2025 NCITE Research Projects Request for Proposals (RFP) on Terrorist Threats to Cyber Critical Infrastructure

RFP Issue Date: August 5, 2024
Proposal Due Date: September 19, 2024
Submit proposals by email to NCITERFP@unomaha.edu.
About NCITE

The National Counterterrorism Innovation, Technology, and Education Center (NCITE) is the Department of Homeland Security’s (DHS) Center of Excellence for terrorism prevention and counterterrorism research. NCITE is a consortium of universities and practitioner partners whose mission is to conduct research, education, and workforce development activities that will respond to challenging problems and offer innovative solutions to issues faced by counterterrorism and targeted violence prevention professionals – both in the public and private sectors. Led by the University of Nebraska at Omaha, the focus of NCITE is to support operationally relevant research and development efforts. More information may be found at [https://www.unomaha.edu/ncite/](https://www.unomaha.edu/ncite/).

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NCITE Targeted Research Grant Program Overview

NCITE’s vision is to be the premier U.S. academic provider of counterterrorism research, technology, and workforce development.

NCITE’s research seeks to innovate, educate, and create new counterterrorism and prevention strategies while building a workforce pipeline where it’s desperately needed: in STEM and Homeland Security fields.

As DHS’ trusted partner for counterterrorism and terrorism prevention research, NCITE seeks to bring together the brightest minds in the field and leverage the capabilities of colleges, universities, federal laboratories, industry, and nonprofit organizations to help thwart terrorism.

Our mission is to make these research findings relevant and ready. Our hope is to help America’s Homeland Security frontline be known as first in-class in counterterrorism and targeted violence prevention.

Because NCITE is sponsored by the Office of University Programs in DHS’ Science and Technology Directorate, the intent of this call is to spark innovation from university labs and research teams. As such, only proposals led by universities will be considered for funding. However, we do welcome collaborative proposals that include non-government organizations, individual consultants, and technology partners (although such partners are not required).

NCITE funds projects across our four research themes:

1. The nature of counterterrorism and targeted violence operations
2. The nationwide suspicious activity reporting initiative
3. Terrorism and targeted violence prevention and program evaluation
4. Counterterrorism and targeted violence workforce development

With those objectives in mind, NCITE requests proposals intended to address the specific question and challenge of terrorists’ threats to cyber critical infrastructure. NCITE will lead a scientific review of proposals and facilitate a DHS relevancy review after scientific merit has been evaluated.

Estimated Funding
For this targeted RFP, NCITE intends to award 1-2 projects. These projects will be conducted from approximately January 1, 2025, through 18 to 36 months. The opportunity for continuation after each NCITE period of performance is based on project performance and DHS funding availability. Average award in 2023-2024 for a one-year period of performance was $153k, and individual awards varied depending on level of effort and evaluation of impact to DHS mission areas.

Eligible Grantees
As noted above, organizations eligible to receive NCITE grants for this RFP are institutes of higher education. NCITE does not award grants to individuals, private non-higher education organizations, or to federal, state, county, or local government entities — though those groups may
be partners in the work conducted by the grant recipient. The proposal’s designated principal investigator must be an employee of the higher-education organization applying for an NCITE grant.

**Eligible Projects**

NCITE will fund projects that should generate new knowledge (research projects). Funding decisions will be based on how well an invited proposal meets the evaluation criteria detailed in Appendix D. Quantitative scoring of the evaluation criteria will be provided by scientific reviewers and then advanced to DHS for a relevancy review. We are particularly interested in funding projects that align to the challenge questions listed in Appendix A.

Please note that all selected projects must be able to complete the proposed research using non-DHS data sources or simulated and/or synthetic data. DHS is unable to provide operational data suitable for algorithm development and testing to performers under this award. Each proposal must identify how and where it will acquire real, simulated, or other synthetically generated data.

NCITE reserves the right to fund, in whole or in part, any, all, or none of the applications submitted in response to this request for proposals. Submission requirements for this grant program may be waived at the discretion of NCITE.

In accordance with University of Nebraska at Omaha policy, NCITE does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran.
Submission Guidance

Deadline
The due date for grant proposals is 11:59 p.m. EST on September 19, 2024, via email. NCITERFP@unomaha.edu

Format
See Appendix B for cover page guidelines and Appendix C for details on proposal requirements.

