the proposal must include a stand-alone SOW and a stand-alone WBS without any proprietary restrictions. The WBS must include a detailed listing of the technical tasks/subtasks in hierarchical fashion for the tasks required to accomplish the effort. The WBS format must be complete to at least WBS level three. Each task in the SOW shall describe the work to be carried out, the result of the task, the time allocated, the organization performing the task, the predecessor tasks, the performance goals of the task, and the

resources (labor, materials, and services) required. The resources shall be costed to provide a baseline budgeted cost for the applicable task. The SOW shall be at a level sufficient to define the nature of the work to be carried out, measure progress, and demonstrate the relationship of the tasks to one another.

- Project Schedule and Milestones: A summary of the schedule of events and milestones. If applicable, identify the critical path.
- Deliverables: A detailed list and description of all deliverables and data deliverables the offeror proposes to provide to the Government, the schedule for delivery, and acceptance criteria. The deliverables information must be a separate section in the offeror's proposal and begin on a new page. Proposals must include a severable self- standing detailed list and description of all deliverables without any proprietary restrictions, which can be used to make award.
- Commercialization Plan: If relevant, offerors must also include a description in the proposal of their plan for commercializing the technology, or other plans for getting the technology into established transition paths. Technology transition plans that include commercial partnerships are preferred, but transition into the open-source community is also acceptable. This request does not entail providing a full business plan, nor does it imply that DHS views commercialization activities as in the scope of the LRBAAs topic. The intent is for offerors to provide evidence that, as part of the technical plan development, consideration has been given to the ultimate commercialization of the outputs of DHS-funded programs. Such considerations would include expected user base, how the technology will be used, and how it will be transitioned, manufactured and distributed to broad use. Of key importance are the identification of technology diffusion paths that are appropriate for the type and maturity of the technology involved, and any additional factors that might increase the likelihood of it being commercialized. Offerors who intend to partner with other companies for manufacturing and distribution services should identify their partners and the partners' capabilities.
- Detailed Risk Mitigation Plan: Discuss in detail the technical, cost, and schedule risk(s) involved with the project and how each risk will be mitigated.
- Management Approach. A discussion of the overall approach to the management of the effort, including brief discussions of the total organization, use of personnel, project, function, and subcontractor relationships, government research interfaces, and planning, scheduling and control practice. Identify which personnel and subcontractors (if any) will be involved. Include a description of the facilities that are required for the proposed effort with a description of any Government-Furnished Equipment/Hardware/ Software/ Information required, by version and/or configuration.
- Employment Eligibility Verification. Include a statement specifying compliance with FAR Clause 52.222-54.

- **Intellectual Property** (not included in the page count): In accordance with the various Intellectual Property (IP) provisions contained in applicable award authorities, including FAR provisions for “Data Rights” and “Patent Rights,” where a FAR-based contract will be awarded, include a summary of any assertions to any IP rights, including technical data or computer software that will be developed or delivered under the resultant award. This includes assertions to pre-existing rights, prototypes, or systems supporting and/or necessary for use of the research, results, or prototype. Any rights asserted in other parts of the proposal (oral or written) that would impact the rights to the Government must be cross referenced here. If any less than unlimited rights in any data delivered under the resultant award are asserted, the offeror must explain how these rights in the data will affect its ability to deliver research data, subsystems, and toolkits for integration as set forth below. Additionally, offeror must explain how the program goals are achievable considering these proprietary and/or restrictive limitations. If there are no claims of proprietary rights in pre-existing data, this section shall consist of a statement to that effect.

Offerors responding to this LRBAAs must submit a separate list of all technical data or computer software according to the assertions table below as an attachment to its written proposal that will be furnished to the Government with other than unlimited rights. The Government will assume unlimited rights if offerors fail to identify any IP restrictions in their proposals. Include in this section all proprietary claims to results, prototypes, and/or deliverables. If no restrictions are intended, then the offeror should state “NONE.”

