

# Data Driven Solutions for Preventing Cross-Border Terrorist Attacks

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## Panelists:

### Dr. Victor Asal

“Planes, Trains and Automobiles: What Factors Make It More Likely That Terrorist Organizations Will Target Transportation Systems”

University at Albany, SUNY, START [vasal@email.albany.edu](mailto:vasal@email.albany.edu)

### Dr. Brent Smith

“Characteristics of Border Crossings and Border Crossers Involved in American Terrorism”

University of Arkansas, START [bls@uark.edu](mailto:bls@uark.edu)

### Mr. Aaron Elkins

“Identifying Terrorists at Border Crossings: Deriving Cues from Case Studies for Informed Interrogation at Land and Air Borders”

University of Arizona, BORDERS [aelkins@cmi.arizona.edu](mailto:aelkins@cmi.arizona.edu)

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The DHS Science Conference - Fifth Annual University Network Summit

**Catastrophes & Complex Systems:**  
**TRANSPORTATION**

March 30 - April 1, 2011  
Renaissance Hotel · Washington, DC

<https://www.orau.gov/dhssummit>

# Introduction

Panelists represent multi-institutional, multi-disciplinary research that examines collecting and analyzing social science data to improve understanding of why terrorists target transportation systems and how we can better use border crossing points to reduce terrorist threats. The research has relevance for determining:

- Which organizations are most likely to target transportation systems now and in the future
- Terrorist likely points of origin and border crossing behavior
- Characteristics of terrorist border crossers

# Problem

- U.S. ports need both *profit* and *security* to operate effectively and efficiently to handle large volumes of passengers and cargo in a timely manner by limited numbers of customs officers.
- Officers need information, data, and technological tools to support split second decision making as to whether an individual presenting at a border checkpoint represents a security risk to the nation.
- To this point in time, decision makers concerned with transportation and border security have had little systematic information and analysis on the motivation of terrorist groups for attacking transportation systems or the human characteristics of those who cross borders to carry out or flee after committing terrorist attacks.

# Potential Solution

The results of these research projects will enable policy makers to specify more accurately the characteristics of groups that target transportation systems and the characteristics of those crossing borders for terrorist purposes in order to more effectively uncover and respond to groups and individuals that constitute the most critical security threats.

# State the Challenges to Attaining the Solution and Results

- Total number of cases where individuals have crossed borders for terrorist purposes is extremely low, but those individuals are difficult to distinguish from millions of border crossers on legitimate business.
- No system to date has incorporated data on characteristics of terrorist groups and networks and characteristics of past offenders.
- Proposed solutions must account for the privacy and civil liberties concerns consistent with policy and legal restrictions.
- Need to investigate terrorists' ability to work to overcome new screening systems as they come on line.
- No current ability to integrate data with that in ATS
- Need to access anonymized data samples on non-terrorist crossers in order to better recognize border crossers seeking to harm the US

# End Users/Customers

Results of the research of these projects will support decision making activities of:

- TSA, CBP and local and state law enforcement officials to recognize and evaluate signs of threatening activity or associations and respond appropriately
- DHS and FBI officials to track where threatening activity related to border crossing is most likely to occur and develop and deploy counteractive measures
- Congressional and White House policy makers in deciding priority areas to focus resources upon and appropriate balance of security vs. efficiency at border crossings.
- International partners we coordinate with

# Discussion and Conclusion

- Collecting social data is challenging—especially in real time.
- General problems with “long tail” distributions; terrorist border crossings are exceedingly rare
- Predictive variables must be identified, coded and analyzed on a continual basis to ensure data supporting border crossing decision making is current and comprehensive.
- Most predictive variables must be identified and collected to ensure utility of analyses.
- Models must be validated against actual terrorist cases