



CREATE - CENTER FOR RISK AND ECONOMIC ANALYSIS OF TERRORISM EVENTS – (<u>www.usc.edu/create</u>) is an interdisciplinary national research center based at the University of Southern California in Los Angeles, California (<u>www.usc.edu</u>) and funded by the U.S. Department of Homeland Security.

Advanced Decision Analysis -- Modeling Preferences and Capabilities of Terrorists in a Random Utility Framework -- This project will develop advanced decision and risk analysis models and tools for terrorism threat assessment. The project has three sub-projects: 1) Development of a model of terrorist objectives and preferences among modes and targets of attack, 2) Development of a random utility model to represent probabilities of terrorist choices among modes and targets of attack, and 3) Development of dynamic and adaptive decision tree methods to model terrorists' responses to our defensive actions. Detlof von Winterfeldt (winterfe@usc.sppd.edu)

Measuring Economic Resilience to Terrorism – This project will estimate several of the major types of economic resilience to terrorist attacks that have the potential to greatly reduce business interruption losses. The research will develop resilience adjustment factors that can be used with a variety of economic impact models. **Adam Rose (adamzros@usc.sppd.edu)**

Socioeconomic Impacts of Terrorist Attacks: A CGE Analysis – This project will develop the capability for analyzing the distribution of impacts of terrorist attacks on various income groups. The study will update the multisector income distribution matrix previously developed to the most recent year possible at the national level, refine procedures for down-scaling it to various regions, integrate it into a CGE model, and apply distributional analysis capability to various case studies. Adam Rose (adamzros@usc.sppd.edu) (With Oak Ridge National Laboratory)

Behavioral Impacts of Terrorist Attacks: Bounded Rationality Analysis of the "Fear Factor" – This study is translating research by decision scientists and psychologists on the social amplification of risk into a formal economic modeling framework. This research will develop a bounded rationality framework to analyze extreme behavioral reactions to catastrophic risk, to calibrate the production utility functions to data collected, generate estimates of the range of behavioral linkages such as the "fear factor," apply the model to various case studies, and transfer the modeling capability to other researchers and DHS staff. Adam Rose (adamzros@usc.sppd.edu)

Terrorist Economic Impact Forum – This initiative will create a mechanism for economic modelers in the terrorist field to meet and share expertise on assumptions, data, and models, to reconcile differences in approaches, and to narrow the bounds on empirical modeling results. The objectives of this initiative are to improve economic modeling in the terrorist field and to generate more reliable estimates of modeling applications. **Adam Rose (adamzros@usc.sppd.edu) (Coordinator, with participation of other USC economists each year)**

Applied Decision Analysis – This project will apply decision and risk analysis techniques to important homeland security problems. The purpose of this project is to apply both traditional and advanced decision and risk analysis model and tools to address important problems of homeland security. In all applications we will develop user friendly computer tools, similar to those developed for the MANPADS model, to assist the clients at the DHS in their decision making process. **Detlof von Winterfeldt** (winterfe@usc.sppd.edu)

Why Choose Terrorism? Rebels and Terrorists, University of California Institute on Global Conflict and Cooperation, UCSD – This project seeks to understand what kinds of rebel organizations choose terrorism rather than insurgency, and under what conditions. It explores the conditions under which rebels choose terrorism (i.e., targeting civilians) rather than rural insurgency, the conventional pattern of civil war. Eli Berman (berman.eli@gmail.com)