IMMIGRATION POLICY AND BORDER SECURITY
Few issues today are as polarizing as U.S. immigration policy and border security, as evidenced by fervent views on such topics as removals, border walls, asylum seeking, and visa policies. And although many people have an opinion on such policies, the United States is in short supply of nonpartisan studies to inform the related pressing policy decisions. For more than two decades, the RAND Corporation has sought to fill these analytic gaps in the United States and across the world.

RAND’s research and analysis seek to help policymakers measure, understand, and forecast migration flows; understand environmental, political, and security drivers of migration; develop and evaluate approaches to deter and detect unlawful immigrant groups and illicit flows of narcotics and goods; formulate and enforce immigration policy; and understand the experience of immigrants in the United States. Here, we bring together some of RAND’s interdisciplinary work on immigration and on managing the U.S. border.
EXAMPLES OF OUR RESEARCH AND ANALYSIS

MANAGING U.S. BORDERS

Modeling the Impact of Border-Enforcement Measures


The authors investigated the impact that surveillance technology has on levels of U.S. Border Patrol apprehensions of unlawful border-crossers between ports of entry along the southwest border, using quasi-experimental statistical methods to understand the effectiveness of border enforcement measures. Findings include that the impact of surveillance technology varies by technology type.

Domain Awareness Strategy Plan

Angela Putney, Jan Osburg, June 2020–June 2021

The researchers advised DHS on how to modernize domain awareness for existing technologies, identify potential new opportunities, and test potential technologies or capabilities in simulated or operational U.S. settings, including surveillance platforms and systems, and related issues, such as data interoperability and data sharing.

Human Smuggling and Associated Revenues: What Do or Can We Know About Routes from Central America to the United States?


The authors estimated smugglers' revenues from transporting migrants from the Northern Triangle region of Central America (Guatemala, Honduras, and El Salvador) to the United States, and characterized the smugglers' structures, operations, and financing, including the role of transnational criminal organizations.

The willingness of smugglers to accept substantial loss rates often mitigates the deterrent effects of security measures.

Nuñez-Neto et al., 2018

Southwest Border Threat Assessment


The researchers investigated current and emerging threats on the southwest border that are addressed or required by technology and infrastructure. They highlighted smuggling and transnational criminal organizations, human rights violations, and potential future adaptation. Finally, they provided data estimates and future trends to help operational commanders and policymakers inform decisions about investments into technology and infrastructure.

Using Pattern Analysis and Systematic Randomness to Allocate U.S. Border Security Resources


The report outlines how pattern and trend analysis and systematic randomness can be used to position border security personnel and equipment where and when they will be most effective. The analysis shows how approaches that combine these two techniques yield higher interdiction rates than approaches using either technique alone, and the authors identified circumstances in which combined approaches were competitive with perfect surveillance.

Understanding the Factors that Influence Smuggling Along the Southwest Border


The authors investigated the factors that influence smugglers' operations along the southwest border, identifying trends and patterns that could be used to inform future law enforcement strategies.

Using Predictive Analytics and Domain Awareness to Inform U.S. Border Security Resources


The researchers used predictive analytics and domain awareness to identify potential threats and vulnerabilities along the southwest border. They highlighted the importance of data interoperability and intelligence sharing in informing decision-making processes.

U.S. Border Enforcement Measures


The study investigated the impact of border enforcement measures on smuggling and transnational criminal organizations. Findings include that the impact of surveillance technology varies by technology type.
Measuring Illegal Border Crossing Between Ports of Entry: An Assessment of Four Promising Methods
Andrew R. Morral, Henry H. Willis, Peter Brownell, 2011, www.rand.org/t/OP328
The authors explicated four innovative approaches to estimating the total flow of illicit border crossings between ports of entry: (1) capture–recapture methods to account for the loss of migrants after previous apprehension; (2) ways to estimate total crossings based on samplings at certain border crossings; (3) survey-based approaches to estimate flow; and (4) modeling of stock and flow of migrant community or of the black market economy for smuggling services.

Measuring the Effectiveness of Border Security Between Ports-of-Entry
The authors recommended approaches to measure the effectiveness of the national border security enterprise, including efforts to interdict and deter illegal flows of people, drugs, and weapons between ports of entry and to exploit shared intelligence information in support of border security efforts.

Managing International Borders: Balancing Security with the Licit Flow of People and Goods
The authors indicated opportunities to strengthen border security—when and where appropriate, preventing people and goods from crossing borders—while improving the flow of licit travelers and goods, through national policies, programs, regulations, and activities.

Characterization of the Synthetic Opioid Threat Profile to Inform Inspection and Detection Solutions
Bryce Pardo, Lois M. Davis, Melinda Moore, 2019, www.rand.org/t/RR2969
The report describes synthetic opioid supply and consumption trends to inform U.S. Department of Homeland Security (DHS) efforts to detect and identify these substances. The researchers characterized the compounds being used as cutting agents and the extent to which these agents can be detected and the national and regional trends in the seizures of synthetic opioids.

Health, Wellness, and Resilience in the Customs and Border Protection Workforce
Rajeev Ramchand, Jessica Saunders, 2018 (unpublished)
The researchers assessed the prevalence of resilience factors among U.S. Customs and Border Protection (CBP) employees, focusing on suicide prevention, domestic violence, substance abuse, marriage and family issues, and stress and anxiety. They outlined key components of the CBP resilience program and how they compare to other state-of-the-art efforts to promote workforce resilience.

