Capstone projects at the Bush School of Government and Public Service at Texas A&M University are integrative, team-based, applied research projects required of all students. Led by a faculty member on behalf of a client agency, these projects require students to think independently, frame and analyze issues, and apply their academic knowledge and skills.

Capstone students and their course instructors define the project with the client, allocate tasks, and establish deadlines, using effective communication, teamwork, and collaborative learning strategies. The projects fully prepare students to supervise, conduct, and evaluate large-scale public policy research and culminate in a formal, written report and oral presentation to the client.

“For more information visit: http://bush.tamu.edu/capstones
Assessing Regional Border Security
CLIENT: CENTRA TECHNOLOGY, INC./DEPARTMENT OF HOMELAND SECURITY
SUPERVISING INSTRUCTOR: JEFFREY A. ANGEL

Government agencies face special problems when they seek to assess non-disaster security risks in areas where there are multiple jurisdictions and levels of governance. The client, Centro Tecnologico, in support of the Department of Homeland Security, sought a conceptual approach or theoretical model for determining how governments should value, assess, and balance risks that arise from illegal immigration, weapons smuggling, the narcotics trade, natural disasters, and terrorism. The students compiled and evaluated the available literature on the subject and developed a structure by which policymakers should consider the difficulties of regional risk assessment.

Combating Child Labor through DESTINO
CLIENT: CREATIVE ASSOCIATES INTERNATIONAL, INC./U.S. DEPARTMENT OF LABOR
SUPERVISING INSTRUCTOR: KISHORE GAWANDE

This project focused on how to reduce child labor in Panama, using the DESTINO (Disminuyendo y Erradicando el Trabajo Infantil para Nuevas Oportunidades) program, a joint effort of two Panamanian organizations: Casa Esperanza and Fundación Tierra Nueva. DESTINO seeks to reduce the incidence of child labor through community workshops, income generation activities, scholarship activities, teacher training programs, and civil society programs. The study looked at child labor statistics gathered by DESTINO as well as additional work done by the Centro de Capacitacion y Desarrollo Integral to improve income generating activities among indigenous women. The DESTINO project is funded by the U.S. Department of Labor and is being managed by Creative Associates.

Effective Intelligence Operations during Counterinsurgency Campaigns
CLIENT: THE RAND CORPORATION/DEPARTMENT OF DEFENSE
SUPERVISING INSTRUCTOR: JASEN J. CASTILLO

The United States Army’s recently published field manual detailing an improved counterinsurgency doctrine is seen by many as a crucial step towards improving military effectiveness in counterinsurgency campaigns. This capstone project laid out a framework to help the intelligence community craft its own unique doctrine for counterinsurgencies. The project looked at intelligence operations that are crucial for defeating insurgencies, the operational factors that are most effective, and the lessons learned from past counterinsurgency successes and failures. Blending historical case studies and first-person accounts from field operatives, the project outlined the kinds of intelligence operations that should be implemented and the goals they must meet in order to run a successful counterinsurgency.

Investigating the Current Terrorist Threat to the U.S. Homeland
CLIENT: NATIONAL COUNTERTERRORISM CENTER
SUPERVISING INSTRUCTOR: SARA DALY

This project analyzed the current terrorist threat to the U.S. homeland both from homegrown terrorists and those who represent foreign terrorist organizations or who come to the United States to carry out an act of terrorism. Although there has been no terrorist attack in the United States since 9/11, the assumption that there is little support for al-Qaeda or the jihadi worldview from U.S. citizens or others is challenged by recent cases that reveal there are still individuals in the country who may become involved in terrorist activity. The study examined recent cases of thwarted attacks and failed plots to determine current capabilities and tactics possessed by terrorist groups and individuals. The students also looked at how successful al-Qaeda and those who share its views have been at finding new recruits for U.S. operations.

