RAND develops solutions to public policy challenges to help make people throughout the world safer and more secure, healthier and more prosperous. We are nonprofit, nonpartisan, and committed to the public interest.
In many ways, 2015 was a year of increasing fragmentation. Longstanding international partnerships were tested. Violence erupted in unexpected places. Social, economic, and political divides appeared to widen. Decisionmakers confronting these and other challenges turned to RAND to make sense of the chaos—to help them understand, through objective, fact-based research and analysis, how to forge a way ahead.

In 2015, experts at RAND combined traditional methods with unconventional approaches to take on some of the world’s most pressing problems. They released groundbreaking work on sexual assault in the U.S. military, the health care challenges faced by the newly insured, and the economic costs of the Israeli-Palestinian conflict. They studied the consequences of a future in which viruses and bacterial infections have become resistant to antibiotics, and in which police officers can halt an autonomous vehicle with a simple gesture. They challenged longstanding assumptions about hazing in the armed forces, and about the effects of a new supermarket in an urban food desert.

In these pages, we’re pleased to share a small sample of our accomplishments in 2015—another year of research and analysis undertaken to help make people around the world safer and more secure, healthier and more prosperous. As always, we thank the clients, sponsors, grantors, donors, and thought leaders who make our work possible and worthwhile.

Karen Elliott House
Chair, RAND Board of Trustees

Michael D. Rich
President and Chief Executive Officer
In 2015, individuals, communities, and nations arrived at a series of crossroads: decision points where the choices we make will shape both the direction we take and the opportunities and challenges we'll face as we move forward. RAND research plays a critical role in illuminating possible paths and anticipating what lies ahead.
Chaos in the Middle East, Russian intervention in neighboring states, Chinese assertiveness in the South China Sea, climate changes, and a decline in U.S. military readiness have raised fresh questions about how the United States envisions its role in a turbulent world. They have also reminded us that stability is not the natural state of the international environment, that peace is not self-perpetuating, and that whole regions can descend suddenly into anarchy.

Philanthropic support made it possible for RAND to convene teams of senior researchers to answer critical questions about America’s role in the world: What are the nation’s international ambitions? What level of international engagement will Americans support? Is there a coherent national strategy for diplomacy and defense that aligns interests with the means to achieve them?

In the first of a series of reports, Ambassador James Dobbins and the Strategic Rethink team identified challenges and options in three key regions (Europe, the Middle East, and East Asia) and across five key domains (economic, defense, counterterrorism, cyber, and climate). Finding that the nation confronts an unusually wide and diverse array of challenges, they contend that the United States should continue to take the lead in sustaining and extending a rules-based international order.

They also warn that a focus on defense, deterrence, and dissuasion is essential but insufficient, noting that the most successful eras of American statecraft have been periods of construction: the birth of new institutions, the reconstruction of shattered nations, and the establishment of new norms for international behavior. The United States needs to combine its defense of existing institutions and norms with a rededication to such a positive agenda, the researchers argue, and commit to providing the necessary resources. Additional volumes examine the global economy, national defense and intelligence, alliances and partnerships, and institutional reform of the U.S. system for managing national security.
Many U.S. employers now offer defined contribution plans instead of pensions, a shift that has given employees more freedom—but also more responsibility—in saving for retirement. In these plans, employees choose whether to participate, how much to contribute, and how to invest their contributions. Importantly, defined contribution plans often also offer increased portability, allowing employees to access their retirement savings when separating from a job. Exactly what happens to these savings upon separation deserves a closer look.

On average, Americans change jobs seven times between ages 25 and 70, so the question of what to do with retirement savings arises repeatedly over a lifetime. Some separating employees keep their account in the employer’s plan. Others roll their balance into another retirement account. Still others receive a cash distribution, and this withdrawal is the default action for the vast majority of plans when it comes to balances of less than $1,000.

Unfortunately, these withdrawals from retirement savings accounts prior to retirement—also called “leakages”—can significantly reduce a person’s retirement assets in the long run. For example, taking $1,000 out of a retirement account at age 25 translates into a loss of more than $10,000 over a lifetime.

Using data from more than 500,000 participants in 385 plans, RAND researchers found that job separation is a significant source of leakage. About half of separating employees in the sample took a cash distribution. The researchers also found that those separating from automatic enrollment plans—where employees had been enrolled into a retirement savings plan by default—were more likely to get a cash distribution than those separating from voluntary enrollment plans.

Automatic enrollment policies have certainly encouraged retirement savings among those who otherwise would not save. However, these savings might not actually make it to retirement, as they can easily leak out upon job separation.

Ideally, we’d put as much thought into policies for what happens to savings at the end of a period of employment as we do into policies that encourage savings at the start of employment. This is especially important for younger and lower-income employees, who experience higher job turnover and are more likely to take a cash distribution.

Angela A. Hung | Director, RAND Center for Financial and Economic Decision Making
Smart-Grid Technologies

The electric grid that keeps America running is so old, outdated, and prone to outages that Thomas Edison would still recognize its fundamentals. Bringing it into the 21st century could save billions of dollars, create new business opportunities, and make better use of other energy sources, such as solar and wind, according to RAND researchers studying the electric industry.

The “smart grid” of the future will have circuits that can talk to each other to isolate outages, and power lines that can monitor and balance their own loads. Power companies will be able to measure demand moment by moment, house by house. That level of detail could make the electric industry much more efficient, researchers found, helping providers better anticipate demand and reducing their reliance on backup generators to handle spikes. It would also allow power companies to introduce real-time pricing plans to encourage conservation, and help them tailor services or promotions based on information about how individual consumers use electricity.

But consumer unease over how these usage data could be employed has helped slow—and, in some communities, stop—the rollout of smart-grid technologies, researchers say. Furthermore, the much-touted benefits of the smart grid, especially the promise of lower electric bills, have not always materialized. At the moment, the researchers note, consumers bear much of the risk related to smart-grid development, and utility companies are reluctant to invest in expensive capital equipment in the absence of technology standards.

These concerns have made the process of modernizing the nation’s grid slower and more piecemeal than expected. Regulators need to address consumer unease and take the lead in establishing standards for grid technology, the researchers conclude. They also need to assure power companies that they will be able to recoup their smart-grid costs—by setting rates to account for societal benefits, such as improved reliability and emissions savings—to keep the modernization effort fully charged.
The world is witnessing the emergence of what some are calling the “Second Nuclear Age”—an era characterized by a greater diversity of nuclear-armed states, the rise of regional nuclear rivalries, and dramatic asymmetries in capability and interest between regional nuclear powers and other states inside and outside their regions. As the contours of this Second Nuclear Age emerge, it seems more likely that the United States will find itself in confrontation with states with a handful of nuclear weapons and strong antipathies toward America and its friends and allies.

In research and analysis for the U.S. Air Force, RAND researchers set out to answer three critical questions: What dilemmas would U.S. decisionmakers likely face in military confrontations with emergent nuclear-armed regional adversaries? Under what circumstances, if any, might the United States be able to neutralize a regional opponent’s nuclear capabilities? How can the United States avoid escalation while defeating nuclear-armed opponents in a conventional war?

