



START ➤➤ 2011 RESEARCH REVIEW

About START

The National Consortium for the Study of Terrorism and Responses to Terrorism, known as START, opened its doors in January 2005. Its mission: to use state-of-the-art theories, methods and data from the social and behavioral sciences to better understand the origins, dynamics and social and psychological impacts of terrorism.

Funded by an initial \$12 million Center of Excellence grant from the U.S. Department of Homeland Security's (DHS) Science & Technology Directorate, START is aligned with the directorate's Human Factors/Behavioral Sciences Division. START also receives support from units within DHS, including the Federal Emergency Management Agency and the Transportation Security Administration, and from other federal sources, such as the National Science Foundation, the National Institute of Justice and the Department of Defense.

START's research is intended to benefit homeland security professionals at the federal, state and local levels. It offers insights into important policy issues, including how to disrupt terrorist networks, reduce the incidence of terrorism and enhance the resilience of society in the face of terrorist threats. START's major research areas are terrorism group formation and recruitment, terrorist group persistence and dynamics and the societal impact of terrorism. These three focus areas are based on the developmental cycle of groups employing terrorism, which traces its origins (radicalization), life span (operations and interventions) and impact (community resilience). START also does work that cuts across all three of its major research areas, with projects such as the Global Terrorism Database, an open-source database on terrorist events around the world since 1970.

To accomplish its mission, START brings together a multi-institutional, multidisciplinary team of experts, including criminologists, political scientists, sociologists, psychologists, geographers, economists, historians and public health experts. With administrative offices at the University of Maryland, START works in collaboration with nearly 50 affiliate institutions from around the world.

In addition, START is dedicated to training and mentoring a new generation of scholars and analysts capable of examining questions about the behavior of terrorists and terrorist groups and how societies can best prepare for dealing with terrorist threats or responding to terrorist attacks.

START supports the homeland security policy community by generating scientifically validated findings that inform operations and policies involving terrorism prevention, threat detection, counterterrorism, preparedness and response, community recovery and risk communication. In 2009, START received a Certificate of Recognition from the DHS Science and Technology Directorate, Office of University Programs, recognizing its outstanding contributions to the security of the nation by developing the Global Terrorism Database.

ACKNOWLEDGEMENTS Support for this publication was provided by the Science and Technology Directorate of the U.S. Department of Homeland Security under Grant Award Number 2008-ST-061-ST0004, made to the National Consortium for the Study of Terrorism and Responses to Terrorism (START, www.start.umd.edu) at the University of Maryland. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Department of Homeland Security.

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START ►► 2011 RESEARCH REVIEW

Since its inception in 2005, START has evolved to keep pace with the complex, ever-changing needs of the homeland security enterprise, **conducting research that sheds light on the threats the nation is facing,** as well as the trajectories followed by the perpetrators of those threats.

From the Director

WELCOME TO THE 2011 EDITION OF THE START RESEARCH REVIEW, a publication of the National Consortium for the Study of Terrorism and Responses to Terrorism (START), a Center of Excellence supported by the Science and Technology Directorate of the U.S. Department of Homeland Security and headquartered at the University of Maryland, College Park.

This year marks the 10th anniversary of the September 11, 2001, terrorist attacks on America and the nation's entrance into a sometimes unsettling decade focused on a global confrontation with extremists. START was born as a result of this new focus and America's response to these watershed attacks. Since our inception in 2005, we have evolved to keep pace with the complex, ever-changing needs of the homeland security enterprise, conducting research that sheds light on the threats the nation is facing, as well as the trajectories followed by the perpetrators of those threats. START brings together a partnership of nearly 50 institutions throughout the nation and the world, working across a multitude of social and behavioral science disciplines, to offer our stakeholders state-of-the-art research and tools to support the needs of decision-makers, train and educate the next generation of security professionals and inform the media and the public of the nature of terrorist threats at home and abroad.

Our research and outreach teams work hand in hand to craft effective means to bring evolving academic research and data from the field into the hands of policymakers, legislators and their staffs, and the media. This publication is one means to serve this goal and provides an overview of a selection of START research products that are especially relevant to today's critical issues. We invite you to learn more about these projects, as well as all of START's research, by visiting www.start.umd.edu; joining our announcements distribution list, Facebook page or Twitter feed; or attending any of our many public events.

This research, and its promotion throughout the homeland security community, could not be possible without the support of our Center of Excellence sponsor at the Department of Homeland Security Science and Technology Directorate's Office of University Programs, as well as notable support from the Science and Technology Directorate's Human Factors/Behavioral Sciences Division.

We thank you for your interest in START and its research and programs. We hope you will find these analyses valuable in the nation's fight against terrorism and its aftermath.

Sincerely,



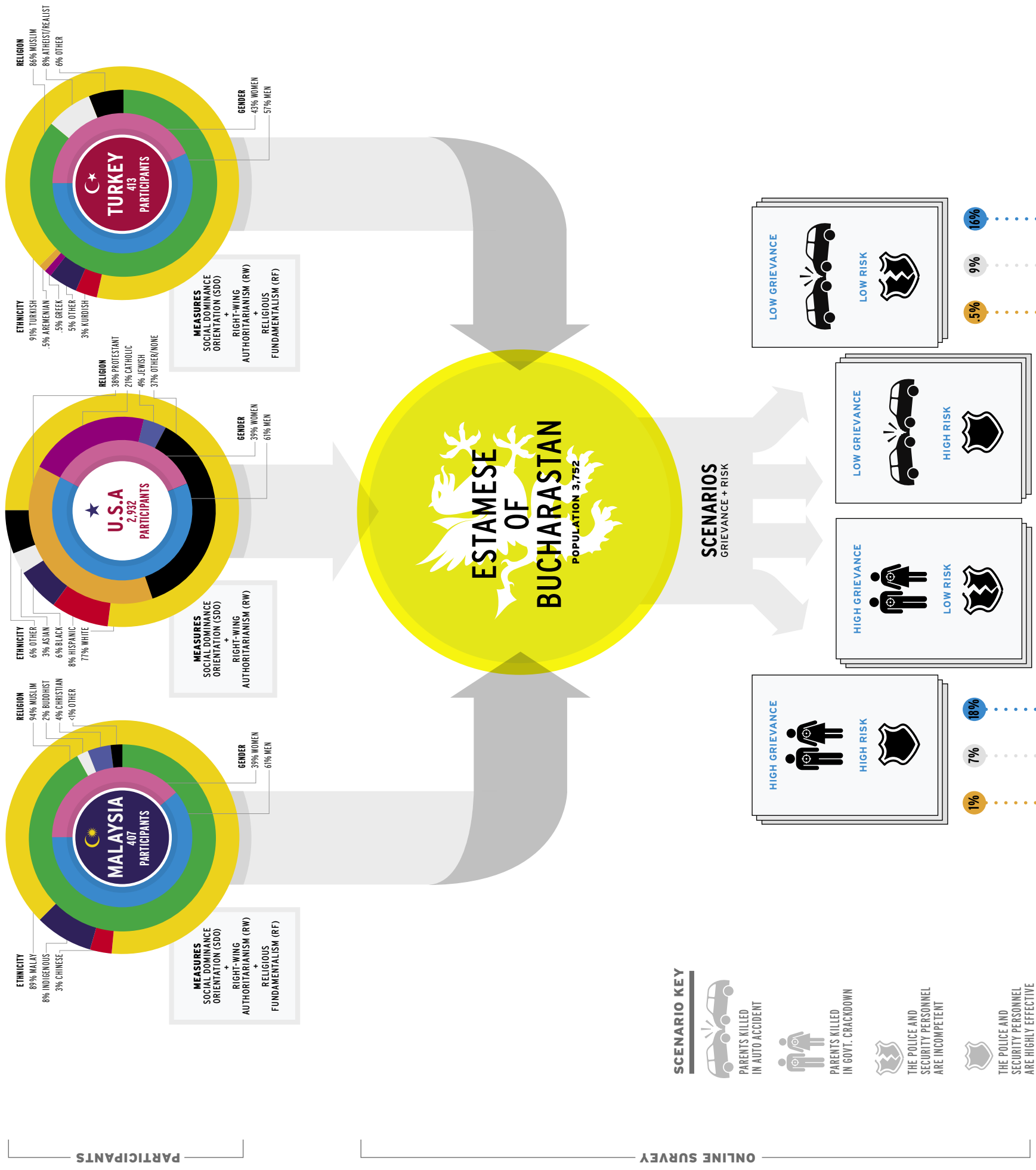
Gary LaFree, Director

FEATURED RESEARCH



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From tracking Islamic radicalization within North America, to understanding long-term health effects caused by terrorist attacks, the featured research projects provide a broad overview of policy-relevant studies conducted at START. These featured projects reflect the range of methodologies used by START researchers—from qualitative case studies to cutting-edge statistical analyses—as well as the types of original data that inform START projects, including interviews, focus groups, surveys, archival materials, primary and secondary documents and START's own large-scale data collections on terrorist activity. The results of these studies provide a striking representation of the realities of terrorism.



Terrorism vs. Protest

Simulating Individual Decision-making via Online Experiments

ANTHONY LEMIEUX & VICTOR ASAL

Scholars have theorized that structural, social and psychological factors are among the motivations that lead individuals to engage in terrorism. By using an experimental design, researchers examine if it is possible to identify whether individuals are likely to choose violence and to identify what factors influence individuals' support for terrorism.

METHODOLOGY START researchers commissioned Zogby International to conduct a series of online experiments in the United States, Turkey and Malaysia. Participants were asked questions that measured their preferences for hierarchy (Social Dominance Orientation, or SDO), degree of deference to authorities, aggression toward out-groups and support for traditional values (Right-Wing Authoritarianism, or RWA), and (in Turkey and Malaysia) Religious Fundamentalism (RF). Participants were then asked to assume the perspective of a member of an ethnic group that has faced discrimination, the fictional Estamese of Bucharastan. Each participant, asked to assume the persona of an ethnic Estamese, read one of four versions of a vignette, which varied levels of grievance and levels of risk. In the vignettes meant to evoke a high level of grievance, the participant was told that the government subjected ethnic Estamese to high and consistent levels of

discrimination and that the government had killed his or her family members based on their political activities. In the vignettes evoking low levels of grievance, ethnic Estamese faced low levels of discrimination, and the government had not killed any family members. In the high-risk vignettes, police and security forces were described as competent and likely to apprehend participants in illicit activities. In the low-risk vignettes, police and security forces were described as incompetent and unlikely to apprehend participants in illicit activities. After reading the vignette, participants completed a survey measuring the likelihood that they would take any form of action, or would be willing to engage in nonviolent protest, or would be willing to engage in a violent attack. They also indicated how justified they believed protest and terrorism were, given the situation presented in the vignette.

RESULTS High levels of grievance were associated with greater willingness to take action in the U.S. and Malaysian samples. Higher grievance was also related to an increased likelihood to choose terror in the U.S. sample, but not in the Turkish

or Malaysian samples. Individuals who read high-grievance vignettes were also more likely to justify protest (U.S. and Malaysian samples) and terrorism (all countries).

Participants with greater preferences for hierarchy (higher SDO scores) were less likely to support or take any form of action (U.S. and Turkish samples); however, those who did endorse action were more likely to endorse violence (U.S. and Malaysian samples). In particular, higher SDO scores were associated with less justification or use of protest (U.S. and Turkish samples).

Participants who scored high on deference to authorities and support for traditional values (right-wing authoritarianism) were less likely to take any form of action (all samples) and less likely to justify either protest (U.S. and Turkish samples) or terror (U.S. and Malaysian samples).

Participants in Turkey and Malaysia who scored higher on religious fundamentalism were more likely to justify and to take action, especially protest.

BOTTOM LINE Overall, extremely few participants (109 out of 3,643, or about 3%) indicated that they would choose violent attack, and the majority of participants indicated that a violent attack was totally unjustified. Results did vary across country samples, indicating that cultural context matters. In general, however, higher levels of grievance were linked to individuals choosing to take action; a stronger relationship existed between grievance and support for action, especially support for terrorism. High levels of grievance, therefore, may foster a climate where the use of violence is more widely tolerated. Furthermore, individuals with high social dominance orientation or right-wing authoritarianism scores were almost uniformly more likely not to take action. Further experiments, in other country contexts, will assist in identifying country-specific factors that are associated with pursuit and justification of violence as compared to factors that are relevant across country contexts.

FOR MORE INFORMATION ON THIS PROJECT, PLEASE VISIT: WWW.START.JUMD.EDU/RRT/PROJ.

Trajectories of Terror

Islamic Radicalization in North America

GARY ACKERMAN & JOHN SAWYER

"Homegrown" Islamic radicalization is one of the most pressing national security issues for the United States. Although counterterrorism measures have severely damaged al-Qa'ida central in the decade following 9/11, including the killing of Osama bin Laden in May 2011, this same period has witnessed an alarming increase in the number and lethality of attacks by individuals and small groups inspired by jihadist rhetoric. This project draws on a wide range of theories to systematically compare radicalization trajectories of known jihadists to identify common patterns, influences and potential warning signs.

METHODOLOGY Previous scholarship identified three variables as potentially significant influences on the likelihood and process of radicalization: time period of radicalization (before and after 9/11), individual's socioeconomic status and the degree to which the individual is rooted within the host culture and society. Researchers conducted detailed case studies on eight individuals drawn from the Profiles of Islamic Radicalization in North America (PIRANA) database (detailed on page 27). To enhance the qualitative analysis of each individual's radicalization process and allow direct comparison between them, the researchers created a new technique for measuring the trajectories of radicalization for beliefs and behavior. These structured trajectories were used to identify key process dynamics and were assessed against factors identified by existing radicalization theories drawn from individual psychology, group psychology, social network analysis, sociology and political science.

RESULTS This study produced two strong results, as well as a number of preliminary findings. First, in nearly all cases, beliefs became radical before behavior. All individuals in the study reached their highest level of radical beliefs well before engaging in their most violent activities. With one notable

exception, this pattern appears to persist throughout the radicalization process. Moreover, individuals spent the vast majority of their time between exposure to jihadist rhetoric and ultimate action in a passive mode rather than actively engaging in public radical behaviors—either legal or illegal. Second, the events of 9/11 and the subsequent Global War on Terror significantly impacted the Islamic radicalization process. After 9/11, individuals radicalized much faster, with less of an interlude between reaching maximum levels of belief and behavior.

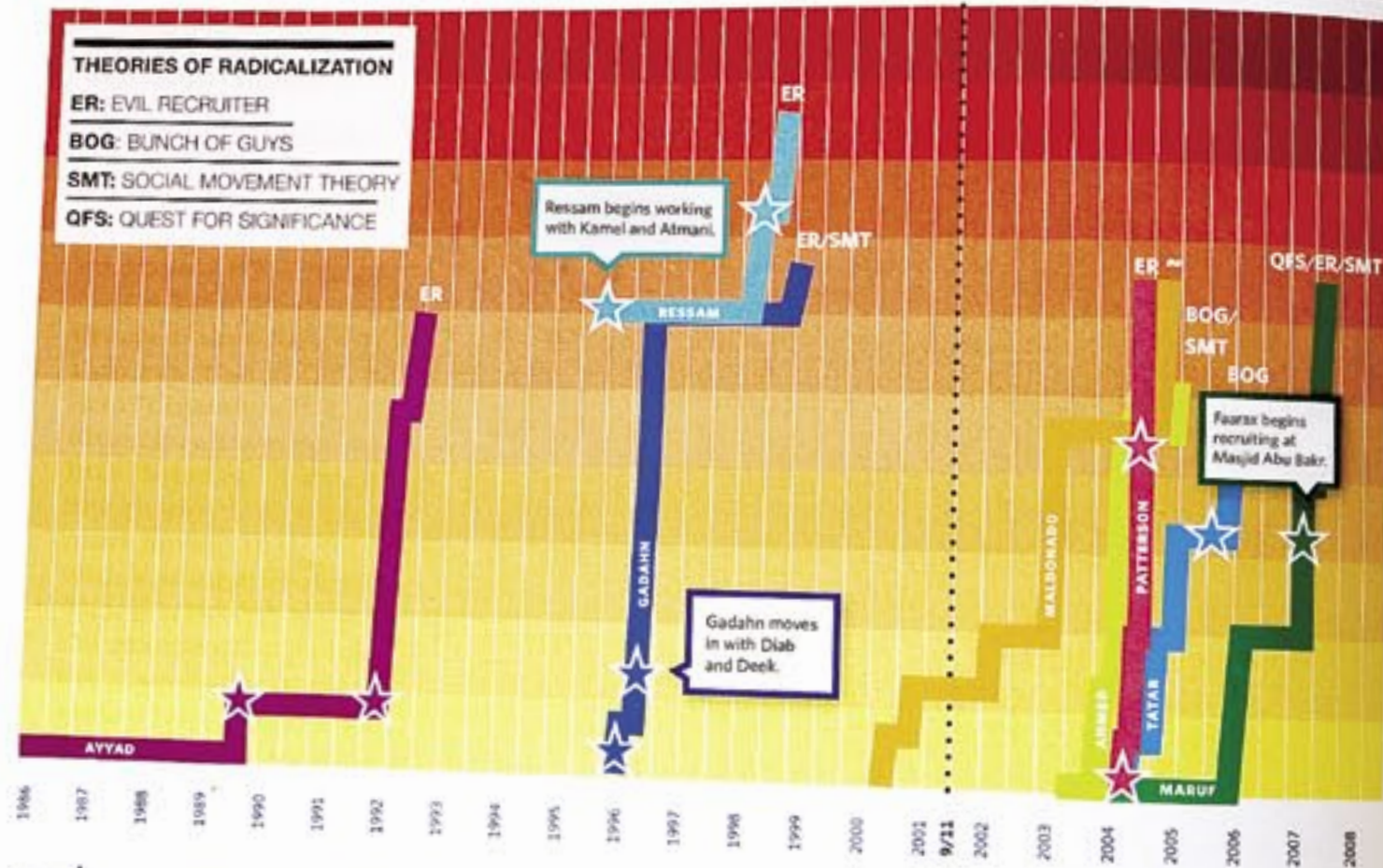
While there was no single pattern of radicalization across the cases, existing radical groups and individuals often directly influenced critical periods of the case studies' journeys. These already-radical actors appear to have guided the individuals into increasingly extreme positions. More tentative findings indicate that individuals who are deeply connected to their host society and culture and are of middle to upper-class status tend to radicalize more rapidly.

BOTTOM LINE Distinguishing early warning signs of radicalization is extremely difficult. Yet findings point to significant windows of opportunity to intervene and deflect potential jihadists before they have committed to a course of violence. This study suggests that proactive public diplomacy and engagement strategies may be highly beneficial for combating the threat of terrorist behavior.

Additionally, the finding about the critical influence of already-radicalized individuals and groups raises serious questions about how to deal with known radicals. These people may break no laws, but nevertheless may serve as a conduit to extremism for individuals who come under their sway.