Assertions Table

For each deliverable listed in the below table, please identify any assertion of restriction on the Government’s Use, release or disclosure of technical data or computer software.

Deliverable	Technical Data or Computer Software to be Furnished with Restrictions*	Basis for Assertion**	Asserted Rights Category***	Name of Person Asserting Restrictions****

* For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

** Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting

restrictions.

*** Enter asserted rights category (e.g., Government purpose license rights from a prior contract, limited, restricted, or Government purpose rights under this or a prior contract, or specially negotiated licenses).

**** Corporation, individual, or other person, as appropriate, or enter “none” when all data or software will be submitted without restrictions.

Completed by:

Signature

Date

Printed Name:

Statement of Assertion

Include the following statement: “The offeror asserts for itself, or the persons identified below, that the Government's rights to access, use, modify, reproduce, release, perform, display, or disclose only the following technical data or computer software should be restricted:”

Identification of the technical data or computer software to be furnished with restrictions.

For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process as specifically as possible (e.g., by referencing specific sections of the proposal or specific technology or components). For computer software or computer software documentation, identify the software or documentation by specific name or module or item number.

Detailed description of the asserted restrictions. For each of the technical data or computer software identified above, identify the following information:

- Asserted rights. Identify the asserted rights for the technical data or computer software;
- Copies of negotiated, commercial, and other non-standard licenses. Offeror shall attach to its offer for each listed item copies of all proposed negotiated license(s), offeror's standard commercial license(s), and any other asserted restrictions other than Government purpose rights; limited rights; restricted rights; rights under prior Government contracts, including Small Business Innovative Research (SBIR) data rights for which the protection period has not expired; or Government’s minimum rights;
- Specific basis for assertion. Identify the specific basis for the assertion. For example:

- Development at private expense, either exclusively or partially. For technical data, development refers to development of the item, component, or process to which the data pertains. For computer software, development refers to the development of the software. Indicate whether development was accomplished exclusively or partially at private expense;
 - Rights under a prior Government contract, including SBIR data rights for which the protection period has not expired;
 - Standard commercial license customarily provided to the public;
 - Negotiated license rights; and
 - Entity asserting restrictions. Identify the corporation, partnership, individual, or other person, as appropriate, asserting the restrictions.
- Previously delivered technical data or computer software. - The offeror shall identify the technical data or computer software that are identical or substantially like technical data or computer software that the offeror has produced for, delivered to, or is obligated to deliver to the Government under any contract or subcontract. The offeror need not identify commercial technical data or computer software delivered subject to a standard commercial license;
 - Estimated Cost of Development. The estimated cost of development for that technical data or computer software to be delivered with less than Unlimited Rights;
 - Supplemental information. When requested by the Contracting Officer, the offeror shall provide sufficient information to enable the Contracting Officer to evaluate the offeror's assertions. Sufficient information must include, but is not limited to, the following:
 - The contract number under which the data or software were produced;
 - The contract number under which, and the name and address of the organization to whom, the data or software were most recently delivered or will be delivered; and
 - Identification of the expiration date for any limitations on the Government's rights to access, use, modify, reproduce, release, perform, display, or disclose the data or software, when applicable.

The Bayh-Dole Act shall apply for any patentable materials, technologies, or knowledge developed on a FAR-based contract resulting from this LRBA and may apply in the case of an OTA. The Government reserves nonexclusive, perpetual, royalty-free licensure of any materials developed under any contract or agreement resulting from this LRBA.

The Government reserves the right to require delivery of additional data within the scope of the project that is not otherwise specified in the agreements as authorized to be withheld within a period of three years after acceptance of all items to be delivered. Any conversion of data into a prescribed form, including any reproduction or delivery, will be considered for compensation.

Ineligibility for award. An offeror's failure to submit or complete the identifications and assertions required by this provision with its offer may render the offer ineligible for award.

