



## ADVISORY COMMITTEES

### SCIENTIFIC ADVISORY COMMITTEE

**CREATE** has assembled a Scientific Advisory Committee of professional experts from diverse backgrounds. Their experience, ranging from the U.S. Department of Homeland Security, national laboratories, the RAND Corporation, the Department of Transportation and academia, provides our researchers with diverse perspectives. The committee meets twice a year to review the Center's research agenda.

### GOVERNMENT ADVISORY COMMITTEE

**CREATE's** regional Government Advisory Committee helps the center and its researchers meet the needs of the user community. CREATE provides a constructive and cooperative forum for representatives from local, state and national agencies to come together, exchange ideas and plan for the future.

### INDUSTRIAL ADVISORY COMMITTEE

**CREATE** has a strong commitment to collaborate with leading organizations at the forefront of each of our core research areas. The Industrial Advisory Committee is comprised of established, well-respected industry leaders, ensuring that the Center's research is relevant, with results that are designed to improve homeland security.

## MISSION

**CREATE's** mission is to improve our Nation's security through the development of advanced models and tools for the evaluation of the risks, costs and consequences of terrorism and to guide economically viable investments in homeland security. We will accomplish our mission through an integrated program of research, education and outreach that is designed to inform and support decisions made by elected officials and governmental employees at the national, state, and local levels. We will also work with private industry, both to improve the security of private enterprises and to work in partnership toward meeting the needs of public organizations.

**CREATE** is working to build models that gauge how and where terrorist events may occur, estimate the economic consequences of such attacks and identify where the country's vulnerabilities reside.

The Center serves national interests by providing tools and guidance to the Department of Homeland Security, as well as local, regional and state decision-makers, for the prioritization of countermeasures to terrorism, identifying areas where investments are likely to be most effective, assessing relative risks among potential terrorist events, and estimating the societal consequences of terrorism.

To fulfill this mission, the Center draws from an exceptional group of researchers within its participating universities, who represent a truly interdisciplinary, problem-oriented focus on homeland security issues.

## CONTACT US

**CREATE** – Center for Risk & Economic  
Analysis of Terrorism Events  
University of Southern California  
3710 McClintock Avenue, RTH 314  
Los Angeles, CA 90089-2902  
(213) 740-5514  
create@usc.edu

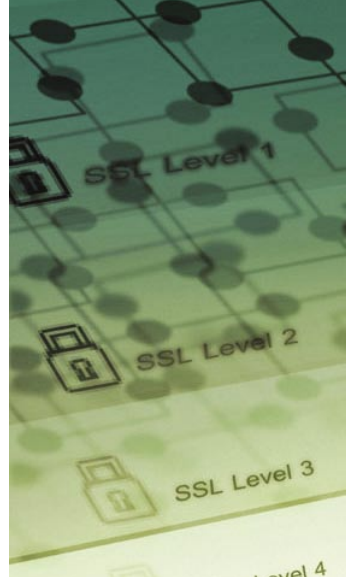


**WWW.USC.EDU/CREATE**



## CENTER FOR RISK AND ECONOMIC ANALYSIS OF TERRORISM EVENTS

The first university center of  
excellence funded by the U.S.  
Department of Homeland Security



# **CREATE** HOMELAND SECURITY CENTER

**CREATE** is an interdisciplinary national research and education center based at the University of Southern California and funded by the U.S. Department of Homeland Security. The Center comprises a team of experts from across the country, including partnerships with New York University, University of Wisconsin at Madison and Structured Decisions Corporation.

## **CREATE LEADERSHIP**

Dr. Detlof von Winterfeldt is the Director of the Center and a Professor of Public Policy and Management at USC's School of Policy, Planning and Development. He is an expert in decision and risk analysis with particular interest in the application of these fields to environmental, technology, and security problems.

## **RESEARCH**

### **RISK ASSESSMENT**

Our team has both developed the tools for probabilistic risk assessment and used these tools to prepare against nuclear power plant accidents, environmental pollutants, and earthquakes. We are now working on terrorist threat assessments and developing methods to assess the likelihoods of specific terrorism attacks, building from our research in expert elicitation of risks and uncertainties and in game theory. In addition, we are using risk-based methods to improve the allocation of funds to fight terrorism.

### **ECONOMIC ASSESSMENT**

Our team includes world-class experts in the economic modeling of major disasters, cost-benefit analysis of major risk reduction decisions, and the impact of risk perceptions on economic decisions. We are modeling the costs of terrorist attacks on critical infrastructure, including both direct impacts and indirect impacts on the economy as a whole. We are also developing computer software to evaluate the inter-dependencies of economic sectors in the aftermath of catastrophic terrorist attacks.

## **RISK MANAGEMENT**

A major focus of CREATE is to develop advanced models and tools for risk management – the evaluation, implementation and monitoring of terrorism countermeasures. Risk management alternatives include prevention, protection, and response and recovery. CREATE examines how to reduce threats, vulnerabilities, and consequences of terrorism by cost-effective investments. In the first two years, CREATE emphasized emergency response planning and recovery, since these are often cost-effective for multiple hazards. In future years, CREATE will emphasize preventive and protective measures to reduce terrorism risks.

## **CASE STUDIES**

CREATE is applying its models and tools to provide guidance on the most cost-effective investments in reducing the risk of catastrophic terrorist attacks. Risk assessments are conducted as case studies, leading to specific recommendations, in such areas as aviation security, port security, electricity distribution, bio-terrorism, border security and risk-based resource allocation, with new case studies developed in response to national priorities.

## **EDUCATION**

USC offers a professional master's degree program and a professional certificate program in System Safety and Security, with emphasis on risk based economic analysis. The program is designed to meet the needs of industry and government for analysts and engineers who are trained to develop and evaluate terrorist countermeasures, and to identify the most economically effective means to improve the nation's security. The programs are interdisciplinary, combining courses from the USC School of Policy, Planning and Development and the USC Viterbi School of Engineering and are available through USC's Distance Education Network. CREATE is also offering short courses for professionals through USC's Aviation Safety & Security Program.