FOR MORE INFORMATION ON THIS PROJECT, VISIT: WWW.START.UMD.EDU/RR11/PROJ2

35 // CHAPTER 1: Islamic Radicalization in Europe and North America Parallels & Divergence



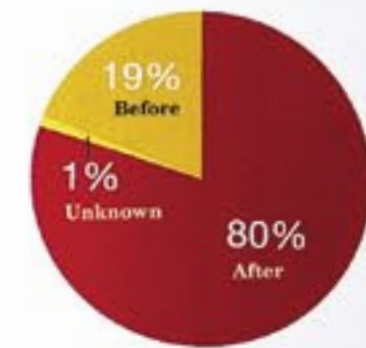
GRAPH 1.9: INDIVIDUAL BEHAVIORAL RADICALIZATION TRAJECTORIES OVER TIME

- Active participation in operational actions/plots not intending to result in casualties [illegal, violent]
- Seeks additional training in jihad [illegal, semi-violent]
- Logistical support to operational elements [illegal, but non-violent]
- Material/financial support [illegal, but non-violent]
- Legal/above ground activism [public]
- Distancing from past relationships (family, friends, etc.) [personal]
- Attempts to convert others to Islamism [personal]
- Changing daily lifestyle (appearance, attendance at prayer) [personal]
- Associates with other radicals [personal]
- No radical behaviors

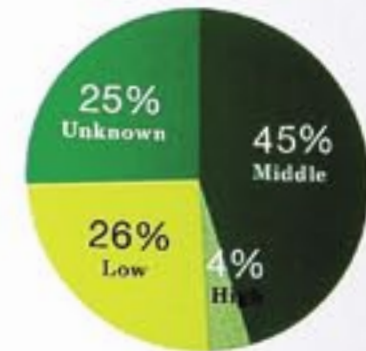
Radical Trajectories

The apparent weakening of ER and slight improvement of both hSMT and BOF after the start of the Global War on Terror are apparent in a graphical representation of the individual behavioral radicalization trajectories over time (Graph 1.9). All three of the subjects who fully radicalized before 9/11 (Ayyad, Gadahn and Ressam) were strongly supportive of ER. In contrast, only two of the four subjects who began their radicalization after 9/11 (Patterson and Maruf) provided significant support for ER. Similarly, only one of the pre-9/11 cases (Gadahn) supported hSMT, but two of the post-9/11 cases (Ahmed and Maruf) did. Finally, none of the pre-9/11 cases provided significant support for BOG, but two of the post-9/11 cases (Ahmed and Tatar) did. Similarly, a graphical representation of the trajectories divided by socioeconomic status highlights the fact that only one of the four

RADICALIZATION BEFORE AND AFTER 9/11



RADICALIZATION BY SOCIOECONOMIC STATUS



RADICALIZATION BY DEGREE OF ROOTEDNESS IN SOCIETY



Data for pie charts are drawn from the full PIRANA database



Hezbollah's Service Sector

EXECUTIVE COUNCIL

SOCIAL UNIT

JIHAD CONSTRUCTION FOUNDATION

FOUNDATION FOR THE WOUNDED

MARTYRS FOUNDATION

KHOMEINI SUPPORT COMMITTEE

ISLAMIC HEALTH UNIT

3 HOSPITALS

 12 HEALTH CENTERS

 20 INFIRMARIES

 20 DENTAL CLINICS

 10 CIVIL DEFENSE DEPARTMENTS

 SOCIAL HEALTH PROGRAMS

EDUCATION UNIT

PROVIDES FINANCIAL AID AND SCHOLARSHIPS

OPERATES NUMEROUS PRIMARY, SECONDARY AND TECHNICAL SCHOOLS

Jokers Wild

Understanding the Influence of Service Provision on Popular Support for and Participation in Violent Political Groups

SHAWN FLANIGAN

Policymakers are increasingly concerned with the connections between terrorist and insurgent groups and the provision of social services. Conceptually, linkages may occur in two ways: Charitable work and violent activity may be viewed as vehicles of resistance and community protection; and/or violent organizations may use their charitable endeavors in order to garner support from the communities they serve. START researchers set out to determine if social service provision by violent organizations is a wild card, linking charitable works to their militant activities.

METHODOLOGY START researchers interviewed social service providers working in organizations linked to violent organizations and their clients, as well as workers with independent charitable organizations. Additionally, researchers analyzed content of materials produced by social service organizations linked to violent organizations. Research focused on three areas and a number of militant organizations: the United States (the Black Panthers), the Palestinian territories (Fatah and Hamas, as well as other groups) and the Mindanao Province of the Philippines (Moro National Liberation Front and Moro Islamic Liberation Front, as well as other groups).

RESULTS Researchers found that militant organizations provide social services when governments fail to provide basic public services to targeted communities. Militant groups view both provision of social services and their violent activities as integral to their strategy of resistance. While members

acknowledge that charitable work may help them recruit new members, recruitment is not the sole or primary reason militant organizations engage in social service provision. In many cases, social service provision began prior to a group's violent behavior.

In the Palestinian territories, community members who would seek help from Hamas or Hamas-affiliated non-government organizations when facing family illness or unemployment are more likely to view Hamas as trying to avoid civilian casualties and as caring deeply about the Palestinian community. Furthermore, such individuals are more likely than those who would not seek Hamas-provided assistance to report that members of their community have joined and fought with Hamas.

BOTTOM LINE Militant organizations appear most likely to engage in charitable work when the state is either absent or discriminates against a community the organization views as its constituency. While organizations do not seem to be engaging in social service provision for the direct purpose of recruiting, community members who receive services from militant groups and their affiliates are more likely to view those groups in a positive light, bolstering the levels of community support these groups need in order to continue their militant operations.

▶ FOR MORE INFORMATION ON THIS PROJECT, VISIT: WWW.START.UMD.EDU/RR11/PROJ3.

IED I.D.

Understanding Terrorist Bomb Attacks and Improvised Explosive Device Usage

MARGARET WILSON, GARY LAFREE & RICHARD LEGAULT

Despite the importance of understanding the use of explosives in terrorist attacks, relatively little systematic data analysis has explored this common tactic. START researchers have addressed the challenge of quantifying and characterizing the behavioral and tactical dimensions of terrorists' use of explosives in two studies that examine patterns of bomb attacks and, in particular, improvised explosive devices (IEDs).

Study #1: Wilson

METHODOLOGY Wilson carried out extensive analysis of nearly 1,000 terrorist bombings that occurred worldwide between 1974 and 2009. The study examined terrorist behavior in carrying out the attacks and explored a number of dimensions such as patterns of targeting and intended lethality. Among several subsets of attacks studied, detailed behavioral information on attacks motivated by animal rights and anti-abortion ideologies in the United States were presented, and models were developed to better understand the way attacks were carried out.

RESULTS Using an analytical strategy called Multidimensional Scalogram Analysis, Wilson develops behavioral profiles of bombing attacks. For animal rights-related bombings, a wide range of profiles emerged, indicating that while these attacks varied considerably with respect to target type and intended and actual lethality, a central focus was economic sabotage or scare tactics. In comparison, anti-abortion terrorists followed a more uniform strategy insofar as their targets were primarily workplace locations and they carried out more attacks that are deliberately lethal. The research presented models that can be used to assess targeting strategies across a wide range of terrorist activity.

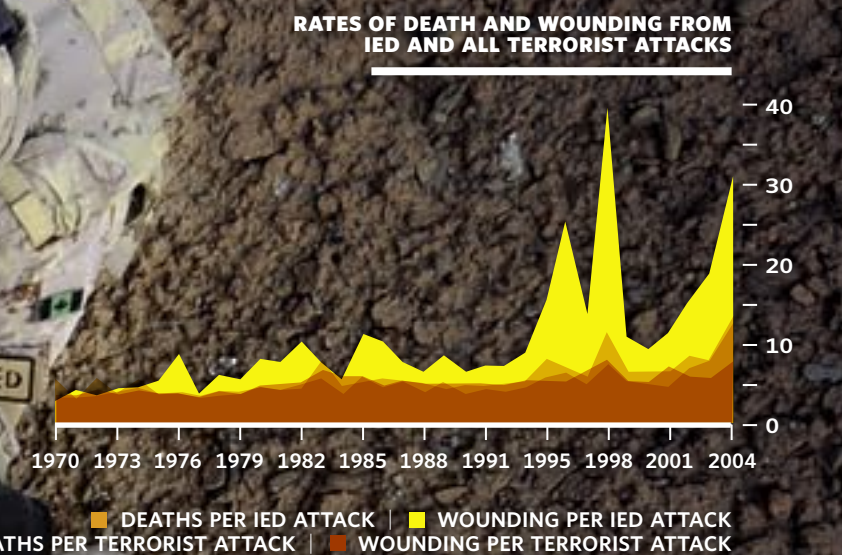
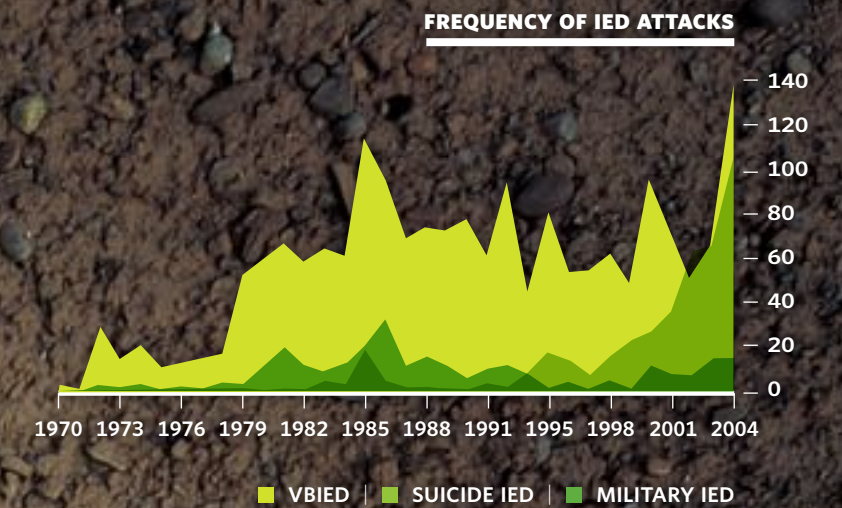
Study #2: LaFree & Legault

METHODOLOGY LaFree and Legault define an IED as a bomb that is constructed in part or wholly from military or commercial explosives or commercial components, and used in a manner other than intended by the manufacturer. Recognizing the lack of available data on terrorist usage of IEDs, the researchers reviewed 70,000 terrorist attacks from the Global Terrorism Database between 1970 and 2004 to determine which used IEDs as a weapon. The researchers also determined the type of IED used, distinguishing between suicide attacks, vehicle-borne IEDs (VBIED) and IEDs built from military components.

RESULTS Between 1970 and 2004, at least 15% of all explosive terrorist attacks worldwide involved the use of an IED. This figure has increased gradually over time, ranging from a minimum of 9% in 1971 to a maximum of 38% in 2002. The use of IED attacks varies greatly by country. Over the entire span of data, IED attacks occurred most commonly in the United Kingdom, Peru and Spain. They caused far more deaths, however, in Lebanon, Iraq, Russia and Sri Lanka. The lethality of IED attacks is similar to the lethality of terrorist attacks generally, yet two specific types of IED attacks—suicide bombings and VBIEDs—consistently result in higher casualties than other IED attacks.

BOTTOM LINE These studies represent an important advance in the quantitative analysis of terrorist bombing attacks. They reveal important characteristics of behavioral dimensions of these events and of the prevalence and impact of various tactical strategies. They also develop scientific data for use in future research.

FOR MORE INFORMATION ON THESE PROJECTS, VISIT: WWW.START.UMD.EDU/RR11/PROJ4 AND WWW.START.UMD.EDU/RR11/PROJ5.



	TYPE OF DEVICE					TIME OF ATTACK
	SECONDARY BOMBS	SIMULTANEOUS BOMBS	DETONATED SINGLE BOMBS	UNEXPLODED BOMBS	HOAX	
WORKING HOURS	1 ⁽¹⁾	3 ⁽¹⁾	20 ⁽²⁾	1 ⁽¹⁾	4 ⁽¹⁾	
UNKNOWN TIME	0 ⁽⁰⁾	6 ⁽¹⁾	37 ⁽¹⁾	7 ⁽²⁾	7 ⁽²⁾	
LEISURE HOURS	2 ⁽²⁾	30 ⁽¹⁾	9 ⁽²⁾	5 ⁽¹⁾	6 ⁽¹⁾	
	← APPARENT INTENDED LETHALITY →					NONE

- ANTI-ABORTION ATTACK PROFILES
- ANIMAL RIGHTS ATTACK PROFILES
- ANTI-ABORTION, ANIMAL RIGHTS AND/OR MIXED PROFILES
- X^(Y)** NUMBER OF CASES (ATTACK PROFILES)

Munitions discovered as Improvised Explosive Devices (IEDs) are rigged with C-4 and detonation cord for disposal by the Counter-IED team at Tarnak Farms, just outside Kandahar Airfield, Afghanistan, 16 February 2009.

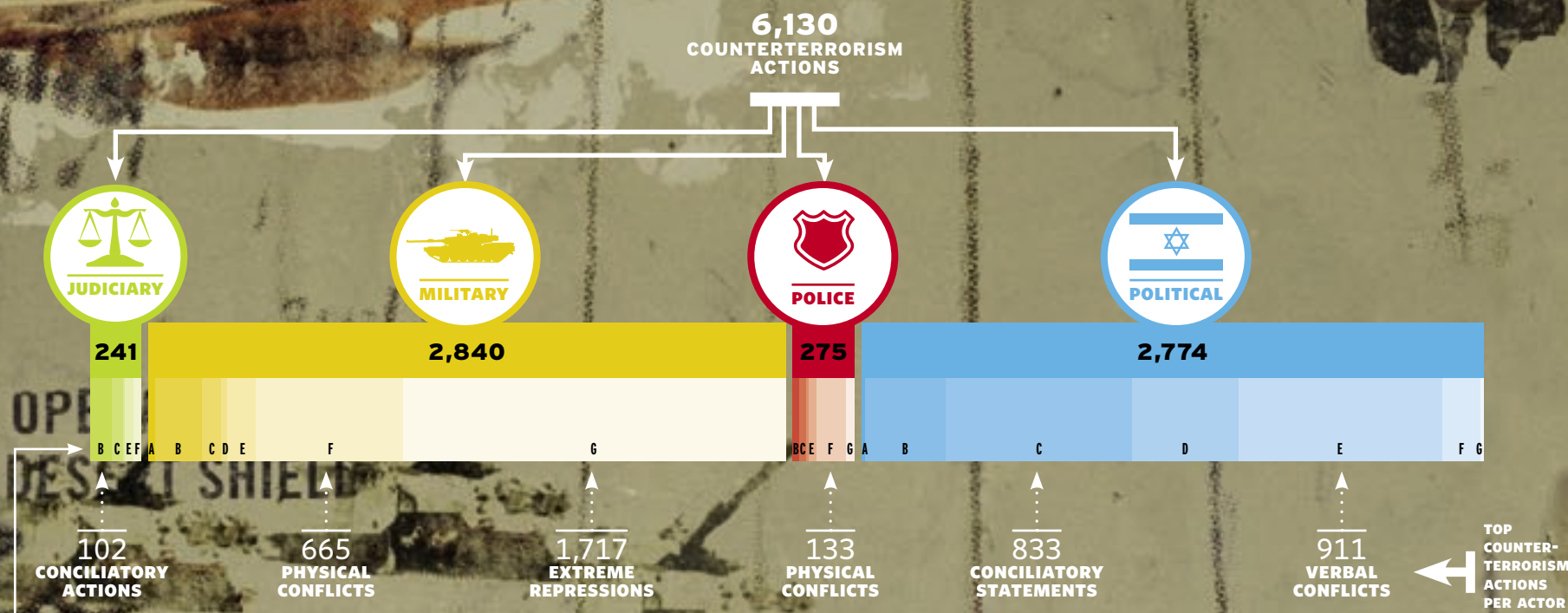
PHOTO BY: MCPL ROBERT BOTTRILL, CF COMBAT CAMERA
© GOVERNMENT OF CANADA

Cause & Effect

Terrorism and Counterterrorism in Israel and Palestinian Territories

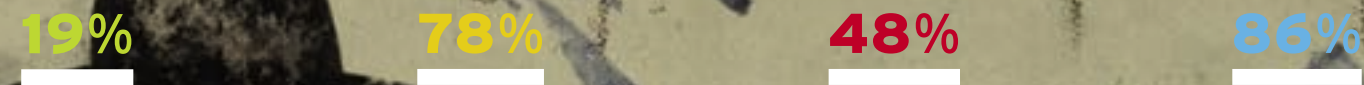
ARIE KRUGLANSKI, LAURA DUGAN & ERICA CHENOWETH

FREQUENCY OF COUNTERTERRORIST ACTIVITY BY GOVERNMENT ACTOR AND CONCILIATION/REPRESSION TAKEN BY ISRAELI GOVERNMENT AGAINST PALESTINIANS



TYPES OF ACTIONS (TOTAL OCCURENCES)
 A. ACCOMMODATION—INCLUDING SURRENDER (8) | B. CONCILIATORY ACTIONS (719) | C. CONCILIATORY STATEMENTS (987) | D. NEUTRAL/AMBIGUOUS (525)
 E. VERBAL CONFLICT (1,110) | F. PHYSICAL CONFLICT (1,020) | G. EXTREME REPRESSION (1,761)

PERCENTAGE OF ACTIONS INDISCRIMINATELY APPLIED (I.E., NOT FOCUSED SOLELY ON TERRORISTS)



Two START projects used innovative analytical techniques to study how counterterrorism actions affect the frequency of terrorist attacks in Israel and Palestine. Arie Kruglanski examined a set of large-scale counterterror operations, including military operations, targeted assassinations and peace summits. Laura Dugan and Erica Chenoweth looked beyond major counterterrorism initiatives to evaluate the impacts of day-to-day responses to terrorism.

Study #1: Kruglanski

METHODOLOGY Kruglanski used proportional hazard modeling to examine the effects of a variety of key counterterrorism measures in Israel and Palestine against a backdrop of 486 terrorist incidents that occurred between Sept. 28, 2000, and October 2006. Those measures included five large-scale military operations, 12 targeted assassinations of prominent terrorist leaders, the construction of a physical barrier, three peace summits, six cease-fires and various political events. The analysis isolated each measure's short-term and long-term impact on terrorist activity of particular terrorist organizations (Fatah, Hamas and Palestinian Islamic Jihad), regions (Israel, West Bank and Gaza) and tactics (suicide attacks and shooting attacks) to identify outcomes.

