



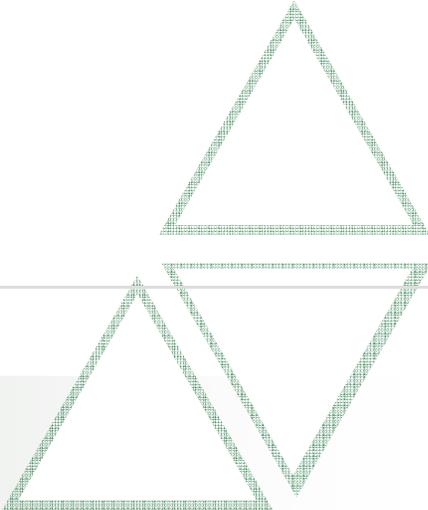
# Building on Clues: Improving Methods to Detect and Characterize Terrorist Activity

Kevin J. Strom, Ph.D.

RTI International

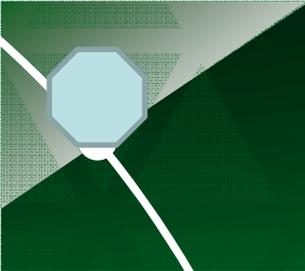
November 4, 2010

IHSS Research Summit



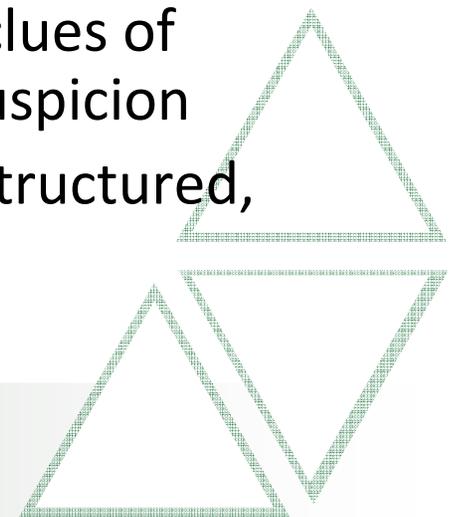
Institute for Homeland  
Security Solutions

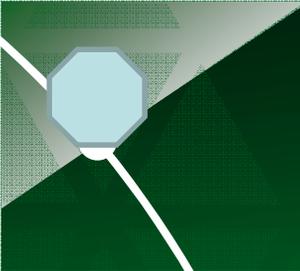
Applied research • Focused results



# Project Overview

- **Problem:** Limited guidance on *how* to collect, analyze and share counterterrorism-related data
  - Emphasis has focused more on *what* to do and less on *how* to do it
- **Response:** Develop methods for collecting, prioritizing, and analyzing information potentially related to terrorism including suspicious activity reports
  - Identify best approaches to finding the initial clues of terrorist activity and establishing reasonable suspicion
  - Identify effective approaches for analyzing unstructured, narrative data





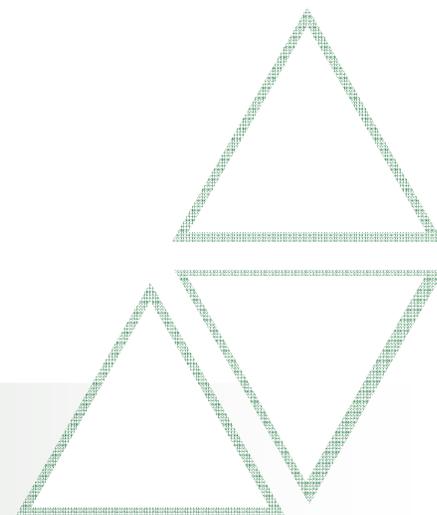
# Project Phases

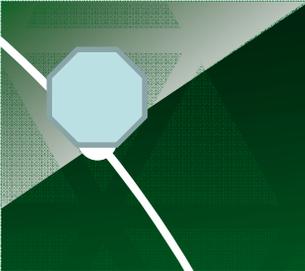
- I. Used open-source analysis to assess foiled terrorist plots and executed attacks
  - Developed database of 86 foiled and executed plots against U.S. targets from 1999 – 2009
  - Report available at [https://www.ihssnc.org/portals/0/Building\\_on\\_Clues\\_Strom.pdf](https://www.ihssnc.org/portals/0/Building_on_Clues_Strom.pdf)
- II. Conduct interviews with subject matter experts including law enforcement, regional and state fusion center personnel
  - Identify what is working well and what needs improving
- III. Develop and test analytic processes for prioritizing and analyzing suspicious activity reports (SARs) potentially related to terrorism