This section must be severable, i.e., it will begin on a new page and the following section shall begin on a new page. It is anticipated that the proposed Assertion of Data Rights will be

incorporated as an attachment to the resultant award instrument. To this end, proposals must include a severable self-standing Assertion of Data Rights without any proprietary restrictions, which can be attached to the contract or agreement award. This Assertion of Data Rights will not count against page limit for written proposals.

Cost Proposal Format

- The price/cost proposal must consist of a cover page and two parts. Part I is a detailed breakdown of all costs by cost category by calendar and Government fiscal year. Part II further breaks down this information as it pertains to each task or sub-task. The following information must be provided for the base year and any proposed option(s) or option year(s):
 - Part I must provide a detailed cost breakdown of all costs by cost category by calendar and Government fiscal year and include the Basis of Estimates– contractor format is permitted; (Provide a time-phased spend plan);
 - Part II must provide a detailed cost breakdown by task/sub-task using the same task numbers in the Statement of Work.
- Cover Page: The use of the SF 1411 is optional. The words “Price/Cost Proposal” must appear on the cover page in addition to the following information:
 - LRBA Number 24-01;
 - Title of proposal;
 - Topical area and reference code;
 - Identity of prime offeror, including name and address, and complete list of subcontractors, including names and addresses, if applicable;
 - Technical contact (name, address, phone/fax, electronic mail address);
 - Administrative/business contact (name, address, phone/fax, electronic mail address);
 - Duration of effort (separately price out the basic effort and any options);
 - UEI number and CAGE code;
 - Type of Contract Proposed (i.e. Firm Fixed Price (FFP), Cost-Plus-Fixed-Fee (CPFF), Cost-Plus-Award-Fee (CPAF), Time and Materials (T&M), Labor Hour (LH));
 - Statement on whether the offeror has been audited by a Government organization (Defense Contract Audit Agency (DCAA), Office of Naval Research, etc.) and if the offeror has a Government determined adequate accounting system;
 - Is this proposal consistent with your established estimating and accounting practices and procedures and FAR Part 31 cost principles? If not, explain.
 - If applicable, identify determinations of CAS non-compliances; and
 - DCAA point of contact (name, telephone number, and email address).
- Cost Proposal Part I
 - Part I of the cost proposal must include a detailed breakdown of all costs by cost category by calendar and Government fiscal year and include a summary explaining how each element is applied in the cost proposal:

CPFF, CPAF, Cost No Fee:

- Direct Labor: Individual labor category or person, with associated labor hours and unburdened direct labor rates. Provide the basis and supporting data for direct labor rates, such as payroll records, commitment letters, Forward Pricing Rate Agreements (FPRA) or Forward Pricing Rate Recommendations (FPRR). Additionally, to support the reasonableness and realism of the compensation provide recognized national and regional compensation surveys and studies of professional public and private organizations.
- Material: Provide the quantity, unit cost and purchasing method to ensure fair and reasonable pricing (e.g., competition, engineering estimate, market survey, etc.). Include supporting documentation, i.e., vendor quotes, catalog price lists, and past invoices for similar purchases.
- Subcontractor Costs: Subcontractors must each submit a cost proposal in the same detail as the prime. The subcontractor's cost proposal shall be provided securely in electronic submission with the offeror's cost proposal or the subcontractor may submit directly to the Contracting Officer. The subcontractor's cost proposal must be on company letterhead and include the complete company name and mailing address, technical and administrative/business point of contacts, email address, and telephone number. Include the UEI number. The prime offeror must submit a copy of its subcontracting agreement(s) and a copy of their analysis used to establish the reasonableness of proposed subcontract prices (FAR 15.404-3(b)). The Contracting Officer may elect to waive this requirement;
 - Consultants. Provide a copy of the consulting agreement or other documents which support the proposed costs.
- Other Directs Costs (ODCs). List and describe ODCs, including any proposed equipment or facilities;
- Travel. Provide proposed costs by destination and include number of trips, duration in number of days, number of travelers, per diem (travel costs, hotel and meals in accordance with the Federal Travel Regulations and FAR Part 31), airfare, car rental, if additional miscellaneous expense is included, list description and estimated amount;
- Indirect Costs: Fringe Benefits, Overhead, General and Administrative expenses (G&A), Facilities Capital Cost of Money (FCCOM/COM), etc. (Must show base amount and rate). Include the basis and supporting data for proposed indirect rates and factors, such as an FPRA or FPRR. If an FPRA or FPRR does not exist, indicate how indirect rates and factors are computed by providing detailed pool and base costs with supporting history and trends.; and
- Spend Plan must provide a time-phased spend plan which includes all costs proposed, i.e., labor, travel, materials, and ODCs (contractor format is acceptable).

