



**START**

# **Improvements, Updates, and Support for the TEVUS Portal: Final Report**

*Report to the U.S. Department of Homeland Security Science and Technology Directorate*

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## About This Report

The author of this report is Sarah Fishering, at University of Maryland. Questions about this report should be directed to Sarah Fishering, [sfishing@start.umd.edu](mailto:sfishering@start.umd.edu)

This report is part of the National Consortium for the Study of Terrorism and Responses to Terrorism (START) project, "Creation and Analysis of an Integrated U.S. Security Database," led by Gary LaFree, Director, START.

## About 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 led by the University of Maryland. 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](mailto:infostart@start.umd.edu) or visit [www.start.umd.edu](http://www.start.umd.edu).

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## Overview

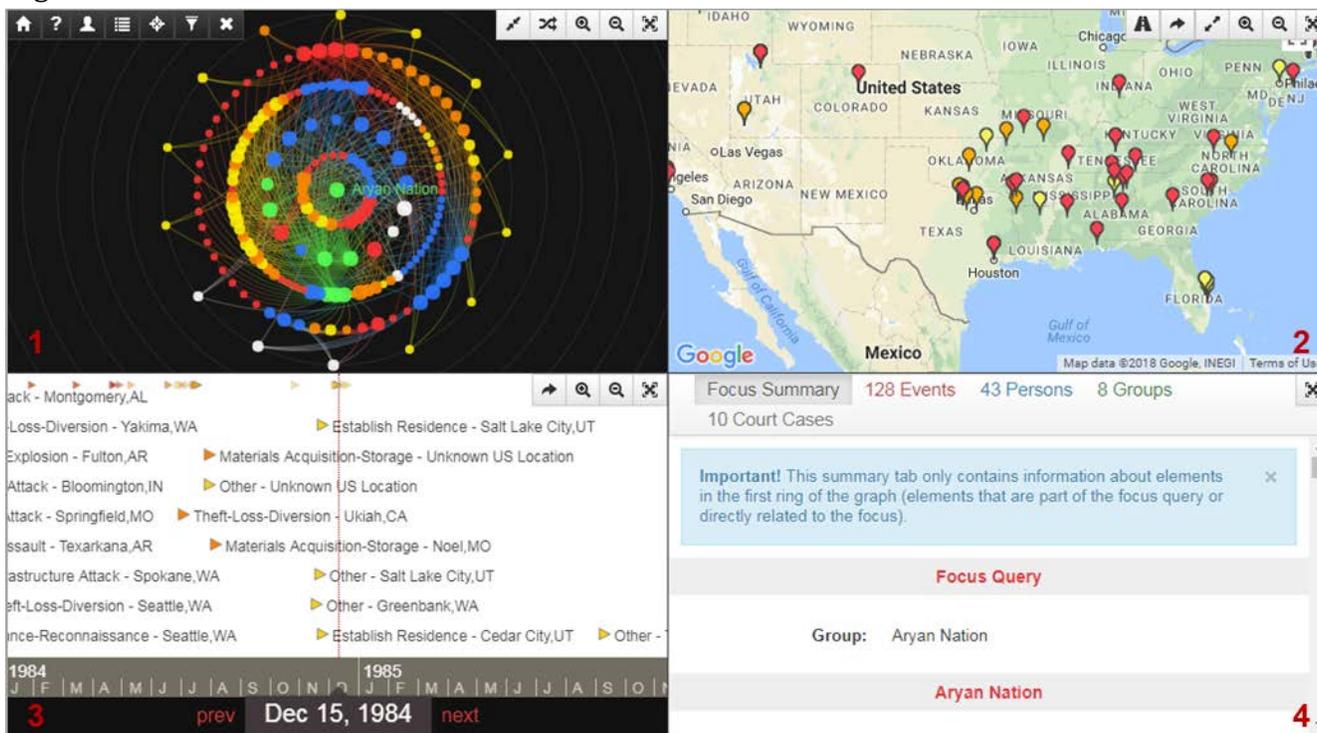
The Terrorism and Extremist Violence in the United States (TEVUS) Database addresses the lack of publically available, reliable data about the incidents of terrorism and violent extremism in the United States by bringing together four open-source data sets developed by START and affiliated consortium researchers.