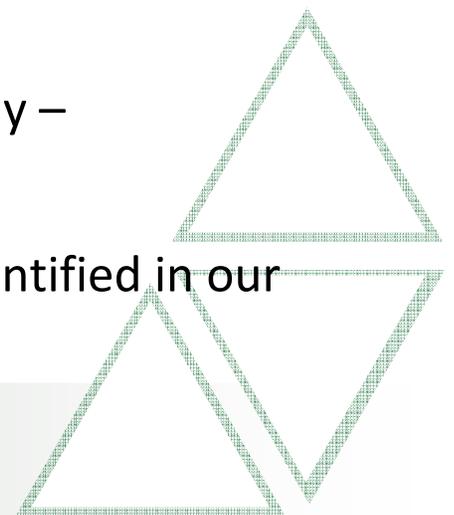
# Phase I : Case Studies of Prior Terrorist Plots

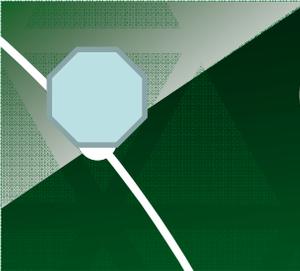




# Case Selection Criteria

- Included cases in which—
  - A terrorist plot against a US target was executed;
  - A terrorist plot to injure or kill at a US target was foiled; or
  - Material support to terrorist organization in service of a future plot
- The planned or executed plots were intended to cause casualties or catastrophic damage to critical infrastructure
- Plots could be from any ideological motivation
- Cases were identified from public information sources
- Limitations
  - Do not include plots that were never reported publically –
    - Plots that are only known to intelligence agencies
    - Plots that “self-foiled”
  - Every plot relevant to our study may not have been identified in our searches