Multi-Year Project Proposals
Applicants may submit multi-year proposals with deliverables and budgets with a period of performance beginning January 1, 2025. If submitting a multi-year proposal, applicants are advised to structure their workplan January 1, 2025 – June 30, 2025, with following years July 1 – June 30. Partners awarded multi-year projects must follow the same reporting schedule for semiannual and annual reports.

Budgets submitted in the proposal should mirror workplans. The first year is calculated beginning January 1, 2025. If submitting a multi-year proposal, applicants are advised to structure their workplan January 1, 2025 – June 30, 2025, with following years July 1 – June 30. Continued funding year over year will be contingent upon acceptable performance in reviews by NCITE and DHS, available funding, and continued need. Continued funding of a project is not a guarantee.

Applicant Notification and Timeline
NCITE will strive to notify applicants regarding our intent to fund in October 2024 for a period of performance beginning on January 1, 2025. Please note that research project start date is contingent upon IRB, DHS Compliance Assurance Program Office (CAPO), and DHS Privacy approvals.

Privacy Guidelines
Research grant awards will be subject to the terms and conditions found on the NCITE webpage at https://www.unomaha.edu/ncite/. Applicants are encouraged to review the terms and conditions prior to drafting and submitting a proposal to determine their ability and/or willingness to adhere to the proposal requirements and to accept the terms and conditions in a subaward should one be awarded.

Due to the nature of the cooperative agreement that governs the NCITE grant from DHS, subaward projects are subject to additional privacy guidelines. NCITE’s review of proposals will include an evaluation of risk to individuals’ privacy, civil rights, and civil liberties. As a result, applicants must complete the attached Data Acquisition Management Plan to provide a description of the data they intend to use in the proposed project (particularly third-party data, defined below) and how they will acquire and manage that data, to include the use of privacy-enhancing technologies.

- Third-party data is data not generated via project activities; this is data you did not create or collect. Third-party data includes any information not generated via project activities or information sourced from other than the research subject; for you to meaningfully use third-party data, these data need to appear in the project outputs. Studies would not be
using third-party data if they are purely education or they are solely collecting original/new information through surveys, interviews, focus groups, or experiments. A non-exhaustive list of examples of this data include publicly available social media data, existing datasets, replication data from journal articles, survey data from other research, databases that collate information, among other information.

If a project that includes methods or data sources that could result in the collection, generation, or use of personally identifiable information (PII), sensitive PII, or other privacy sensitive information is awarded, the principal investigator shall incorporate safeguards to ensure alignment with the Fair Information Practice Principles (FIPPs) and to adequately protect the data. Information on those safeguards should be provided in the proposal, and NCITE will work with awardees to ensure they are in accordance with the FIPPs.¹ Web scraping is not permissible. Any data collection must not profile, target, or discriminate against any individual based on the content of their speech and how they express themselves non-violently, their associations, how and whether they choose to worship, and how they choose to non-violently express their concerns or positions to government.

- **Personally Identifiable Information (PII)** is any information that permits the identity of an individual to be directly or indirectly inferred, including any information that is linked or linkable to that individual, regardless of whether the individual is a U.S. citizen, legal permanent resident, visitor to the U.S., or employee or contractor to the Department.
- **Sensitive PII** is PII which, if lost, compromised, or disclosed without authorization, could result in substantial harm, embarrassment, inconvenience, or unfairness to an individual.
- **Privacy sensitive** means that the research activity could have an impact on an individual’s privacy – be it bodily privacy, communications privacy, territorial privacy, or information privacy.

Examples of projects that meet the definition of privacy sensitive may include those that use social media data or those that involve commingling information with other data sources that may make it privacy sensitive. Although, in general, NCITE can fund projects that are privacy sensitive, please be advised that those projects may require additional levels of review by NCITE and DHS. This process can take up to 3-6 months, so it is important that researchers build privacy reviews from the funder into their workplans as a funded activity.

**Questions about this Request for Proposals**
Applicants should direct questions about this request for proposals to NCITERFP@unomaha.edu. Written questions will be accepted until Friday, August 30, 2024. NCITE will publish a document with all written questions and responses to the RFP page on our website by September 6, 2024, for review by all prospective applicants.