Unsettlingly, the researchers found that there is probably no case in which U.S. forces could neutralize an opponent’s nuclear capabilities with a high enough probability of success that U.S. leaders would attempt it. However, U.S. forces should be able to manage escalation in some conventional conflicts, as long as the United States does not threaten the survival of the enemy regime or its nuclear-deterrent forces. Two essential precepts for the United States are deterring adversaries from escalating above critical U.S. thresholds and managing U.S. forces to avoid inadvertent escalation.

The researchers recommend that the Air Force continue to pursue methods for finding, tracking, targeting, and assessing enemy nuclear weapons capabilities; continue research and development on ballistic and cruise missile defenses; and investigate how to rebalance the force to better enable conventional strike operations from afar, in order to defeat a nuclear-armed adversary’s conventional forces while operating from bases beyond the range of its conventional and nuclear strike capabilities.
Growing numbers of schools are experimenting with "personalized learning," a new approach to education that tailors lesson plans and learning pace to individual students. Many educators think that this approach can accelerate and deepen learning and provide a richer variety of learning experiences, although there is not yet consensus on how best to implement it in the classroom.

RAND researchers tracked the achievement of thousands of students in mostly low-income, urban charter schools that implemented personalized learning with funding from the Bill & Melinda Gates Foundation. They also visited schools, surveyed students and teachers, and interviewed administrators to develop an in-depth look at how personalized learning is being put into practice.

Over the two years of the study, the researchers found, students in schools with personalized learning made greater gains on standardized tests than students who started with similar achievement but were not in personalized learning schools. Students in personalized learning programs had average test scores in math and reading that placed them below the national median at the start of the study but comfortably above it two years later.

The personalized learning schools with the greatest achievement gains used achievement data and flexible lesson plans to group students according to their needs and interests. Those schools also included students in discussions of their progress and goals.

Most of the teachers involved in personalized learning programs continued to align their lesson plans with district, state, and federal instructional standards. They used projects or individualized study time to provide students with choice and a personalized path through content. But few managed to implement another element of personalized learning: competency-based progression, in which students earn credit whenever they demonstrate mastery in a subject, not just at the end of the year. Most of the schools gave students some leeway to work at their own pace, but within limits. State requirements appeared to preclude greater use of such individualized progression.
On Health

Many factors play a role in health, from biology and genetics to personal choices and the policy decisions that shape our social, economic, and physical environments. RAND analyzes these complex dynamics to help decisionmakers promote both individual well-being and healthy communities.
A potent drug that can ease an addict’s craving for heroin or other opioids remains out of reach in some parts of the United States, even as the abuse of narcotics has exploded into what the Centers for Disease Control and Prevention now consider a national epidemic. An estimated 2 million Americans are affected by opioid addiction or abuse.

When buprenorphine was first approved for widespread use in 2002, experts thought it would revolutionize addiction medicine. The drug works by blocking the brain receptors that heroin and other opioids use, satisfying the cravings of addiction without the high. It’s similar to methadone, except that qualified doctors can prescribe it for home use, no trip to a clinic required.

RAND researchers studying access to buprenorphine found that the number of doctors authorized to prescribe the drug has increased in recent years. Nonetheless, nearly 47 percent of U.S. counties—especially in the rural Midwest—still had a shortage of prescribing physicians in 2011, and 10 percent of the population was living in areas with a treatment shortage. The numbers might be improving, but access to the drug still has not diffused as widely as hoped.

The researchers found that state drug policies appear to play a strong role in where buprenorphine is most available. Several states exclude the drug from their Medicaid payment plans, and those states tend to have the lowest numbers of prescribing physicians.

Clinical guidelines for buprenorphine also had not been updated in more than a decade, leaving doctors unsure of such basics as proper dosing and length of treatment. To remedy that, the researchers brought together a panel of experts and physicians to begin formulating a new set of guidelines designed to encourage doctors to make better use of buprenorphine in their treatment.
From Coverage to Care

Many implementation efforts associated with the Affordable Care Act have focused on getting people health insurance. And millions of previously uninsured Americans have indeed obtained coverage. But many of these newly insured are asking a critical question: “I have an insurance card—now what?”

The nation’s emphasis on enrollment has overshadowed the fact that reducing the number of uninsured Americans is only part of the Affordable Care Act’s overall goal. The law also aims to help more Americans use their coverage to access routine primary care and preventive services, as engaging with a regular source of medical care improves the chance that illnesses will be prevented or caught in earlier stages, that patients and physicians will discuss health-promoting lifestyle changes, and that nonemergency health care needs will be handled somewhere other than in high-cost emergency departments.

However, RAND researchers found that consumers face considerable challenges to successful participation in their health care. Low health literacy is a hefty barrier, with complex health insurance terminology causing confusion about subsidies and tax credits, monthly premiums, copays, coinsurance, and deductibles. Other challenges include doctor shortages, concerns about out-of-pocket costs, and social and structural factors, such as language barriers and access to transportation.

In response, the researchers led development of a pioneering tool—“A Roadmap to Better Care and a Healthier You”—to help the newly insured navigate the health care system. During pilot testing, consumers reported that the roadmap opened an entire new world to them, showing them for the first time, for example, that they could advocate for themselves and leave a provider who was not respectful or a good fit. The reach has been astonishing: More than 1 million print copies have been distributed, and the roadmap has been translated into Spanish, Arabic, Chinese, and several other languages.
Suicide and suicide attempts can take a terrible toll on family, friends, and other loved ones. They also represent a substantial societal and economic burden in the United States, resulting in as many as 42,000 deaths, 836,000 emergency department visits, and $51 billion in combined medical bills and lost wages in recent years. California has implemented a pioneering suicide prevention initiative to support those at risk of suicide. But is the program saving lives and dollars?

RAND researchers studying California’s effort have found that one component of the initiative—a suicide awareness and prevention social-marketing campaign called “Know the Signs”—is reaching a majority of the state’s adults and appears to be increasing their confidence about how to intervene with those at risk of suicide. The campaign uses television, online, and other advertising to encourage Californians to understand the signs of someone at risk of suicide, and directs them to a website where they can learn more.

The researchers also assessed a companion program—“Applied Suicide Intervention Skills Training”—designed for clergy, first responders, teachers, and others likely to come into contact with someone at risk of suicide. They found that, for each year the program is operated, the long-term effect could be the prevention of at least 140 deaths and 3,600 suicide attempts over the next three decades. They also estimated that, for every $1 the state invests in the program, the people of California will receive an estimated $1,100 in economic benefits, such as reduced spending on emergency care and increased earnings. Economic benefits to the state government alone could reach $50 for every $1 invested in the effort.

