Celebrating a Decade of Security Enhancements

On April 24, 2014, the National Center for Risk and Economic Analysis of Terrorism Events (CREATE)—the Department of Homeland Security’s (DHS) first Center of Excellence (COE)—will celebrate its tenth anniversary with a full-day of events, discussions, and remarks from counterterrorism officials from the public and private sector highlighting the contributions and advancements developed by CREATE to enhance homeland security missions.

The COEs were established at the direction of Congress as part of the Homeland Security Act of 2002. The DHS Science and Technology Directorate (S&T) was tasked with developing and managing a university-based system that uses science and technology to enhance the nation’s security. Each COE has a focused area of study aligned with universities to engage the expertise of the academic community. The nine COEs are responsible for developing multidisciplinary, customer-driven, homeland security science and technology solutions as well as training the next generation of homeland security experts.

CREATE, led by the University of Southern California (USC), evaluates the risks, costs, and consequences of terrorism and man-made disasters. Comprised of a team of experts, universities, and research partners from around the country, CREATE provides analytical tools and guidance that enable users to prioritize terrorism countermeasures, compute risks for catastrophic events, and estimate the societal consequences of terrorism and other major disruptive events.

One of CREATE’s most successful projects, the Assistant for Randomized Monitoring Over Routes (ARMOR), was developed to assist law enforcement with randomizing their vehicle checkpoints and canine unit patrols to prevent criminals and terrorists from predicting patrol schedules and locations. This technology directly resulted in increased seizures of illegal weapons and drugs.

CREATE, capitalizing on the successful program, was able to customize and further expand ARMOR to support the randomized scheduling of other law enforcement organizations including the U.S. Coast Guard, Los Angeles Sheriff’s Department and others.

ARMOR and its subsequent variations are enhancing security operations across the nation—transitioning from an exclusively government program to a wide commercial use, available for law enforcement and other security-based organizations with each program tailored to specific requirements requested by the user.

Though very successful, ARMOR isn’t CREATE’s only successful project. CREATE subject matter experts and USC academic researchers frequently conduct studies that allow organizations to better prepare for emergency situations, improve their economic model, or develop plans for improving infrastructure at major transportation hubs across the United States.

For example, last year CREATE studied Customs and Border Protection operations and showed how adding a small number of officers could stimulate U.S. employment and economic activity. The CREATE study found adding one new CBP officer at 33 ports of entry would result in a $65.8 million increase in gross domestic product and more than a thousand jobs in the United States.
One of CREATE’s first studies examined the impact and costs of requiring commercial aircraft to have systems to defend against shoulder-fired missile threats. The study highlighted better ways to invest in safety and avoid unnecessary spending. In another example, an expert elicitation tool was developed and used by the National Biodefense Analysis and Countermeasures Center to query and combine multiple expert opinions on the potential for various biological threats.

As CREATE marks one decade of research, we recognize their commitment to projects focusing on both the economic and physical security of the nation. Ongoing research at CREATE will include analyzing current and future catastrophic risks from emerging threat technologies, designing layered defenses against terrorism with risk analysis, and economy-wide modeling for the analysis of disruptive events—establishing CREATE as a leading research facility to provide the tools and information to support counterterrorism efforts.

For more information on CREATE or the ARMOR programs, visit http://create.usc.edu/.

For more information on the anniversary event, visit http://create.usc.edu/2014/02/create_10_year_anniversary_eve.html

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