The database and portal help users from a wide range of organizations and backgrounds analyze the behaviors, operations, and activities of violent extremists within the United States. Over the course of the project data related to terrorism and extremist violence in the United States has been collected, validated and merged into a single functional dataset that can be accessed via the web based portal. In addition, over the previous project year's analysis of the data has been conducted to provide insights into terrorism and extremist crime.

TEVUS is designed to help supplement professionals' experience and expertise to help fill in the gaps in their understanding of terrorism and extremist crime in the United States. The database integrates information from four open source databases and allows users to manipulate all the information compiled. Users are able to develop an understanding of terrorism and extremism in the United States that is based on empirical data as opposed to anecdotes or rhetoric. TEVUS data may be used to help make data-driven decisions regarding things like allocation of resources at the local, state, and/or national level or provide contextual information to new incidents as they occur. By showing the user where linkages occur in the data the portal helps users understand how groups and individuals are connected and how attacks are planned and executed.

Figure 1 shows the four different synchronous panels in the TEVUS data: Relational Graph, Timeline, Map, and Summary Report. These panels are populated with results related to the focus element(s) defined in the user’s search.

Figure 1: TEVUS User Interface Panels



**Constituent Datasets**

Over the course of this project the four constituent databases have been expanded and enhanced. Each utilizes open source records including court case documents and media reports.

**American Terrorism Study (ATS)**

Lead: Terrorism Research Center at the University of Arkansas.

Description: The ATS is an empirical relational database. The data consists of information regarding federal terrorism-related court cases, persons indicted in these court cases, and related officially designated terrorism incidents.

Data Available through TEVUS: For a court case from the ATS to be included in TEVUS it must be a federal court case where the charges are terrorism related according to the Attorney General/FBI guidelines on terrorism investigations. The case must be closed and at least one person must have been either convicted or the person died prior to trial. The portal provides access to data points related to court cases, indicted or convicted individuals, related organizations, group affiliations, incident and event information, antecedent activities, as well as the temporal and geospatial variables when available. Due to the logistics and nature of collecting the court case data and of the court cases themselves, not all terrorism related court cases from this time span appear in the TEVUS portal though a representative sample is provided.

### Global Terrorism Database (GTD)

Lead: START researchers at the University of Maryland.

Description: GTD consists of information on terrorist attacks around the world from 1970 through 2017. The whole dataset includes over 170,000 cases worldwide.

Data Available through TEVUS: Given the domestic focus of TEVUS, only GTD data related to attacks that occurred in the United States (U.S.) are included in the TEVUS data set. The period currently covered by GTD data in TEVUS is 1970-2016.

### U.S. Extremist Crime Database (ECDB)

Leads: John Jay College of Criminal Justice, Michigan State University, Seattle University and Indiana University – Purdue University, Indianapolis.

Description: The ECDB team collects data relating to violent and financial crimes committed in the United States by extremists associated with the violent Far Right (FR), the Animal and Earth Liberation Fronts (ELF and ALF) and al-Qa'ida and its associated movement (AQAM) - which for the purpose of this dataset also include crimes committed by extremists associated with the Islamic State of Iraq and the Levant (ISIL).

Data Available through TEVUS: ECDB data available through the portal includes variables related to the incidents themselves, their perpetrators, related organizations and targets. The period covered is currently 1990 and 2016.

### Profiles of Perpetrators of Terrorism in the United States (PPT-US)

Lead: START researchers at the University of Maryland.

Description: PPT-US utilizes GTD data to compile a group-level dataset. Groups included must have at least one violent attack attributed to them in the GTD. Information listed includes background, ideology, structure, goals, and activities. Currently the dataset includes more than 140 groups that have carried out terrorist attacks in the U.S. between 1970 and 2016.

Data Available through TEVUS: The group descriptions provided through TEVUS are derived wholly from this dataset.