In addition to preventing suicide, California’s public education and early-intervention efforts are intended to reduce stigma and discrimination surrounding mental illness and improve the mental health of students in schools and colleges across the state. RAND researchers are currently studying the effectiveness of these efforts.
The Staggering Toll of Antimicrobial Resistance

Antimicrobial drugs, the frontline defenses of modern medicine, have been losing ground to growing numbers of antimicrobial-resistant viruses and bacterial infections, posing what the World Health Organization considers a “profound threat” to human health. In 2015, researchers from RAND Europe answered U.K. Prime Minister David Cameron’s call for action by calculating the potential human and economic toll of drug-resistant disease.

The researchers focused on three diseases (malaria, tuberculosis, and HIV/AIDS) and three bacteria (E. coli, methicillin-resistant Staphylococcus aureus, and Klebsiella pneumoniae) that have already shown growing resistance to antibiotics and other drugs. If current rates of resistance continue, the researchers estimate, these three diseases and three bacteria alone could reduce the world population by 11 million working-age adults by 2050.

This human loss—which includes people killed by drug-resistant disease as well as those who are never born because of it—would compress the world economy by an average of $53 billion annually even under the most optimistic scenario. In all, the worldwide economic costs over the next 40 years could approach $2.1 trillion—a “best case” total that doesn’t include increased health care costs and wider indirect social costs.

The aim of the study was not just to model a future of disease unchecked by antimicrobial drugs. Rather, it sought to raise an alarm while interventions—such as better antibiotic stewardship or new lines of research—can still change the equation. Until now, the researchers note, drug-resistant disease has not generated the same level of public concern as other global threats, such as climate change.
A Supermarket Oasis in a Food Desert

The U.S. government has spent hundreds of millions of dollars to help finance the construction of supermarkets in low-income, underserved communities known as “food deserts.” But no major study had ever examined whether a new supermarket really improves health and diet in those neighborhoods.

In 2013, the opening of the first supermarket in decades in a low-income Pittsburgh neighborhood offered a unique chance to conduct just such a study. RAND researchers interviewed and weighed nearly 1,400 residents—and assessed their diets and food-purchasing habits—before the store opened, and then followed up with those same residents 7–13 months after it opened.

The results were not straightforward. Neighborhood residents did not consume significantly more fruits, vegetables, or whole grains after the store opened, and their body-mass indexes stayed about the same. However, following the opening of the store, residents consumed fewer calories and solid fats and less alcohol and added sugar. Their overall diet quality did not change, but that actually might have been a small victory: Diet quality slipped significantly over the same period in the nearly identical comparison neighborhood that lacked a supermarket.

But here’s the twist: Improved outcomes for residents in the neighborhood with the supermarket held not just for the store’s regular customers but also for those who shopped there infrequently. What changed was not necessarily these residents’ shopping habits but rather their satisfaction with and pride in their neighborhood. The community had long fought for a supermarket as a social-justice issue; its very presence might have raised the profile of health, diet, and wellness.

The findings show—for the first time conclusively—that there are benefits to financing the placement of supermarkets in food deserts. But policymakers should move forward with an understanding that the how and why of those benefits are not as clear as they might have thought.
Hotspots

Slow-burning threats and flashes of violence in 2015 made safety a top foreign and domestic concern. From terrorist radicalization to the plight of refugees, from interstate tension to air pollution, RAND tackles some of the world’s toughest challenges with a focus on strategies to prevent future harm.
Why Youth Say “No” to Violent Extremism

Continued terrorist attacks and the involvement of foreign fighters in Syria and Iraq have prompted a surge of interest among policymakers, law enforcement, journalists, and academics around the world in what, exactly, drives terrorist radicalization. But many of the factors that push or pull a person toward terrorism are in dispute within the expert community.

Instead of examining the factors that lead to radicalization and the commission of terrorist acts, RAND researchers took a new approach: understanding, empirically, why individuals reject violent extremism. In the first report of its kind, the researchers described the results of an exploratory analysis in the West Bank, where they surveyed 600 Palestinians between the ages of 18 and 30 who lived in Hebron, Jenin, and Ramallah.

The researchers found that, for these residents of the West Bank, family influence was more important than peer groups in dampening a young person’s propensity for radicalization. They also found that demographic factors, such as age, employment, and education, did not have a significant effect on attitudes toward nonviolence, that encouraging nonviolent political activity was unlikely to reduce terrorism, and that fear of arrest or threats to personal safety go only so far in suppressing violent behavior.

Policies aimed at undermining radicalization should, according to the researchers, emphasize family members—especially parents—more than friends. These policies should include teaching parents how to discuss detrimental messages on social media with their children, as well as programs designed to strengthen both families’ influence on youth and youth ties to their local communities.

If this approach sounds somewhat familiar, we shouldn’t necessarily be surprised. The researchers found that efforts to reduce radicalization among youth should be conducted in much the same way as efforts to prevent other problems, such as underage drinking and gang recruitment.
Breathing Easier in China

Rapid economic growth in China over the past three decades hasn’t just raised incomes: It has also resulted in massive increases in air, water, and land pollution. The costs of this pollution are tremendous, approaching 10 percent of China’s gross domestic product per year over the past decade.

Air pollution has been particularly pernicious. Concentrations of air pollutants exceed standards recommended by the World Health Organization in virtually every major urban area in China. And the costs associated with air pollution alone—driven largely by health effects and loss of productivity—approached 6.5 percent of China’s gross domestic product between 2000 and 2010.

A RAND researcher and a Pardee RAND Graduate School Ph.D. candidate investigated the costs of three measures to reduce air pollution in China: replacing coal with natural gas for residential and commercial heating, replacing half of China’s coal-fired electric power generation with renewables or nuclear power, and scrapping highly polluting vehicles. They found that the recurring annual costs of replacing coal with natural gas for residential and commercial heating could run from $32 billion to $52 billion, and that replacing half of China’s coal-fired electric power generation with renewables or nuclear power would run about $184 billion. (China could also incur one-off costs of $21 billion to $42 billion for scrapping highly polluting vehicles.)

The first two measures would, in the aggregate, cost $140 billion to $160 billion annually. This total is less than one-third of the annual cost of air pollution in China, which was roughly $535 billion in 2012. The researchers suggest that, in the near term, China should focus on substituting natural gas for coal for residential and commercial use, a measure that would substantially improve air quality in urban areas, especially in winter months, and greatly reduce the number of days when air quality is extremely bad.
The Syrian Refugee Education Crisis

Amid the many tragedies of Syria’s civil war, there is this: More than 700,000 children taking refuge in neighboring countries lack access to formal education. They risk becoming a lost generation, unprepared to provide for themselves or their families—a circumstance that could threaten the future stability and prosperity of the greater Middle East.

Jordan, Lebanon, and Turkey have shouldered enormous costs, both economic and social, to shelter millions of refugees, even going into debt to do so. But in education, as in other social services, governments and international aid organizations have treated the flow of refugees as a short-term hardship, despite clear evidence that it has become a long-term fact.

RAND researchers traveled through these countries, finding both a shortage of school spaces and overcrowded schools, often filled with double shifts of students and teachers unprepared for the traumas experienced by refugee children. They also found that the realities of refugee life, such as parents barred from working, often keep children out of classrooms.

