HOMELAND SECURITY OPERATIONAL ANALYSIS CENTER

THE HOMELAND SECURITY OPERATIONAL ANALYSIS CENTER (HSOAC)—a federally funded research and development center (FFRDC)—provides nonpartisan, independent, objective analyses to the U.S. Department of Homeland Security (DHS) to support policy development, decisionmaking, and alternative approaches. Housed within the RAND Homeland Security Research Division, a research division of the RAND Corporation, HSOAC also supports other federal, state, local, tribal, and public- and private-sector organizations that make up the homeland security enterprise.
RESEARCH PROGRAMS

Disaster Management and Resilience Program
Assisting DHS and the broader emergency management community in identifying strategies to mitigate, plan for, respond to, and recover from disasters, hazards, and catastrophic incidents.
Director: Jessie Riposo | Jessie_Arciniegas@rand.org
Associate director: Shelly Culbertson | Shelly_Culbertson@rand.org

Infrastructure, Immigration, and Security Operations Program
Supporting DHS operational components and sponsors across the homeland security enterprise in proactively adapting to changing opportunities, threats and hazards, and resulting risks.
Acting director: William Shelton | William_Shelton@rand.org
Associate director: Aaron C. Davenport | Aaron_Davenport@rand.org

Management, Technology, and Capabilities Program
Advancing research and analysis to ensure that organizational structures, workforces, resources, and technological capabilities are appropriately aligned to confront urgent threats and execute missions.
Director: Emma Westerman | Emma_Westerman@rand.org
Associate directors: Kelly Klima | Kelly_Klima@rand.org and Abbie Tingstad | Abbie_Tingstad@rand.org
HSOAC’S RESEARCH AND ANALYSIS ALIGN WITH DHS MISSIONS AND PRIORITIES

HSOAC analyses focus on nine functional areas that cut across DHS mission categories:

1. **Acquisition.** Assessments to support acquisition planning, performance evaluation, and decisionmaking up to acquisition decision event/key decision point or other key life-cycle and acquisition events (e.g., procurement and contract review, integrated life-cycle sustainment plan review).

2. **Preparedness, Response, and Recovery.** Analyses that support sponsors as they help constituents prepare for, respond to, and recover from disasters, strengthen preparedness and resilience, and help people before, during, and after disasters.

3. **Innovation and Technology Acceleration.** Assessments and research to support innovation and technology acceleration. Example technologies include cyber, 5G, drones, data management, facial recognition technology, artificial intelligence, machine learning, and surveillance.

4. **Homeland Security Threat and Opportunity Studies.** Analyses to support planning and execution of homeland security mission areas.

**Interagency coordination**

RAND works with agencies and departments across the federal government, as well as at the state and local levels. This familiarity and experience supporting a range of organizational needs, requirements, and missions mean that RAND is well positioned to help DHS collaborate and coordinate with its many partners—including the U.S. Department of Defense, the Centers for Disease Control and Prevention, the U.S. Department of Commerce, and international governments.
5. **Personnel Policy and Management.** Studies that support DHS components and headquarters offices to ensure that they are able to recruit, train, retain, and sustain a workforce of sufficient size and capability to meet DHS mission goals and maintain a workplace culture that fosters inclusivity and employee resilience, values diversity, and ensures equity in treatment and opportunity.

6. **Operational Studies.** Evaluation and simulation to help DHS assess mission requirements, improve operational processes and procedures, and understand the impact of operations on a range of outcomes.

7. **Organizational Studies.** Studies that use workforce analysis and performance measurement to help DHS improve unity of effort across management and planning.

8. **Regulatory, Doctrine, and Policy Studies.** Studies that use regulatory and policy analysis to offer insight into the potential impact of changes in external regulations, policies, and doctrines on DHS missions and activities.

9. **Research and Development (R&D).** Assessments to strengthen DHS’s R&D capability that enables the department to envision, prepare, and grow the homeland security enterprise of tomorrow.
ABOUT RAND

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. As a nonpartisan organization with quality and objectivity as its core values, RAND is widely respected for operating independently of political and commercial pressures.

Organization

1,770
STAFF

In 2021

800
NEW PROJECTS LAUNCHED

NEARLY
1,000
PUBLICATIONS RELEASED

Wide-ranging policy research expertise

4 FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS
dedicated to U.S. homeland and national security: HSOAC, RAND Project AIR FORCE, RAND Arroyo Center, and the RAND National Defense Research Institute

3 SOCIAL AND ECONOMIC POLICY RESEARCH DIVISIONS
RAND Health Care, RAND Education and Labor, and RAND Social and Economic Well-Being

2 INTERNATIONAL SUBSIDIARIES
RAND Europe (Cambridge, UK, and Brussels, Belgium) and RAND Australia (Canberra)

1 GRADUATE SCHOOL
The Pardee RAND Graduate School in Santa Monica, California, is the nation’s oldest and largest public policy Ph.D. program.
An Interdisciplinary Matrix Approach to Research and Analysis

RAND’s research staff represents a diversity of work experience, academic training, political and ideological outlook, and race, ethnicity, gender, and age. RAND project teams bring together subject-matter experts, specialists in data methods, technical and policy analysts, programmers, data visualization and interactive tool developers, and strategic communicators. This dynamic matrix approach to policy research ensures that findings and recommendations are robust, nuanced, and inclusive.