Time and Materials / Labor Hour

As described in the FAR, a Labor Hour (LH) contract type is a variation of a Time and Materials (T&M) contract type, differing only in that materials are not supplied by the contractor. When using these contract types, offerors shall identify their proposal as

either T&M or LH and shall structure their cost proposals to reflect the substance of each contract type in accordance with FAR Part 16, *Contract Types*, more specifically FAR 16.601, *Time-and-Materials Contracts*, and FAR 16.602, *Labor-Hour Contracts*.

List the labor categories that will be used in performance of the work and the qualifications for each labor category to include education, certifications, and years of experience.

Rates - The hourly T&M/LH rates shall include direct labor, indirect costs and profit. Proposal details shall provide the direct labor, indirect costs, and profit that comprise the fully burdened rates. These individual cost elements must be supported as discussed above, for the cost type proposals.

Hours – Provide the basis of estimated hours by labor category, such as history of similar effort or engineering estimates.

Material and ODC – Proposed material and other direct costs must be supported as discussed above, for the cost type proposals.

Accounting System Adequacy

The accounting system must permit timely development of all necessary cost data in the form required by the proposed contract type and track costs allocable to the contract.

Cost Reimbursement

To qualify for the award of a cost reimbursement contract, the offeror must have an adequate accounting system in accordance with FAR 16.301- 3(a)(1). Evidence of an adequate accounting system would include copy of written determination of an adequate accounting system from the cognizant federal agency official (CFAO). Provide supporting report or audit number, date, auditing agency name, address, telephone number, and point of contact;

Contractor's corrective action plan for identified accounting system deficiencies that preclude a determination of adequacy; or

If the contractor does not have an opinion from the CFAO, a review by a public accounting firm can be submitted. The CPA's review shall state that the accounting system complies with the requirements applicable to the contract type found on Standard Form 1408, "Pre-Award Survey of Prospective Contractor Accounting System." Contractors not providing this proof may be found ineligible for award. A contractor's self-certification of an appropriate accounting system may not be found acceptable.

If requested, the offeror shall provide sufficient accounting system information to allow a pre-award accounting system review for adequacy.

Time-And-Materials / Labor-Hour

The offeror's accounting system must substantiate vouchers (including any subcontractor hours reimbursed at the hourly rate in the schedule) by evidence of actual payment and by:

- (i) Individual daily job timekeeping records;
- (ii) Records that verify the employees meet the qualifications for the labor categories specified in the contract; and
- (iii) Other substantiation requested by the CO. (FAR 52.232-7(a)(5)).

Offeror must provide in proposal:

Copy of written determination of an adequate accounting system from the cognizant federal agency official (CFAO). Provide supporting report or audit number, date, auditing agency name, address, telephone number, and point of contact;

Offeror's corrective action plan for identified accounting system deficiencies that preclude a determination of adequacy; or

If the contractor does not have an opinion from the CFAO, a review by a public accounting firm can be submitted. The CPA's review shall state that the accounting system complies with the requirements applicable to the contract type in Standard Form 1408, "Pre-Award Survey of Prospective Contractor Accounting System."