The influx of refugees in Jordan, Lebanon, and Turkey has created an education crisis, the researchers report. Solving it will require the cooperation of the host governments, United Nations agencies, nongovernmental organizations, and donors. It will demand new approaches and sustainable plans for the foreseeable future to provide quality education to refugees and citizen children alike.

Specifically, the researchers recommend a coordinated strategy to provide more classrooms and more instructional time to more students, while also improving teacher training and expanding school monitoring. They also call for coordination of regional curriculum standards and tests with those of Syria, so that Syrian children can complete their studies regardless of whether they remain in their new homes or return to Syria.
Criminal Justice and Information Technology

Tense relations and confrontations between law enforcement and the public have focused national attention on criminal-justice practices and procedures. New Internet-based technologies could substantially change how the criminal-justice community operates, offering opportunities for improved criminal databases, better information-sharing, and remote monitoring. But exactly how should criminal-justice decisionmakers evaluate and pursue these technologies to realize their potential benefits?

The National Institute of Justice asked RAND to help assess and prioritize the future technologies that are most likely to benefit the criminal-justice community. Researchers convened panels of law-enforcement officers, academics, technology experts, and professional futurists to envision how crime, policing, and society itself might evolve in the coming years.

Self-driving cars, they found, could be a boon to law enforcement, allowing officers to bring autonomous vehicles to a stop with a gesture or move an illegally parked car blocking a fire hydrant. However, law enforcement must work with technology companies and transportation agencies to develop policies and procedures for interacting with self-driving cars, which is the top priority for law enforcement when it comes to leveraging new technology.

Panelists also painted a picture of a future so saturated with information that law-enforcement agencies could face serious data overload. Police on the street, for example, might have mobile displays that can feed them many types of information at once—information that, it is hoped, future technologies will optimize to meet an officer’s needs from moment to moment.

Other elements of the criminal-justice system stand to benefit from technological innovation too. For courts, technology might help ease case backlogs by making it possible for witnesses to testify remotely. Jails and prisons could leverage improved Internet connectivity to allow prisoners to stay in touch with community service providers and parole officers prior to their release.

However, the researchers caution that many of these promising technologies also raise issues related to civil rights, privacy, and cybersecurity, and that these issues must be addressed before benefits can be fully realized.

The criminal-justice field has mostly been reactive to new technology developments. RAND has created a road map showing how new Internet-based technologies might help law enforcement in the future and how to set priorities for the improvements that are needed most.

John S. Hollywood | Senior Operations Researcher
Combating Russian Aggression

Russia’s continuing aggression in Ukraine, including its annexation of Crimea, isn’t just a stark rejection of Euro-Atlantic integration: It has shattered the vision of a stable, secure, and economically healthy Europe that has guided North Atlantic Treaty Organization (NATO) and European Union (EU) policy for two decades.

Despite broad agreement on several priorities for responding to Russian aggression, neither NATO nor the EU has articulated a comprehensive strategy for accomplishing these goals. This is not surprising, as Russia’s ambitions remain uncertain and NATO and EU countries are experiencing competing political and economic interests and pressures.

However, this ambivalence has resulted in a tendency to focus on one Russia-related issue at a time. RAND researchers believe this leads to unclear signaling to both friends and prospective adversaries. They contend that NATO, working closely with the EU, needs to regain the initiative to proactively seek peace and stability on the continent and find a coherent, cohesive way forward.

The researchers analyzed two potential strategies to guide the political and military choices that lie ahead. The first would use the threat of significant punishment to deter the possibility of Russian military aggression against NATO members. The second would strengthen the resilience of those NATO members to limit their vulnerability to Russian political, economic, and military coercion.

The researchers note that, even if it takes many years, a strategy of resilience and engagement is a way to build on NATO’s post–Cold War core values, design a military posture for the most likely future threats, and keep Russia engaged to whatever extent is possible. If this strategy proves unsuccessful, punishment and disengagement could be adopted as a last resort.
On Security

Since its establishment shortly after the end of World War II, RAND has helped senior government officials, military officers, and other decisionmakers diagnose the root causes of complex security problems and design policies to solve them. Nearly 70 years later, RAND continues to apply rigorous analytic techniques to our ever-broadening understanding of what constitutes security—and how to achieve it.
The U.S.-China Military Scorecard

Over the past two decades, China’s People’s Liberation Army has transformed itself from a large but antiquated force into a capable, modern military. China’s military development has garnered considerable attention in recent years, but much of that attention has focused on comparisons of aggregate equipment inventories and on discussions of individual weapon systems. Few analyses have considered how those inventories and systems would perform in specific conflict scenarios.

RAND researchers used a set of operational assessments and scorecards to analyze how U.S. and Chinese forces would perform against each other at various distances from the Chinese mainland and at different points in time between 1996 and 2017. They found that China is not close to catching up to the United States in terms of aggregate capabilities but that it is rapidly narrowing the gap in many aspects. Moreover, China enjoys the advantage of being close to potential conflict areas in most plausible conflict scenarios—a geographic advantage that would likely neutralize many U.S. military strengths.

In the future, U.S. military dominance is likely to be challenged at greater distances from China’s coast. To maintain robust defense and deterrence capabilities in an era of fiscal constraints, the researchers contend, the United States will need to ensure that its own operational concepts, procurement, and diplomacy anticipate future developments in Chinese military capabilities.

The researchers recommend that the United States adopt an active denial strategy that emphasizes a resilient, dispersed base posture; standoff systems optimized for high-intensity conflict; procuring an adequate number of stealthy fighters and strike aircraft; capitalizing on U.S. strengths in submarine and antisubmarine warfare; and maintaining robust space and counterspace capabilities. Western leaders should intensify diplomatic efforts to expand potential U.S. access during a conflict, make it clear to China that aggression would carry immense risks, and engage China on issues of strategic stability and escalation.
Privacy versus security: As society debates the pros and cons of government surveillance in this era of big data and global threats, that’s how the choice is usually framed—black and white, either-or, with no room for gray. But researchers from RAND Europe got a far more nuanced response when they surveyed more than 26,000 people in 27 countries in the European Union. The survey was part of one of the largest studies ever undertaken on European views of security, surveillance, and privacy issues—an effort to help policymakers shape future security investments.

The researchers found widespread support for surveillance cameras at train stations and metro stops, especially in the case of cameras with advanced features, such as facial-recognition software or abandoned-bag-detection capabilities. On average, in all but a few of the countries included in the survey, respondents also reported supporting the storage of video from these cameras for up to 15 days.

But most respondents reported opposition to any collection and storage of, or outside access to, their Internet usage data, and they indicated a willingness to pay extra for Internet service providers that could protect their privacy. They also reported opposition to Internet surveillance without a warrant, even in times of government-declared states of emergency.

Most respondents reported support for the idea of doctors, nurses, and paramedics having access to their health records and for expanding those records to include additional identifying information, such as lifelong health conditions. They even reported being willing to pay a premium to store such additional health information. But they were averse to expanding access to their records to insurance companies, academic researchers, and private-sector pharmaceutical companies.