RESULTS The study found that targeted assassinations do not appear to affect the frequency of total terrorist attacks across all groups. They do, however, correspond to decreases in activity for Fatah and increases in activity for both Hamas and Palestinian Islamic Jihad, particularly within two weeks of the assassination. The study also found that Operation Defensive Shield, a large-scale military operation, was the most effective event for decreasing terrorist activity throughout Israel, but that it increased terrorist violence within Gaza. For suicide attacks, the only measure with a lasting impact was the construction of a separation fence, while Operation Defensive Shield was the only intervention with a lasting impact on shooting attacks.

Study #2: Dugan and Chenoweth

METHODOLOGY Dugan and Chenoweth examined the relative impact of more than 6,000 Israeli government counterterrorism actions between 1987 and 2004. The actions represented a variety of strategies, ranging from raids and arrests to the installation of telephone lines in refugee camps. The study coded each action according to a seven-point conciliatory-repression scale (accommodation, conciliatory action, conciliatory statement, neutral, verbal conflict, physical conflict and extreme deadly repression), as well as coding it "discriminate" or "indiscriminate." Generalized additive models and negative binomial regression analyses illustrate the impact of state actions on terrorist activity the following month.

RESULTS The study found that an increase in the number of conciliatory actions in a given month corresponded to fewer terrorist attacks the following month, while greater numbers of repressive actions in a given month corresponded to more terrorist attacks the following month. Both discriminate and indiscriminate conciliatory actions were associated with a decrease in terrorist activity the following month; analysis of weekly data, however, revealed that indiscriminate repressive actions in a given week were linked to increased terrorist activity the following week. These findings suggest that the harmful impact of repressive action is immediate, while the beneficial impact of conciliatory action is cumulative.

BOTTOM LINE These studies indicate that the effects of counterterrorism actions vary depending on the type of strategy, as well as across perpetrator organizations, locations and type of terrorist tactics. Together, they underscore the need to weigh desirable and undesirable potential outcomes before enacting counterterrorism strategies.

FOR MORE INFORMATION ON THESE PROJECTS, VISIT: WWW.START.UMD.EDU/RR11/PROJ7 AND WWW.START.UMD.EDU/RR11/PROJ8.

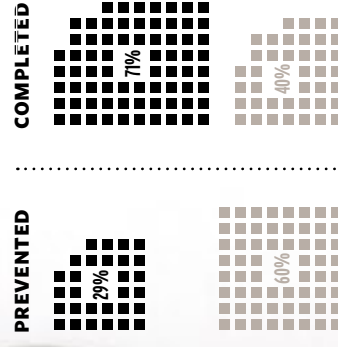
ATTACKS BY DIFFERENT ORGANIZATIONS BY MONTH & INFLUENTIAL INTERVENTIONS AND EVENTS



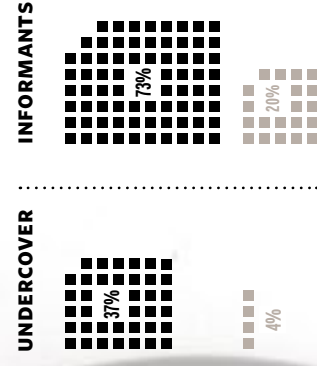
FBI

■ PRE 9/11 | ■ POST 9/11

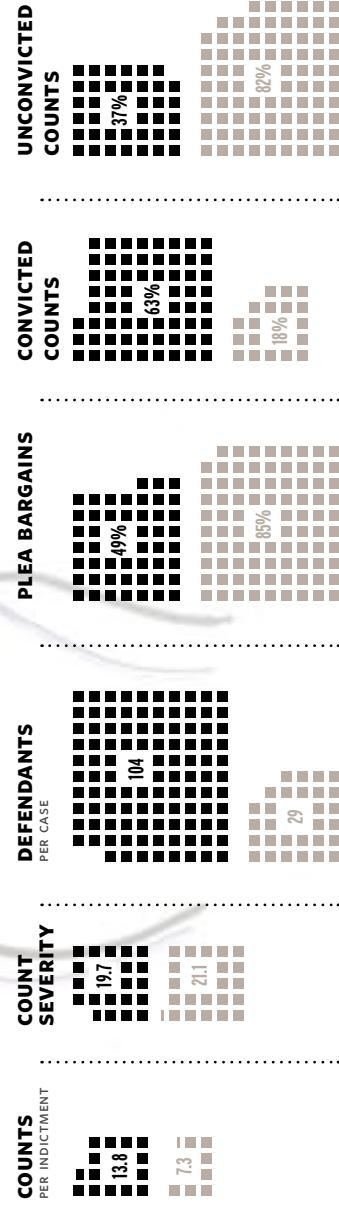
ACTS OF TERROR
1985-2005



INVESTIGATION CASES



PROSECUTION FINDINGS



CONVICTION RATE
71% / 72%

Against the Clock

Measuring Intervention Success in Terrorist Activity

KELLY DAMPHOUSSE, BRENT SMITH & SUMMER JACKSON

In the wake of 9/11 the FBI made dramatic changes to its strategies. In an effort to ensure that the United States would not again be victim to the type and scope of violence perpetrated by al-Qa'ida in 2001, the FBI shifted from a reactive to a more proactive approach to countering terrorism, with an emphasis on prevention. This research aims to examine the effects of this shift in FBI policy and practice.

FBI's counterterrorism program from 1983 to 2004, with more recent data continuously being added. The researchers used these primary sources to build a new dataset called Measuring Intervention Success in Countering Terrorism (MISCT). MISCT data were employed in a series of Independent Sample T-Tests to assess hypotheses related to whether changes following 9/11 have had a significant impact on FBI counterterrorism operations and the outcomes of these operations.

METHODOLOGY This study used data from two primary sources: the FBI's annual report, *Terrorism in the United States*, which details multiple features of completed and prevented terrorist attacks by year; and the American Terrorism Study (ATS), compiled by this project's research team to provide a near-complete record of the indictments, arrests, trials and convictions associated with the

RESULTS The newfound FBI emphasis on proactive policing following 2001 was not mere rhetoric: Analysis of MISCT data shows that 60% of all FBI terrorism indictments after 2001 involved prevented acts of terrorism. Prior to 2001, only 29% of indictments involved prevented acts, with the majority of indictments coming after an attack had been

attempted. Accordingly, the project also found that completed terrorist acts decreased significantly in the United States after 9/11.

The changed FBI approach affected not only when arrests were made, but how those cases were developed and prosecuted, and the outcomes of the cases. The scope of indictments per individual was reduced in the wake of 9/11, with the number of counts against indictee reduced by more than 40%. The number of defendants per case was dramatically reduced as well, although the conviction rates of defendants remained almost constant pre- and post-9/11, increasing from 71% to 72% after 2001.

Far more of the terrorism cases that emerged after 2001 resulted in plea bargain agreements, with 85% of post-9/11 cases involving a plea bargain versus only 49% of pre-9/11 cases. Notably, FBI agents were far more likely to engage confidential

informants and to assign undercover agents to terrorism cases prior to 2001, as more time was available to develop larger cases and to build relationships to bolster those cases.

BOTTOM LINE The FBI's shift from reactive to proactive approaches to terrorism has shown marked improvement in preventing terrorist attacks. The shift, however, did create significant issues that affected the manner in which terrorists are both investigated and prosecuted. Despite these issues, federal prosecutors were able to maintain a consistent conviction rate before and after 9/11.

FOR MORE INFORMATION ON THIS PROJECT, PLEASE VISIT: WWW.START-UMD.EDU/RR11/PROJ9

Terror's Legacy

Quantitative Index of the Public Health Impacts of Terrorism

KATHLEEN SHERRIEB & FRAN NORRIS

The deaths, injuries and shattered infrastructure resulting from mass-casualty terrorist attacks provide clear evidence of the immediate impact of such violent incidents. Equally as destructive and more difficult to measure are the less visible and less immediate damages terrorist attacks wreak on a community, especially on a community's most vulnerable citizens. Building on past research on the holistic impact of disasters, START investigators examined maternal health trends following two major terrorist attacks—on the World Trade Center in New York City in 2001, and on commuter trains in Madrid, Spain in 2004.

METHODOLOGY Employing official health statistics in an interrupted time-series analysis, which corrects for the impact of previous observations of a phenomenon in an earlier time period, enabled researchers to identify expected rates of infant mortality, low birth weight and preterm birth on a quarterly basis for the communities in the area most directly affected by these two terrorist attacks. These data enabled the researchers to examine whether measures of maternal health significantly changed in the wake of major terrorist events. Specifically, they asked, does evidence exist that such attacks compromise maternal health?

Researchers compared health data from the geographic areas most directly impacted by these terrorist attacks (New York City and Madrid) with those from their larger regions, New York State and the country of Spain, respectively, to determine whether unique dynamics emerged in the areas of the attack. Researchers also analyzed data on in-migration to and out-migration from New York City pre- and post-2001 to ensure that any changes were not the result of general population shifts in the area.

RESULTS Mass-casualty terrorist attacks like the World Trade Center and Madrid train attacks significantly impact longer-term public health, particularly that of women and children.

Following the 2001 attacks, there was no significant change in migration patterns in or out of New York City. Despite the stable population, the region experienced a significant increase over forecasted estimates in the rates of infant mortality (deaths within the first 12 months of a baby's life): Infant mortality increased by one death per 1,000 live births in New York City, a change which persisted for more than six years.

In Madrid, the incidence of low birth weight significantly increased over the expected rates following the 2004 terrorist attack. The rates of infants weighing less than 2,500 grams at birth in Madrid increased by almost one low-weight birth per 100 women during more than a five-year period after the attacks.

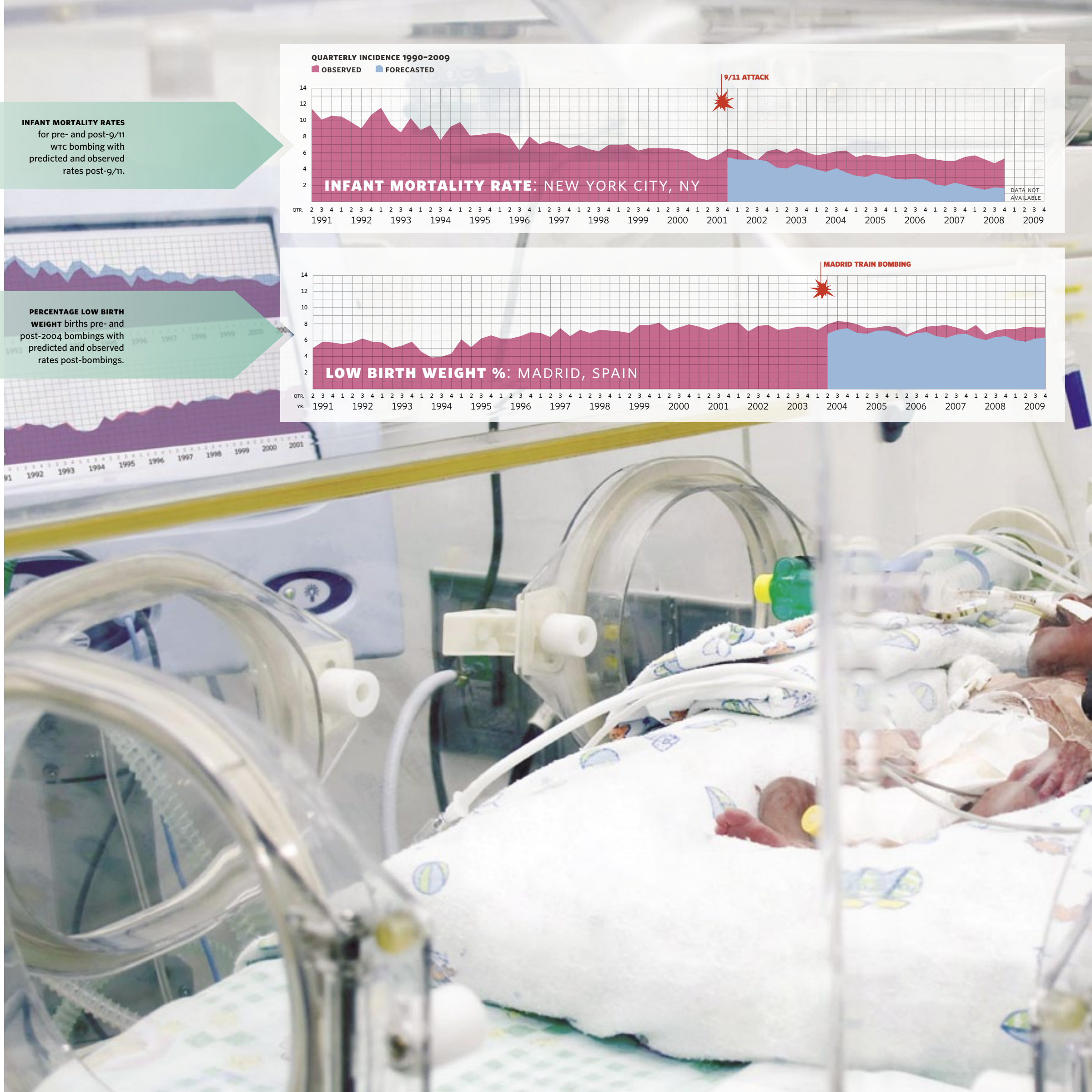
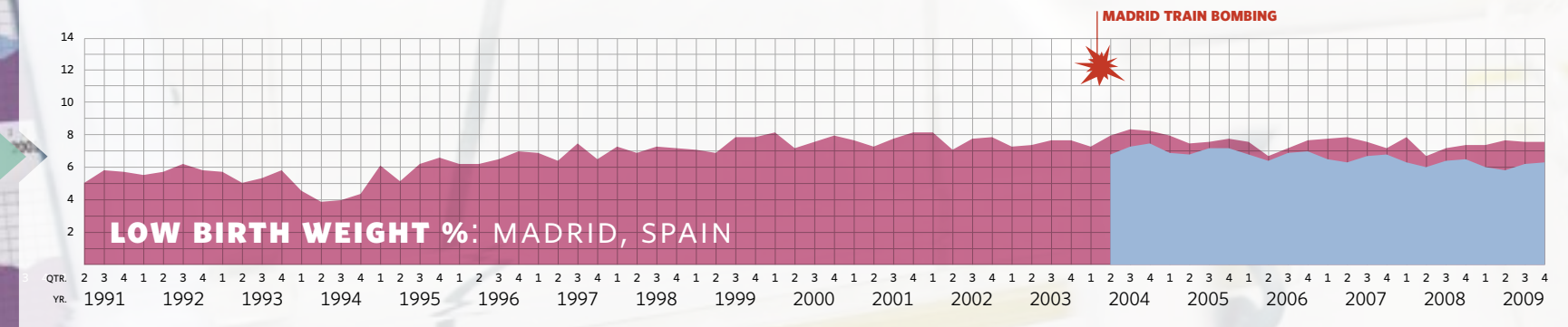
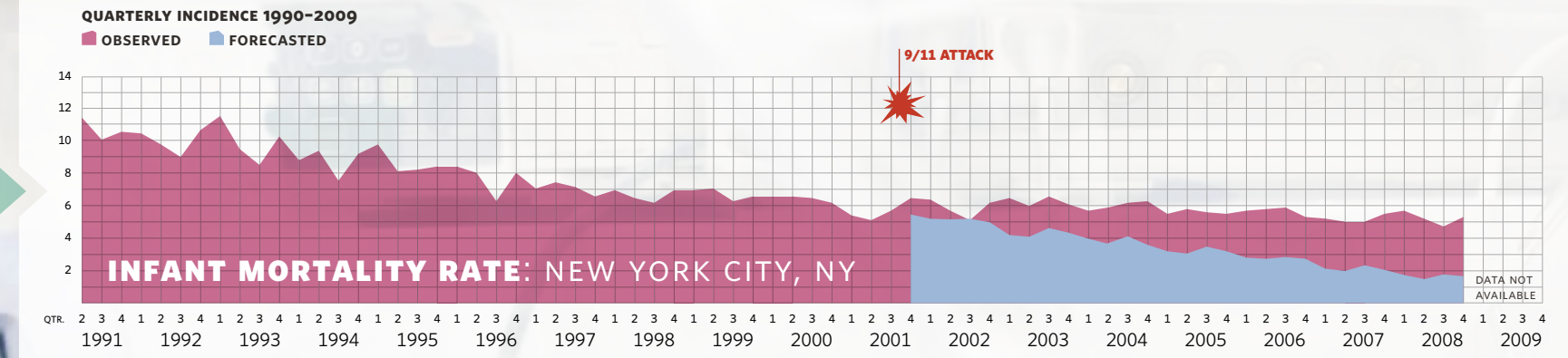
Neither New York City nor Madrid experienced changes in rates of preterm births in the wake of terrorist activity. Notably, the detrimental effects to maternal health in New York City and Madrid did not reverberate to comparable populations in New York State or the whole of Spain, respectively.

BOTTOM LINE The impact of mass-casualty terrorism far exceeds the immediate devastation created by such events, and the health effects extend beyond those who may have been killed or injured in the attack itself. The negative effects on birth outcomes in terrorism-affected areas years later not only reinforce the importance of preventing such attacks, but underscore the complexities associated with recovering and rebuilding in the wake of mass-casualty terrorism. Public health impacts, including maternal health, should constitute an important component of short-term and long-term recovery plans for catastrophic events.

▶ FOR MORE INFORMATION ON THIS PROJECT, PLEASE VISIT: WWW.START.UMD.EDU/RR11/PROJ10.

INFANT MORTALITY RATES for pre- and post-9/11 wtc bombing with predicted and observed rates post-9/11.

PERCENTAGE LOW BIRTH WEIGHT births pre- and post-2004 bombings with predicted and observed rates post-bombings.





The Missing Piece

Citizen Engagement in Public Health Planning

MONICA SCHOCH-SPANNA

It is well established that effective planning before a catastrophic event, such as a terrorist attack, natural disaster or public health epidemic, can help mitigate the costs to a community that experiences such a catastrophe. But how can local leaders best ensure their most critical resources are engaged in the planning process?

METHODOLOGY Investigators employed multiple research methods in this analysis. A working group of local leaders and preparedness experts from around the country assembled to develop a consensus on the relative value of engaging the public in emergency planning efforts. Based on conclusions from this group, researchers analyzed data from the National Association of County and City Health Officials (NACCHO) to identify structural characteristics of those communities in which institutional efforts have involved the public as a partner in public health emergency preparedness (PHEP). Additionally, case studies of both high-achieving and high-aspiring organizations are being conducted to better understand the factors that contribute to the success and challenge of public engagement, specifically regarding potential catastrophic community health emergencies.

RESULTS Traditional planning processes tend to occur within official circles, and these processes can too often view the public as a problem to be managed. This research shows that preparedness, as well as a community's capacity for resilience, improves when the civic infrastructure of a community—people who live, vote, play, work and worship together—is instead recognized to be a key resource in the planning process.

In the PHEP arena, officials can and should encourage citizens to play essential roles in pre-event public deliberation of ethical dilemmas and volunteer mobilization, as well as household and organizational preparedness. Data from NACCHO indicate that public involvement in PHEP activities is more likely to occur in communities whose local health department has staff to interface with the public: namely, an emergency

preparedness coordinator, a public information specialist or a health educator. These positions, however, are inconsistent across the country. Only half of all local health departments had a public information specialist, and one in four did not employ a health educator or preparedness coordinator—a trend likely to worsen in a poor fiscal environment.