## Planned Project Activities

In November 2013, researchers and programmers met with DHS end-users to demonstrate the TEVUS database and obtain feedback on ways to enhance the web portal through which the data is accessed. Initial feedback was gathered and improvements to the draft TEVUS portal were made to align with this feedback. A second session was held with end-users in April 2014, and a third in November 2014, providing additional recommendations and improvements to extend and expand TEVUS.

To support the continued development of TEVUS and provide end-users at the federal, state, and local level with the most robust platform to examine terrorism and extremist violence in the United States, the following deliverables were planned and completed during this project period:

1. Online User Guide and video-based tutorials were developed to help familiarize end-users with TEVUS, including a library of use cases to guide them through relevant scenarios within TEVUS;
2. The TEVUS interface was enhanced to support rich source attribution and visualization across all data sources;

3. Data collection, coding and incorporation of data into the TEVUS portal from the Global Terrorism Database, Profiles of Perpetrators of Terrorism, and the Extremist Crime Database; and
4. Completed coding and incorporation of partially coded cases from the American Terrorism Study (ATS) into the TEVUS portal, with the aim of significantly increasing the total number of cases from that data source.

In addition, the project team also provided technical and subject matter support for TEVUS users on process, sources, data collection, and other relevant topic areas. Finally, the TEVUS team engaged in transition activities, identifying and participating in events to increase awareness of the TEVUS portal as well as hosting online training and introduction sessions for interested customers.

### **Updates and Improvements to Constituent Datasets**

Currently, the TEVUS Portal allows users access to data related to 2,936 terrorist incidents, 2,445 pre-incident activities, and 262 extremist crimes in the United States and identifies relationships between these events and individuals (3,393), groups (392), and court cases (414) in a dynamic, unique interface. The following updates were made to each of the constituent datasets after which the data were matched, quality controlled and integrated into the TEVUS database which feeds the portal.

#### **American Terrorism Study (ATS)**

The ATS data available through TEVUS now includes a total of 414 court cases, spanning 1978 through 2016. As well as the inclusion of more court cases, the ATS data included in TEVUS also underwent significant quality control processes in order to improve the reliability and usefulness of the data available through the portal.

#### **Global Terrorism Database (GTD)**

GTD data available through the TEVUS portal was updated and now includes data spanning the period 1970-2016.

#### **U.S. Extremist Crime Database (ECDB)**

ECDB data available through TEVUS now covers the period 1990 and 2016. There are 199 FR ideologically motivated homicide incidents; 45 AQAM ideologically motivated homicide incidents, and 190 ELF and ALF bombings and arsons included in the ECDB TEVUS data.

#### **Profiles of Perpetrators of Terrorism in the United States (PPT-US)**

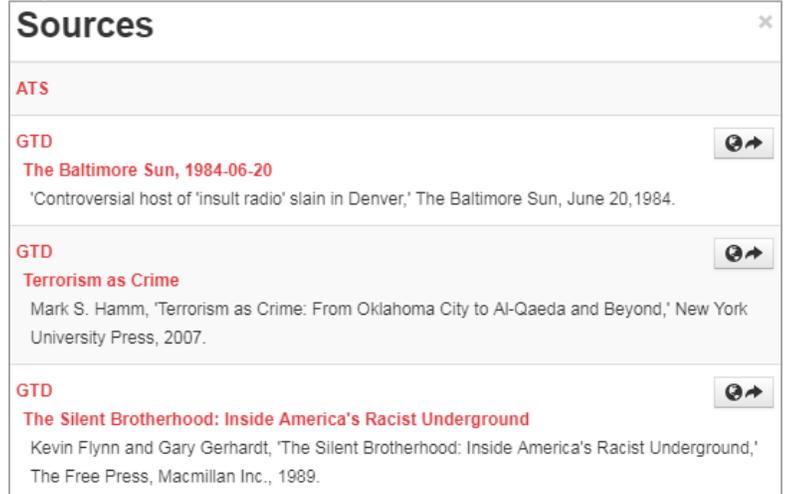
PPT US data were reviewed and refreshed and include over 140 groups that have carried out terrorist attacks in the United States between 1970 and 2016.