The survey showed that Europeans don’t necessarily accept that more security or surveillance must come at the cost of privacy and liberty, the researchers concluded. The key for policymakers, they suggest, is accountability—especially when public or private organizations are collecting personal data.

People are often assumed to support either privacy or security, as if the choice is between one or the other. But the general public appears to have a much more nuanced understanding of surveillance and privacy issues.
The Costs of the Palestinian-Israeli Conflict

More than 90 percent of Israelis and Palestinians are not old enough to remember a time of peace. Their conflict has endured through 60 years of international efforts to resolve it, a destructive stalemate in the best of times that has cost both sides billions of dollars.

In the most comprehensive accounting of those costs ever undertaken, RAND researchers analyzed future directions the conflict might take and their economic consequences, from changes in security costs to the rise or fall of international goodwill. Philanthropic support made it possible for researchers to seek to provide a new perspective and a new appreciation for alternatives to the cycle of action, reaction, and inaction that has come to define the conflict.

The researchers found that ten years of peace, with a Palestinian state built alongside but apart from Israel, would boost the Palestinian economy by $50 billion and the Israeli economy by $123 billion. Ten years of violence, on the other hand, would cost the Palestinians $50 billion and the Israelis $250 billion. The difference in total between those two paths, says C. Ross Anthony, director of the RAND Israeli-Palestinian Initiative, is $469 billion over a single decade.

But within those numbers lies another economic reality of the conflict. Because their economy is so much smaller, Palestinians would, on average, see a much greater percentage change in their income from all those billions of dollars than would Israelis. The Palestinians thus have greater economic incentive to seek peace, while the Israelis can better afford to keep paying the costs of the status quo.

“While our findings make a strong case for the two-state solution, this hardly makes it the most likely outcome,” says study coleader Ambassador Charles P. Ries. “Economics are but one factor in a complex political dynamic.”
Nearly two years of RAND expertise and analysis helped inform the fierce debate over a nuclear deal with Iran, giving policymakers a clear-eyed view of the likely consequences. To its supporters and opponents alike, the deal that world leaders negotiated with Iran represented a break with history. It promised Iran some relief from economic sanctions in return for limits on its enrichment of uranium—an effort to seriously curtail its ability to make a nuclear weapon.

Philanthropic support made it possible for RAND’s Middle East and foreign-policy experts to take the long view in a series of reports leading up to the deal’s signing. What would happen, they asked, in the days after a deal?

The deal might give moderates inside Iran’s government a boost—and some breathing room to pursue domestic and foreign-policy reforms, they concluded. But hard-line conservatives still maintain a tight grip on Iran’s economy, military, and security forces, so any improvement in its relationship with the United States will be neither sudden nor dramatic.

That also means the deal will not likely change Iran’s anti-Israel stance or its regional rivalry with Saudi Arabia, both major drivers of unrest in the Middle East. That will put added pressure on the United States to reassure its regional allies that any failure by Iran to live up to the terms of the deal will be met with strong consequences.

For its part, the United States has shown little appetite for any change in its posture until Iran can demonstrate full compliance with the deal. But that wait-and-see approach misses a historic opportunity to engage Iran on other regional problems—Syria, especially—and encourage it to pursue a more moderate future. That could eventually allow the United States to shift resources and military forces that have been committed to containing the Iranian threat.
The threat of cyber hacks and attacks has become so persistent that large corporations must now assume that their networks not only are being targeted but may well have already been breached. Worldwide spending on cybersecurity is approaching $80 billion a year, but many chief information security officers (CISOs) believe that malicious hackers are still gaining the upper hand.

CISOs face a costly defender’s dilemma: fighting a shadow force of hackers that is constantly probing for weaknesses and evolving, with no real way to know how many exploits their defenses have thwarted.

RAND researchers used interviews with 18 CISOs to delve into that secretive world of hacking. They also reviewed efforts to harden network perimeters and software against hackers, and developed a model of the costs and consequences of confronting cyber attacks.

What most worries CISOs, they found, was not the direct cost of an attack, but the potential harm to their organization’s reputation. That makes it harder to judge whether the escalating costs of cybersecurity are worth it, since there is no standard way to calculate the dollar value of such risk.

Companies are paying much more attention to cybersecurity than they were just five years ago, and software is improving—all of which will make hacking more costly. But the threat will evolve as well, the researchers concluded, and organizations will need to balance the cost of adding security against what they stand to lose to a successful hack. The government could play a useful role by compiling research on how systems fail, similar to safety guidance it provides for the fields of aviation and medicine.
Those Who Serve

In 2015, RAND researchers studied a wide range of challenges faced by those who serve in the U.S. armed forces. Their groundbreaking research and analysis on health care, sexual assault, hazing, compensation, separation, and retirement has set the stage for policy changes and organizational transformations that will improve the lives of millions of the country’s military service members, veterans, and families.
Military Sexual Assault

The U.S. Department of Defense (DoD) has launched a top-priority campaign to root out sexual assault and harassment within the ranks, calling such crimes an affront to the military traditions of honor, dignity, and respect. A RAND study, unprecedented in scope and detail, provided the data used to guide that effort, and the Secretary of Defense has since announced new policy initiatives based directly on RAND’s findings to further understand and prevent sexual assault and reduce retaliation against victims.

During the Military Workplace Study, RAND surveyed 170,000 service members, using questions that were clearer and more carefully focused on actual crimes than previous military surveys. Responses allowed researchers to estimate that nearly 5 percent of women and 1 percent of men in active duty—around 20,300 service members in all—had been sexually assaulted in the past year. Nearly all of those assaults took place within a military setting or were perpetrated by military personnel. Almost half of the women and one-third of the men experienced penetrative assaults, a higher rate than previously thought.

The survey was the first of its kind to allow a detailed look at the sexual-assault experiences of men in the military. It found that men were more likely than women to have experienced both multiple assaults in the past year and assaults involving multiple offenders. Men were also more likely to describe the assault as hazing or humiliation, and less likely to report it. The researchers also found that more than half of the active-duty women who reported a sexual assault perceived that they experienced professional or social retaliation afterward.

“Our study has provided new insights into gender differences in sexual assault and into the risk and consequences of sexual assault and sexual harassment in the military,” says Andrew Morral, study coleader and senior behavioral scientist. “These findings should facilitate new, more-targeted strategies for combating these problems in military and nonmilitary settings.”
Warriors in the Workforce

Tens of thousands of U.S. service members are about to join the civilian labor force as the military draws down its forces following more than a decade of war. A growing body of RAND research shows what they can expect in the job market—and how their military training can pay off on a résumé.

Researchers focused on a program called the 100,000 Jobs Mission, through which 11 major U.S. corporations pledged to hire more veterans. The program could serve as a model for putting veterans to work, researchers found, with participating companies sharing best practices and résumés and educating their hiring managers about what veterans bring to the job.