If requested, the offeror will provide sufficient accounting system information to allow a pre-award accounting system review for adequacy.

Offerors must have an adequate accounting system that provides timely development of cost data necessary to meet the requirements of the payment clause. Proposals will be rejected if the offeror does not have an adequate accounting system unless the Government determines that the offeror's action plan for correcting the accounting system is reasonable.

For more information on accounting system adequacy, see Enclosure 3 of Defense Contract Audit Agency (DCAA) Manual Number 7641.90, "Information for Contractors," at [DCAA Information for Contractors](#).

- **Cost Proposal Part II**

Cost breakdown by task/sub-task using the same task numbers in the Statement of Work (SOW).

The Cost Proposal should be consistent with your proposed SOW. Activities such as demonstrations required to reduce the various technical risks should be identified in the SOW and reflected in the Cost Proposal. The offeror should provide a total estimated price for the program.

Evaluation Process and Assessment

A Peer Review Panel comprised of a TM and two or more additional subject matter panelists will conduct confidence assessments. The TM will then conduct a consensus discussion and complete a consensus evaluation. The timeframe for reviewing the written proposal and completing the Peer Review is 21 (twenty-one) business days.

The Peer Review Panel will complete their evaluation assessments based upon the following three (3) criteria:

- **Criterion I: Technical Approach.** Confidence rating based on the overall scientific and technical merit including the quality, depth and thoroughness of the proposed technical approach and techniques and to what extent the proposal clearly provides sufficient detail for the Government to understand and evaluate the nature of the technical approach;
- **Criterion II: Management Approach.** Confidence rating based on the proposed project management, understanding of risk, mitigation of risk, the proposed process to demonstrate the technical outcome in an operational environment and to what extent the proposal clearly demonstrates how the offeror intends to manage and accomplish the project and provides sufficient detail for the Government to understand and evaluate the nature of the management approach; and
- **Criterion III: Scientific Merit.** Confidence rating based on the expected outcome of an acquisition that, in the Government's estimation, provides the greatest overall benefit in response to the requirement. This may include an assessment of price reasonableness or cost realism as determined appropriate.

At the conclusion of the Written Proposal phase, offerors will be provided a notification letter. Electronic notification is made through the DHS S&T OIP portal within five (5) business days following the Peer Review Panel's consensus evaluation.

Proposal Feedback

DHS will make award decisions and notify applicants of its decisions. Specific instructions on requesting feedback will be provided to each offeror upon notification that their proposal was not selected for award.

Requests for proposal feedback must be received within three (3) business days of the notification and will only be provided to offerors upon request.

Award Requirements

A Peer Review Panel's award recommendation is subject to agreement between the parties on the terms and conditions of the award.

The following represents those requirements that must be recognized and fully met prior to an

award being made:

- The North American Industry Classification System (NAICS) code for this announcement is 541715 (Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) with a small business size standard of 1,000 employees;
- Successful offerors not already registered in the SAM.gov will be required to register prior to award of any grant, contract, cooperative agreement, or other transaction agreement. Information regarding registration is available at the following address <https://SAM.gov/>.
- Certifications: In accordance with FAR Part 4.11, all prospective contractors shall be registered in SAM.gov prior to award. SAM.gov is the official U.S. Government system that consolidates the capabilities of the former Central Contractor Registration (CCR)/FedReg, Online Representations and Certifications Application (ORCA) and Excluded Parties List System (EPLS). There is NO fee to register with SAM.gov. If you used any of the previous systems, you should now go to <https://SAM.gov/> to update your information. SAM training tools and quick-start guides are available on both the SAM and Federal Service Desk (FSD) websites, located at <https://SAM.gov/> and <https://www.fsd.gov/>.

Federal Travel Regulations (FTR): Information on per diem rates based on travel locations are provided on <https://www.gsa.gov/>. Also, refer to FAR Part 31 for information on travel costs.