Other factors that facilitate or serve as catalysts to public engagement in catastrophic event planning include:

- *An event that serves as a rupture in routine thinking*
- *Demonstrated political will and interest from the federal, state and local levels*
- *Endorsement by local and organizational leaders*
- *Shared recognition of the role of church-based and faith-based organizations in preparedness and response*
- *Adequate resources to engage the public in a sustained and meaningful way*
- *Good-faith efforts to build relationships between official organizations and the civic infrastructure*
- *Ability of leaders to meet other related priorities*

BOTTOM LINE Local leaders who do not engage the public in emergency planning are neglecting an invaluable resource that could serve to strengthen community resilience in the face of a disaster. Prioritization at the federal, state and local levels can ensure that community members are better integrated into emergency preparedness planning, efforts and activities.

► FOR MORE INFORMATION ON THIS PROJECT, PLEASE VISIT: WWW.START.UMD.EDU/RR11PROJ11.



Clear, Calm, Collected

Communicating Effectively During Times of Threat

ELAINE VAUGHAN, HAMILTON BEAN, KATHLEEN SMARICK & DENNIS MILETI

One of the defining characteristics of terrorism is that it is intended to impact—directly or indirectly—the public at large. As a result, the public needs and wants information about the threat and risk posed by potential or actual attacks. Ensuring that such information is conveyed effectively and spurs appropriate protective action is essential to the successful management of crisis situations. Are guidelines for effective communication during times of threat being followed in U.S. communities?

Study #1: Bean, Mileti and Smarick

METHODOLOGY Researchers conducted a survey of more than 500 people in Los Angeles County who had experienced a major wildfire to assess the types of warnings residents had received. In addition, researchers conducted 70 interviews with public information officers in and around the New York City, Los Angeles and Washington, D.C., regions designed to assess the degree to which best risk communication practices were being followed in U.S. communities.

RESULTS Surveys revealed that 35% of residents who received a mandatory evacuation order during a major wildfire never evacuated their homes. Those who did evacuate reported that they received the evacuation order from a source they knew and trusted; they received multiple messages through a variety of channels; and the information they received was specific about what action they needed to take and when. These findings reinforce the long history of research on effective communication of warnings.

Interviews with public information officers, however, revealed that knowledge of and attention to these factors associated with successful warnings varies greatly, even in areas considered to be likely targets for mass-casualty terrorism. Few officials had any experience in composing messages for large-scale disasters that would require the public to take action. Less than half indicated that they have or would use pre-scripted messages—messages specifically crafted to prompt public action—during an emer-

gency event. Interviews also revealed a general lack of awareness as to how diverse sectors of a population interpret uniform official messages.

Study #2: Vaughan

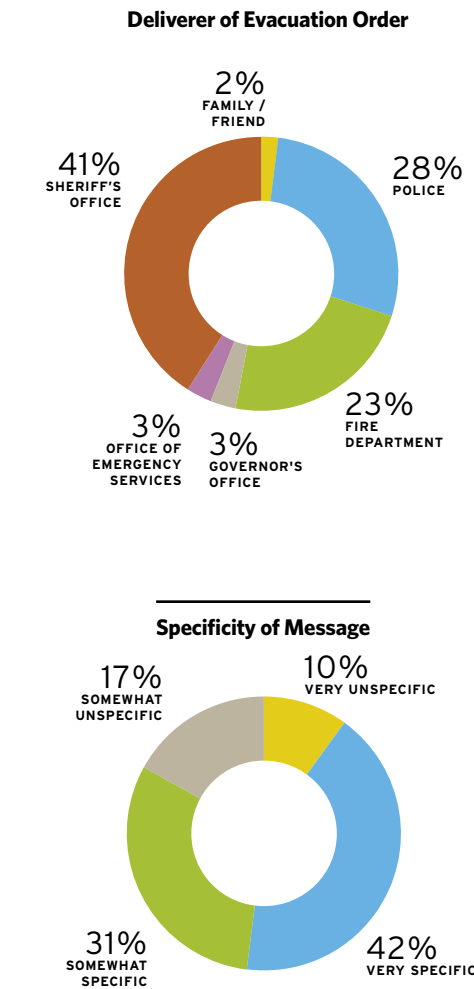
METHODOLOGY START sought to improve understanding of how diverse U.S. audiences respond to threat information. Researchers presented broadcast media stories from the 2001 anthrax attacks to members of minority communities and, through interviews and focus groups, identified how communication needs differed among participants from various ethnic and socioeconomic groups.

RESULTS Focus groups with representatives from minority communities reinforced the need for officials to know and adapt to their audience. Within some lower-income African-American and Hispanic communities, for instance, premature public reassurances severely damaged the short-term credibility of public officials. These audiences were more forgiving of warnings about threats that never materialized. Conversely, skepticism among those who mistrust the government was reduced when officials offered repeated and clear communications about what was known about the situation, while openly acknowledging existing distrust of the messenger and messages.

BOTTOM LINE Communities recognize that effective public communication in the midst of a crisis, such as a terrorist attack, can mitigate its negative consequences. To ensure that messages about warnings, threats and risk effectively convey information to prompt appropriate action, officials need to heed established principles of effective communication and also adapt their messages and channels of communication to the diverse populations and life circumstances in their communities.

▶ FOR MORE INFORMATION ON THESE PROJECTS, VISIT: WWW.START.UMD.EDU/RR11/PROJ12 AND WWW.START.UMD.EDU/RR11/PROJ13.

RESULTS FROM LOS ANGELES COUNTY SURVEY ON COMMUNICATION DURING WILDFIRES



Are explicit efforts made to reach special populations (including non-English speakers, low-income and special needs)?

72%	23%	5%
Yes	No	DK

Efforts are made to reach special populations.

Are steps taken in advance of a disaster to ensure that warning providers are prepared to issue messages effectively?

	Yes	No	DK
Standard operating procedures (SOPs) are written down.	66%	31%	3%
Warning thresholds are in place.	28	63	9
SOP training is conducted.	76	23	1
Exercises and/or scenarios are conducted.	76	24	0
Succession planning is detailed within SOPs.	89	10	1
Shifts in responsibility are identified.	80	17	3

UNANTICIPATED RESPONSES ARE LIKELY TO OCCUR.

MULTIPLE CRISIS COMMUNICATORS ARE NEEDED TO PROVIDE ACCURATE AND TIMELY INFORMATION.

REASSURANCES MAY BE RE-INTERPRETED AS A SIGNAL THAT INFORMATION IS BEING IGNORED.

ADDRESS COMMUNICATION ERRORS IN A TIMELY MANNER.

INFORM THE PUBLIC ABOUT UNCERTAINTIES.

RISK COMMUNICATION CONSIDERATIONS IN DIVERSE URBAN POPULATIONS

Are efforts made to ensure the effectiveness of warning messages?

53%	44%	3%
Yes	No	DK

Pre-scripted and pre-vetted messages are used.

71	23	6
Yes	No	DK

Pre-event public warning education is provided.

How do warning providers evaluate their efforts?

	Yes	No	DK
An after action report	81%	12%	7%
Public feedback is formally sought and collected.	23	74	3
Public feedback influences subsequent operations.	42	49	9

THE DEADLY EVENTS OF SEPTEMBER 11, 2001, were a shock to the American public. The malicious attacks targeting ordinary civilians brought to U.S. soil a newly heightened awareness of the threat presented by terrorism. This threat was not unique to the United States. Nor was it a new threat. But, as of 2001, neither researchers nor the government had clear, comprehensive data on the scope, breadth and impact of terrorist activity around the world.

On the morning of September 11, 2001, nobody could say with certainty how often the United States had experienced terrorism, how often terrorists had engaged in hijackings or what groups had engaged in attacks on U.S. landmarks. Through significant investments by the Science and Technology Directorate of the U.S. Department of Homeland Security, START has developed open-source data collections that allow officials, analysts, researchers and the interested public to answer these questions and to examine nuanced issues related to the causes, dynamics and consequences of terrorist activity.

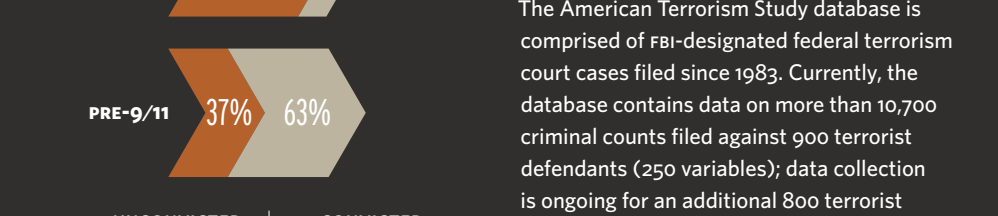
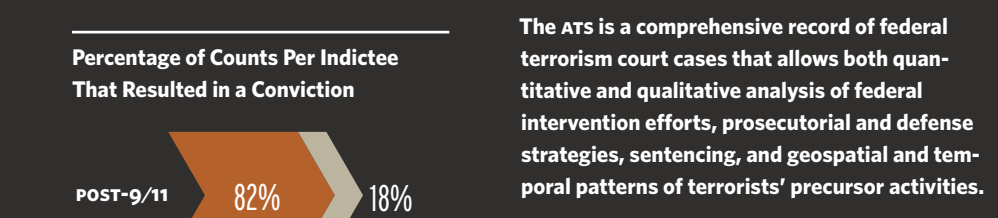
The data collections presented here represent efforts by teams of researchers at START to systematically compile objective information on incidents of terrorism and extremist violence, on the perpetrators of those violent incidents and on criminal justice responses to those incidents. While each of these data collections has a specific focus, all can provide users with an overview of relevant trends over time and space, a summary of the nature of terrorist behaviors and a heightened understanding of the context of today's terrorist threat. They can supplement an expert's in-depth knowledge of specific incidents, and they can serve as an introduction to specific types of terrorism to a novice audience.

START believes that these data represent the building blocks of a more robust science of terrorism studies. For this reason, START makes the data in these collections available to the public for use in the critical work being conducted around the world to reduce the terrorist threat. While these data are vital to the cutting-edge research being conducted by START researchers, we encourage all of those interested in advancing the understanding of terrorism dynamics to consider these data to be a resource to be used in pursuit of that goal.



AMERICAN TERRORISM STUDY (ATS)

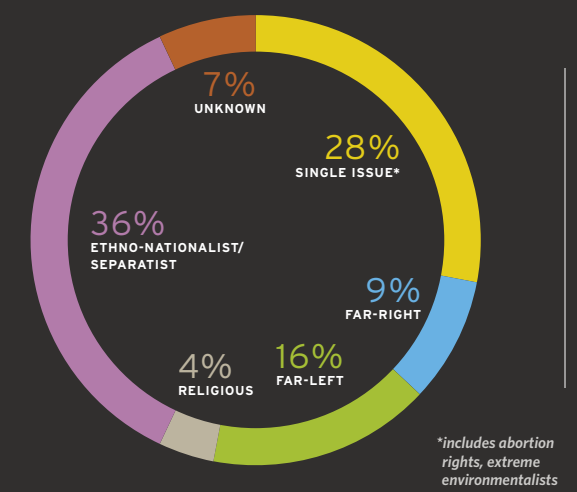
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The ATS is a comprehensive record of federal terrorism court cases that allows both quantitative and qualitative analysis of federal intervention efforts, prosecutorial and defense strategies, sentencing, and geospatial and temporal patterns of terrorists' precursor activities.

The American Terrorism Study database is comprised of FBI-designated federal terrorism court cases filed since 1983. Currently, the database contains data on more than 10,700 criminal counts filed against 900 terrorist defendants (250 variables); data collection is ongoing for an additional 800 terrorist defendants. With original funding provided by the National Institute of Justice and the National Memorial Institute for the Prevention of Terrorism, the ATS began in 1988 in collaboration with the FBI's former Terrorist Research and Analytical Center. The FBI compiled a list of persons indicted under official FBI "terrorism/domestic security" investigations from 1980-88 to start the project. Subsequently, the FBI provided periodic lists of "indictees" under these official investigations, with sponsorship through either the House Judiciary Subcommittee on Crime or the Senate Judiciary Committee. Since 2004, the database has expanded to include additional information on defense and prosecutorial strategies used in terrorism trials and geospatial and temporal records of hundreds of precursor activities associated with each terrorism case.

Dominant Ideology of Terrorist Groups Attacking the United States (1970-2008)



PROFILES OF PERPETRATORS OF TERRORISM IN THE UNITED STATES (PPT-US)

LEAD RESEARCHERS
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Erin Miller, University of Maryland

PPT-US provides detailed information on the characteristics, dynamics and actions of all groups that have launched terrorist attacks against the United States since 1970.

More than 140 organizations have engaged in terrorism on U.S. soil since 1970. PPT-US is a comprehensive source of data on these groups, providing structured information on each group's history, ideological foundations, goals, structure and alliances, and the nature of the group's activities—including, but not limited to, its engagement in terrorism. Users can turn to PPT-US if they want a quick introduction to any of the groups that have attacked the United States, or they can use PPT-US data to examine trends and patterns in the nature of these terrorist groups and their actions. For instance, PPT-US data indicate that, while a religiously inspired terrorist organization (al-Qa'ida) was responsible for the mostly deadly U.S. terrorist attacks, religious terrorist groups have been quite rare in the United States. PPT-US is updated annually to integrate the latest information on groups already included in the database, as well as to add profiles of organizations that have newly emerged as terrorists active in the United States.

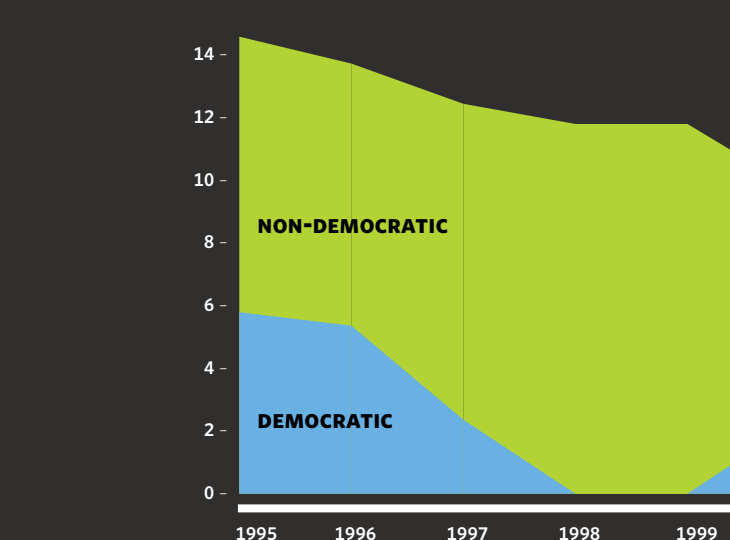
POLITICAL ORGANIZATIONS DATABASE (POD)

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Amy Pate, University of Maryland

The Political Organizations Database allows researchers to compare violent to non-violent extremist organizations in the Middle East, in order to determine the correlates of organizational violence and terrorism.

The Political Organizations Database contains data on a representative sample of extremist organizations (religious, rightist, leftist and ethnic) that were active for at least three consecutive years between 1995 and 2008. The majority (58%) of organizations active during that time period were religious in orientation, with another substantial percentage being ethnic (25%) in orientation. Smaller proportions were leftist (13%)

Percentage of Organizations Targeting Civilians



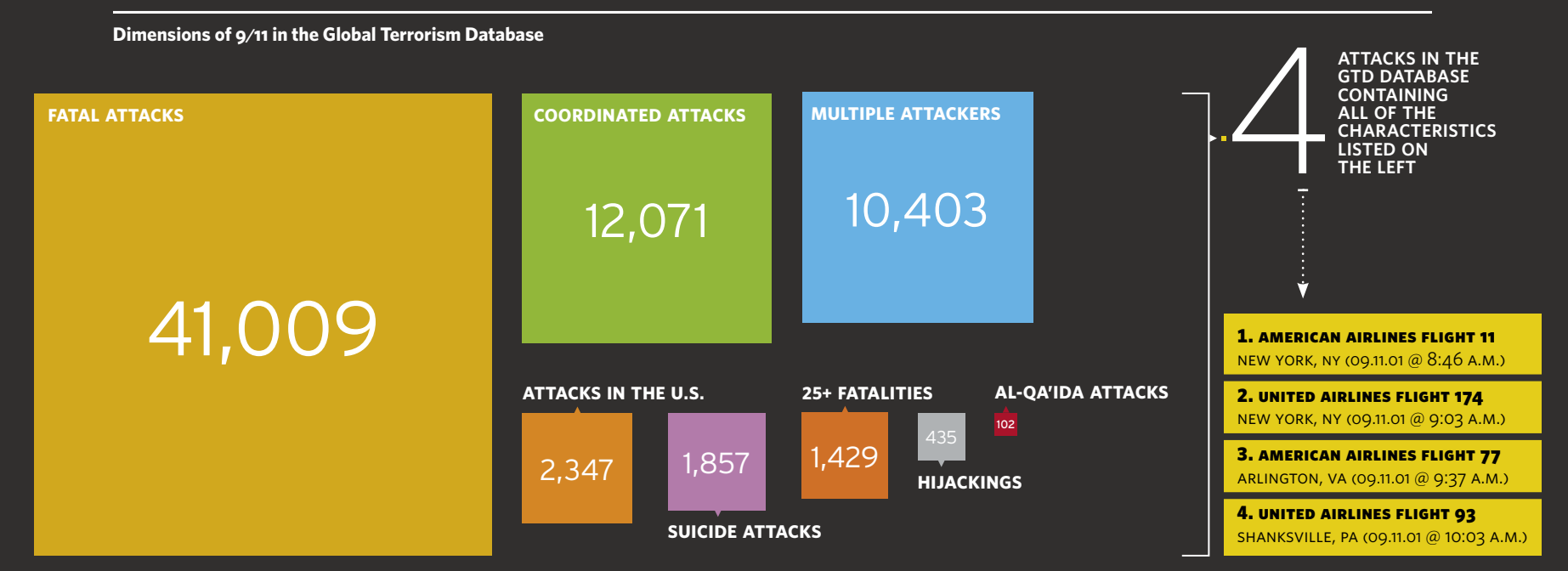
PROFILES IN ISLAMIC RADICALIZATION IN NORTH AMERICA (PIRaNA)

LEAD RESEARCHERS
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John Sawyer, University of Maryland

Profiles in Islamic Radicalization in North America provides biographical and radicalization information for all known "homegrown" Islamic radicals in the United States and Canada.