### **Updates and Improvements to TEVUS Interface**

During this project period the database teams worked with the Center for Advanced Spatial Technologies (CAST) team at the University of Arkansas to improve matching protocols and procedures between the four datasets. The targets and weapons data categories were also rationalized to make the portal more user friendly.

CAST successfully aligned, integrated and uploaded data to the TEVUS Portal from the ATS, GTD, PPT and ECDB databases. In addition source information was made available for all data nodes, while nodes originating from GTD were enhanced with media source information allowing users to find out more about where the data originated (see Figure 2 for an example of the source information now available). The data visualization tools were also improved with the graph and map data now being downloadable. User feedback was utilized to improve some of the back end coding and remedy some glitches that were made apparent during the initial launch of the portal and contact form was added to help users access customer support. Finally a login form was designed and implemented to enable START to control access to the portal.

Figure 2: TEVUS Source Information Panel



The portal was also enhanced by the completion of the following user materials which CAST added to the portal interface so that users can access these resources directly from the TEVUS dashboard.

- User Guide, provides users step-by-step instructions on how to set up searches as well as an overview of the features of the portal and data.
- Glossary, provides a comprehensive list of terms used in the portal and their specific definitions in relation to TEVUS.
- Frequently Asked Questions document, developed based on feedback from users this document provides an easy to access resource for the most common queries START fields regarding TEVUS.
- 10 recorded tutorials
  - Three General Tutorials, which introduce the portal, provide a general overview of the tool, and guide viewers through a simple use case. These videos are provided as one full-length video as well as in three separate parts for the convenience of the viewer.
    - Part One: Introduction to TEVUS
    - Part Two: General Overview of the Portal
    - Part Three: General Use Case
  - Four Basic Use Case Tutorials, which are designed to provide simple step-by-step guidance on how to build searches using each of the data types: group, event, person, and court case. Each Basic Use Case Tutorial highlights selected portal features that can be used to enhance each search.
    - Focus by Group
    - Focus by Event
    - Focus by Court Case
    - Focus by Person
  - Three Advance Use Case Tutorials, which are designed to help TEVUS end users learn how to build optimal searches in TEVUS. These tutorials were developed based on user feedback so as to ensure they provided insights that the team thought would be most useful.
    - Building Optimal Searches: ISIL
    - Building Optimal Searches: Sovereign Citizen

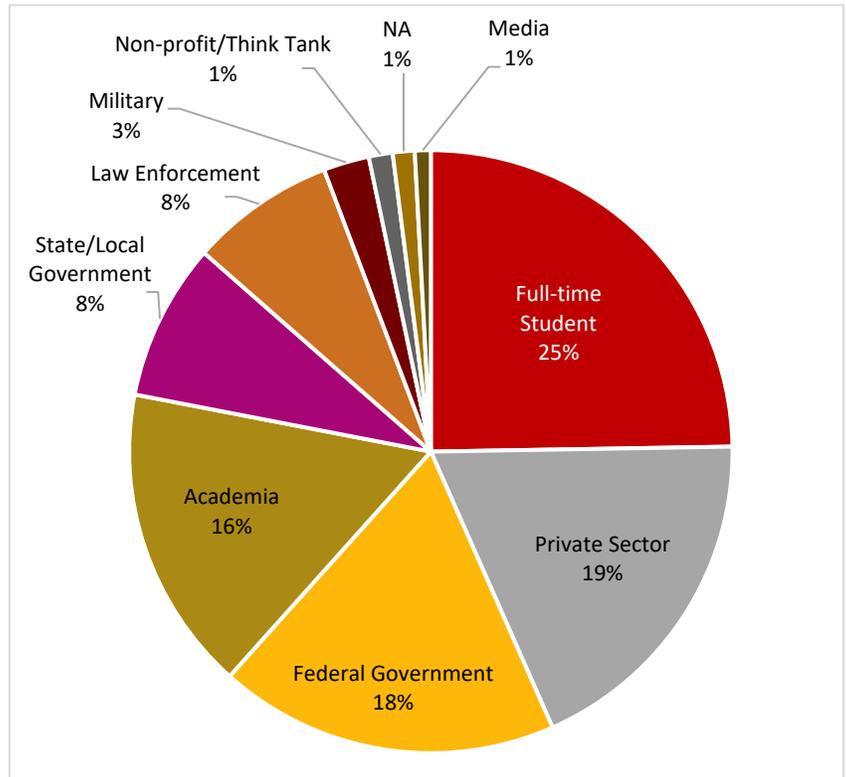
- Building Optimal Searches: Violent White Supremacist Groups

