HOMELAND SECURITY AND EMERGENCY MANAGMENT

Since 1999, CNA has applied specialized operational analysis techniques to homeland security challenges at the federal, state, and local levels. We have supported the Department of Homeland Security continuously since its creation, worked across the federal interagency since 1999, and helped hundreds of state, local, international, private, and voluntary organizations analyze risks and evaluate homeland security policies, programs, and operations. We use research and analysis to deliver solutions that improve decision-making during crisis operations and develop innovative answers to challenging safety and security problems. Our applied expertise—from analyzing and planning policy to assessing capabilities, developing performance metrics, designing and facilitating training and exercises, and evaluating responses to real-world crises and disasters—allows first responders, emergency managers, public health and agriculture professionals, homeland security practitioners, and corporate and citizen partners to integrate risk-management policy, planning, and operations, and to develop and sustain prevention, protection, mitigation, response, and recovery capabilities at a national level. Our staff of more than 600 scientists, analysts, and technical experts brings deep expertise in a broad range of scientific disciplines as well as operational expertise in homeland security, emergency management, public health and law enforcement.

Building a National Training Curriculum in Risk Management

In support of FEMA, CNA developed three training courses (two web-based, one instructor-led) to address a critical shortfall in risk-management capabilities among regional, state, and local homeland security organizations. Together, the courses defined key risk-related terminology; articulated core concepts of risk analysis and risk management; and helped learners apply the concepts through interactive lessons, discussions, and case studies.

THREAT AND RISK ASSESSMENT

CNA is deeply experienced in the development and analysis of Threat and Hazards Identification and Risk Assessments (THIRA) and the State Preparedness Reports (SPR). We have supported FEMA in the development of National THIRA guidance; created the THIRA/SPR Unified Reporting Tool; and have helped the Greater Houston Region complete the annual THIRA/SPR process since this joint reporting requirement began in 2012.

For nearly a decade, CNA supported FEMA's National Preparedness Assessment Division by reviewing, organizing, analyzing, and integrating disparate data related to emergency preparedness. Our goal has been to produce new, actionable preparedness knowledge to influence the evolution of FEMA programs and support FEMA leadership. CNA defined and implemented a strategy to achieve the measurement of national, all-hazards preparedness in both steady-state and surge operations. We articulated this strategy in the National Preparedness Report (NPR), published for the first time in May 2012, and prepared annually thereafter. The NPR evaluates U.S. progress in building and sustaining core capabilities in prevention, protection, mitigation, response, and recovery for all hazards. For the 2012 and 2013 reports, our team analyzed nearly 2,000 sources—including self-assessments, independent evaluations, and program accomplishment reports—to prepare key findings.

Selected Clients: Department of Homeland Security (DHS) • DHS, Federal Emergency Management Agency • DHS, Office of Infrastructure Protection • DHS, Domestic Nuclear Detection Office • DHS, Office for Bombing Prevention • Department of Health and Human Services, Assistant Secretary for Preparedness and Response • Amtrak • National Emergency Management Association • District of Columbia Homeland Security and Emergency Management Agency • Virginia Department of Emergency Management • South Carolina Law Enforcement Division • New Mexico Department of Homeland Security and Emergency Management • Southeastern Pennsylvania Regional Task Force • Metropolitan Washington Council of Governments • City of Houston, Mayor's Office of Public Safety and Homeland Security • Seattle, WA Fire Department • San Francisco Bay Area, CA Urban Areas Security Initiative • Montgomery County, MD Office of Emergency Management and Homeland Security • King County, WA Office of Emergency Management • Hampton Roads, VA Planning District Commission • Austin–Round Rock, TX Urban Area • Atlanta, GA Urban Area

CAPABILITY ASSESSMENT AND THE DEVELOPMENT OF PERFORMANCE METRICS

CNA employs nationally-recognized subject matter expertise in the field of assessing, designing, and building preparedness capabilities for urban areas, cities, and critical infrastructure owners and operators across the United States. We have also supported the federal government on researching and creating objective measures for preparedness capabilities. Our experience in this field runs from the earliest days of homeland security. CNA staff members led the development of Homeland Security Presidential Directive 8 (National Preparedness), and the corresponding National Preparedness Guidelines and Target Capabilities. CNA staff also developed the Core Capabilities associated with Presidential Preparedness Directive 8 (PPD-8), which was issued in March 2011. With this experience, we understand the issues and complexities surrounding capability construction and evaluation from virtually every perspective.

CNA has developed and tailored capability assessment methodologies to support projects for numerous states and localities, including the Greater Houston Region, the Puget Sound Region, the San Francisco Bay Area, the San Diego Urban Area, Hampton Roads and Central Virginia Regions, the State of South Carolina, the Atlanta Urban Area, the Los Angeles Regional Transit Authority, and the Austin-Round Rock Urban Area.