Test and Evaluation Facilities

DHS S&T may make available appropriate test and evaluation facilities to support this program. Offerors should provide any specific requirements needed for test and evaluation of their proposed concept in their white papers and proposals.

Certificate of Current Cost or Pricing Data

Successful contract proposals shall comply with the thresholds for the required submission of a Certificate of Current Cost or Pricing Data in accordance with FAR 15.403-4(b)(2), prior to award.

Government Property, Government Furnished Equipment and Facilities

The Government may provide Government Furnished Equipment (GFE), Government Furnished Resources (GFR), Government Furnished Information (GFI), or Government Furnished Services (GFS) under the terms of each negotiated contract or agreement. GFE, GFR, GFI, or GFS requested by an offeror must be factored into the offeror's project cost. Each offeror must provide a very specific description of any equipment or hardware it needs to acquire to perform the work. This description should indicate whether each piece of equipment or hardware will be included as part of a deliverable item under the resulting award. In addition, this description should identify the component, nomenclature, and configuration of the equipment or hardware that it proposes to purchase for this effort. The Government wants to have the contractor purchase the equipment or hardware for deliverable items under its contract. It will evaluate case-by-case the purchase, on a direct reimbursement basis, of special test equipment or other equipment, not included in a deliverable item, will be evaluated for allowability on a case-by-case basis. Maximum use of Government integration, test, and experiment facilities is encouraged in each of the offeror's proposals.

Government research facilities may be available and should be considered as potential GFE. These facilities and resources are of high value, and some are in constant demand by multiple programs. The use of these facilities and resources will be negotiated as the program unfolds. Offerors should explain which of these facilities they recommend and why.

If any prototype, instrument or device that is produced during the period of performance of a funded project, one or more samples shall be delivered to DHS S&T Chemical and Biological Defense (CBD) before the end of the period of performance for demonstration purposes. More specific information about the provision of a sample(s) will be incorporated in the SOW.

The SAFETY Act

As part of the Homeland Security Act of 2002, the U.S. Congress enacted the Support Anti-Terrorism by Fostering Effective Technologies Act of 2002 (the "SAFETY Act"). The SAFETY

Act puts limitations on the potential liability of firms that develop and provide qualified anti-terrorism technologies. DHS S&T, acting through its Office of SAFETY Act Implementation (OSAI), encourages the development and deployment of anti-terrorism technologies by making available the SAFETY Act's system of "risk management" and "liability management." Offerors submitting proposals in response to this announcement are encouraged to submit SAFETY Act applications for their existing technologies. They are invited to contact OSAI for more information, at 1-866-788-9318 or helpdesk@safetyact.gov. They also can visit OSAI's Web site at <https://www.safetyact.gov/>.

Export Control Considerations

International Traffic in Arms Regulations (ITAR) may apply to one or more of the Topics in this announcement. Foreign nationals must meet the requirements for participation set by those regulations, if required.

Hazardous Materials

Depending on the topic and in accordance with applicable FAR and DHS hazardous material clauses to be incorporated under any resultant contract award, offeror may choose to or be required to utilize hazardous materials during the project development effort. If the Government provides hazardous samples as part of the developmental and operational testing, information on the samples will be provided to the successful offerors requiring such samples.

Hazardous material, as used here, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract). If the successful offerors choose to use their own hazardous samples, offerors must meet the requirements for the identification and material safety as follows:

HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SECURITY DATA

- (a) "Hazardous material," as used in this section, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

- (b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract. This list must be updated during performance of the contract whenever the contractor determines that any other material to be delivered under this contract is hazardous.

Material (If none, insert "None")	Identification No.
_____	_____
_____	_____
_____	_____
_____	_____

The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet (MSDS), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items.