Nearly 300,000 veterans have found jobs through the program, which is now known as the Veteran Jobs Mission and consists of more than 200 companies. But challenges persist. Few of the companies track the performance of the veterans they hire, a crucial weakness when making the business case to hire more. Veterans themselves often need a better understanding of what is available to them in the job market, and of how to match their education and skills to civilian job requirements.

To help, researchers produced guidebooks for both job-seeking veterans and civilian employers that translate common military experiences into job skills. An applicant who has been through basic training, for example, has been trained to handle stress, work in a team, and pay attention to detail.

Philanthropic support enabled RAND to host a workshop that brought together representatives from the military, other federal agencies, and the private sector for roundtable discussions on the challenges still faced by veterans in the civilian workforce—and possible solutions.
Reforming Military Compensation and Retirement Systems

The U.S. military’s current compensation and retirement systems have helped the services meet manning requirements and stabilize the retention of valuable midcareer personnel. They have also provided service members with a low-risk and predictable source of income in old age and helped retiring service members transition to a second career. Nonetheless, multiple commissions and reviews have found that aspects of these systems are inequitable, inefficient, and inflexible.

In response, the National Defense Authorization Act of 2013 mandated that an independent commission review military compensation and retirement systems and make recommendations for their modernization. To replace the current defined benefit–only plan, the commission proposed a blended system consisting of a defined benefit plan, a defined contribution plan with matching, and continuation pay in the 12th year of service.

To support the commission’s initial deliberations, researchers employed the RAND Dynamic Retention Model, which uses real career data from administrative files to estimate how individual service members will respond to different internal and external factors and, ultimately, make decisions about their military career.

The researchers found that, contrary to fears that changes could hurt the size and experience mix of the military, the commission’s proposed reforms can sustain the current force size and shape—an assurance that is of fundamental importance for national defense. They also found that the commission’s blended system is cost-effective, saving between $2.3 billion and $7.7 billion each year.

Furthermore, the reforms appear to benefit both individual service members and the military services. Service members gain through the early vesting defined contribution plan and lump-sum choice afforded by the blended system, while the military services gain the potential for greater flexibility in how they manage the force.
Hazing in the U.S. Armed Forces

The U.S. military prohibits acts of hazing outright, but high-profile incidents in recent years—beatings, “blood pinnings,” and even deaths—have presented stark evidence that the problem persists. To make its response more effective, the U.S. Department of Defense (DoD) asked RAND to conduct a review of its hazing policies and prevention efforts.

The researchers found that, at the time of the study, the DoD’s definition of hazing was overly broad and failed to differentiate hazing from other types of abuse and mistreatment—problems that hobbled its prevention efforts. They also found inconsistencies among the services in terms of how hazing is tracked, making any assessment of prevalence across the armed forces difficult.

The services also vary widely in terms of how often and how extensively they provide antihazing training, the researchers found. Most use lectures to educate service members about hazing but fail to address the problematic attitudes, skills, and behaviors that underlie it. More-active training techniques, such as instructor-led discussions, might encourage greater understanding of the problem and yield better results from the ground up.

The findings helped the DoD rewrite its hazing policies with stricter language and a better definition of what it prohibits. The DoD also issued revised guidance that incorporates other recommendations identified by the researchers, including standardized requirements for the tracking and reporting of hazing allegations across the services.

To further the military’s prevention efforts at the unit level, researchers produced a handbook for commanders that lays out what hazing is, how to combat it, and how to demonstrate clear and consistent commitment to and support for antihazing initiatives. Philanthropic support has made it possible for the researchers to further extend the impact of their work by developing an antihazing training program designed to help military leaders better identify, prevent, and respond to hazing. This program could ultimately become a model for other organizations—such as universities, law-enforcement agencies, and fire departments—as they attempt to combat the harms of hazing in environments beyond the military.

Proponents of hazing often argue that it contributes to greater group cohesion and commitment. However, research on this is mixed. In fact, hazing often appears to increase feelings of isolation and can lead to physical and psychological injuries among those who are hazed.

Kirsten M. Keller | Associate Director, Manpower, Personnel, and Training Program, RAND Project AIR FORCE
Improving Health Care for Veterans

Reports of veterans experiencing serious delays while waiting for care at Department of Veterans Affairs (VA) facilities—combined with allegations of secret waiting lists meant to hide the extent of scheduling and capacity issues—have led to public outcry and demands for immediate improvements in health care for veterans.

Congress responded by authorizing veterans to seek care outside of VA facilities, in an effort to alleviate serious delays. At the same time, Congress also mandated a series of 12 independent assessments on the department’s most significant systemic problems and areas requiring reform. RAND was asked to conduct three of these assessments: on the demographics and needs of the veteran population, on VA’s current and projected health care capabilities and resources, and on the mechanisms and authorities provided to VA to help meet veterans’ health care needs. In just nine months, a team of 160 RAND staff developed more than 25 recommendations designed to address the reality that the size, demographics, and needs of the veteran patient population are changing. These include anticipating a potential long-term decline in the number of veterans, as well as shifts in where veterans live; improving access to care; improving metrics for assessing care access and quality; meeting a near-term increase in needed care; making strategic use of care purchased in the community; and improving the collection of data on veterans’ use of care services.

At a hearing called to examine the findings of the independent assessments, Chairman of the House Veterans’ Affairs Committee Jeff Miller noted that the consolidated report “thoughtfully lays out what steps need to be taken to transform the broken VA health care system into one that our nation’s veterans can truly be proud of.” VA has begun implementing many of the recommendations, and Congress is moving forward with efforts to transform VA, incorporating lessons learned from the assessments.
Founded in 1970 as one of eight graduate programs created to train future leaders in public policy, the Pardee RAND Graduate School is the only program specializing exclusively in the Ph.D. and the only one based at a public policy research organization. The student body represents diversity in work experience; academic training; country of origin; and race, gender, and ethnicity.

For both RAND and the Pardee RAND Graduate School, this diversity promotes creativity, deepens understanding of the practical effects of policy, and ensures that multiple viewpoints and perspectives are heard in the classroom and beyond. More than 33 percent of the incoming cohort hails from countries outside the United States, including Kazakhstan, Lithuania, Mexico, Nigeria, and—for the first time—Finland, Guatemala, and Romania.

To learn more about the Pardee RAND Graduate School, visit www.prgs.edu.

Because of real and rapid worldwide changes, policy problems are increasingly complex, and traditional approaches to policy analysis are increasingly inadequate. In 2015, we began a two-year initiative to reimagine the Pardee RAND Graduate School to ensure that its tradition of innovation, informed and inspired by analysis, continues well into the future.

Susan L. Marquis, Dean | Pardee RAND Graduate School
In 2015, Harold Brown, the former U.S. Secretary of Defense, president of the California Institute of Technology, director of the Lawrence Livermore National Laboratory, and RAND trustee, and his wife, Colene, made a gift to establish the Harold and Colene Brown Faculty Chair at Pardee RAND. The chair will enable exceptional RAND researchers and faculty to be in residence at the school each year, allowing them to work on independent research and provide mentorship and guidance to students.
Summer Faculty Workshop

In July 2015, Pardee RAND held its third annual Summer Faculty Workshop in Policy Research and Analysis, hosting 12 select faculty members from colleges and universities serving highly diverse student bodies for an intensive, weeklong experience.

