NCITE Project Summary K-12 Soft Target Risk Assessment

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Soft targets like K–12 schools face growing physical, cyber, and natural hazards but often lack resources including time staff, and funds to manage risk. This project develops a simple, risk informed assessment tool centered on a K–12 "risk engine" that can adapt to other venues (e.g., houses of worship, stadiums, malls). The team will build a minimum-viable product with next-gen chat-based user interface, craft and vet question items, and translate responses into weighted risk scores and tailored low/no-cost recommendations. Usability testing, workshops, and iterative revisions will refine reports and training materials, with artificial intelligence (AI) used to enhance routing, analysis, and recommendations. Expected results include a validated, easy-to-use tool that prioritizes risks across threat, vulnerability, and consequence and points schools to recovery resources. Ultimately, this should help resource-constrained operators act on the highest-value mitigations and strengthen resilience across the soft-target landscape.

Impact Statement

Delivers a validated, low-cost, risk-informed based assessment and reporting capability that helps federal, state, and local practitioners, such as resource-constrained schools or other soft targets triage assistance, steer organizations to appropriate protective and recovery resources, and prioritize interventions where they reduce risk most.

Policy Impact

- Executive Order 14239, "Achieving Efficiency Through State and Local Preparedness" (Mar. 18, 2025): The project advances the EO's risk-informed approach by delivering a practical local tool and risk outputs that can feed state/local prioritization and, over time, a National Risk Register.
- Executive Order 14306, "Sustaining Select Efforts to Strengthen the Nation's Cybersecurity and Amending EO 13694 & EO 14144" (June 6, 2025): The tool's cyber-risk elements and Al-enabled features align with federal efforts to modernize cybersecurity risk management and translate NIST/CISA guidance into actionable steps for schools.
- Office of Management and Budget Memo 25-21, "Accelerating Federal Use of AI through Innovation, Governance, and Public Trust (Apr. 3, 2025): The project's AI integration and transparency in scoring/reporting reflect federal expectations for trustworthy, governed AI that supports public-sector missions affecting DHS partners and grantees.







End User Offices with Direct Operational Impact

DHS Cybersecurity and Infrastructure Security Agency (CISA)	DOJ Office of Community Oriented Policing Services
DHS Federal Emergency Management Agency (FEMA)	Department of Education Readiness and Emergency Management for Schools
National Education Association	Department of Education Office of Safe and Supportive Schools
State Departments of Education	State and Local Emergency Responders

Expected Findings and Outputs

- A validated K–12 risk question set and scoring logic that reliably distinguishes risk across threat, vulnerability, and consequence and produces interpretable section- and overall-scores.
- Evidence that a chat-based, user-centric interface increases completion rates, data quality, and user satisfaction compared to conventional forms.
- A library of tailored, low/no-cost mitigation and recovery resources mapped to common K-12 risk profiles, improving operators' near-term actionability.
- Demonstrated adaptability of the risk engine to other soft-target categories (e.g., houses of worship) with minimal re-engineering.

NCITE Strategic Priority

Targets — Directly addresses how to better protect high-risk soft-target venues by quantifying risk drivers and pointing to concrete mitigations.

NCITE Operational Area of Excellence

Technology and Innovation — Delivers a usable software tool (with AI features) that translates research and existing methodologies (e.g., the Enhanced Critical Infrastructure Protection Program, Security Planning Workbook) into field-ready outputs for operators.

Methodology

The team will build a minimum viable product and define back-end response structures and scoring equations, develop items via subject matter expert review and targeted scans of existing assessments, down-select items, and conduct exploratory and confirmatory factor analyses for construct validity. Usability testing and workshops (local, state, national) will gather feedback, followed by iterative system testing and modifications. Artificial intelligence capabilities (e.g., adaptive question routing and recommendation generation) will be configured, trained on project data, and user-tested. Outputs include an overview of safety tools, reports with overall scores, and curated low/no-cost resources, with training materials to support adoption.

Please visit the NCITE website for more information on the project at <u>ncite.unomaha.edu</u>. This project is supported by the Nebraska Research Initiative via the State of Nebraska.