The Profiles in Islamic Radicalization in North America database contains data for more than 200 individuals who have radicalized to the point of engaging or attempting to engage in jihad. These individuals meet at least one of three criteria: They were indicted on violent terrorism-related offenses, were killed while engaging in jihadist activities, or self-identified publicly as a member of a jihadist group. Additionally, only individuals who began and completed a significant portion of their path into radicalism in North America are included in PIRANA. In addition to basic biographical data, such as age, marital status, education, ethnicity, religious status (convert), criminal record, location and citizenship, PIRANA provides broad assessments of how embedded individuals are in society and their socioeconomic status. In addition, PIRANA captures a range of variables on the individuals' radicalization process, including the affiliated group, cell leader, spiritual mentor, role of the Internet, whether part of the radicalization occurred outside North America and the location of jihadist training (if any).

Although PIRANA includes individuals who began radicalizing as early as the late 1970s, a large and growing majority of profiled individuals began their radicalization after September 11, 2001. Additionally, Islamic radicalization appears to be a prominently middle-class phenomenon. Perhaps the most troubling finding is that most cases were of individuals highly embedded in their host societies. This finding may be in part a result of the fact that roughly one-quarter of the included individuals converted from a different religion.



GLOBAL TERRORISM DATABASE (GTD)

LEAD RESEARCHERS
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Laura Dugan, University of Maryland

The Global Terrorism Database is the longest-running, most comprehensive open-source database on domestic and international terrorism in the world.

The Global Terrorism Database has collected information on more than 100,000 domestic and international terrorist attacks carried out around the world since 1970. The GTD defines terrorism as the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious or social goal through fear, coercion or intimidation. The original event data that comprise the GTD were handwritten on index cards by analysts who reviewed wire services, government reports and newspapers, then systematically recorded details of the date, location, target, perpetrator, tactics and outcome of each attack. Since 2003 the GTD staff has digitized and enhanced the original data, as well as expanded the data collection process to include over 120 different variables, thousands of sources and millions of source articles. The data, which are updated annually, are collected entirely from unclassified information and are available to researchers, analysts, officials and the general public through the GTD website (www.start.umd.edu/gtd).

SOCIAL VULNERABILITY INDEX (SoVI)

LEAD RESEARCHER
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The Social Vulnerability Index shows which counties in the United States are the least and most vulnerable to environmental hazards.

The Social Vulnerability Index utilizes socioeconomic and demographic data to measure the social vulnerability of U.S. counties to environmental hazards. Social vulnerability is defined as the social, economic, demographic and housing characteristics that influence a community's ability to respond to, cope with, recover from and adapt to environmental hazards. Primarily based on data from the U.S. Census Bureau, the index synthesizes 32 socioeconomic variables that contribute to social vulnerability. By comparing information at the county level for the entire United States, the index helps determine which counties are least and most vulnerable to environmental hazards. The index is available through the website (sovi.us.org) of the Hazards and Vulnerability Research Institute at the University of South Carolina.

RADIOLOGICAL AND NUCLEAR NON-STATE ADVERSARIES DATABASE (RANNSAD)

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RANNSAD contains qualitative and quantitative data on all former non-state (i.e., non-government) users and attempted users of radiological or nuclear weapons.

Created as part of a larger START research effort to identify the most likely future radiological- and nuclear-armed non-state adversaries, RANNSAD collects information on each of 45 actor entities (lone actors, unaffiliated cells and formal organizations) involved in 68 separate radiological or nuclear incidents. The data are drawn from open sources and are structured systematically in 55 fields of qualitative and quantitative information. Recorded features of each perpetrator and attempted perpetrator include detailed information on organizational affiliation, demographics (with an emphasis on educational and vocational background), the radiological and nuclear activity engaged in and materials involved, the results of these incidents and any criminal justice proceedings, and information on specific motives and perpetrator capability levels. The database also includes analytical commentary on each case and discusses the lessons that law enforcement and intelligence officials might draw from the case.

UNITED STATES EXTREMIST CRIME DATABASE (ECDB)

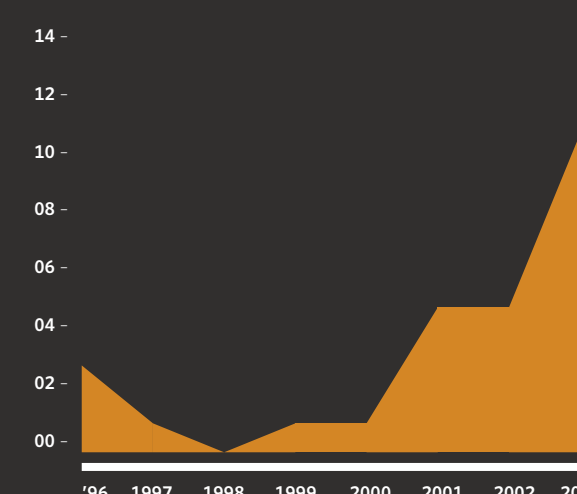
LEAD RESEARCHERS
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Unlike other terrorism-focused databases, the ECDB includes ideological and non-ideological crimes, violent and non-violent (e.g., financial) crimes, terrorist and non-terrorist acts, crimes committed by groups and lone wolves, and cases prosecuted federally and under state jurisdictions.

The ECDB is a relational database on the violent incidents and financial schemes, suspects, victims and targets, suspects' and victims' social ties, and group characteristics (as well as an assessment of the quality of the open-source information used to code the database) committed by far-rightists, jihadists and Arab nationalists, and animal and environmental rights extremists in the United States since 1990.

For an incident to be included in the ECDB, two criteria must be satisfied. First, a violent act (e.g., a homicide) must have been committed inside the United States since 1990. Second, at the time

Islamic-related Schemes by Indictment Date



UNITED STATES EXTREMIST CRIME DATABASE (ECDB)

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The ECDB was developed in three related stages. The first was a multi-tiered data collection effort to identify violent and financial crimes committed by right-wing, jihadist, Arab nationalist and animal/environmental rights extremists from 1990 to the present. Incidents were identified from existing terrorism databases, official records, scholarly works, newspaper accounts and watch-group reports.

In the second stage, each identified incident and group was systematically searched in 26 Web engines. These searches uncovered published open-source materials on each case and group. Additional criminal cases uncovered during these searches were treated as separate incidents and added to the database. The information uncovered includes media accounts, government documents, court records, indictments, appeals, videos, blogs, books, watch-group reports, movement-produced materials and scholarly accounts.

In the final stage, coders reviewed the open source information to input values for the hundreds of attributes across the codebooks.

LAUNCHING IN 2012

TERRORISM AND EXTREMIST VIOLENCE IN THE UNITED STATES (TEVUS)

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This relational database integrates vital information on terrorist and extremist violence in the United States, individuals and groups responsible for it, its victims and the measures taken to counter it. TEVUS will launch in 2012.

TEVUS will advance analysts' and researchers' abilities to examine the violent extremism landscape in the United States by systematically integrating data from a range of other START data collection efforts—including GTD, ATS, ECDB and PPT-US—into a publicly available relational database. TEVUS will be a dynamic tool and is being constructed to seamlessly include additional data in the future, including data on terrorist countermeasures as well as data on communities affected by extremism. Users will be able to access the database via the START website, from which they will be able to search for specific information on incidents, groups and individuals. Analysts will also be able to download data on the variables they are most interested in, allowing them to examine trends over time and across the country. TEVUS will prove to be a vital resource for understanding the scope of past, present and future extremist threats in the country.

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RESEARCH SUMMARIES



START prides itself on the diversity of research conducted to bring a holistic understanding to the study of terrorism. **START research falls into four overarching areas: (1) Terrorist Group Formation and Recruitment, (2) Terrorist Group Persistence and Dynamics, (3) Societal Impacts of Terrorism and (4) Cross-Cutting Research.** These broad research areas further focus on radicalization, terrorism operations and interventions, and community resilience. START researchers are based throughout the United States and around the world and bring to the analysis of terrorism dynamics varying perspectives informed from related research in such areas as criminal activity, international and civil conflict, deviant behavior, natural disasters, public health, risk communication, public policy and many others. Collectively, the START consortium provides unique insights and approaches to questions surrounding terrorism and homeland security and has undertaken rigorous, empirical research designed to answer these questions.

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Unless otherwise noted, research was funded by the Center of Excellence program of the Office of University Programs, Science and Technology Directorate, U.S. Department of Homeland Security.

AREA 1 TERRORIST GROUP FORMATION & RECRUITMENT

Islamic Radicalization in Europe and North America: Parallels and Divergence

INVESTIGATORS: Gary Ackerman, Magnus Ranstorp & Peter Neumann

While there are many recognized factors that might lead an individual to radicalize, a question persists about the impact of geographic context on radicalization processes: Are there fundamental similarities and/or differences among the dynamics of radicalization based on where an individual is living at the time he or she is radicalizing? This project seeks to address this question through a systematic comparison of the processes resulting in the violent radicalization of a collection of individuals based in Europe versus those based in North America.

The research team, involving U.S.- and European-based scholars, is cataloging individuals known to have engaged or attempted to engage in terrorist activity in support of jihadi ideology, specifying where these terrorists were living as they were radicalized toward extremist violence. Using this inventory, researchers are identifying a subset of individuals based in Europe and in North America and are conducting detailed case studies, focused on the trajectory of each individual's shift to more extremist beliefs and increased participation in violent activity. Comparative case analysis will reveal parallels as well as divergence in the radicalization processes in Europe versus North America.

This project is funded by the Office of International Programs of the Science and Technology Directorate, U.S. Department of Homeland Security.

Geographic Concentrations of Violent Extremism and Terrorism in the United States

INVESTIGATORS: Amy Adamczyk, Bianca Bersani, Steven Chermak, Kelly Dampousse, Shira Fishman, Joshua Freilich, Gary LaFree, Kathleen Smarick & Brent Smith

This project examines to what degree certain areas in the United States are more likely to experience a rise in violent extremism. The research team is building upon conclusions of the START report *Community-Level Indicators of Radicalization*:

A Data and Methods Task Force and will identify: (1) geographic areas that have experienced the highest levels of terrorist violence and extremist crime during the past 20 years; and (2) underlying structural factors and characteristics of U.S. counties where such clusters have existed.

The project applies data from START's Global Terrorism Database (GTD), American Terrorism Study (ATS) and Extremist Crime Database (ECDB) in conjunction with archival county-level data on non-extremist crime, political participation and socioeconomic characteristics. Researchers are conducting a series of statistical and spatial analyses to identify factors related to the patterns of violent extremist clusters.

This project is funded by the Human Factors/Behavioral Sciences Division of the Science and Technology Directorate, U.S. Department of Homeland Security.

Radicalizing the Poor: Understanding the Influence of Service Provision on Popular Support for, and Participation in, Violent Political Groups

INVESTIGATOR: Shawn Flanigan

Groups that engage in terrorist attacks often participate in a range of other activities, including providing social support services to people in the communities in which the organizations are based. This project examines the degree to which organizations actively pursue the role of service providers in their communities and examines the impact that this role has on perceptions of, support for and recruitment to these violent organizations. This research considers to what degree engaging in social service provision is related to violent extremist groups' durability.

The research team is conducting a comparative study of the role of violent organizations in communities. Survey data are being collected from 1,000-plus low-income residents in Mindanao, Philippines, and the West Bank and Gaza Strip, and researchers are interviewing community leaders in those areas to explore the role and impact of these organizations. In addition, researchers are interviewing former Black Panther Party members who were active in the Oakland, Calif., area in the 1960s and 1970s as well as community residents from that time to improve understanding of the goals and impacts of the organization's community engagement.

Database of U.S. Extremist Crime, 1990-2009

INVESTIGATORS: Joshua Freilich & Steven Chermak

Competing theories of radicalization offer differing perspectives on the degree to which prior criminal activity indicates an individual's future involvement in violent extremism. Some argue that prior criminal activity in support of extremist goals might be precursor to future radicalization, while others propose that a willingness to engage in non-violent criminal activity is a distinct decision leading from radicalization to violence. In an effort to inform this debate, the current project provides a rigorous empirical assessment of the relationship between non-violent crime and extremist violence.

Building on past work that developed a structured methodology for establishing an Extremist Crime Database (ECDB), this research team is engaged in the systematic collection of open-source data on non-violent and violent criminal behavior associated with far right-wing extremist groups and jihadist groups in the United States, including data on events, perpetrators and victims, all integrated into a relational database. Using these data, the researchers are conducting descriptive, bivariate, multivariate and time-series analyses to examine the criminal trajectories of extremists and to generate insights regarding possible precursor crimes associated with violent radicalization.

Homegrown Radicalization and the Role of Social Networks and Social Inclusiveness in the United States

INVESTIGATOR: Paul Harwood

While decisions to support or engage in violent extremism occur on an individual level, that individual operates within a community, which can impact the likelihood of such a shift toward extremism. This project explores issues surrounding social inclusiveness by examining the nature of the social networks in which individuals are embedded. The study is assessing the degree to which variation in the structure of an individual's social network is associated with beliefs about violent extremism and aims to provide insights on differing dynamics of social networks among subpopulations in the United States.

Findings for this project will be based on network and other statistical analyses of original data collected by the research team through a telephone survey of approximately 1,000 Americans. The survey instrument seeks, for example, to gauge a respondent's perceived level of political and economic deprivation within his or her community, as well as his or her levels of religiosity and political efficacy. The telephone survey also includes an over-sample in areas of high population density in which U.S. terrorist activity has been most common.

European Converts to Islam: An Evolving Threat?

INVESTIGATOR: Emmanuel Karagiannis

The size of the Muslim population in Europe has been growing steadily as a result of immigration from Asia, North Africa and the Middle East in recent decades. But the growth of Islam in European countries also reflects large numbers of native Europeans converting to Islam. An estimated 100,000 Muslim converts live in the United Kingdom alone. Some have argued that, if the newly converted are particularly devout and eager to defend their new religion, they might be more likely to support Jihadist goals and the use of violence to support these goals. This project involves collecting and analyzing new data to examine this hypothesis.

The research team is interviewing newly converted Muslims in countries throughout Europe to gain insights into their decisions to convert and examine the degree to which their new religious beliefs are reflected in their political beliefs. In addition to analyzing data from interviews with recently converted individuals, the project will also examine the mission and workings of European Islamic organizations established by converts to improve understanding of the role of these organizations in the lives of converts.

Choosing Between Violence and Non-violence

INVESTIGATOR: Rolin Mainuddin

Far more individuals and groups have an extremist ideology than actually engage in violence to assert that ideology. Understanding the factors that lead an individual to encourage or engage in violence in support of extremist goals requires not only examining why those individuals turn to violence

but also studying others who have similar political, religious and/or social beliefs who did not engage in terrorist activity. This project examines the decision among those with extreme ideologies to rely upon non-violent strategies.

Data for the project include interviews, focus groups and primary source documents. The research team is particularly interested in identifying individuals and groups that have considered turning to violence but decided to avoid this strategy.

Cell Groups and Individual Radicalization in Indonesia, United Kingdom and the United States

INVESTIGATOR: Douglas McLeod

Qualitative, comparative case studies of small groups associated with radical Islamic groups in three national contexts—Muslim Brotherhood (MB) and Hizb ut-Tahrir (HT) in Indonesia, MB and HT in the United Kingdom and the American Muslim Council in the United States (considered by many to be the U.S. Muslim Brotherhood). Data for the case studies will be collected through field work involving interviews with group leaders, group members and journalists in each context. In addition, the research team will analyze the communication of groups in each context, looking at websites, pamphlets, books and public discourse at rallies. This project is a follow-up to previous START-supported work by McLeod, "The Role of the Media in the Recruitment of Terrorists: Mass Communication and the Battle for the Hearts and Minds of Muslims in Indonesia."

Violent Radicalization and Terrorist Recruitment among Somali-Americans

INVESTIGATOR: Stevan Weine

Much anecdotal evidence exists about the involvement of Somali-Americans in extremist violence in ongoing conflicts in and around Somalia. This project seeks to improve understanding of the dynamics of violent radicalization and terrorist recruitment among Muslim diaspora communities in the United States by focusing analysis on Somali-Americans in Minnesota and the roles of risk and protective processes at different levels

(individual, family, sociocultural and structural) that impact violent radicalization and recruitment.

The research team is collecting original data through interviews and focus groups in Minnesota with Somali-American young men, family members and service providers, so as to characterize the potentially modifiable multilevel risk and protective factors that impact radicalization and recruitment. In addition, the project seeks to engage community advocates (parents, community leaders, service providers and policymakers) to provide insights that can help local leaders develop socially and culturally appropriate strategies for preventing violent radicalization and terrorist recruitment in their community.

This project is funded by the Human Factors/Behavioral Sciences Division of the Science and Technology Directorate, U.S. Department of Homeland Security.

AREA 2 TERRORIST GROUP PERSISTENCE & DYNAMICS

Understanding and Combating Mass-Casualty Terrorism

INVESTIGATOR: Gary Ackerman & Victor Asal

While all terrorist activity shares some characteristics, notable variation exists among the strategies of terrorist organizations and the nature of the attacks they launch. For instance, while all terrorism is designed to invoke fear among a public, some terrorist activity involves far more bloodshed. Since 1970, there have been approximately 500 terrorist attacks worldwide that have resulted in 100 or more casualties, while more than 30,000 terrorist attacks have resulted in no casualties. This project focuses analysis on the phenomenon of mass-casualty terrorism (MCT) and its perpetrators.

In order to generate new understandings of this type of terrorism and the organizations that perpetrate it, the research team is collecting structured country-, organization- and individual-level data on MCT events. These data will supplement START's existing GTD and will provide the materials necessary for statistical analyses focused on understanding the

methods and target selection of MCT. In addition, the research team is undertaking comparative case studies of groups that have engaged in MCT, focused on the decision processes involved in the selection of a mass casualty attack from the wide range of attack options open to terrorists.

Assessment of Organized and Transnational Crime and Drug Cartel Nexus with Illicit Radiological/Nuclear (R/N) Trade, Smuggling and Terrorism

INVESTIGATOR: Gary Ackerman

There has been little robust empirical or theoretical examination of a potential nexus between transnational criminal organizations (TCOs) and terrorist groups with respect to radiological and nuclear weapons and materials. START has assembled a multidisciplinary research team to examine the prospective dynamics of such a nexus with respect to Central America (including the Caribbean). The data collection team at the University of Pittsburgh identified 215 criminal organizations operating in the region and produced profiles of each. Investigators employed quantitative and qualitative assessment tools in order to identify the highest-threat organizations. A parallel effort conducted by START involved a detailed compilation of current literature on the nexus between radiological and nuclear weapons, and organized crime and terrorist organizations in the region, followed by field work and case studies in related domains to shed light on how the potential nexus might function.