As with past workshops, faculty participants represented a wide array of academic disciplines, including law, medicine, architecture, social work, political science, and engineering. Four universities have sent faculty participants each year: Xavier University of Louisiana, University of Alabama at Huntsville, Florida International University, and Charles Drew University. This year, we had four first-timers: University of Illinois at Chicago, Louisiana State University, Utah State University, and California State University at San Bernardino.

Workshop sessions included Building Public Policy into the Curriculum; Engaging and Mentoring in the Field of Public Policy; Examining Community Research in Action; and a session called Learning from Alumni, in which three program alumni returned to share how they are implementing their policy research and bringing public policy analysis into their classrooms.

In his keynote address, “A New Approach to Diversifying the Medical Profession Through Community Engagement and Outreach,” Dr. Pedro José “Joe” Greer—a RAND trustee and chair of the Pardee RAND Board of Governors—shared his experience delivering medical care to underserved communities in Miami, training medical students through a community-based approach, and attracting and retaining a diverse student body.

Air Force Fellows Promotion

Every Pardee RAND cohort is familiar with the “Air Force guys” in their midst, but few students are familiar with their profession as military officers. So we welcomed the opportunity in May 2015 to celebrate the promotion of students Mick Powell, Tim Smith, and Steve Trochlil from second to first lieutenant. The ceremony was an exciting and inspiring experience for the faculty, researchers, and students who attended.
New Courses

To ensure that our students have access to the latest policy analysis tools and are tuned in to the most pressing public policy challenges, we continually add new courses and bring new faculty into our classrooms. This year, we offered eight new electives.

Analyzing Text with Computers
Bill Marcellino (policy analysis) led this course on analyzing very large volumes of text.

Criminology and Public Policy
This introduction to the criminal justice system, criminological methods, and criminal justice policy was taught by Jessica Saunders (policy analysis).

Cyber 101: Fundamental Concepts of Security and Risks in Cyberspace
Taught by Lillian Abion (engineering) and Josh Baron (engineering), this course explored fundamental concepts surrounding the technology and policy aspects of cyber: what it is, and what you can do in, through, and with it.

Cyberwar
Taught by Martin Libicki (engineering), this course examined the uses and abuses of cyberwar and cyberspace policy, covering the basics of systems attack, information system security, infrastructure protection, cyber operations, and more.

Environmental and Natural Resource Economics
Taught by Craig Bond (economics), Nicholas Burger (economics), and Shanthi Nataraj (economics), this course focused on the economic theory and methods relevant to analyzing policy choices related to externalities, public goods, and non-renewable and renewable resources in the context of the coupled human/natural system under alternative property rights, biological, and technology regimes.

Smart Markets and Combinatorial Auctions
Taught by John Raffensperger (operations research), this course offered an overview of the exciting new field of smart markets, while exploring some relationships between operations research and economics.

Understanding Terrorism
Taught by Angel Rabasa (political science), this course explored radicalization and terrorism, counterradicalization and counterterrorism strategies, and the factors and conditions that lead to the disengagement of militants.

The U.S. Defense Budget in International Security and Domestic Politics
Taught by Stephanie Young (political science), this course provided a brief overview of the budget as policy—both as a reflection/determinate of grand strategy and as a product of delicate political negotiation among U.S. institutions with unique responsibilities and incentives.

Pardee RAND has the potential to help RAND chart an entire new course. It can transform not just the science and art of policy analysis but, by serving as an engine of innovation for the world’s most prominent policy research institution, can help transform the practice of policy analysis, too.

Michael D. Rich, President and CEO | RAND Corporation
People

53 Countries
With locations in North America, Europe, and Australia, RAND attracts top talent from more than four dozen nations.

1,875 Staff
Our people bring a diverse range of professional, educational, and cultural backgrounds to their project teams.

56 Hold Doctorates
Well over half our research staff of ~1,100 hold one or more doctorates—and another 36 percent hold one or more master’s degrees—in a vast array of disciplines.

75 Languages
Many of our staff are multilingual. Languages spoken include Arabic, Chinese, Farsi, French, German, Japanese, Korean, Russian, and Spanish.

Highest Degree Obtained

- Doctorates, including MDs and JDs (56%)
- Master’s (36%)
- Bachelor’s (8%)

Disciplines

- Arts and letters (3%)
- Behavioral sciences (8%)
- Business and law (5%)
- Computer sciences (4%)
- Economics (12%)
- Engineering (6%)
- International relations (8%)
- Life sciences (9%)
- Mathematics, operations research, statistics (6%)
- Political sciences (8%)
- Policy analysis (10%)
- Physical sciences (5%)
- Other (1%)
- Social sciences (13%)
- Other disciplines (20%)
We performed work for more than 375 clients and grantors, including government agencies, international organizations, and foundations.

Through more than 1,750 projects (including more than 600 new ones), RAND provides research services, systematic analysis, and innovative thinking to a global clientele.

Last year, we added more than 550 RAND publications and more than 400 journal articles to our growing online library—15,500 and counting—of reports, podcasts, videos, tools, and commentary, most of which can be downloaded at www.rand.org.

* FY2015, net of subcontracts and RAND-initiated research.
At RAND, diversity of experience and richness of perspective aren’t buzzwords: They are critical enablers of the breadth and depth of research and analysis we undertake, and of the multidisciplinary approach to framing and solving problems that makes our mission possible. The eight very different researchers featured here are members of RAND’s growing community of vibrant, varied, and accomplished individuals who have come together to take on the world’s most pressing challenges.

**DEBORAH FREUND**, senior principal researcher, has spent her career making managed health care work for more people. She was an early student of HMOs, studying how they were implemented and how they could be improved when extended to the Medicaid population. Later, she helped develop the scientific discipline of pharmacoconomics, which measures the comparative cost-effectiveness of drug therapies—work that changed how the Australian government reviews the effectiveness of new drugs and prices them. She was also part of a group that pioneered research into the early outcomes of total knee replacement surgery. More recently, Freund constructed a new database that many private insurers now use to determine what to pay for out-of-network claims. In 2015, she was appointed to RAND’s Paul O’Neill-Alcoa Chair in Policy Analysis, a position that will allow her to advance her research on health care and health disparities, bundled payments for knee replacements, and other matters. “The challenge of health care reform didn’t get solved with the Affordable Care Act,” she said in a recent interview. “In many ways, the challenges are just beginning, and the need for objective, nonpartisan research and analysis has never been greater.”