RESEARCH STAFF DOCTORATES, BY DISCIPLINE

- Arts and letters 3%
- Behavioral sciences 6%
- Business and law 3%
- Computer sciences 5%
- Economics 11%
- Engineering 8%
- Other 3%
- International relations 9%
- Life sciences 6%
- Mathematics, operations research, statistics 7%
- Physical sciences 6%
- Political sciences 7%
- Policy analysis 13%
- Social sciences 12%
**RAND’S VALUES**

**Research and Analysis to Address Critical Challenges**
RAND finds solutions to difficult problems that affect people around the world. RAND’s research sponsors span the public and private sectors, and philanthropic support offers opportunities to tackle additional tough and often-controversial topics.

**Integrity and Quality Standards**
RAND is committed to the highest level of integrity and ethical behavior. All RAND work—every publication, database, and major briefing—undergoes a rigorous quality-assurance process.

**Transparency**
RAND is committed to the public interest, which means making its publications and the details of its research methods, findings, and recommendations available at no cost to the public.

**Graduate Education**
RAND operates the Pardee RAND Graduate School, the oldest and largest public policy Ph.D. program in the United States. The school, which also offers an M.Phil. in policy analysis, is producing the next generation of policy leaders, who bring innovative ideas to RAND’s homeland security research projects.
A LEGACY OF INNOVATION TO ADDRESS EMERGING CHALLENGES

RAND has pioneered numerous innovative research methodologies that have set benchmarks for data-driven decisionmaking. Solutions to complex national and global policy problems require a diverse analytic toolkit.

The interdisciplinary Methods Centers at the Pardee RAND Graduate School provide RAND research sponsors with innovative and agile approaches and serve as a proving ground for RAND to test new approaches and grow its capabilities.

RAND Center for Applied Network Analysis
Network analysis, complex systems analysis, and social media analysis at RAND holistically map the interconnections among factors that influence behaviors, drive trends, and influence outcomes.

RAND Center for Causal Inference
Recklessly inferring cause and effect from observed relationships can be costly and even dangerous. RAND employs a robust suite of methodologies to ensure that causal inferences are sound.
RAND Center for Gaming
Since its founding, RAND has developed simulations, models, and games to help stakeholders better understand problems, test concepts and ideas, and account for human behavior in devising solutions.

RAND Center for Qualitative and Mixed Methods
A single research approach does not always provide a complete picture of a problem. Quantitative analysis, drawing on such sources as interviews and focus groups, can be used to explore emerging trends and provides a nuanced understanding of the real-world impact of policies and solutions.

RAND Center for Scalable Computing and Analysis
Large data sets are a powerful decisionmaking resource, but interpreting them requires the right computing infrastructure and expertise. RAND has developed best practices and tools for collecting, storing, processing, protecting, and leveraging big data to provide insights on everything from predictors of community health to the spread of political movements.
COMMUNICATION AND OUTREACH SUPPORT

RAND’s Office of External Affairs oversees public dissemination of RAND research and is staffed by experts in communication strategies, publishing, digital outreach, design, and public and media relations.

Reaching Policymakers
HSOAC works with RAND’s Office of Congressional Relations to ensure that its research gets into the hands of those best positioned to effect policy change. The office conducts targeted outreach to key members of Congress and their staffs through hundreds of individual meetings and briefings each year. These interactions facilitate in-depth policy discussions of pressing problems and how RAND research can inform solutions. RAND staff often brief and testify before Congress as subject-matter experts—recently addressing such topics as the Federal Emergency Management Agency’s workforce, the opioid epidemic, mass shootings, online extremism, public health emergency preparedness, airport infrastructure, and supply-chain resilience.

Reaching Other Stakeholders and the General Public
Working with HSOAC leadership, RAND’s Office of Media Relations coordinates media appearances and interviews, produces news releases and advisories, and helps reach relevant audiences through researcher-authored commentaries published in national and regional media outlets and publications targeting specific audiences.
FELLOWSHIP OPPORTUNITIES AT RAND

Each year, RAND hosts one or more U.S. Coast Guard officers and DHS analysts who have been selected to participate in the U.S. Coast Guard and DHS fellowship programs, respectively.

Fellows collaborate with RAND researchers on critical maritime or homeland security issues, learn about RAND’s approach to policy analysis, and hone the skills needed to address current mission challenges. RAND research projects benefit from the fellows’ operational knowledge and experience.