Evaluating the Consequences of Texas’ High Dropout Rate
CLIENT: UNITED WAY OF TEXAS
SUPERVISING INSTRUCTOR: LORI TAYLOR

This capstone project examined the causes and consequences of the high number of high school dropouts in Texas, in particular, the individual and societal impact on GDP of each dropout. To assess the economic impact to Texas of this key education measure, the ongoing capstone project identified the best way to measure the dropout rate and gauged the dropout rate’s economic impact. Finally, the team reviewed available research regarding dropout prevention programs in order to identify best practices that could be implemented in Texas. One goal of the study was to inform and encourage a broader discussion by the Texas Legislature of the state’s high school dropout rate and the societal and economic impact of failing to address the problem.

Generation Y in the Federal Workplace
CLIENT: CONGRESSIONAL RESEARCH SERVICE
SUPERVISING INSTRUCTOR: DOMONIC BEARFIELD

Some members of Generation Y (generally considered to be those born between the late 1970s and 2000) have already entered the workforce, and many more soon will. This project explored how Gen Y differs from previous generations in terms of expectations about work, salary, job security, time off, benefits, retirement, pensions, etc., and how the CRS can address these issues in recruitment and retention efforts. Reliance on digital technology in personal and professional lives is one defining characteristic of Gen Y—instant access and response, personalization, and information sharing via podcasts, wikis, and blogs. Gen Y also holds different views on personal privacy, and the CRS is interested in how these attitudes toward privacy will affect the agency’s core value of confidentiality.

The Regional Impact of Climate Change on Public Infrastructure and Decision Making
CLIENT: HOUSTON-GALVESTON AREA COUNCIL (HGAC)
SUPERVISING INSTRUCTOR: ERIC LINQUIST

In the wake of Hurricanes Rita and Ike, policy and decision makers in the Houston area are concerned with the growing threat of climate change impacts and how to adapt to these changes. This capstone project examined the regional impact of climate change on public infrastructure in 13 counties in the Houston-Galveston area, focusing on resiliency planning as one alternative solution to the problem. They also looked at how local governments respond to recommendations from a non-binding metropolitan planning organization (MPO). The goal was to offer recommendations that validate the needs and solutions for local and regional governments regarding funding, capacity building, and regulatory authority necessary for adaptive responses to the hazards of global climate and environmental problems at the regional level.

Municipal Funding of Nonprofit Agencies
CLIENT: CITY OF COLLEGE STATION
SUPERVISING INSTRUCTOR: EDWINA DORCH

The City of College Station funds nonprofit agencies through a program called Outside Agency Funding because the nonprofits provide services not offered by the city. In working to streamline the application, review, and monitoring of this funding, it became clear that there is no standard method outlined and packaged for annual joint procurement of nonprofit agencies. This capstone project studied the role of municipal governments that fund nonprofit agencies.

National Preparedness Goal, Execution, and Performance
CLIENT: THE HOMELAND SECURITY AND JUSTICE TEAM/GOVERNMENT ACCOUNTABILITY OFFICE (GAO)
SUPERVISING INSTRUCTOR: SHARON CAUDE

A presidential directive ordered the secretary of homeland security to develop a domestic all-hazards preparedness goal. In 2007, the Department of Homeland Security finalized the national goal and related preparedness tools such as national planning scenarios and identification of specific capabilities that communities, the private sector, and all levels of government should collectively possess to prevent, protect against, respond to, and recover from all major hazards. This capstone project reported to the GAO their observations about what national preparedness means in terms of assigning authority and responsibility for preparedness across the nation’s highly decentralized system of public, not-for-profit, and private sector entities. They also reviewed factors management should consider to achieve preparedness within acceptable risk tolerances, to allocate resources for preparedness, and to assess performance in developing needed preparedness capabilities.

Proliferation Security Initiative
CLIENT: NUCLEAR NONPROLIFERATION OFFICE OF THE NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA)
SUPERVISING INSTRUCTOR: LARRY NAPPER

This capstone project conducted a focused examination of the Proliferation Security Initiative (PSI) and identified options for U.S. policy makers by designing a simulated interdiction operation. The simulation involved a cargo aircraft carrying sensitive nuclear components bound for Iran that stops for refueling in a Central Asian country, thus creating the opportunity for cooperative action. Capstone students joined students from Texas A&M’s Department of Nuclear Engineering to construct and execute a mini-move simulation. In addition to a literature review and interviews with PSI experts, the students conducted an initial play of the simulation for the client along with an after action report.