### Customer Support and Transition

#### TEVUS Users

As of May 2018 there are 938 registered TEVUS Portal users from over 540 different organizations. Users are drawn from a wide range of professions including academia, law enforcement, emergency services, journalism, policy makers and active military (Figure 3 shows user general professional categories). 183 different universities and colleges from all over the world are represented among portal users, as are 118 US state and local government entities (such as municipal law enforcement agencies, regional fusion centers and local fire departments), and 64 different federal departments of offices. This includes 17 different entities within DHS. Table 1 provides examples of the organizations represented among TEVUS users.

Figure 3: TEVUS User Occupations



TEVUS users are located in all 50 U.S. states and the District of Columbia as well as 53 countries besides the U.S. The highest numbers of users are located in Washington D.C., Virginia, Maryland, New York, California and Texas.

Table 1: TEVUS User Organizations

<b>Examples of Organizations Represented by TEVUS Users</b>			
<b>Category</b>	<b>Examples</b>		
<b>Universities and Colleges</b>	American University Arizona State University Auburn University Australian National University Boston College Boston University College of William & Mary Cornell University Duke University Emory University Flinders University George Mason University George Washington University	Howard University Johns Hopkins University King's College London Leiden University London School of Economics National College of Ireland Oklahoma State University Oxford University Pennsylvania State University Purdue University Science Po Grenoble Stanford University University at Albany, SUNY	University of Auckland University of Barcelona University of Bristol University of California University of Florida University of Notre Dame University of Oxford University of Pennsylvania University of Queensland University of Southern California University of Virginia Western Sydney University Yale University
<b>State and Local Government Entities</b>	Alberta Sheriff's Department Arlington Fire Department Austin Police Department Austin Regional Intelligence Center Boise City Police Operations Bureau California Office of Emergency Services Central California Intelligence Center City of Dallas City of Gaithersburg Police Department Clark County School District Police Department Colorado Department of Public Safety Colorado Division of Homeland Security and Emergency Management Dallas Fire Rescue Department Erie County Department of Homeland Security & Emergency Services Fairfax County Fire & Rescue Department - Northern Virginia Regional Intelligence Center Federal Reserve Bank of St. Louis - Law Enforcement Unit Florida Department of Law Enforcement Fort Worth Arson and Bomb Investigations Hawaii State Fusion Center Illinois Criminal Justice Information Authority, Targeted Violence Prevention Program Irvine Police Department	Joint Regional Intelligence Center Kansas Legislature Los Angeles Police Department, MCD, Anti-Terrorism Intelligence Section Montgomery County Fire and Rescue New Jersey Department of Corrections New Jersey Office of Homeland Security and Preparedness New Jersey State Police, Regional Operations Intelligence Center (ROIC) New Mexico All Source Intelligence Center North Carolina State Bureau of Investigation North Central Texas Council of Governments North Texas Fusion Center Northern California Regional Intelligence Center NYPD - Counterterrorism Bureau NYPD - Intelligence Division Ohio Homeland Security Philadelphia Office of Emergency Management Rhode Island State Bomb Squad San Antonio Police Department St. Louis Metropolitan Police Department Tennessee Office of Homeland Security and Fusion Center Texas Department of Public Safety Washington Regional Threat Analysis Center	
<b>Federal Departments and Agencies (other than DHS)</b>	Air Force Army Bureau of Alcohol, Tobacco, Firearms & Explosives Coast Guard Department of Agriculture, Food Safety & Inspection Service Department of Defense, DARPA Department of Defense, DTRA	Department of Justice, Executive Office for Immigration Review Department of Justice, National Security Division Department of Justice, NIJ Department of State, Anti-terrorism Assistance Program Department of State, Diplomatic Security Service	FBI Forest Service Marine Corps National Guard National Park Service Navy NCTC NSA Nuclear Regulatory Commission
<b>DHS Entities</b>	Chemical Security Analysis Center Customs and Border Protection DNDO FEMA	First Responders Group ICE Office for Bombing Prevention Office of Community Partnerships	Office of Intelligence and Analysis Office of University Programs Secret Service TSA
<b>Private Companies and Organizations</b>	Airbnb Bank of America Cato Institute Fidelity Bank Human Rights Watch Hyatt Regency	IBM Institute of World Politics RAND Corporation SAIC Santander Bank US	Sempra Energy The Economist The Washington Post Vanguard Medical Wall Street Journal Wynn Resorts, Ltd.