- (c) Failure to submit the MSDS prior to award may result in the apparently successful offeror being considered non-responsible and ineligible for award.
- (d) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the contractor shall promptly notify the Contracting Officer and resubmit the data.
- (e) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the contractor of any responsibility or liability for the safety of Government, contractor, or subcontractor personnel or property.
- (f) Nothing contained in this clause shall relieve the contractor from complying with applicable federal, state, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

- (g) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:
- (1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to:
 - i. Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;
 - ii. Obtain medical treatment for those affected by the material; and
 - iii. Have others use, duplicate, and disclose the data for the Government for these purposes.
 - (2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h) (1) of this clause, in precedence over any other clause of this contract providing for rights in data.
 - (3) The Government is not precluded from using similar or identical data acquired from other sources.
- (h) Except as provided in paragraph (i)(2), the contractor shall prepare and submit a sufficient number of MSDSs, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.
- (i) For items shipped to consignees, the contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.
- (j) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the contractor shall provide one copy of the MSDSs in or on each shipping container. If affixed to the outside of each container, the MSDSs must be placed in a weather resistant envelope.

Post-Award Reporting

When applicable, successful offerors shall have various post-award reporting requirements, such as, but not limited to FAR:

- 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (Jun 2020); and
- 52.204-14, Service Contract Reporting Requirements (Oct 2016).

As well as other post-contract (after completion of the contract) follow-ups with the respective DHS S&T program offices and end-users.

LRBAA Role	Name	E-mail
Contracting Officer	Mr. John Whipple	John.Whipple@hq.dhs.gov
Contracting Officer	Mr. Jason Rios	Jason.Rios@hq.dhs.gov
Program Office	Ms. Dusty Lang	lrbaa.admin@hq.dhs.gov

DHS S&T OIP Portal: <https://oip.dhs.gov/baa/public>

DHS S&T OIP Portal Technical Support

E-mail: oiportalhelpdesk@hq.dhs.gov

Phone: 571-446-4869

Support Hours: Monday through Friday 9:00 AM - 5:00 PM ET

Attachment No.	Attachment Title
1	Quad Chart Instructions
2	Industry Engagement Video Instructions

Attachment 1 (Quad Chart Instructions)

Quad Chart Instructions

The Quad Chart is used to provide a synopsis of the proposed project objectives and progress, as well as providing a graphical representation of the project. The Quad Chart is one landscape-oriented page divided into four quadrants. Emphasis will be placed on brevity and factual statements. Also, technical engineering details are not included.

- Sources may NOT include proprietary information on the quad chart submitted during the Industry Engagement process; and
- Sources will have the opportunity to update their quad chart and include proprietary information if they are invited to submit to the Virtual Pitch phase.

Each of the four quadrants that comprise the Quad Chart conveys information on a specific aspect of the project.

First Quadrant (Picture(s) or Graphic(s)): Located in the upper left-hand corner, comprises visually appealing graphics or pictures that clearly represent the key technological idea(s) or the expected impact of the research. If more than one picture is needed to clearly convey the technological idea(s), then a plurality of pictures may be used. Due to the limited space, the number of graphics and pictures should be limited to a maximum of five. If a plurality of pictures is included, they can be presented in any clear, appealing layout, such as a simple array of pictures or a collage of overlapping of pictures; however, they must fit neatly within the first quadrant. There may be something subtle or non-obvious to the casual observer in one or more of the pictures. If this is the case, graphics, such as red arrows, may be added to bring attention to important aspects of the picture(s).

Second Quadrant (Project Description): Located in the upper right-hand corner, includes a brief project description. A bulleted list format is used to present this information. For purposes of brevity, the description should be limited to a maximum of five bullets.

Third Quadrant (Impact): Located in the lower left-hand corner, includes three to five quantitative statements discussing how the project work will revolutionize an area of importance to DHS.

Fourth Quadrant (Technical, Schedule & Cost): Located in the lower right-hand corner, includes three technical objectives and three project milestones along with the projected cost of the research project.