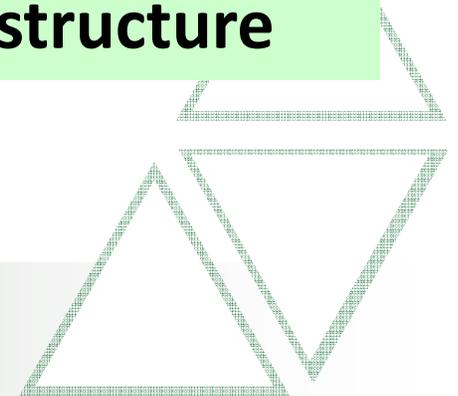




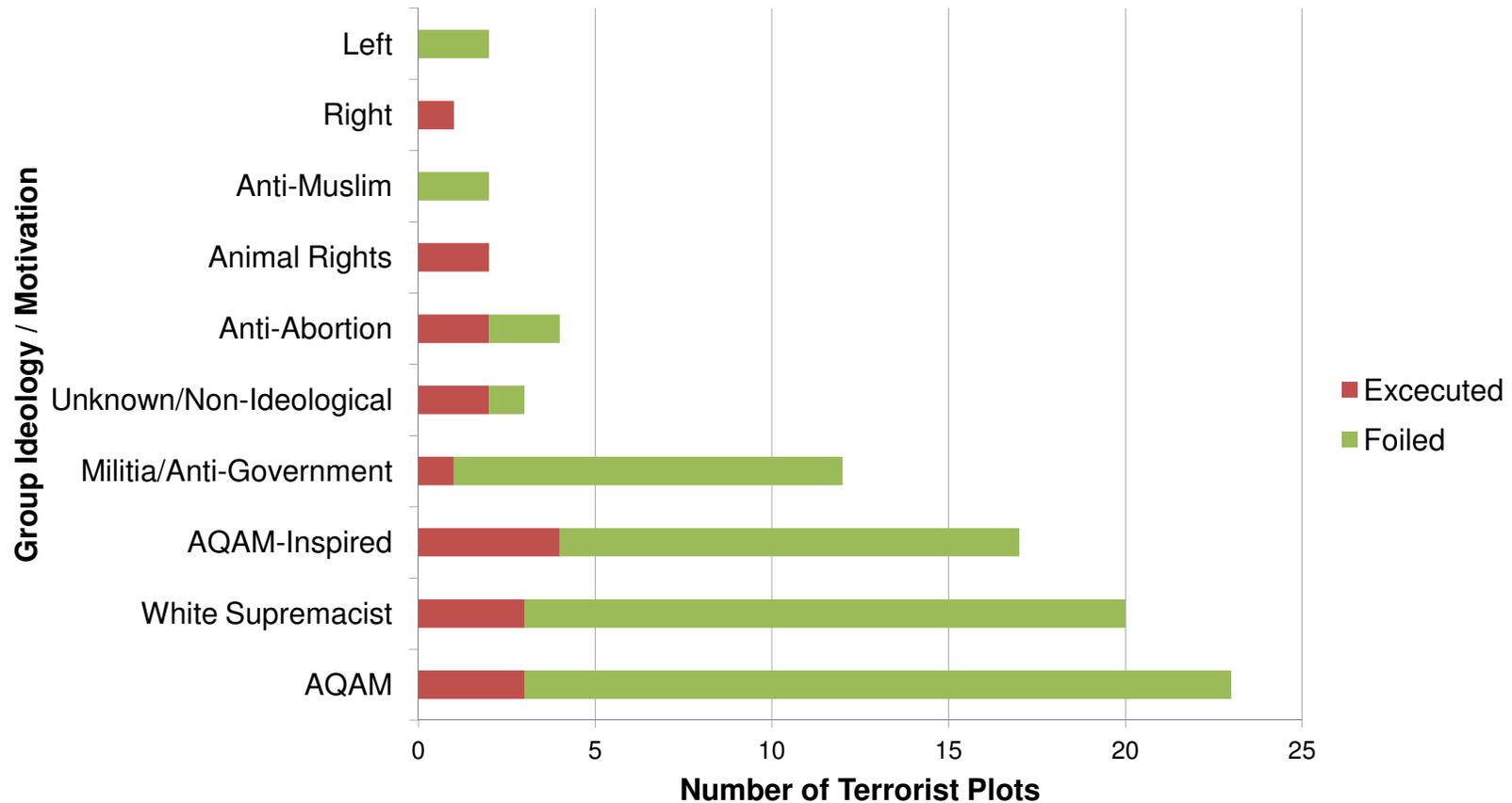
# Characteristics of Terrorist Plots in the United States From 1999 – 2009

- Identified **18 plots reaching execution** that caused, or were intended to cause, casualties
- Identified **68 foiled plots** intended to cause casualties during the same time period

**Among identified cases, findings demonstrate that the US is interdicting about 80% of terrorist plots intended to cause casualties or destroy critical infrastructure**