Appendix A: Challenge Questions

The NCITE challenge questions are research questions or homeland security challenges from NCITE, the Department of Homeland Security (DHS), and other partners in the homeland security enterprise (HSE) that new proposals should seek to address. They are aligned to the four NCITE research themes and will guide the direction of new projects. This targeted RFP is meant to address research gaps identified at the Envision2024 Annual Conference. As you develop proposals to address the identified challenges, please consider how your proposed project aligns to:

- DHS Strategic Framework for Countering Terrorism and Targeted Violence
- National Strategy for Countering Domestic Terrorism
- FBI and DHS Strategic Intelligence Assessment and Data on Domestic Terrorism

Please keep in mind that proposals should be research-based and leverage your academic expertise and training to provide foundational knowledge to inform the HSE’s strategy and policy for the counterterrorism mission over the next 5-10 years.

Challenge Area 1: Cyber Targets of Terrorism

1. How can violent extremist threat actors exploit the cyber and closely related domains against any of the 16 critical infrastructure (CI) sectors to further their organizational goals? Topics could consider cyber and closely related domains (e.g., cloud-based software, networking, dark web and legitimate platforms, etc.) as an avenue for:
   a. terrorist attacks,
   b. fundraising, and/or
   c. economic disruption.

2. Which CI sectors would be most enticing to different violent extremist threat actors and why? Conversely, what types of infrastructure or characteristics of those structures do terrorists avoid?

3. What knowledge, skills, abilities, and other characteristics (KSAOs) might violent extremists need to attack via cyber pathways? Which violent extremist actors are most capable and have the most aligned ideology to attack cyber domains associated with CI?

4. What baseline security measures should federal, state, local, tribal, or territorial (FSLTT) government partners and industry owners and operators implement to mitigate violent extremist cyber threats on critical infrastructure? How effective are current FSLTT promising practices (e.g., NSM-22, NIST SP-171, NIST CSF & RMF, etc.) at guiding partners to mitigate threats? In what ways should government partners or professional associations engage with industry (e.g., CI Information Sharing and Analysis Centers) for public safety concerns?

5. How might violent extremist threat actors use Artificial Intelligence or other technology applications to identify vulnerabilities to critical cyber infrastructure? How does this vary across ideological actors?
Appendix B: Cover Page

Information to be included in your cover page:
- Project Title
- NCITE Research Theme
- Challenge Question (if applicable)
- Project Information
  - Principal Investigator (Name, Institution, and Contact Information)
  - Co-Principal Investigators (Name, Institution, and Contact Information)
  - Administrative Contact (Name, Institution, and Contact Information)

Appendix C: Proposal Requirements

All project proposals – research and development – in response to this call must explicitly include the following sections below. Proposals should be no more than 12 single-spaced pages. A Project Workplan Template can be found under “application documents” on the RFP website.

Proposal Sections
Proposals must contain all the following elements. Applicants should strictly abide by this framework.

1. A completed cover page that contains the information shown in Appendix B, identifying the research question/challenge need that your research project will address. Note: cover page is not included in the 12-page limit.

2. Detailed descriptions of your project to include the following sections:

   a. Abstract (a summary of objectives, outcomes, value proposition)
      Provide a summary overview of the research concept being proposed, to include a description of:
      - Your research objectives (at a high level)
      - The intended outcomes of your project
      - The value proposition for your project.

   b. Objectives/Purpose
      Provide a description of:
      - The tangible objectives and outcomes of your research and detail how those outcomes map onto the DHS Strategic Framework for Countering Terrorism and Targeted Violence.
      - The purpose of the research, including key literature references, demonstrating that this concept will help address a resiliency need identified by DHS, its federal partners, or the homeland security enterprise that is NOT currently being adequately addressed.

   c. Baseline
Identify the baseline state of knowledge or practice in your target domain (e.g., currently, the USG does not know the future impact of pending F/SLTT laws on cyber security for critical infrastructure in the U.S.).

d. **Methodology**
Clearly describe your research methodology to include the proposed method, required data, and analytic technique.

e. **Data**
Describe in detail the types of data and data sources you anticipate using to complete the proposed research.
  - Identify if you will be using any third-party data or privacy-sensitive data (e.g., social media data, data requiring execution of a license or consent/cooperation of current owner or custodian, PII or sensitive PII, protected critical infrastructure information, 1st amendment rights information).
  - Describe how you anticipate using, storing, and protecting all data.