New Analytic Methods for the Exploitation of Open-Source Structured Databases on the Pursuit of WMD Terrorism

INVESTIGATOR: Gary Ackerman

The Profiles of Incidents Involving CBRN by Non-state actors Database (POICN) is a relational, open-source database including information on terrorist plots, acquisitions and attacks relating to chemical, biological, radiological and nuclear (CBRN) agents. The initial version of the database focuses on international and domestic CBRN terrorism cases from 1998 to 2009. The full database is comprised of more than 70 incident-level variables including event type, agent type, acquisition method, target

type, perpetrator group and various casualty counts, making it the most in-depth open-source database of its kind. POICN is unique among terrorism databases in its transparent classification of source validity and includes variables that rate the uncertainty often present in and between sources. The event-level data in POICN will be aggregated to an actor-level dataset through coordination with the Big, Allied and Dangerous (BAAD) Database. Network analysis on the combined dataset will be used to decipher group characteristics and profiles of non-state actors interested in pursuing or using CBRN weapons.

The creation of POICN is funded by grants from the Defense Threat Reduction Agency of the U.S. Department of Defense and the U.S. Department of Homeland Security.

Big, Allied, Dangerous and Charitable?

INVESTIGATORS: Victor Asal & R. Karl Rethemeyer

While all terrorist organizations engage in violence, some have a complicated dual identity, in which they also serve as social service providers in the communities in which they operate and/or which they claim to represent. The decision for an organization to engage in charitable behavior can be triggered by a range of interconnected considerations, such as concern for a neglected community, desire to co-opt support for an organization and its cause, effort to compete with or cooperate with other organizations or need to recruit new members. Questions arise as to how their service provision mission affects, if at all, other behaviors and actions of these organizations. This project is examining that question.

Building on Asal and Rethemeyer's Big, Allied and Dangerous (BAAD) dataset, the research team is collecting original data on the social service roles of more than 400 terrorist organizations. These data are supporting statistical analyses designed to provide new knowledge about the patterns of social service activity across this collection of organizations and about the general behaviors of those organizations that do engage in social service provision compared to that of those organizations not engaged in social service.

Terrorism and Violence in Colombia

INVESTIGATOR: Enrique Arias

Colombia has experienced almost 7,000 terrorist incidents in the past four decades—more than any other country. Their frequency presents an important case for understanding dynamics of terrorism and terrorist organizations over time within one geographic area, particularly in a country characterized by high internal economic, political and historical diversity. This diversity within Colombia allows for important in-country comparisons to provide a more nuanced understanding of the causes and effects of long-term terrorist activity.

This profile of terrorism in Colombia involves qualitative case studies of distinct regions within the country, based on original data collected through field research as well as data from primary and secondary sources, focusing on in-country variation in terrorist behavior as well as variation in local governance structures and effectiveness. In addition, the research team is conducting quantitative analyses of changes in terrorist behavior and operations throughout the country as political and social conditions evolve, employing data from START's Global Terrorism Database integrated with previously unreleased terrorism data from the Colombian government as well as from regional governments in the country.

The Social Determinants of Terrorist Organizations' Resilience in Latin America

INVESTIGATOR: Jóhanna Birnir

Latin America has experienced more terrorist activity in the past four decades than any other region. These attacks have been perpetrated by some short-lived organizations that have had minimal impact as well as by robust, durable organizations like Sendero Luminoso (Shining Path) and the Revolutionary Armed Forces of Colombia (FARC). Similarly, while this region has been greatly affected by violence and conflict, there remains an array of organizations that have relied exclusively on non-violent approaches to bringing about social change. This project is studying the dynamics of organizations in Latin America to generate insights about which types of groups are more likely to use violent, as opposed to non-violent

strategies, and why some violent organizations have proven to be so resilient in this region.

To answer these questions, the research team is collecting structured data on 32 organizations that represent the interests of ethnic minorities in Bolivia, Colombia, Ecuador and Peru. These new data will contain information on organizational characteristics (including duration of organization), organization-state relations, external support for the organizations and organizational behavior (including the use of violence) and will be used in analyses designed to highlight factors that contribute to organizational resilience and to develop assessments of organizations' likelihood of adopting extreme tactics such as terrorism in the future.

This project is funded by the Office of International Programs of the Science and Technology Directorate, U.S. Department of Homeland Security.

Effectiveness of Counterterrorism Strategies

INVESTIGATOR: Martha Crenshaw

While almost all countries share a common goal of countering terrorism and terrorist threats, countries do not share a common approach for trying to achieve this goal. Rather, countries tend to pursue independent, albeit sometimes related, counterterrorism strategies—strategies that reflect national interests, priorities, perceived threats, resources and a host of other factors that this project is examining in an effort to improve understanding of the dynamics of counterterrorism policy development. In addition, this project is examining the impact and effectiveness of these different strategies as related to the ultimate goal of reducing the threat of terrorist attacks.

This project involves qualitative analyses of the development and implementation of government counterterrorism policies in countries in Europe, Asia, Africa and the Middle East, as well as the United States, and efforts by international and regional organizations such as the United Nations, European Union and NATO. Researchers are reviewing open-source historical documents, supplemented by interviews with past and current officials from the countries and organizations being studied. The team is also examining the impact of counterterrorism measures from the perspective of the terrorist via review of memoirs, public

statements, media interviews, correspondence and other evidence of reactions to government decisions and actions from terrorists.

Dealing with the Devil: When Bargaining with Terrorists Works

INVESTIGATORS: Laura Dugan & Erica Chenoweth

As with any policy goal, many different approaches can be adopted in efforts to stop terrorism. This project looks specifically at the effect and effectiveness of conciliatory—as opposed to confrontational—approaches taken by governments in dealing with recognized terrorist threats to understand under what conditions such a strategy might be more effective.

This research builds on the Global Terrorism Database (GTD) and the Minorities at Risk/Organizational Behavior (MAROB) data sets. For this project, researchers are employing automated data extraction tools to collect open-source materials on the range of counterterrorism policies enacted by governments in Israel, Lebanon, Egypt, Turkey and Algeria from 1980 through 2004 and to categorize those policies along a spectrum from conciliatory to confrontational. These new data are being integrated with existing data on political organizations and their behaviors (MAROB), terrorist activity in general (GTD) and political conditions within a state. The researchers are using multivariate statistical analyses to determine the effect and effectiveness of counterterrorism strategies under a range of conditions.

Countering Extremist Ideology Among Detainees: The Effects and Effectiveness of De-Radicalization Programs

INVESTIGATOR: Arie Kruglanski

Through existing relationships with leaders of the Abu Sayyaf, a group in the Philippines affiliated to al-Qa'ida, and Tamil Tigers detainees in Sri Lanka, this research team will have the opportunity to collect unique data from detainees as well as from family members of these detainees. Data collection will involve:

- structured interviews with the clerics carrying out the program,
- content analysis of their manuals and printed materials used in the deradicalization work,
- structured interviews with imprisoned and released terrorists and insurgents,
- a battery of questionnaires designed to tap the subjects' attitudes toward jihad, the U.S. and the rehabilitation program as such,
- questionnaires assessing the detainees relevant personality variables and social roles in the organization.

In addition to collecting the self-report data mentioned above, the researchers will carry out an implicit analysis of the language used by the clerics and the inmates, and observe the changes it may undergo over time.

Using Global Terrorism Data to Model Counterterrorism Policies in Sri Lanka

INVESTIGATORS: Gary LaFree & Sue-Ming Yang

Many counterterrorism efforts reflect a strategy of deterrence—inducing terrorists or would-be terrorists to cease violence due to fear of punishment. Such a strategy can result in a backlash effect, however, whereby efforts to quash a group actually serve to further mobilize and radicalize a group and its supporters. This project examines both the deterrent and backlash effects of measures taken by the Sri Lankan government against one of the most prolific terrorist organizations of modern times, the Liberation Tigers of Tamil Eelam (LTTE).

This research team is tracking the trajectory of LTTE violence, examining both the frequency and intensity of the group's attacks from 1970 through 2008, using data from START's Global Terrorism Database. Information on government countermeasures targeting LTTE is being collected through reviews of primary and secondary documents as well as through interviews with Sri Lankan public officials. The team will employ these data on terrorism and counterterrorism in statistical models designed to measure and evaluate the impact of

specific government interventions on future LTTE actions to provide insights into the value of deterrent strategies and the potential of backlash.

U.S. Attitudes Toward Terrorism and Counterterrorism: A Supplemental Module for the General Social Survey

INVESTIGATORS: Gary LaFree, Stanley Presser & Roger Tourangeau

This project seeks to increase understanding of the dynamics of the American public’s attitudes and beliefs about terrorism and counterterrorism. The team will collect systematic survey data from a representative sample of Americans in response to a range of newly developed survey questions through a partnership with the well-established General Social Survey (GSS) in two successive waves, 2012 and 2014. The supplemental GSS module will be developed by survey methodologists, following consultations with experts who study the dynamics of terrorism, counterterrorism and community resilience, as well as with practitioners and officials from throughout the homeland security community charged with developing policy-relevant programs and tools. Findings will be used in analyses to generate baseline trends on U.S. attitudes and beliefs about terrorism and counterterrorism and will support development of methods, models and technologies to enhance community resilience. Improved understanding of public attitudes can inform programs and tools related to managing public risk perception; increasing effectiveness of pre- and post-event communication by federal, state and local officials; and building and supporting more resilient social networks within and across communities. These data can also contribute to efforts to determine the nature of threats to the homeland, including individuals’ or groups’ potential use of improvised explosive devices (IEDs) against the United States.

This project is funded by the Human Factors/Behavioral Sciences Division of the Science and Technology Directorate, U.S. Department of Homeland Security.

Assessing Success and Failure in Terrorism and Counterterrorism: Development of Metrics on the Global War on Terror and the Global Jihad

INVESTIGATOR: Rashmi Singh

This project evaluates the impacts of U.S. efforts against the threat presented by adherents of jihadist philosophy, taking into consideration the degree to which these efforts have helped to achieve U.S. policy goals as well as how the targets of these policies have perceived U.S. actions and efforts and how jihadist organizations, including al-Qa’ida, have responded to them.

The research team is developing an index designed to measure impacts of counterterrorism efforts related to stated policy aims of the U.S. government. Similarly, the research team is developing an index to measure jihadists’ progress in achieving their goals, even in the face of countermeasures. Among other factors, these indices will reference the scope, nature and frequency of al-Qa’ida attacks; breadth of the al-Qa’ida network; and costs (economic and otherwise) of efforts on both sides of this conflict. Project researchers are collecting data relevant to these metrics from the past 10 years to generate findings regarding overall success and failure of measures.

AREA 3 SOCIETAL IMPACTS OF TERRORISM

Domestic Weapons of Mass Destruction: Populations at Risk from U.S. Chemical Facilities Releases

INVESTIGATOR: Susan Cutter

While ample attention has been paid to the possibility that a terrorist could develop a weapon of mass destruction that would have a catastrophic impact on the United States, less energy has been devoted to the potential impacts to U.S. communities of a release—either intentional or accidental—from one of the many chemical facilities in the United States working with and developing materials that could cause a grave threat to exposed communities. This project is designed to address this gap by considering the

threats posed by a potential release from such facilities, taking into consideration the conditions and characteristics of the communities most likely to be impacted.

The research team is combining data on the presence of chemical facilities in communities with localized demographic data and employing spatial analysis methods to determine the spatial distribution of threats (including sabotage of theft of materials) and to uncover and understand patterns in the types of threats and the nature of communities at risk of exposure. These empirical data will be integrated into theoretical models of expected behavioral responses to populations at risk in an effort to spatially model the likely responses within the nation’s urban areas.

Societal Ripple Effects from Terrorist Attacks and Risk Communication Strategies Based on Fear and Anger

INVESTIGATORS: Xiaoli Nan & Ben Sheppard

The social amplification of risk framework, which introduced the concept of “accidents as signals,” explains why some events like terrorism have enormous ripple effects that extend beyond the immediate direct damage to encompass many other victims. Risk communicators in the days and months following terrorist attacks can benefit from increased awareness of the importance that effective risk communication can play and acquire a greater understanding of what types of messages would elicit desired behavioral responses. This project aims to improve understanding of avoidance and adaptive behaviors exhibited following a mass-casualty terrorist event as related to public responses to messages and to offer recommendations of what types of messages (such as those framed around either fear or anger) may be most effective and most likely to elicit desired behavioral responses.

The research team is conducting case studies of the post-attack ripple effects demonstrated after three major incidents in distinct contexts: 9/11, the July 2005 London bombings and the Second Intifada. Based on findings from these cases, the researchers are developing a simulation exercise based on the effects of an improvised explosive device attack

within the United States. This will form the basis for experimental research on the impact of fear-based, anger-based and mixed-content messages in the wake of a terrorist attack.

This project is funded by the National Center for Risk and Economic Analysis of Terrorism Events.

Quantitative Index of the Public Health Impacts of Terrorism

INVESTIGATORS: Fran Norris & Kathleen Sherrieb

While the immediate impacts of large-scale terrorist events are often typically evident, some longer-term impacts are more subtle. These long-term impacts, however, can potentially have detrimental effects on societies, especially if the effects are overlooked in light of more immediate concerns. This project examines long-term public health effects of major terrorist events, looking particularly at maternal health in areas victimized by mass-casualty events.

The research team is conducting time-series analyses of health data beginning five years before high-profile terrorist attacks in New York City (World Trade Center, 2001), Madrid (commuter trains, 2004) and London (Underground, 2005), and continuing at least two years after the event. Indicators of maternal health being considered are birth weight, infant mortality and preterm birth rates. Analyses will uncover whether significant changes appeared in these crucial indicators in the aftermath of terrorist events—a finding that would point to lingering health effects beyond the immediate impact of an attack.

Building Community Resilience Through Public Involvement: The Extended Communities Advancing Resilience Toolkit (CART-E)

INVESTIGATORS: Betty Pfefferbaum & Rose Pfefferbaum

Many public agencies encourage the development of resilient communities in the United States—communities that can weather catastrophic events, be they acts of terrorism or acts of nature, and emerge from them even stronger. While this is a national priority, debate continues over what the key factors of a resilient community are and how to best foster

them. This project builds on previous scientific studies of resilience to develop tools for communities to assess their resilience capacities and to develop those capacities in key areas.

This project builds on the Communities Advancing Resilience Toolkit (CART) previously developed with support from START. In this phase of the project, researchers are developing instruments for communities to assist them in:

- *collecting demographic data*
- *creating community capacity inventories*
- *generating community ecological maps*
- *conducting neighborhood tours*
- *developing asset maps*
- *undertaking vulnerability assessment*
- *identifying barriers to disaster prevention, preparedness, response and recovery.*

CART-E is being developed in conjunction with Community Emergency Response Teams (CERTS) in selected cities to ensure that the tool has utility and is accessible to community leaders in general.

Organizational Factors in the Successful Application of Community Engagement Principles for Bioterrorism Preparedness

INVESTIGATOR: Monica Schoch-Spana

It may seem obvious that members of the community would be important sources to involve in the development of community preparedness plans. But institutional barriers as well as developed habits at all levels of government often lead to preparedness and planning being a topic discussed and decided upon by selected officials, rather than engaging the public in the process. This research highlights institutional designs as well as practices that local leaders can implement to encourage community engagement in planning and preparedness efforts.

This research draws on county-level data to determine the state of community engagement in planning in the United States and to identify structural factors that both encourage

and discourage community engagement. The research team will also conduct case studies of communities where public engagement in catastrophic planning has evolved as the norm to determine the key developments and factors that led to this inclusive approach.

An Integrated Conception of Community Resilience

INVESTIGATORS: Kathleen Smarick, Fran Norris, Betty Pfefferbaum, Rose Pfefferbaum, David Salvesen, Kathleen Sherrieb & Gavin Smith

Resilient communities are those best equipped to reduce vulnerabilities and recover swiftly after disasters, but there is no simple blueprint for constructing resilient communities. Rather, community resilience is a function of both the physical and the social resilience capabilities present in a given community. Physical resilience follows from the community’s actions to create, protect and/or restore high-quality built and natural environments, including infrastructure and resources (water, land, etc.) that are critical to the population’s health, safety and quality of life, whereas social resilience follows from the community’s actions to create, protect and/or restore high-quality social and economic environments that promote the well-being of community members. To date, however, resilience research efforts have focused on one or the other of these related components of resilience.

This project is designed to remedy this gap in the science by developing an integrated model of community resilience that explicitly addresses physical and social resilience. The model is being developed and tested using multiple data sources, including surveys of key community leaders as well as archival data related to components of physical and social resilience.

This project, funded through a Multi-Disciplinary, Multi-Institutional Research award from by the U.S. Department of Homeland Security’s Office of University Programs, involves researchers from START and from the Department of Homeland Security Center of Excellence on Natural Disasters, Coastal Infrastructure and Emergency Management.

AREA 4
CROSS-CUTTING
RESEARCH

Global Terrorism Database (GTD)

INVESTIGATORS: Gary LaFree & Laura Dugan

Understanding terrorist dynamics requires objective data on the scope and nature of the phenomenon. The Global Terrorism Database (GTD) provides this baseline for terrorism research. The GTD is the world's largest open-source database on terrorist incidents, providing detailed structured information on when, where and how an incident occurred, who the perpetrator was and what the impact of the attack was. The GTD currently contains information on nearly 100,000 incidents since 1970. It is a dynamic project, with information on new incidents and new information on historical events continuously being integrated into the data collection. This project is working to update and validate the contents of the GTD while using its contents to conduct innovative analysis about terrorist behavior. In addition, the research team is continuing efforts to make the data easily accessible to the public.

Through partnership with the Institute for the Study of Violent Groups at the University of New Haven, the project team continues to add vetted data on current events to the GTD, while integrating additional relevant information on new and old events from open-source materials, including trial transcripts, secondary source materials like specialized monographs, specialized databases such as those maintained by the United Nations and in-person interviews with experts and practitioners. Building on past work involving the GTD, the research team is applying advanced statistical methods for identifying important trends and patterns related to radicalization, terrorist operations, counterterrorism and the impact of terrorism.

Turning to Terrorism: Ethnic, Religious and Extremist Organizations

INVESTIGATORS: Jonathan Wilkenfeld & Victor Asal

Terrorist organizations represent a small subset of all politically mobilized organizations that have grievances against policies or situations. A key question for terrorism researchers and analysts is: Why do some of these aggrieved organizations turn to terrorism as a strategy while others avoid the use of violence in their efforts? This project is helping to answer this question through an ambitious effort to collect and analyze data on all organizations in two regions (the Middle East/North Africa and Eastern Europe) that represent the interests of ethnic minorities in countries of those regions.

Continuing to develop and update the Minorities at Risk/Organizational Behavior (MAROB) data set is at the core of this project, with the research team expanding the scope of MAROB to include a sample of right-wing extremist organizations and jihadist organizations in the United States. These data on the behaviors, structures, support and operations of violent and non-violent groups with similar grievances are being employed in statistical models designed to evaluate which factors are associated with the use of and desistance from terrorism. These data will be complemented by analysis of experimental data collected from the United States, Turkey and Malaysia on the impact of grievance, risk and social-personality variables on the justification, endorsement and intention to use violence at the individual level. Finally, the research team is examining the role of MAROB groups in the emergence of hybrid terror-crime networks in the Middle East, post-communist states and Latin America.