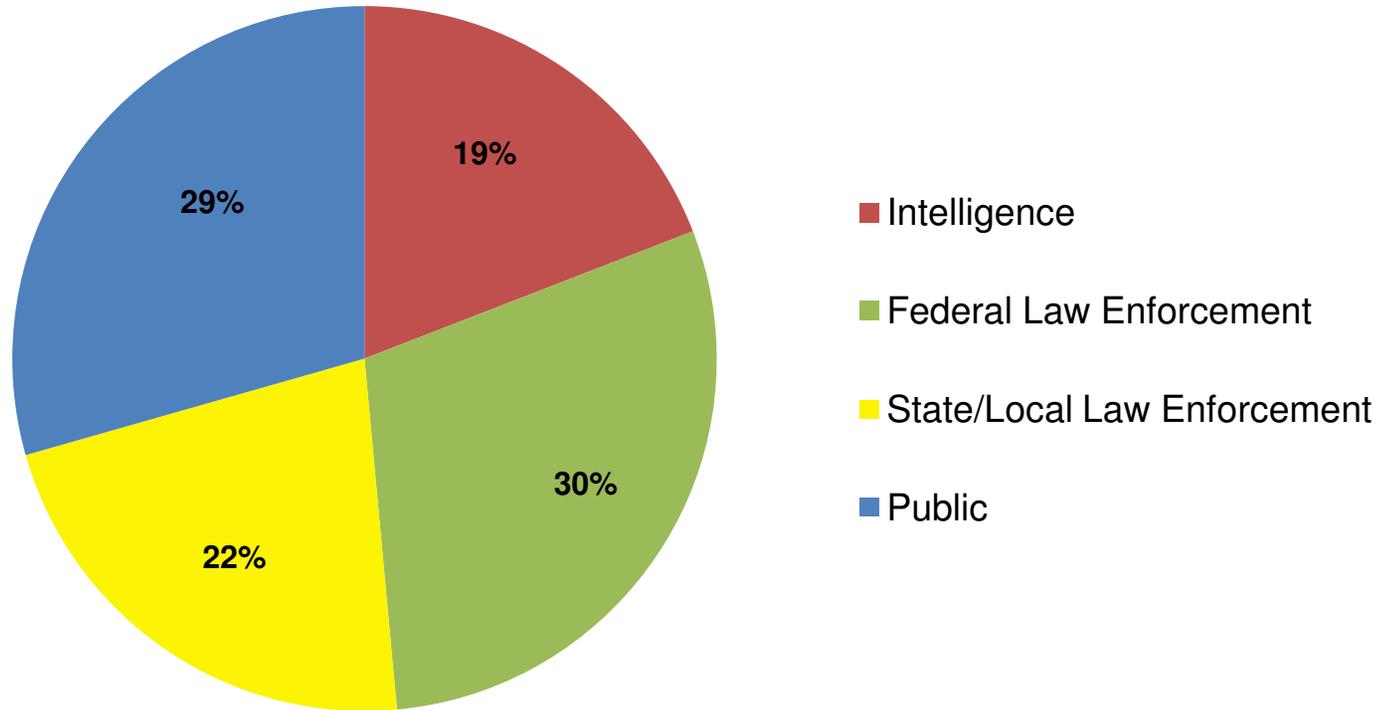


# Organization of "Terrorist Groups" Responsible for Plots Within the US, 1999-2009



**Similar numbers of AQAM and AQAM-inspired plots (n=40) and White Supremacist / Militia/Anti-Government (n=32) plots**

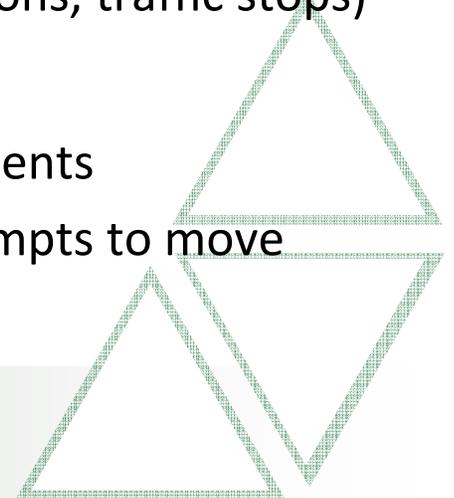
# Source of Initial Clues in Foiled Plots



**In over 80% of the foiled plots in our dataset, the initial clue came from law enforcement (20 federal cases and 15 state/local cases) or from the general public (20 cases)**