f. **Project Milestones and Deliverables**
There are several required deliverables and reporting metrics throughout the course of the project as outlined below:
  i. **Required to begin work:**
   - Submission of project to your university’s Institutional Review Board (IRB)
   - Submission of institutional approvals to the DHS Compliance Assurance Program Office (CAPO) and Privacy Office via NCITE administrative team and OUP Program Manager
   - Submission of Data Acquisition and Management Plan
   - Government kick-off meeting via Microsoft Teams
  ii. **Required Reporting**
   - Center of Excellence Metrics Spreadsheet (December and June) tracking quantitative metrics including media mentions, publications, presentations, students associated with your project and transition items. A template will be provided.
   - Semiannual Report (mid-December) describing scientific and applied outcomes of research, as well as students impacted, government engagement, and field & industry outreach. A template will be provided.
   - Annual Report (early July) describing scientific and applied outcomes of research, as well as students impacted, government engagement, and field & industry outreach. A template will be provided.
  iii. **Required Participation**
   - Participation in annual NCITE meeting in Omaha, D.C., or virtual.

Using the provided table below, add your project’s type of deliverable and the intent, organizing by date, keeping the required items in the chart.
Deliverable Type & Sub-type:

**Milestones:** A milestone is a key project step or activity, included to provide an overview of project timeline.

**Deliverables:** A deliverable is a tangible product, report, or final outcome delivered by the project team. Types of deliverables include:

1. **Research Report:** This deliverable is a comprehensive, full-length report on a given topic of research. It will go through a full peer review process and is meant to be shared with government stakeholders.

2. **Research Brief:** This deliverable is shorter report (<10 pages), usually describing interim results or providing a summary of a more extensive report. It will go through an abbreviated peer review process and is meant to be shared with government stakeholders.

3. **Infographic:** This deliverable is designed to clearly convey key findings from a research project. It will go through a peer review process, although the type of review will depend on the content/purpose (e.g., standalone infographic vs. infographic explainer of full report).

4. **Interim Deliverable:** This is a pre-deliverable that will be submitted to NCITE to show progress but is not intended to be public facing. Although it will undergo review, it will not be distributed online or directly to stakeholders (exceptions might include when a stakeholder has asked to review). Examples of this might involve journal articles submitted for peer-review publication.

5. **Engagement:** These are additional types of final products such as presentations, workshops, trainings, etc. Please clearly describe the proposed deliverable in the description of proposed activity column.

<table>
<thead>
<tr>
<th>Deliverable Type</th>
<th>Description of Proposed Activity (include approximate page count)</th>
<th>Projected Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED MILESTONE</td>
<td>Submission of IRB Approvals</td>
<td>ASAP</td>
</tr>
<tr>
<td>REQUIRED MILESTONE</td>
<td>Hold Kickoff Meeting with Project Team/NCITE/Government</td>
<td>January 2025</td>
</tr>
<tr>
<td>REQUIRED MILESTONE</td>
<td>Data Acquisition and Management Plan</td>
<td>January 2025</td>
</tr>
<tr>
<td>REQUIRED REPORTING</td>
<td>Annual Progress Report and COE Accomplishment Sheet</td>
<td>June 2025</td>
</tr>
</tbody>
</table>

**g. Performance Metrics**

Describe the metrics you will use to evaluate progress or impact of your project.

**h. Transition Plan**

Describe how you deliver end-user value to include how you will disseminate knowledge products or develop, protect, and market technology products.

**i. Stakeholder Engagement**

List and describe current DHS or HSE stakeholders and partner relationships. Describe the benefits that would accrue to DHS and/or the HSE through successful completion
of your research. Identify specific DHS components and other HSE agencies, owners, and operators that would benefit. Describe your proposed plan to engage with them throughout the project.

**j. Potential Programmatic Risks**
Describe any potential risks or barriers to completing the work as described; what are some me

**k. Project Outcomes and Outputs**
Describe the anticipated outcomes and outputs of your project, including information on how those outcomes and outputs will advance or impact current policies, procedures, technologies, or capabilities. Describe how your project will improve upon the current state of knowledge and practice.

**l. Qualifications**
Provide a summary of the expertise and capabilities of the research team, including:

- The applicant’s credentials in this topic area, including past accomplishments. Experience with the NCITE consortium or DHS COEs should be highlighted when relevant.
- The names of public- and private-sector partners.
- Commitments from partners in terms of collaboration and resources (letters of support do not count against page counts).

**m. Citations** (not included in the 12-page limit)

**n. Estimated Cost**
Detail the total estimated cost for the project using a 12-month to 24-month period of performance with submission of the budget template and budget justification (templates found on the NCITE webpage at [www.unomaha.edu/ncite](http://www.unomaha.edu/ncite) under the research tab).