The Quad Chart also includes a project title that is clearly visible and centered at the top of the page. The Quad Chart concludes with the LRBA Topic Number and Name in the bottom left-hand corner and the offeror's name and Entity in the bottom right-hand corner.

Quad Charts are limited to one page and will only be accepted in Microsoft PowerPoint formats converted to PDF. Quad Charts are meant to be a capabilities and technology overview and

should not include any proprietary information.

The quad chart should briefly convey the following information as relevant to your idea:

- What are you trying to accomplish?
- How is it done now, with what limitations?
- What is truly new in your approach which will remove current limitations and improve performance? How much will performance improve?
- If successful, what difference will it make?
- What are the mid-term, final exams or full-scale applications required to prove your hypothesis? When will they be done?
- How could this transition to the end user?
- How much will it cost?

XYZ System

PICTURE(S) OR GRAPHIC(S)	<u>Project Description</u> • XXXXXX • XXXXXX • XXXXXX • XXXXXX • XXXXXX
<u>Impact</u> • XXXXXX • XXXXXX • XXXXXX • XXXXXX • XXXXXX	<u>Technical</u> • XXXXXX • XXXXXX • XXXXXX <u>Milestones</u> • XXXXXX • XXXXXX • XXXXXX <u>Projected Cost</u> • XXXXXX
LRBAA Topic Number & Name	Offerors Name, Entity

Attachment 2 (Industry Engagement Video Instructions)

Industry Engagement Video Instructions

Note: Submission of an accompanying short video with the Industry Engagement research concept material(s) is optional.

- 1.0 Potential sources submitting to the industry engagement process have the option of submitting a link to a short (up to 4 minute) video to support capability statements described in the required 3-page written abstract.

Potential sources:

- 1.1 Must not include proprietary information or sensitive information, or otherwise make the video with any restrictive language regarding use.
 - 1.2 Are highly discouraged from preparing and submitting a studio or professionally prepared video. The preferred method for recording a video is with a smartphone or video camera.
 - 1.3 May film an effective video using only their smartphone. Special lighting and sound equipment are not required. The web provides many tutorials, recommendations and processes for recording and editing.
- 2.0 Considerations
 - 2.1 Keep the video concise and simple. The video is intended to support statements made in your research concept material.
 - 2.2 Keep your impact and benefit statements to one to two sentences. Address this in more detail within the research concept material's abstract.
 - 2.3 Familiarize yourself with tips and processes for creating effective short videos.
 - 2.4 Devote most of your time to demonstrating how the prototype or idea is addressing the topic's problem.
 - 2.5 Do not discuss your company or researchers. That is what the industry engagement's abstract is intended to address.
 - 2.6 Your prototype does not have to work flawlessly or look great. Concentrate on getting your message across.
 - 3.0 Instructions for uploading the video to YouTube:
 - 3.1 Record the video.

- 3.2 Go to YouTube.com and register/sign-in.
- 3.3 Click “upload” in the upper-right corner.
- 3.4 Click the large arrow above “select files to upload.”
- 3.5 Choose your file (Compatible files include: MOV, MPEG4, MP4, WMV).
- 3.6 All videos will be submitted via an “unlisted” YouTube link.
- 3.7 Upload the video and include the unique URL with your industry engagement submission.
 - 3.7.1 YouTube is inherently a public website and by that nature your submitted video is considered public.
 - 3.7.2 Do not include proprietary information in your video and do not mark or otherwise utilize restrictive language regarding public use. Submissions that convey such restrictions will not be accepted, and DHS is not responsible for enforcement of any restrictions.
 - 3.7.3 Do not state in the video description, title, or tags that the video is unlisted.
- 3.8 Additional information may be obtained by visiting YouTube’s Help Page at: https://support.google.com/youtube/answer/57407?hl=en&ref_topic=2888648.

X X X X X X X X END OF ANNOUNCEMENT 24-01 X X X X X X X X