START
NATIONAL CONSORTIUM FOR THE
STUDY OF TERRORISM AND RESPONSES TO TERRORISM

Project Fact Sheet

Transnational Illicit Trafficking (TransIT) Geospatial Tool

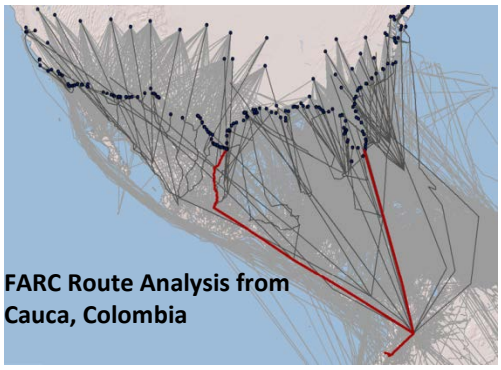
Initial Development for Central American and Caribbean Transnational Criminal Organizations, Terrorism and Radiological/Nuclear Smuggling

PARENT RESEARCH PROJECT OBJECTIVE

- Identify transnational criminal organizations (TCOs) and networks operating in the Central American Region (including the Caribbean) capable of engaging in radiological/nuclear (RN) smuggling.
- Analyze possible smuggling routes and methods that could be used by TCOs smuggling RN materials on behalf of terrorists.
- Explore and analyze vulnerabilities and provide possible modifications to enhance the Global Nuclear Detection Architecture.

TransIT DEVELOPMENT

Tool was developed to address parent research objective, but can be expanded to other illicit trafficking contexts. The model calculates optimized routes of TCOs based on a variety of risk indices and accounting for 13 modes of transportation: road, tunnel, foot, air, commercial aviation, Cessna, ultra-light aircraft, shipping, go-fast boats, pangas, full and semi-submersibles, ferry and freight rail.

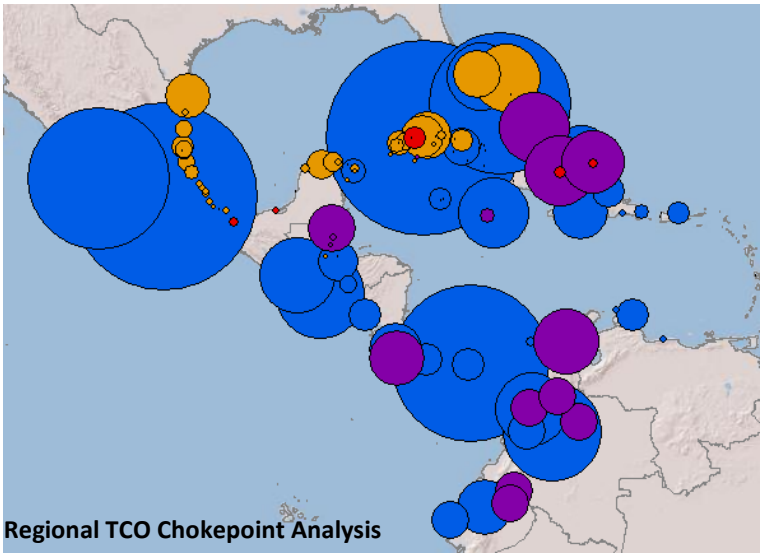

FARC Route Analysis from Cauca, Colombia

An in-depth analysis of intermediate transit chokepoints, key aerial, land and sea based transition points and preexisting and predicted trafficking routes was conducted using fixed origin points based on TCO operational areas as well as predetermined destination points, including but not limited to Ports of Entry (PoE). TransIT is a dynamic model that is able to continuously absorb the most current data and can be reworked to depict specific RN material scenarios such as avoidance of detection capabilities and shielded material transit.

The resulting assessment includes more than 80,000+ probable routes for TCO smuggling, analysis of regional and group variation in trafficking threats, and strategic valuation of trafficking chokepoints, as well as implementation of security initiatives at foreign ports.

By the Numbers - Behavioral Component
25,000+ Open Sources
Link analysis of 155 groups
Team of 35 coders
115 TCO group profiles created

By the Numbers - Geospatial Component
10 million+ segments
3.5 million+ junctions
330+ legitimate ports of entry/illicit entry points
240+ origin points


Regional TCO Chokepoint Analysis

START

The National Consortium for the Study of Terrorism and Responses to Terrorism (START) is supported in part by the Science and Technology Directorate of the U.S. Department of Homeland Security through a Center of Excellence program headquartered at the University of Maryland. This project was sponsored by the Domestic Nuclear Detection Office, under contract IAA HSHQDC-10-D-00023, task order HSHQDC-10-J-00473. START uses state-of-the-art theories, methods and data from the social and behavioral sciences to improve understanding of the origins, dynamics and social and psychological impacts of terrorism. For more information, contact START at infostart@start.umd.edu or visit www.start.umd.edu.