# Types of Initial Clues in Foiled Plots

- 43% - reports of specific plots
  - Generally split between tips from the general public and would-be terrorists soliciting an undercover agent or informant
- 25% - associates of known terror suspects
  - Individual were first identified through links to known suspects
- 18% - criminal investigations
  - Includes crimes known to be related to terrorism (e.g., robbery, counterfeiting) and “ordinary” crimes (e.g., parole violations, traffic stops)
- 15% - various types of suspicious activity
  - *Planning activity*: paramilitary training, suspicious documents
  - *Preparatory activity*: smuggling-like behavior during attempts to move incriminating material, target site surveillance

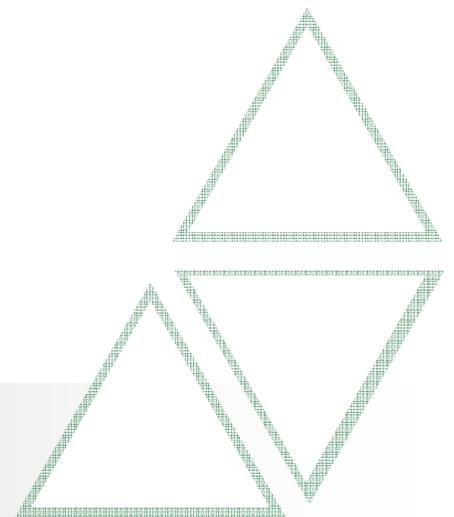


# Phase I - Conclusions and Recommendations

- Recognize importance of law enforcement and the public in preventing attacks, and support them through investments in education and reporting.
- Continue to investigate AQAM, but do not overlook other types of terrorist groups, and pay particular attention to “lone wolves.”
- Ensure processes and training are in place that enable law enforcement personnel to identify terrorist activity during routine criminal investigations.
- Work to establish good relations with local communities and avoid tactics that might alienate them.
- Support “quality assurance” processes and systems to ensure that initial clues are properly pursued and findings shared.
- Expand the federal standards for categorizing suspicious activity reports (SARs).

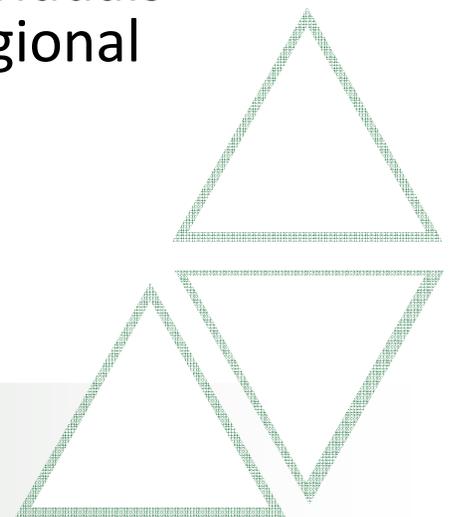


# Phase II : Structured Interviews Regarding SARs with Subject Matter Experts



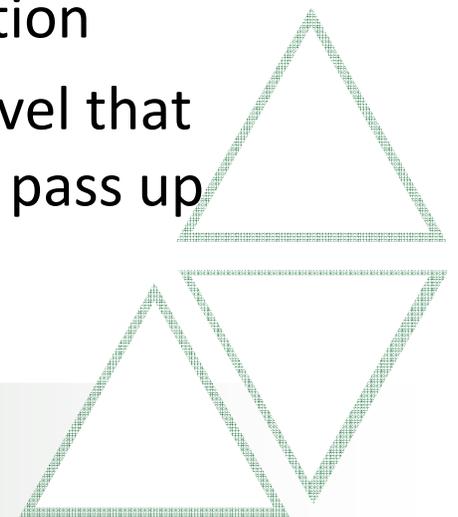
## Phase II - Purpose

- Understand how SARs are processed at state & local level
- Interview topics cover:
  - Collection and initial reporting
  - Processing and review
  - Analysis and prioritization
  - Sharing and dissemination
  - Follow-up and feedback
- To date conducted interviews with nearly 20 individuals representing local law enforcement, state and regional fusion centers, military, and private contractors