Creation and Analysis of an Integrated U.S. Security Database (IUSSD)

INVESTIGATORS: Steven Chermak, Jackson Cothren, Kelly Damphousse, Laura Dugan, Joshua Freilich, David Ihrle, Gary LaFree, Brooke Liu, Erin Miller, Kathleen Smarick & Brent Smith

The IUSSD project is a multifaceted approach to studying terrorism and extremism in the United States by integrating, enhancing and expanding empirical data on terrorist actors and events in the United States and conducting sophisticated and innovative analyses of the dynamics of U.S.-based terrorism and extremist violence.

At the core of this project is the development of the Terrorism and Extremist Violence in the United States (TEVUS) relational database, which combines event data from existing START-funded data sources including the American Terrorism Study (ATS), the Extremist Crime Database (ECDB) and the Global Terrorism Database (GTD). Each of these component databases will be validated and expanded using primary and secondary sources to maximize the accuracy and completeness of the data. TEVUS will also include newly collected data from the Profiles of Perpetrators of Terrorism in the United States (PPT-US) data set, which contains both narrative and structured information on all perpetrator organizations that have been active in the United States since 1970.

In addition, the countermeasures component of the IUSSD project is collecting and analyzing new quantitative data and conducting case studies on counterterrorism, focusing on measures against five terrorist threats: anti-abortion terrorism in the United States, eco-terrorism (Animal Liberation Front/Earth Liberation Front) in the United States, homegrown Islamic terrorism in the United Kingdom, al-Qa'ida in the Islamic Maghreb in North Africa and Armed Forces of National Liberation (FALN) in Puerto Rico and the mainland United States.

Finally, the IUSSD project includes the development of an online interface to the integrated data in TEVUS, as well as analytic tools for homeland security practitioners. These tools provide accessible, operationally relevant information to law enforcement personnel to aid in the assessment of potential threats regarding a particular jurisdiction, perpetrator or tactic.

This project is funded by the Human Factors/Behavioral Sciences Division of the Science and Technology Directorate, U.S. Department of Homeland Security.

Border Crossings and Terrorist Attacks in the United States: Lessons for Protecting Against Dangerous Entrants

INVESTIGATORS: Aaron Elkins, Elyse Golob, Gary LaFree, Jay Nunamaker, Erin Miller, Kathleen Smarick & Brent Smith

This project examines how the United States can better protect itself against dangerous entrants who seek to engage in terrorism against the U.S. homeland as well as offenders fleeing terrorist attacks. The effort builds upon historical data about terrorist activity as well as assessments and analyses of current screening practices at U.S. border crossings.

Researchers from the University of Maryland and the University of Arkansas who are affiliated with START are collecting, compiling and analyzing data on the nature of border crossings by individuals known to have been involved—directly or indirectly—with attempted or executed terrorist attacks. This data collection and analysis effort has been framed by insights about the dynamics of border crossing with researchers from the University of Arizona affiliated with BORDERS who, in turn, will develop guidance for screening potential terrorists at the border.

The project, funded through a Multi-Disciplinary, Multi-Institutional Research award from the U.S. Department of Homeland Security's Office of University Programs, involves researchers from START and the National Center for Border Security and Immigration (BORDERS) Department of Homeland Security Center of Excellence.

Terrorism and Extremist Violence in U.S. Counties

INVESTIGATORS: Amy Adamczyk, Victor Asal, Bianca Bersani, Steven Chermak, Kelly Damphousse, Kathleen Deloughery, Shira Fishman, Joshua Freilich, Ryan King, Gary LaFree, Clark McCauley, Sophia Moskalenko, Fran Norris, Kathleen Sherrieb, Kathleen Smarick & Brent Smith

This project seeks to improve understanding of the local conditions under which violent extremism is likely to occur. Are U.S. communities that experience violent extremism—or that produce a terrorist who attacks elsewhere—reliably different from other communities? Building upon related START projects and employing a range of different

data sources and analytical methods, the project will specify community characteristics related to the occurrence and frequency of violent extremism and terrorism.

Specifically, the project will identify and examine the relationship between the occurrence of extremist violence in U.S. counties, and counties from which violent extremists emerge and operate, and characteristics of those counties related to:

- *the nature and robustness of civil society, including levels of other criminal activity (such as hate crimes) and the integration of immigrant populations*
- *the relevance of extremist ideologies, including levels of non-violent extremist activity*
- *interest in extremist media*
- *public health and community well-being economic development*

This project is funded by the Human Factors/Behavioral Sciences Division of the Science and Technology Directorate, U.S. Department of Homeland Security.

The Ecology of Terrorist Organizations

INVESTIGATORS: Jonathan Wilkenfeld, Gary LaFree, Victor Asal & Ed Crenshaw

The goal of this project is to advance understanding of the behavior of terrorist organizations as agents of change. While there has been enormous public interest in terrorist organizations, especially since 9/11, systematic unclassified empirical data on terrorist organizations, along with similar political organizations that choose not to use terrorism, remain elusive. This project addresses this knowledge gap by assembling a major new dataset, then using the tools of the social and behavioral sciences to develop and test models that predict which political organizations are most likely to use terrorist violence to pursue goals.

This project will generate interdisciplinary insights into the behavior of political organizations as a function of local, national and international political, social and economic variables, as well as organizational characteristics. It will accomplish this by analyzing terrorist organization behavior

as part of a larger social ecology. This research partnership involves more than 15 researchers from three major research universities representing a range of academic disciplines and sharing a substantive interest in the dynamics of human behavior. The inherently multidisciplinary ecological framework constitutes an important advance. Political scientists, criminologists and sociologists are collaborating to construct integrated models of organizational behavior that take into account the broadly defined context in which an organization operates, building upon existing theories and concepts about social mobilization, political violence and criminal gang behavioral dynamics.

This project is funded by the Human Social Dynamics program of the National Science Foundation.

Completed Projects

LISTED ALPHABETICALLY BY LEAD INVESTIGATOR NAME.

Details on findings from each of these projects is available at the *START* website www.start.umd.edu/start/research/projects. Unless otherwise noted, research was funded by the Center of Excellence program of the Office of University Programs, Science and Technology Directorate, U.S. Department of Homeland Security.

AREA 1 TERRORIST GROUP FORMATION AND RECRUITMENT

Where the Extremes May Touch: Islamic Networks, Extremism and Terrorism, Gary Ackerman and Jeffrey Bale, project period: 2006–09

Militant Islamic Networks in the West, Jeffrey Bale, project period: 2005–08

Content Analysis of al-Qa'ida Statements, Deborah Cai, project period: 2006–09

Patterns of Radicalization in Political Activism, Donatella della Porta, project period: 2006–09

Community-level Indicators of Radicalization: A Data and Measurement Workshop, Shira Fishman, project period: 2009*

Creation of a Database of U.S. Extremist Crime, 1990–2005, Joshua Freilich and Steven Chermak, project period: 2007–08

Martyrs Without Borders: Iraq's Foreign Fighters and the Third Generation of Global Jihad, Mohammed Hafez, project period: 2008–10

Guerilla Insurgency: The Springboard to Terrorism? Paul Huth and Mark Lichbach, project period: 2008–10

Effects of Uncertainty on Support for Religious Extremism, Arie Kruglanski, project period: 2005–09

Support for Terrorism as a Function of Individualistic and Collectivistic Goals, Arie Kruglanski, project period: 2005–08

International Survey Capability, Steven Kull and Stephen Weber, project period: 2005–09

Distinctive Characteristics of Terrorist Groups, Gary LaFree and Laura Dugan, project period: 2005–09

Predisposing Root Causes of Terrorism, Gary LaFree and Laura Dugan, project period: 2005–09

State Response and Terrorist Activity, Clark McCauley, project period: 2005–09

Tracking Sympathy and Support of Muslims for Terrorism in Muslim Countries and in the United Kingdom, Clark McCauley, project period: 2008–10

Tracking Sympathy and Support of Muslims for Terrorism in the United States, Clark McCauley, project period: 2008–10*

Measuring Political Radicalization: Diaspora Support for Terrorism Among Ottawa's Lebanese Muslim Community, Clark McCauley, Christian Leuprecht and Bidisha Biswas, project period: 2008–10

The Role of the Media in the Recruitment of Terrorists: Mass Communication and the Battle for the Hearts and Minds of Muslims in Indonesia, Douglas McLeod, project period: 2007–09

Terrorism and Ethnic Political Violence, Jonathan Wilkenfeld and Victor Asal, project period: 2005–09

Modeling and Simulation of Individual and Group Decision-making, Jonathan Wilkenfeld, Victor Asal and Anthony Lemieux, project period: 2005–08

AREA 2 TERRORIST GROUP PERSISTENCE AND DYNAMICS

Anatomizing Radiological and Nuclear Non-State Adversaries, Gary Ackerman, project period: 2009–10

Influencing Violent Extremist Organizations, Gary Ackerman, project period: 2011

More Bang for the Buck?: Examining the Effect of Technological Change on Terrorist Use of Weapons of Mass Destruction, Gary Ackerman and Jeffrey Bale, project period: 2006–10

Terrorist Groups and Weapons of Mass Destruction, Victor Asal, Gary Ackerman and R. Karl Rethemeyer, project period: 2005–08

Social Network Analysis for Combating Terrorist Networks, Victor Asal and R. Karl Rethemeyer, project period: 2007–09

Terrorist Strategies and Tactics: When Do Terrorists Decide to Attack the U.S.? Martha Crenshaw, project period: 2005–09

Shifting Terrorism Trends Across Time and Space, Susan Cutter, project period: 2005–09

Assessing the Effectiveness of Current Deradicalization Initiatives and Identifying Implications for the Development of U.S.-Based Initiatives in Multiple Settings, John Horgan, project period: 2008–09*

Punishing Terrorism: Examining the Multiple Stages of Federal Punishment Across Political Contexts, Brian Johnson, project period: 2009–10

Global Nuclear Detection Architecture: A Study of South Asia, Sharad Joshi, project period: 2008–09

The Impact of Israeli Counterterrorism Interventions on Rate and Intensity of Terrorist Activity: Hazard Modeling and Time Series Approaches, Arie Kruglanski, project period: 2008–10***

Threat Assessment of Terrorist and Extremist Organizations in Indonesia, the Philippines and Thailand, Gary LaFree, project period: 2009–10***

Modeling Risk of Future Terrorist Attacks, Gary LaFree and Laura Dugan, project period: 2005–09

Dynamics of Terror and Counterterrorism, Gary LaFree, Laura Dugan and Robert Greenbaum, project period: 2005–09

Empirical Analysis of IED Attacks, Gary LaFree and Richard Legault, project period: 2008–09*

Understanding Desistance from Terrorism, Clark McCauley, project period: 2005–09

Hizb-ut-Tahrir al-Islami: The Challenge of a Non-Violent Radical Islam, Clark McCauley and Emmanuel Karagiannis, project period: 2005–09

Mobilization for and Against Terrorism in the Islamic World, Clark McCauley, Mohammed Hafez and Mansoor Moaddel, project period: 2005–09

Behavioral Assessments Based on Automated Text Analyses, James Pennebaker, project period: 2008–10

Measuring Intervention Success in Terrorist Activities, Brent Smith and Kelly Damphousse, project period: 2008–10

Correctional Response to Terrorism: Organizational Change and Strategies, Bert Useem and Obie Clayton, project period: 2005–08

Police Responses to Terrorism: Lessons from the Israeli Police, David Weisburd, project period: 2006–10

Key Dimensions in Understanding Terrorist Bomb Attacks, Margaret Wilson, project period: 2008–10*

AREA 3 SOCIETAL IMPACTS OF TERRORISM

Muslim Community Integration: Journey into America, Akbar Ahmed, project period: 2008–10*

Preparedness for Catastrophic Events, Hamilton Bean, Bethany Brown, Paul Harwood, Dennis Mileti, Monica Schoch-Spana and Kathleen Smarick, project period: 2008–10**

National Household Survey on Preparedness Behaviors, Linda Bourque and Dennis Mileti, project period: 2005–09

The Role for State Governments in Community Resilience, Ann Bowman and Mark Tompkins, project period: 2008–11

Organizational Dimensions of Risk Communication during Homeland Security Crises, Caron Chess, project period: 2005–09

Population Vulnerability Analysis, Spatial Social Science and GIS, Susan Cutter, project period: 2005–09

Social History of Anthrax, Susan Jones, project period: 2005–08

Textual Analysis of Electronic Media Coverage of Homeland Security-Related Risks, Lisa Keränen, project period: 2006–08

Modeling and Simulation of Public Response to Threat and Attacks, Dennis Mileti, project period: 2005–08

Developing Community Resilience for Children and Families, Fran Norris and Betty Pfefferbaum, project period: 2005–09

Best Practices for Preparing Communities: Citizen Engagement in Public Health Planning, Monica Schoch-Spana, project period: 2005–08

School-Based Preparedness and Intervention Programs, Terence Thornberry, Delbert Elliott and Sabrina Mattson, project period: 2006–09

Community Field Studies and Analyses of Preparedness Networks, Kathleen Tierney, project period: 2005–09

Communicating Risk of Mass Casualty Terrorism in Diverse Communities, Elaine Vaughan, project period: 2005–09

Campus Dialogues, Jonathan Wilkenfeld and Jeffrey Summit, project period: 2006–09

* indicates support for this project from the Human Factors/Behavioral Sciences Division of the Science and Technology Directorate, U.S. Department of Homeland Security

** indicates support for this project from the Federal Emergency Management Agency, U.S. Department of Homeland Security

*** indicates support for this project from the Office of International Programs, Science and Technology Directorate, U.S. Department of Homeland Security

START's Pre- and Postdoctoral Terrorism Research Award Program funds 10 to 20 graduate students and junior scholars per year. Since 2005, the Terrorism Research Awards have supported 83 advanced graduate students and junior scholars.

2010-11 TERRORISM RESEARCH AWARDS

Terrorism and State Fragility

INVESTIGATOR: Susan Fahey
 INSTITUTION: Stockton College
 FACULTY MENTOR: Gary LaFree

This project investigates the degree to which terrorism is more likely to occur during times of political instability rather than during political stability.

Identity and the Role of Relative Deprivation in Support for Terrorism

INVESTIGATOR: Liran Goldman
 INSTITUTION: Claremont Graduate University
 FACULTY MENTOR: Anthony Lemieux

This project attempts to further understanding of why individuals join terrorist organizations using theories of relative deprivation, i.e. the idea that some individuals perceive their groups to be at some disadvantage to other groups.

Structural and Behavioral Factors Constraining the Capacity of Homeland Security Institutions to Collaborate

INVESTIGATOR: Erik Iverson
 INSTITUTION: Tufts University
 FACULTY MENTOR: Kathleen Smarick

This project utilizes theories of interorganizational collaboration to explore how homeland security organizations collaborate to manage an increasingly turbulent and unpredictable environment.

Snitching Behavior in Cases of Far-Right, Islamic Jihadi and Environmental Extremist Violence

INVESTIGATOR: Tarra Jackson
 INSTITUTION: John Jay College of Criminal Justice, City University of New York
 FACULTY MENTOR: Joshua Freilich

This research systematically examines the role of snitching in terrorism-related incidents across violent extremist ideologies, comparing snitching behavior in homicide incidents perpetrated by far-right and al-Qa'ida-influenced, and local religiously inspired extremists, as well as bombings and arsons committed by animal and environmental extremists in the United States.

Pathways to Radicalization Among Homegrown Extremists

INVESTIGATOR: Ashmini Kerodal
 INSTITUTION: John Jay College of Criminal Justice, City University of New York
 FACULTY MENTOR: Joshua Freilich

This project utilizes panel data from the Extremist Crime Database to assess the individual, group and national variables that contribute to the radicalization of far-right extremists.

Terrorist Group Participation in Elections

INVESTIGATOR: Aila Matanock
 INSTITUTION: Stanford University
 FACULTY MENTOR: Martha Crenshaw

This project uses case studies on Northern Ireland and Colombia, as well as a global dataset from 1980-2010, to explain why militant groups—including terrorist groups—sometimes participate in elections as political parties while simultaneously renouncing violence.

Western Counterterrorism Responses after 9/11: Cultural Dynamics, International Cooperation and Policy Adaptation

INVESTIGATOR: Carlotta Minnella
 INSTITUTION: Harvard University
 FACULTY MENTOR: Peter Neumann

This project explores how cooperation by national security elites within key intergovernmental institutions and ad hoc networks can engender a change in cultural politics that will affect a country's policy preferences in the counterterrorism arena.

Observable Behaviors Present in Political Assassination Incidents

INVESTIGATOR: Angela Scholes
 INSTITUTION: University of Surrey
 FACULTY MENTOR: Margaret Wilson

The purpose of the project is to examine the observable behaviors present in terrorist-perpetrated assassinations, with a focus on three levels: the behavior of the assassin, the behavior of the victim and the incident itself.

Variation in Military and Political Resilience Demonstrated by Non-State Military Actors in the Middle East

INVESTIGATOR: Ora Szekely
 INSTITUTION: McGill University
 FACULTY MENTOR: Victor Asal

Through a comparison of Hamas, Hezbollah and the PLO, this project explores the question of why some non-state actors are able to survive attempts by much stronger state militaries to wipe them out in a particular area, while others, under very similar circumstances, do not.



Urban Insecurity and Terrorism on the U.S.-Mexico Border

INVESTIGATOR: Margath Walker
 INSTITUTION: San Diego State University
 FACULTY MENTOR: Shawn Flanigan

This project interrogates how violence, terrorist threats and the perception of those threats have impacted networks, coalitions and partnerships among not-for-profit organizations on the U.S. side of the United States-Mexico border.