Note that upon award, NCITE may require additional documentation, such as a human-subject research plan or a research safety plan, if applicable and per the deliverable requirements to conduct this work.

Applicants may append any additional documentation they feel will help the decision process of NCITE. Examples of such information may include resumes of key personnel and letters of commitment from research partners. Although such appendices are not subject to the 12-page limit, applicants should exercise discretion in providing additional material.

**Project Reporting**
If awarded a research grant – in addition to other promised deliverables – the grantee shall provide NCITE with progress reports throughout the project period as noted above. These include periodic meetings with NCITE and government end-users as well as semiannual and annual progress reports.
Invoices must be submitted within 30 days following the NCITE period of performance end June 30, 2025.

NCITE may track metrics on funded projects for up to two years after their completion. The metrics will include information on publications, patents, commercialization, student education, external sponsorship, and further collaborations among the partners that were facilitated by NCITE funding.

**Templates and Supplemental Documents**

The full RFP along with project proposal templates can be found on the NCITE webpage at [www.unomaha.edu/ncite](http://www.unomaha.edu/ncite) under the Research tab.

All proposals must include:

- Required sections listed above as outlined in the appropriate Project Workplan Template,
- A written budget justification,
- An Excel budget sheet,
- University Negotiated Indirect Rate Sheet

Research grant awards will be subject to the Terms and Conditions found on the NCITE webpage at [www.unomaha.edu/ncite](http://www.unomaha.edu/ncite) under the Research tab.
Appendix D: Proposal Evaluation Criteria

The technical description of the proposed project will be reviewed in two phases. First, NCITE will conduct a scientific review of proposals. Second, Department of Homeland Security (DHS) stakeholders will evaluate the relevance of proposed projects.

Scientific Review

Full proposals will be evaluated by NCITE on several criteria:

1. Scientific Contribution
   a. Novelty of research questions
   b. Usefulness of proposed research in addressing scientific problems
   c. Methodological quality
   d. Scientific expertise and viability

2. Planning Quality
   a. Identification and mitigation of programmatic risks
   b. Identification of performance metrics
   c. Identification of a clear transition plan for knowledge and deliverables

3. Stakeholder Relevance
   a. Demonstration of baseline understanding of current DHS knowledge or capabilities
   b. New improvements to the DHS baseline
   c. Anticipated impact on DHS operations
   d. Identification of potential DHS stakeholders

Included in this review are: validity of the proposed approach and likelihood of success based on current state of the art and on the scientific principles underpinning the proposed approach; development of a comprehensive and complete workplan and schedule with milestones and interrelated tasks that clearly lead to the successful completion of the project; identification of key technical risks and mitigation strategies to address them; appropriateness of proposed budget for the planned work; and considerations of protections of privacy and CRCL of U.S. persons.

NCITE also looks for teams that are multi-disciplinary and provide an appropriate level of expertise and capability to provide high confidence of success. As part of that, NCITE also encourages inclusion of plans to inspire students – the future generation of the counterterrorism targeted violence prevention workforce.

Relevancy Review

Following scientific review, projects are advanced to relevancy review. In this phase, USG stakeholders will evaluate whether a project significantly advances NCITE’s ability to address the operational needs identified by DHS and its partners. Projects that do not show potential impact to or relevance for the USG will not be advanced for funding.
Appendix E: Intellectual Property Guidelines

Intellectual Property (IP) that will either be brought into the project (Background Intellectual Property) or will be developed via the project will require a basic IP Management Plan prior to being awarded should your project be selected. The IP plan should address the following if applicable to your project:

1. Identify ownership of Project IP (who will own the IP?);

2. Licensing rights of project-developed IP, including revenue sharing amount for joint owners of project participants, if applicable (who will have what license rights to the IP?);

3. The project participant(s) that will have rights to enforce rights in project-developed IP (who can enforce those rights?);

4. Background Intellectual Property (BIP) needed for the Project and terms (if any) under which that BIP will be made available to Project Participants both during and after performance of the Project;

5. Terms under which the collective IP will be made available to government and/or industry upon its transition to general use;

6. Who will bear the filing and other costs of managing that Project IP, including the cost of prosecuting foreign and domestic patent rights;

7. An affirmation of the adoption, without exception, of the provisions of Article I, Section A, paragraph 15 and Article II, Section J, of the most current Terms & Conditions of Cooperative Agreement #20STTPC00001-05-01.