TEVUS has received positive feedback from partner organizations and end users. This is in part demonstrated by The National Governors' Association's decision to highlight TEVUS in guidance documents and through webinars for the state-level authorities responsible for building CVE programs in their respective states. Support was also shown through testimony provided by The State of New Jersey Office of Homeland Security and Preparedness: "START has been an invaluable partner in this effort by making their researchers and findings available to us as well as releasing their new Terrorism and Extremist Violence in the United States (TEVUS) database. TEVUS allows us to look at terrorism in our primary area of interest—the United States and New Jersey—by providing data on extremist activity beyond just attacks. We have already provided START with feedback on the database and expect it to be just as critical to our mission as the GTD."

**TEVUS Transition Activities and Materials**

Over the course of this award START has developed marketing materials to help introduce the portal and database to potential users. These materials include a dedicated page on the START website, full and half page fact sheets, a standard presentation in two lengths (one for sessions of 10 minutes in length and the other for 30 minutes or longer) and a set of demonstration searches and model queries presenters can use in interactive sessions with groups and classes. In addition TEVUS has been featured in the START newsletter on several occasions to highlight the tool's potential utility to customers and to inform users of new data releases.

START has sought to introduce potential users to TEVUS through presentations and demonstrations. In addition to seeking out relevant industry events START held regular online information sessions and offered specially scheduled opportunities for groups to engage with the TEVUS team and portal. Table 2 provides a summary of the events and training sessions that the TEVUS team participated in between March 2016 and July 2017.

Table 2: TEVUS Transition Activities

<b>TEVUS Transition Events and Sessions</b>				
<b>Event Name and Description</b>	<b>Target Audience</b>	<b>Date</b>	<b>Number of Attendees</b>	<b>Other Outcomes</b>
<a href="#">CVE Hill Briefing.</a>	Various.	3/22/2016	50	
<a href="#">UK Embassy visitors' demonstration.</a>	International diplomats and practitioners.	3/23/2016	5	
<a href="#">Domestic Terrorism Conference. Organized by NJ Office of Homeland Security and Preparedness. In person presentation</a>	Homeland security professionals.	5/6/2016	250	15.2% of participants signed up for newsletter. Follow up presentation scheduled.
<a href="#">DHS Centers of Excellence (COE) Tech Showcase. In person demonstrations.</a>	Homeland security professionals.	5/19/2016	50	Precipitated login requests.
<a href="#">START Summer 2016 Enrichment Program. Interactive demonstration</a>	START and UMD interns, students and researchers.	6/2016	25	Constructive feedback on portal and presentation.
<a href="#">First Responder Group Annual Meeting. Organized by DHS First Responder Group.</a>	Homeland security professionals.	7/19-21/2016	80	Precipitated login requests.
<a href="#">Arkansas Fusion Center Talk and Demonstration.</a>	Fusion center staff.	7/20/2016	30	

