

# COUNTERTERRORISM NET ASSESSMENT DATA STRUCTURE

# CT-NEADS | Red. Blue. Green.

The Counterterrorism Net Assessment Data Structure (CT-NEADS) is developing enhanced data collection frameworks for counterterrorism effectiveness to enable the collection and integration of more complete data on "blue" (e.g., counterterrorism), "green" (e.g., relevant contextual data) and "red" (e.g., data on terrorist behavior) actions and effectiveness.

# THE NEED FOR CT-NEADS

Over the last two decades, the U.S. Government has spent trillions of dollars and many Americans have given their lives attempting to defeat terrorism and violent extremism. Nevertheless, the lack of rigorous, systematic evaluation of counterterrorism and terrorism prevention efforts means that a fundamental question remains: are these efforts effective?

#### START's Counterterrorism Net Assessment Data Structure (CT-NEADS) will answer this question.

While plenty of publicly available data exist related to terrorism and counterterrorism, there has not yet been an effort to integrate these distinct datasets into a single resource or framework that would enable a more rigorous, and multi-level statistical analysis of counterterrorism and terrorism prevention efficacy. CT-NEADS compiles relevant observations from publicly available datasets, including those not explicitly developed for the purposes of studying terrorism, counterterrorism and terrorism prevention, to envision and ultimately develop a framework for data-driven counterterrorism.

# **INITIAL RESULTS & OUTPUTS**

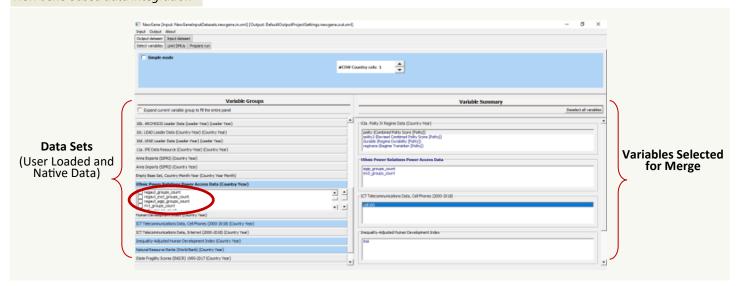
- A data matrix cataloging the currently available, open-source, quantitative empirical data that is relevant to counterterrorism.
  The searchable and filterable Excel-based matrix contains over 1,900 variables from 131 datasets. Information and attributes about each variable are coded to help users assess and identify the content, nature, and availability of the cataloged counterterrorismrelevant data.
- Initial **integration using existing NewGene software** in such a way that the data are useable not only for quantitatively adept analysts, but also for a wider variety of potential end-users.

#### **OBJECTIVES**

To enhance the ability of policymakers and practitioners to make accurate and efficient datadriven decisions about counterterrorism and terrorism prevention, the team will:

- design an enhanced data collection and analysis framework that enables end-users to conduct a data-driven net assessment of the counterterrorism and terrorism prevention efforts;
- examine and catalogue the universe of available and potentially useful data; and
- explore the state of, and contribute to, empirical research on counterterrorism and terrorism prevention effectiveness.

#### NewGene-based data integration



- Use case studies demonstrating how the data integration framework can be leveraged to study pressing questions.
  - ⇒ Specifically, a movement-level analysis of terrorism focusing on the case of al-Qaeda in the Islamic Maghreb (AQIM) and its affiliates demonstrated limitations to extant empirical research, which has largely been bounded to a focus on specific groups and their activities within national boundaries. Rather, CT-NEADS made it easy to generate a dataset that geographically encompasses AQIM and its affiliates' area of operations across national boundaries.
  - A second use case explored resource allocation around U.S. government efforts to build partner counterterrorism capacity. CT-NEADS quickly generated a dataset that allowed for careful evaluation as to how societal factors interact with military considerations in partner nations, which condition the effectiveness of counterterrorism training and other expenditures.

*Use Case: Resource Allocation/Building Partner Capacity Results* CT Variable CTFP Grant Aid CT Grant Aid **CTFP Trainees** Increases Model Set No Reduces (cumulative) (cumulative) (cumulative) correlation terrorism terrorism None В Aid CT Grant Aid В В Total Foreign Aid Military Expenditures D Military Interaction Variable Arms Imports E Security Fragility State Fragility G \* Governance Regime Type (Polity IV) Н Regime Durability Н Development Human Development Index % Pop. in Excluded Ethnic Group Society Number fo Excluded Groups

# THE FUTURE OF CT-NEADS

START is actively seeking follow-on funding to:

- Develop custom software to:
  - ° incorporate and aggregate event-level and public opinion data;
  - ° facilitate automatic updates to make it easy to include new releases of existing datasets;
  - ° incorporate a more intuitive graphic user interface; and
  - ° add canned visualization and analysis functions.
- Produce training materials (e.g. how to videos) to facilitate adoption by non-technical users.
- Continue to integrate existing data catalogued in the data matrix.
- Collect and integrate new data where gaps have been identified and potentially to:
  - include data relevant to information operations efforts of and targeting near-peer competitors, and
  - ° expand the I-VEO knowledge matrix cataloguing well over a hundred hypotheses related to the study of violent extremism, which undergirded data collection efforts.