Southwest Border Solar Electric Energy Study
Aimee Curtright, 2019 (unpublished)
The researcher depicted which areas on the southwest border might be candidates for solar electric systems to convert sunlight directly into usable electricity and which solar technology could provide the greatest benefit to the national defense missions of the Department of Homeland Security.

Radiation Portal Monitor Cost-Benefit Analysis
Michael Heiner, Joseph Chang, June 2020 (June 2021 unpublished)
The research evaluated an independent acquisition analysis for radiation portal monitors. The researchers compared traditional commercial off-the-shelf products to new modular open system architecture that is generally better suited to adapting to new technologies. They focused on the life cycle in each trade-off between performance, program risk, cost, and the need to prevent violations of all the laws in question. The researchers estimated the benefits of the development, including reduced costs, and assessed the program by examining the acquisition of non-clearance items across the entire industry, such as vehicles and commercial equipment.

Analysis of Alternative Research and Development Investments to Mitigate Maritime Domain Awareness for the Department of Homeland Security
Scott Savitz, Angela Pannell, Thomas Overdale, Bill Winders, Michael J. J. Umehr, Todd Martinson, Mark Hvizda, September 2018 (unpublished)
The authors analyzed examples of research and development investments to enhance maritime domain awareness for the Department of Homeland Security. The analysis was designed to provide input into decision-making on which investments have the greatest potential to improve maritime domain awareness and to identify funding opportunities that could provide an address in the gaps, planning, and analyzing systems’ mutual compatibility and modeling related systems for a more robust and efficient maritime domain awareness program.
IMMIGRATION POLICY
A Cost-Benefit Framework for Analyzing the Economic and Fiscal Impacts of State-Level Immigration Policies
The report outlines key state-level immigration policies, including omnibus legislation, E-Verify mandates, and policies that restrict access to resources, such as health care and financial aid. The authors applied a cost-benefit framework to understand known and potential impacts and costs.

Neither Deportation nor Amnesty: An Alternative for the Immigration Debate Building a Bridge Across the Deportation–Amnesty Divide
The author described minor, pragmatic changes to the Cancellation of Removal section of the Immigration and Nationality Act that would allow a number of undocumented immigrants present in the U.S. to attain legal status.

WHAT RAND RESEARCH SAYS
How well are border security programs performing? Answers to this question involve the holistic consideration of several functions: how well these programs are deterring illicit activity, exploiting networked intelligence to gain awareness of cross-border activity, and detecting and interdicting illicit flows. These functions are fundamental to border security efforts, and they provide a foundation for designing effective border management systems.

What makes for effective border management? Balancing the need to secure borders while facilitating legal trade and travel is a key requirement of effective border management systems. Security and commerce do not need to be at odds with each other. By designing and building risk management practices into border management processes and making data-driven cost and performance decisions, border management agencies can focus their limited enforcement resources on higher-risk people and cargo while expanding lawful travel and trade.

What are the drivers of migration, and how can an understanding of these drivers be used to better predict and manage migration flows? Migration flows are influenced by a complex mix of factors, including the threat of violence at home and en route, economic conditions, immigration policy, and the effectiveness of border security efforts. Better characterizing the effect of these factors and the interplay among them can inform the development of better policies and more accurate forecasting of migrant flows.

How do emerging technologies shape border security? Both law enforcement agencies and smugglers increasingly rely on technologies to improve domain awareness and enhance communications. Understanding how emerging technologies shape ongoing border security threats and DHS operations is critical to countering these threats. For example, Homeland Security Operational Analysis Center (HSOAC) research found strong evidence that the presence of integrated, fixed towers is associated with a decrease in apprehension levels, indicating deterrence of border crossings through surveilled zones.

Immigration Data Integration Initiative Study
Carter Price, Keith Gierlack, Bradley Wilson, September 2017–February 2020 (unpublished)
The researchers identified key requirements, gaps in current capabilities, and a variety of technologies that might help close gaps related to the Immigration Data Integration Initiative. They explained a conceptual framework that could be used to assess potential technologies that enforces a closed loop between how data are collected from the border and how those data are analyzed and used to inform decision making.
RISK SECURITY
How can we most effectively detect, analyze, and track potential actions, networks, and local threats at the border, within or approaching U.S. borders? To what extent do border security enhancements affect migration flows over the short- and long-term? How do immigration and benefit workforces affect economic, social, and physical well-being of communities in the United States?

MIGRATION AND PREDICTING MIGRANT FLOW
What effects do U.S. immigration enforcement and benefits administration policy choices have on immigration flows and an unaccompanied child's vulnerability? How can we research and information about these links to immigration enforcement and benefits administration be improved? How do immigration enforcement and benefits affect economic, social, and physical well-being of communities in the United States?

BIG QUESTIONS FOR NOW ... AND INTO THE FUTURE

UNDERSTANDING AND ADDRESSING ROOT CAUSES OF MIGRATION AND PREDICTING MIGRANT FLOW
How can we most effectively detect, analyze, and track potential actions, networks, and local threats at the border, within or approaching U.S. borders? To what extent do border security enhancements affect migration flows over the short- and long-term? How do immigration and benefit workforces affect economic, social, and physical well-being of communities in the United States?