<b>TEVUS Transition Events and Sessions</b>				
<b>Event Name and Description</b>	<b>Target Audience</b>	<b>Date</b>	<b>Number of Attendees</b>	<b>Other Outcomes</b>
National Urban Security Technology Laboratory (NUSTL), New York Area Science and Technology Forum (NYAST) session, presentation and demo.	Homeland security professionals.	8/11/2016	30	Precipitated login requests. Requests for follow on presentations.
NUSTL Make Up Session, online.	Homeland security professionals.	8/25/2016	4	
DHS I & A HSIN weekly chat. Online weekly session organized by DHS I & A.	National police departments and fusion centers.	9/8/2016	50	Precipitated login requests.
University of North Carolina at Wilmington, hybrid graduate class presentation for course relating to terrorism and extremist crime. 2 hour session including interactive exercise.	Mid-level professional law enforcement.	9/10/2016	25	Precipitated login requests.
DC Metro Chapter of the International Association of Law Enforcement Intelligence Analysts (IALEIA) Training. In person presentation.	Homeland security professionals	9/20/2016	50	Precipitated login requests and follow up presentations.
Online information sessions through START. Pre public launch phase	Government end users, future funders, policy makers, academia, media and general public.	9/12/2016 9/20/2016 9/22/2016 9/23/2016 9/27/2016 9/28/2016 10/3/2016	30	Precipitated login requests.
Association of the United States Army (AUSA) Annual Meeting and Exposition. Demonstrations.	National security professionals.	10/3-5/2016	1000+	
Online information sessions through START. Public launch phase	Government end users, future funders, policy makers, academia, media and general public.	10/11/2016 10/19/2016 10/20/2016 11/1/2016 11/3/2016 11/10/2016 11/15/2016 12/1/2016 12/6/2016 12/15/2016 2/28/2017 3/2/2017	30	Precipitated login requests.
3rd Annual Lockheed Martin/University of Maryland Logistics Innovation Conference Exhibit. Demonstrations.	Researchers, national security professionals.	10/12/2016	10	
International Association of Police Chief (IACP) Annual Meeting. Demonstrations.	National law enforcement and first responders.	10/15-18/2016	1000+	
National Fusion Center Association, Annual Training Event, presentation and demonstrations.	Fusion centers, local, state, and federal law enforcement and private industry partners.	10/25-27/2016	375	39 newsletter sign ups. Requests for follow-up presentations/ Precipitated login requests.
DHS Office for Bombing Prevention team presentation.	Office of bombing prevention staff.	11/7/2016	10	
TRIPwire Research team. In person presentation onsite in Arlington Virginia.	TRIPwire Team.	11/21/2016	35	Precipitated login requests. Follow up requests.
START Intern and Student presentation and demonstration.	START and UMD interns, students, researchers and staff.	12/9/2016	30	

<b>TEVUS Transition Events and Sessions</b>				
<b>Event Name and Description</b>	<b>Target Audience</b>	<b>Date</b>	<b>Number of Attendees</b>	<b>Other Outcomes</b>
Philadelphia Chapter of the International Association of Law Enforcement Intelligence Analysts (IALEIA) Training	Homeland security professionals.	12/9/2016	30	Precipitated login requests. Follow up requests.
VACCINE Online Session	VACCINE researchers and staff.	12/16/2016	25	Precipitated login requests. Follow up requests.
TRIPwire Open Source Intelligence Team online demonstration	TRIPwire Team.	1/19/2017	8	
Open Source Intelligence Team, in person presentation.	Intelligence professionals.	1/25/2017	Not recorded	
Senate Homeland Security Governmental Affairs Committee	Policy makers.	2/15/2017	15	
Enterprise Architecture Component Liaison U.S. Department of Homeland Security (DHS) Office of the Chief Information Officer (OCIO), Office of the Chief Technology Officer (OCTO). 1 hour presentation	Practitioners and policy makers.	2/21/2017	30	
Senate Homeland Security Governmental Affairs Committee	Policy makers.	2/24/2017	15	
New Jersey Office of Homeland Security and Preparedness (NJOHSP) Annual Conference	Homeland security professionals.	5/2017	50	
International Association of Law Enforcement Intelligence Analysts (IALEIA) Conference, Bloomington, Minnesota. The presentation provided twice.	Law enforcement.	5/1-5/2017	90	
National Homeland Security Association	Homeland security professionals.	6/6/2017	75	
North Central Texas Council Government's Regional Response Summit. Presentation and demonstrations.	Law enforcement, policy makers and first responders.	7/19-20/2017	500	Precipitated log in requests.