2005-10 TERRORISM RESEARCH AWARDS

AREA 1: TERRORIST GROUP FORMATION AND RECRUITMENT

Role of the Internet in Extremist Group Recruitment

INVESTIGATOR: Kurt Braddock
 INSTITUTION: Pennsylvania State University
 FACULTY MENTOR: John Horgan

Patterns of Right-Wing Political Radicalization Using the Internet within the United States and Europe

INVESTIGATOR: Manuela Caiani
 INSTITUTION: European University Institute
 FACULTY MENTOR: Donatella della Porta

Human Motivations and Goal Setting in Terrorist Motivations and Intentions

INVESTIGATOR: Xiaoyan Chen
 INSTITUTION: University of Maryland
 FACULTY MENTOR: Arie Kruglanski

Democratic Pieces: The Inadvertent Effects of Democracy on Terrorist Group Formation

INVESTIGATOR: Erica Chenoweth
 INSTITUTION: Harvard University
 FACULTY MENTOR: Gary Ackerman

Perceptions of Social Groups: How Lay Persons Attribute Characteristics that Differentiate Social Groups to an Underlying, Immutable Cause

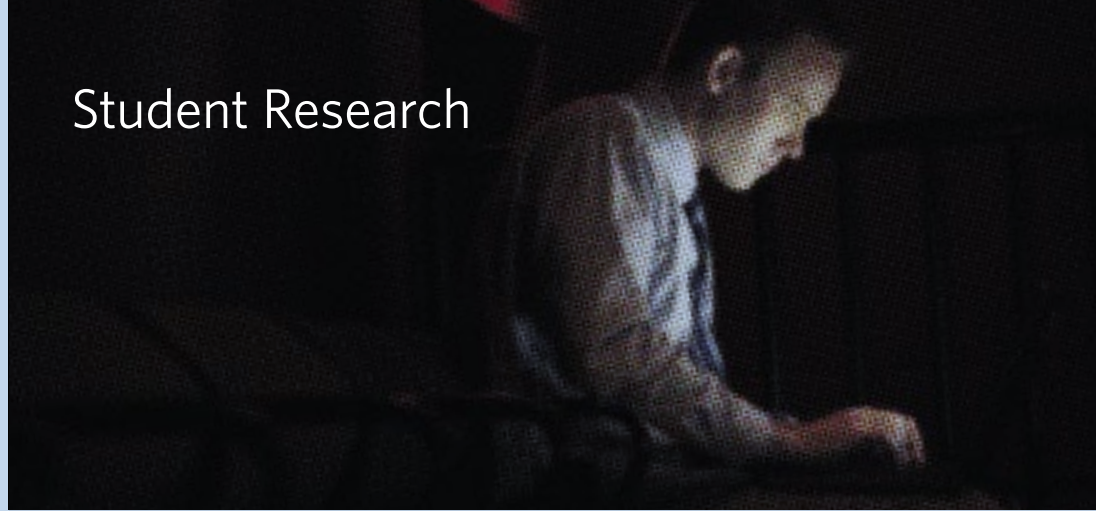
INVESTIGATOR: Natasha Fedotova
 INSTITUTION: University of Pennsylvania
 FACULTY MENTOR: Clark McCauley

Humiliation as Motivation for Extremism and Violence

INVESTIGATOR: Jennifer Goldman
 INSTITUTION: Columbia University
 FACULTY MENTOR: Arie Kruglanski

Reactions to Policy as Motivations for Terror Support

INVESTIGATOR: Anthony Lemieux
 INSTITUTION: Purchase College
 FACULTY MENTOR: Jonathan Wilkenfeld



Common Characteristics of the Formation and Persistence of Right-Wing Groups in the United States

INVESTIGATOR: Jennifer Machado
 INSTITUTION: Monterey Institute of International Studies
 FACULTY MENTOR: Gary Ackerman

Scenario-Based Surveys Exploring Radicalization in Israel

INVESTIGATOR: Sophia Moaskalenko
 INSTITUTION: Bryn Mawr College
 FACULTY MENTOR: Clark McCauley

Consequences of Collectivism for Terrorism

INVESTIGATOR: Edward Orehek
 INSTITUTION: University of Maryland
 FACULTY MENTOR: Arie Kruglanski

Examination of How Causes of Anger (Outrage versus Betrayal) Impact Behavioral Responses

INVESTIGATOR: Virginia Zimmerman
 INSTITUTION: Bryn Mawr College
 FACULTY MENTOR: Clark McCauley

AREA 2: TERRORIST GROUP PERSISTENCE AND DYNAMICS

Armed Groups' Provision of Public Goods: Situational Bargaining in Rebel-Donor Relationships

INVESTIGATOR: Anonymous student
 INSTITUTION: University of California-San Diego
 FACULTY MENTOR: Shawn Flanigan

Strength in a Weakened State

INVESTIGATOR: Anonymous student
 INSTITUTION: St. Andrews University
 FACULTY MENTOR: Alex Schmid

Assessment of the Indonesian Terrorist Group Jemaah Islamiyah Toward Suggestions of Effective Strategies to Counter the Group

INVESTIGATOR: Daniel Barlow
 INSTITUTION: Monterey Institute of International Studies
 FACULTY MENTOR: Gary Ackerman

Examination of Behavioral and Organizational Trends among Militant Islamic Groups in Africa

INVESTIGATOR: Bradford Parker
 INSTITUTION: Monterey Institute of International Studies
 FACULTY MENTOR: Gary Ackerman

Where Terrorists, Far-Right Extremists and Greedy Criminals Meet: A Comparative Study of Financial Crimes in the United States

INVESTIGATOR: Roberta Belli
 INSTITUTION: John Jay College of Criminal Justice, City University of New York
 FACULTY MENTOR: Joshua Freilich

Examination of the Role of Diaspora Communities in the United States in Terrorism and Counter-Terrorism Efforts

INVESTIGATOR: Bidisha Biswas
 INSTITUTION: Western Washington University
 FACULTY MENTOR: Jonathan Wilkenfeld

Relationships Between Charity, Political Insurgency and Terror

INVESTIGATOR: Shawn Flanigan
 INSTITUTION: University at Albany, State University of New York
 FACULTY MENTOR: Victor Asal

Using Affiliation Network Analysis to Assess Structures and Links Among White Supremacist Organizations and the Individuals Associated with These Organizations

INVESTIGATOR: David Caspi
 INSTITUTION: John Jay College of Criminal Justice, City University of New York
 FACULTY MENTOR: Joshua Freilich

Right-Wing Criminal Behavior in the United States by Former Military Personnel and Former Prisoners

INVESTIGATOR: Albert Gamarra
 INSTITUTION: John Jay College of Criminal Justice, City University of New York
 FACULTY MENTOR: Steven Chermak

Extremist Homicide in the United States: A Comparative Analysis of Far-Right, Bias and Non-Ideological Homicide

INVESTIGATOR: Jeffrey Gruenewald
 INSTITUTION: Michigan State University
 FACULTY MENTOR: Steven Chermak

Terrorist Target Selection as a Function of Political Salience of Target

INVESTIGATOR: Lindsay Heger
 INSTITUTION: University of California-San Diego
 FACULTY MENTOR: Victor Asal

Weapons Procurement Operations of Secular (Nationalist) Armed Groups and Assessment of the Involvement with Islamic Groups

INVESTIGATOR: Shanaka Jayasekara
 INSTITUTION: Macquarie University
 FACULTY MENTOR: Gary Ackerman

Effects of War on Trajectory of Terrorist Movements

INVESTIGATOR: Stephanie Kaplan
 INSTITUTION: Massachusetts Institute of Technology
 FACULTY MENTOR: Martha Crenshaw

Coercion by Any Other Name Should Smell as Sweet: The Political Effectiveness of Terrorism

INVESTIGATOR: Peter Krause
 INSTITUTION: Massachusetts Institute of Technology
 FACULTY MENTOR: Martha Crenshaw

The Relationship Between Conventional Crime Rates and Political Violence in Northern Ireland

INVESTIGATOR: Stuart Lee
 INSTITUTION: University of Cambridge
 FACULTY MENTOR: Richard L. Legault

Precision Terror: Suicide Bombing as Control Technology

INVESTIGATOR: Jeffrey Lewis
 INSTITUTION: The Ohio State University
 FACULTY MENTOR: Laura Dugan

Terrorist Communication and Dark Networks

INVESTIGATOR: R. Karl Rethemeyer
 INSTITUTION: University at Albany, State University of New York
 FACULTY MENTOR: Gary Ackerman

Dynamics of Drug and Human Smuggling Organizations Operation Along U.S.-Mexico Border

INVESTIGATOR: Gabriella Sanchez
 INSTITUTION: Arizona State University
 FACULTY MENTOR: Enrique D. Arias

How Men Rebel: The Decision-Making of Violent Political Organizations

INVESTIGATOR: John Sawyer
 INSTITUTION: Georgetown University
 FACULTY MENTOR: Jonathan Wilkenfeld

Spatial Dynamics of Terrorist Groups and the Effects of Intervention Strategies

INVESTIGATOR: Piyusha Singh
 INSTITUTION: University at Albany, State University of New York
 FACULTY MENTOR: Laura Dugan

Comparison of Terrorist Groups that Pursue Political Change Through Peaceful Means in South Africa

INVESTIGATOR: Mischelle Van Brakle
 INSTITUTION: University of Maryland
 FACULTY MENTOR: Gary LaFree

Why Do Terrorist Groups Endure?

INVESTIGATOR: Joseph Young
 INSTITUTION: Southern Illinois University
 FACULTY MENTOR: Laura Dugan

AREA 3: SOCIETAL IMPACTS OF TERRORISM

Appeasing Extremists Through Political Inclusion: A Comparison of Governmental Approaches toward Islamic Extremists in Morocco, Tunisia and Algeria

INVESTIGATOR: Mounah Abdel-Samad
 INSTITUTION: University at Albany, State University of New York
 FACULTY MENTOR: Victor Asal

Acts of Terrorism as Offenses Against Honor

INVESTIGATOR: Collin Barnes
 INSTITUTION: University of Oklahoma
 FACULTY MENTOR: Kelly Dampousse

Interpretation and Use of Homeland Security Information Bulletins Within Emergency Management Organizations and Their Influences on Preparedness

INVESTIGATOR: Hamilton Bean
 INSTITUTION: University of Colorado
 FACULTY MENTOR: Lisa Keranen

Religion in the Lived Experience of Disasters

INVESTIGATOR: Rebecca Carter
 INSTITUTION: University of Michigan
 FACULTY MENTOR: Monica Schoch-Spana

Disaster Preparedness in Local Businesses

INVESTIGATOR: W. Michael Dunaway
 INSTITUTION: George Washington University
 FACULTY MENTOR: Monica Schoch-Spana

Drawing Red Lines: The Role of Outside Media Organizations, Routine and Organizational Structure on Perceptions of National Security Media

INVESTIGATOR: Heather Epkins
 INSTITUTION: University of Maryland
 FACULTY MENTOR: Steven M. Chermak

Comparative Analyses of British, French and U.S. Counterterrorism

INVESTIGATOR: Frank Foley
 INSTITUTION: Stanford University
 FACULTY MENTOR: Martha Crenshaw

Cultures of Security: Military Tactics and City Planning in Lower Manhattan Since 11 September 2001

INVESTIGATOR: Matthew Hidek
 INSTITUTION: Syracuse University
 FACULTY MENTOR: Susan L. Cutter

Disaster Preparedness in California Schools

INVESTIGATOR: Megumi Kano
 INSTITUTION: University of California, Los Angeles
 FACULTY MENTOR: Linda Bourque

Awareness of Vulnerability to Terrorism in Urban Areas: Social Network and Mobility Effects in Boston, MA

INVESTIGATOR: Kevin Keenan
 INSTITUTION: Clark University
 FACULTY MENTOR: Susan Cutter

Cross-National Attitudes of Police Toward Terrorism and Counterterrorism Policies

INVESTIGATOR: Cynthia Lum
 INSTITUTION: George Mason University
 FACULTY MENTOR: Gary LaFree

Cultural Implications of September 11 Through the Lens of Life Writing

INVESTIGATOR: Christine Muller
 INSTITUTION: University of Maryland
 FACULTY MENTOR: Monica Schoch-Spana

Relationships between Media Exposure, Fear of Terrorism and Attitudes Toward Counterterrorism Policies

INVESTIGATOR: Ashley Nellis
 INSTITUTION: George Washington University
 FACULTY MENTOR: Kathleen Tierney

Intelligence Operations at the Local Level in New York City and London

INVESTIGATOR: Brian H. Nussbaum
 INSTITUTION: University at Albany, State University of New York
 FACULTY MENTOR: Victor Asal

Homicide Victims of Terrorism and Ideologically Motivated Crime

INVESTIGATOR: William Parkin
 INSTITUTION: John Jay College of Criminal Justice, City University of New York
 FACULTY MENTOR: Joshua D. Freilich

Analysis of Insurance Purchases as an Indicator of Public Perception of Terrorist Threat and Effectiveness of Counter-Terror Policies

INVESTIGATOR: John Rand
 INSTITUTION: Rutgers, the State University of New Jersey
 FACULTY MENTOR: Caron Chess

Counterterrorism and State Bureaucracy: An Examination of the State's Homeland Security Responsibility

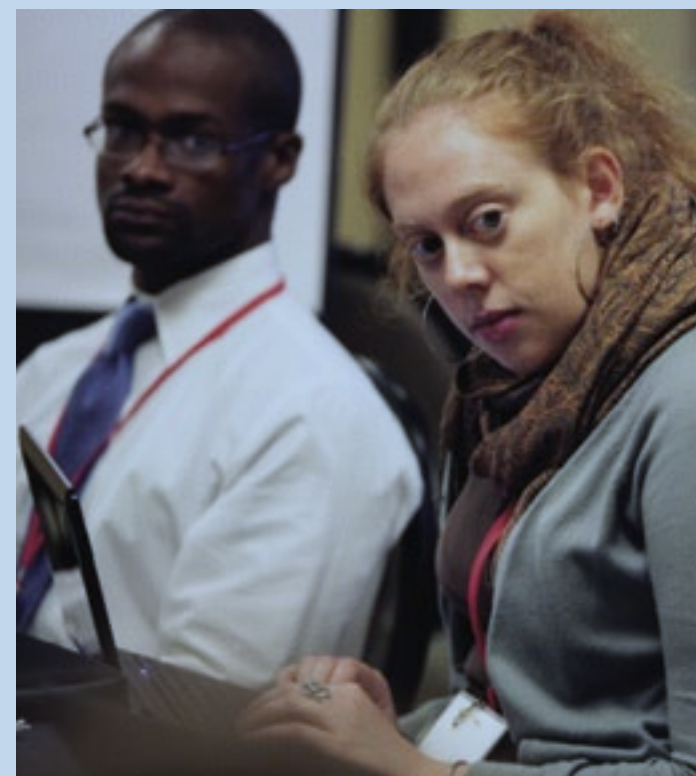
INVESTIGATOR: Lisa Sacco
 INSTITUTION: University at Albany, State University of New York
 FACULTY MENTOR: Victor Asal

Impact of Terror on the Economy and the Tourist Industry

INVESTIGATOR: Sharon Teitler
 INSTITUTION: University of Haifa
 FACULTY MENTOR: Laura Dugan

Individual Preparedness for Disasters: Assessing and Working Toward Behavior Change for Terror Preparedness

INVESTIGATOR: Michele Wood
 INSTITUTION: University of California, Los Angeles
 FACULTY MENTOR: Linda Bourque



Education Programs

Through curriculum development, scholarship and fellowship programs and intensive research training, START trains and mentors the next generation of terrorism scholars and analysts. START has trained more than 1,200 students since 2005 through more than 20 programs. Among its flagship programs are the University of Maryland's Graduate Certificate in Terrorism Analysis, START's Terrorism Research Awards and START's Curriculum Development Project.

GRADUATE CERTIFICATE IN TERRORISM ANALYSIS

START's Graduate Certificate in Terrorism Analysis is a fully online four-course sequence at the University of Maryland. It provides participants with advanced education on the causes, dynamics and impacts of international and domestic terrorism. Participants also develop the methodological skills necessary to pursue advanced research on and analysis of terrorism.

The program is appropriate for academicians and practitioners and can be completed in 12 months. While the program is accredited at the University of Maryland, its four courses are developed and taught by START-affiliated researchers and faculty members from across the consortium. The online learning environment provides a highly dynamic platform allowing students and instructors to interact with one another as if in a small-group seminar, and courses emphasize interactive components such as group work, debates and online simulations of real-world incidents.

More information is available at: www.start.umd.edu/start/education/academic_programs/gc.

CURRICULUM UNITS AVAILABLE FROM START

START funds faculty investigators and Terrorism Research Award winners to develop curriculum units based on their START-supported research projects, with the goal of moving new and cutting-edge science on terrorism into classrooms at an accelerated rate. These curriculum units reflect START's educational priorities, including:

- Presentation of cutting-edge START research;
- Interactivity and novel approaches to teaching;
- Interdisciplinarity, with the goal of challenging students to engage in critical, cross-disciplinary discourse;
- Scalability to different education levels (e.g., k-12, undergraduate, graduate, executive education); and
- Immediacy and impact, with a focus on attention to problems and issues of immediate relevance to national and international policy.

Units are freely available to all interested educators and can be requested at: www.start.umd.edu/start/education/course_materials/cu.

Available and in-progress curriculum units include:

Networks and Preparedness

INVESTIGATOR: Christine Bevc
 This curriculum unit introduces students at the undergraduate, graduate and executive education levels to the methods of social network analysis (SNA) and its application to the study of community preparedness.

Online Simulation Modeled on November 2008 Mumbai Attacks

INVESTIGATOR: Bidisha Biswas
 This curriculum unit consists of a simulation that can be used with secondary school, undergraduate, graduate and executive-level students. The simulation divides students into teams representing the governments of India, Pakistan, the United States and Afghanistan, as well as the United Nations and the Pakistani Army. Teams are required to negotiate steps to respond to a series of terrorist attacks on India's capital, New Delhi.

Conducting Field Research Outside the United States and in Difficult-to-Access Communities

INVESTIGATOR: Shawn Flanigan
 This curriculum unit introduces students at the secondary school, undergraduate, graduate and executive levels to the practice of academic fieldwork, including data collection tools such as interview protocols and surveys, specifically in reference to work with low-income and otherwise vulnerable populations.



Engaging and Countering the Social and Cultural Mechanisms Used by Organizations to Motivate Suicide Attackers

INVESTIGATOR: Jeffrey Lewis
 This curriculum unit aims to introduce undergraduate, graduate and executive-level students to an understanding of suicide bombing as a complex social phenomenon.

Terrorism and International Negotiations in Kurdistan

INVESTIGATORS: Katherine Worboys Izsak & Tim Wedig
 This curriculum unit consists of a simulation that can be used with secondary school, undergraduate, graduate and executive-level students. The simulation divides students into third-party negotiator roles in response to a series of terrorist attacks and violent counterstrikes along the border of Turkey and Iraq.

What Can Oral Histories Tell Us About Sept. 11?

INVESTIGATOR: Christine Muller
 This curriculum unit seeks to introduce secondary school and undergraduate students to the production of September 11, 2001, as history. The unit focuses on oral accounts and video news reporting of the World Trade Center attacks and asks students to conduct a critical analysis of oral histories.

Simulation of Counterinsurgency Impacts

(in progress)
 INVESTIGATORS: Victor Asal & Devin Ellis

Introduction to Using the Global Terrorism Database

(in progress)
 INVESTIGATOR: Bidisha Biswas

Understanding Terrorist Behavior Through Red Team Analysis

(in progress)
 INVESTIGATOR: Shira Fishman

Blue Ribbon Commissions and Responses to Terrorism

(in progress)
 INVESTIGATORS: Katherine Worboys Izsak and Devin Ellis

The Notion That the World Changed on 9/11

(in progress)
 INVESTIGATOR: Christine Muller

Modular Approaches to Radicalization and Terrorist Motivations

(in progress)
 INVESTIGATOR: Anthony Lemieux

START supports the homeland security policy community by generating scientifically validated findings that inform operations and policies involving terrorism prevention, threat detection, counterterrorism, preparedness and response, community recovery and risk communication.

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