STRATEGIC AND OPERATIONAL PLANNING

CNA has extensive experience developing the full range of emergency preparedness and response plans for jurisdictions of all sizes. We are a leader and innovator in planning support, developing tools and methodologies that help jurisdictions better understand and quantify their capability needs, assess their gaps, and then plan regionally to fill them. For example, for the Houston region, we developed capability calculators to support the region's catastrophic planning efforts. These Microsoft® Excel–based tools quantitatively define specific capabilities in terms of resources (e.g., personnel, equipment, and training). Using such tools, the region set specific capability targets, determined its capability levels, and calculated the lifecycle cost to acquire and maintain the capabilities. In addition, CNA completed a countywide planning assessment for the Montgomery County, MD Office of Emergency Management and Homeland Security, where we compiled and reviewed 22 relevant emergency management standards and federal regulatory and compliance guidance documents, and

Expert Capability Assessments

CNA has unmatched qualifications in designing customized core capabiulity assessments for jurisdictions throughout the Nation. As demonstrated by the project examples below, the CNA Team has translated our expert knowledge of national preparedness policies into actionable core capability assessments at the local government level.

Hampton Roads Capability Assessment, Security Strategy, and Measuring Grant Effectiveness on Capabilities Projects

Central Virginia Security Strategy, Metropolitan Medical Response System Capability Assessment

San Francisco Bay Area Compendium of Core Capabilities

San Francisco Bay Area Public Information and Warning Core Capability Assessment and Strategic Plan

Greater Los Angeles Regional Transit Security Core Capability Assessment and Security Plan

Austin-Round rock Critical Infrastructure and Key Resources Protection Plan

Seattle Capability Assessment and Strategic Plan

FEMA Objective Measures for Core Capabilities Project

then developed an assessment tool that identified 535 unique planning requirements recommended for local government. CNA also supported a comprehensive planning, training, and exercise program for the DC Homeland Security and Emergency Management Agency in preparation for the 2017 Presidential Inauguration, and supported the Atlanta Urban Area with development of its homeland security strategy and grant investment justifications.

CNA led the development of a three-year Strategic Plan for Assessments for the DHS Office of Infrastructure Protection (IP) in coordination with the Office of Cybersecurity and Communication (CS&C), and the Office of Cyber and Infrastructure Analysis (OCIA). Specific assessment tools addressed by the plan included the Cyber Infrastructure Survey Tool (CIST), the Cyber Resiliency Review (CRR), the Cyber Security
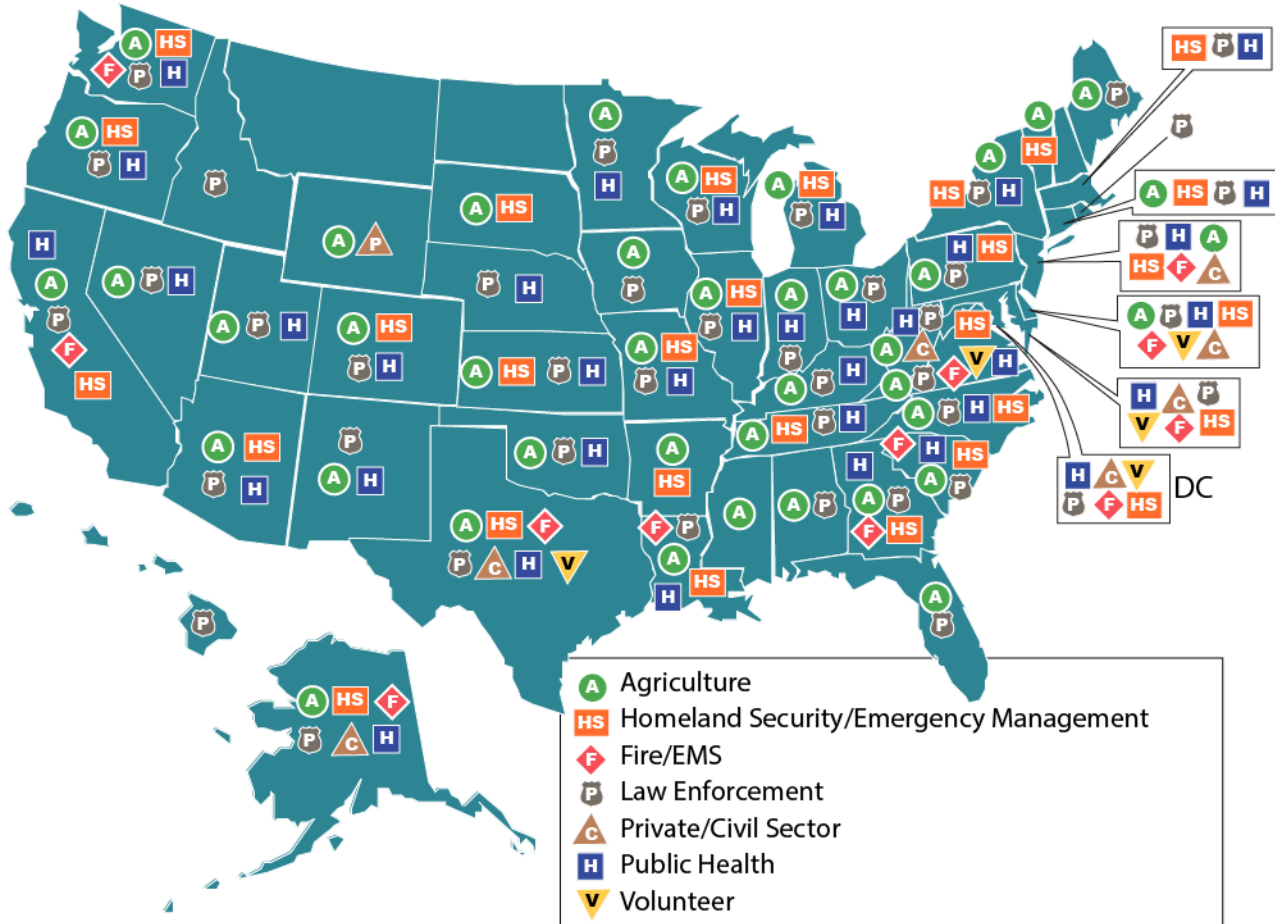
Evaluation Tool (CSET) and several physical security-focused assessment tools. In order to develop the plan, CNA led three principal tasks: creating a baseline analysis, implementing a stakeholder engagement program, and preparing the strategic plan.