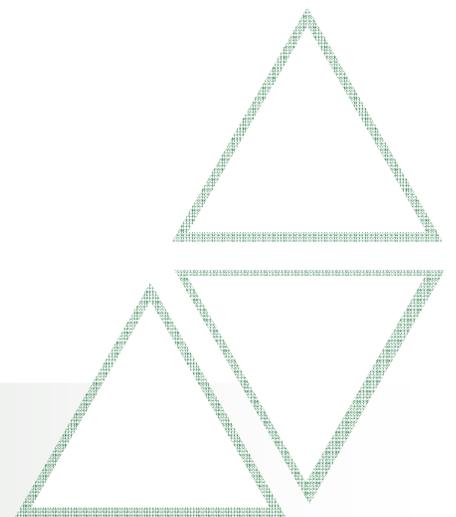


## Phase II – Preliminary Findings

- No uniform reporting format for SARs creates a knowledge management issue between the various SARS data sources
- Lack of a systematic approach for determining whether a SAR is potentially terrorist-related and warrants additional review
- Tendency is to pass reports that are remotely terrorist related up the chain ultimately ending up at the FBI
  - The potential result of this trend is that federal databases will be ‘watered down’ with low value information
- Frustration expressed by individuals at the local level that they rarely learn the outcome of information they pass up

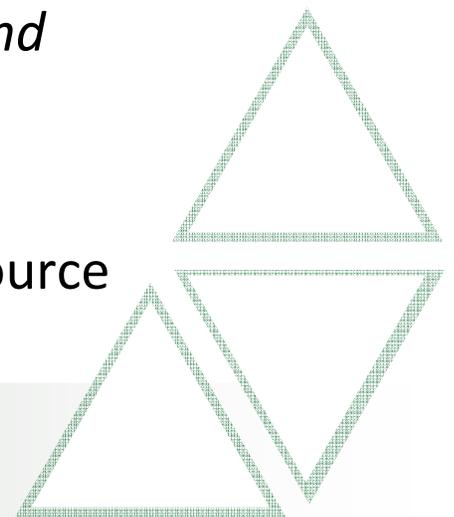


# Phase III : Toward an Analytic Approach for SARs



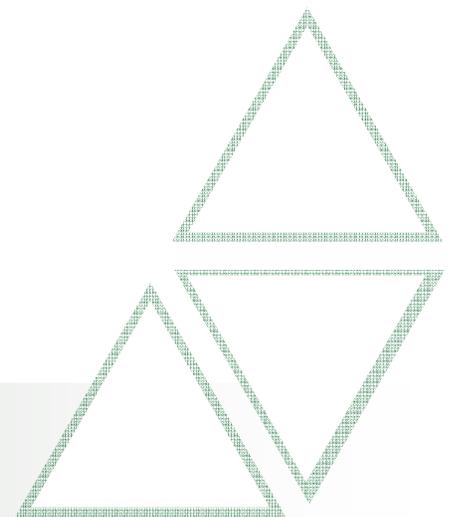
# Phase III – Approach

- Collect samples of various data sources that capture suspicious activity
  - Field interview forms
  - Crime incident forms
  - Online tip line forms
  - 911 data
  - SAR templates used by fusion centers
- Review and categorize common variables associated with these different reporting formats (*includes both structured and unstructured/text narrative fields*)
- Describe the life cycle for each data source
- Describe the strengths and weaknesses of each data source



# Phase III – Approach

- Develop “best practice” analytic strategies and knowledge management that account for the characteristics of each data source
  - Data cleaning, processing, and filtering
  - What are appropriate “triggers” that indicate the activity in question warrants additional inquiry?
  - What is the process for ensuring that pertinent information is not dropped or missed?
  - Which reports should be prioritized ahead of others?



# Questions?

Contact:

Kevin Strom

[kstrom@rti.org](mailto:kstrom@rti.org)

919-485-5729



Institute for Homeland  
Security Solutions

*Applied research • Focused results*