PREPAREDNESS TRAINING AND EXERCISES

CNA is a nationally-recognized leader in emergency preparedness training and exercises. We have designed, developed, and delivered more than 350 preparedness exercises for federal, state, and local clients since 1999.

We have led the design, implementation, and evaluation of preparedness exercises for FEMA and for the U.S. Departments of Agriculture, Defense, Homeland Security, and Justice. We have also led exercises for numerous states, regions, and local jurisdictions, including California; Delaware; the District of Columbia;

CNA has supported homeland security and emergency management programs nationwide

Legend:
- A Agriculture
- HS Homeland Security/Emergency Management
- F Fire/EMS
- P Law Enforcement
- C Private/Civil Sector
- H Public Health
- V Volunteer

the Greater Houston Region; Nassau County, New York; the National Capital Region; New Orleans, Louisiana; North Carolina; the Puget Sound Region; South Carolina; and Texas.

OPERATIONAL ANALYSES OF REAL-WORLD RESPONSES

Our expertise in exercise and training evaluation is directly informed by our experience deploying to and leading operational analyses of real-world incidents. CNA has supported or evaluated nearly every major homeland security event and disaster since 9/11, as shown in the figure below. Our analysts are already experienced in operations across the homeland security enterprise through CNA's work for DHS and other federal, state, and local agencies. For many events, our analysts have deployed onsite to provide real-time analytic support and collect data for future analysis. For example, during

the response to Hurricane Katrina, CNA provided analytic support to the U.S. Department of Health and Human Services (HHS) in the Secretary's Operations Center by synthesizing and analyzing incoming information streams. We also deployed personnel with Public Health Service teams that set up Federal Medical Stations in order to document and support these operations. For other incidents, we have reconstructed and analyzed event operations to identify lessons learned and improvement areas. More recently, CNA analysts deployed to locations in Texas, Georgia, and Florida to document HHS operations in support of Hurricanes Harvey Irma, and Maria. CNA has developed a series of After-Action Reports on real-world response actions for the Virginia Department of Emergency Management, as well as an After-Action Reports for the District of Columbia Homeland Security Emergency Management Agency following the 2017 Presidential Inauguration.

Anthrax Attacks Washington, DC	SARS Outbreak	Hurricanes Katrina and Rita	Haiti Earthquake	Fukishima Earthquake/ Nuclear Disaster	Ebola Virus Disease	Hurricanes Harvey, Irma, Maria, and Nate

2001	2003	2004	2005	2006	2009	2010	2011	2012	2013	2014	2015	2016	2017

Shoe Bomber	Ricin at Senate Office Building	E. coli Outbreak in Spinach	H1N1 Influenza Pandemic	Hurricane Sandy	Washington Navy Yard Mass Shooting	Congressional Baseball Shooting

ABOUT CNA CORPORATION

CNA is a not-for-profit research and analysis organization with over 75 years of experience providing government agencies with data-driven insights and real-world, actionable solutions grounded in our direct experience with the operational environments where these solutions are applied. CNA developed the foundational techniques for operational analysis to address complex challenges facing government programs. We have applied these techniques successfully in areas ranging from defense to aviation, education, justice, and homeland security.

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