**JOHN S. DAVIS II**, senior information scientist, has been interested in science since an early age. In elementary school, he experimented with chemistry sets and electronic-circuit kits. After pursuing a bachelor’s degree and Ph.D. in electrical engineering, Davis worked at IBM Research, where he led projects—and obtained several patents—related to middleware systems and the aggregation of sensory data. These days, Davis enjoys applying his electrical engineering expertise to a wide range of research areas at RAND, such as cybersecurity and technology adoption. In 2015, Davis was appointed codirector of RAND’s new Center for Scalable Computing and Analysis. In this capacity, Davis is helping frame discussions about the implications of large-scale data collection and analysis on ethics, equity, privacy, and other social dimensions. “One of the things that keeps me up at night,” he said in a recent interview, “is concern over how ordinary people will cope with the increasing complexity of technology and the so-called Internet of things, like smart refrigerators and autonomous vehicles. I’ve watched family and friends struggle to manage complex privacy settings in order to keep their devices safe.”

**CHARLENE ROHR**, senior research leader, specializes in the future of traffic and transportation. In 2015, she led a study showing that new technologies, such as driver apps and autonomous cars, could help unlock the United Kingdom’s notoriously congested transportation system. She also helped debunk concerns that the surge of migrants into the European Union would worsen traffic, having found that migrants tend to be less reliant on automobiles. She has helped policymakers from Scandinavia to Australia forecast future travel. Rohr’s focus on modeling consumer choice and behavior has yielded important off-road insights as well. In 2015, she was part of a team that analyzed the economic drag caused by thousands of mobile-phone dead zones across the United Kingdom. The research revealed that residents living in these “not-spots” are willing to pay £12 a month for a signal. In a study of online “free trial” offers, she and her team found that the majority of websites offering free trials across Europe employ problematic practices—and that consumers are overconfident that they’ll remember to cancel before charges kick in.

**OBAID YOUNOSSI** is the director of the Resource Management Program at RAND Project Air Force, a senior management scientist, and an expert on defense acquisition and cost analysis. Thirty-five years ago, he was a refugee fleeing the Soviet invasion of his native Afghanistan. He and his immediate family found separate paths to safety in the United States, but he knows the other side of the refugee experience as well. His cousin, a gifted medical student, suffocated in the back of a smuggler’s truck. “As politicians in the West struggle with how to deal with this (latest) incredible surge in refugees, the world needs to remember to treat them humanely and with dignity,” he wrote in a September 2015 commentary for FoxNews.com. “They are people, awaiting their fate.” After more than a decade of civil service as an engineer for the U.S. Navy, Younossi joined RAND in 1998 and later served as director of the RAND-Qatar Policy Institute. His work has helped the U.S. and allied militaries assess acquisition strategies for major weapon systems, helped Qatar develop a national research strategy and food-security program, and provided a clear-eyed look at the “long march” needed to build the Afghan National Army.
HEATHER SCHWARTZ, policy researcher, was a student teacher in Philadelphia when she learned an important lesson: Housing policy is school policy. This insight has informed much of her research, says Schwartz, who was appointed associate director of RAND Education in 2015. School reform, she contends, must work hand in hand with housing reform to break up pockets of concentrated poverty and narrow America’s persistent student-achievement gap.

“Poverty is one of the biggest drivers of low school performance,” she said in a recent interview. “My main interest is identifying how to narrow that gap.” Accordingly, Schwartz has focused on early childhood education and school accountability, along with economically integrated housing, school choice programs, and other strategies to deconcentrate poverty. She is currently working on an experiment that will test whether summer school programs can improve the academics and social development of children, especially those in low-income schools. “No single reform is going to eliminate the income achievement gap,” she wrote in an op-ed in Education Week. “Instead, the problem should be attacked from multiple sides.”

The RAND career of CHARLES WOLF can be measured in paper (more than 280 reports), policy (his groundbreaking analyses changed our understanding of the Soviet economy, for example), or sheer permanence (60 years of service and counting). Celebrated as one of the intellectual fathers of modern policy analysis, Wolf has often focused on the economic foundations of international relations and security. He was among the first economists to anticipate the economic rise of postwar South Korea, for example, and what that would mean for its relationship with North Korea. His work on the costs of the Soviet empire was so insightful that even the Soviets read it. Wolf built RAND’s economics department into a powerhouse, then became the founding dean of the Pardee RAND Graduate School. He also helped lead United Nations development efforts in West Irian, helped South Korea develop its first five-year plan, and helped the Chinese province of Hainan establish its fiscal and trade policies. In 2007, Japan awarded Wolf the Order of the Rising Sun, Gold Rays with Neck Ribbon, the nation’s highest honor for members of academia.

REBECCA ZIMMERMAN, associate policy analyst, has traveled to Afghanistan six times since 2007 to research the evolution of the U.S. military and its approaches to governance and security force development. She has conducted hundreds of interviews with Afghan citizens, national police members, warlords, and coalition forces. Her on-the-ground research has yielded important insights into the progress—and problems—of U.S. stability efforts in Afghanistan, and of the forces shaping the country’s future. In 2015, Zimmerman coauthored a report on best practices for building special operations forces in Afghanistan, Iraq, and Colombia. She also wrote about the psychological and emotional wounds suffered by “frontline civilians” like her, and—hauntingly—about a little girl she met on the streets of Kabul who was later killed by a suicide bomber. The mental toll of working in a war zone “is exhausting and debilitating,” she explained in a post for The RAND Blog. “And yet it is the work that I love: trying to understand how conflicts evolve, in the hope that I can play a small role in bringing the war to the quickest, most humane end possible.”

JAMES M. ANDERSON, senior behavioral scientist, came to RAND by way of the courtroom. He spent ten years as a federal public defender, representing prisoners who had been sentenced to death. He now directs RAND’s Justice Policy Program and Institute for Civil Justice. Recently, Anderson has focused on exploring the legal and policy implications of self-driving vehicles: Who’s at fault in a crash, for example, when the driver and the car share driving responsibility? This analysis resulted from the kind of interdisciplinary collaboration that has become a RAND hallmark: Anderson was waiting to have his picture taken when he struck up a conversation with senior information scientist Nidhi Kalra, who mentioned her research into the future of autonomous vehicles. Anderson has also examined how stock ownership limits which judges can hear corporate cases and how criminal law controls corporate behavior. His review of Philadelphia’s indigent defense system revealed that public defenders routinely won their clients shorter sentences than poorly paid private attorneys appointed by the court. His findings raised serious concerns about equal protection and prompted a senior state judge to order reforms.
New Leaders for the RAND Board of Trustees

In 2015, the Board of Trustees was augmented by five leaders who, with the other trustees, will help ensure that RAND continues to provide objective analysis to policymakers and decisionmakers in all corners of the world.

MALCOLM GLADWELL has been a writer with the New Yorker since 1996 and has authored many best-selling books, including David and Goliath: Underdogs, Misfits and the Art of Battling Giants; Blink: The Power of Thinking Without Thinking; and The Tipping Point: How Little Things Can Make a Big Difference. Much of his writing examines the implications of research in the areas of sociology, psychology, and social psychology. In 2005, TIME magazine named him one of its “100 most influential people.”

CHUCK HAGEL served as the 24th U.S. secretary of defense from February 2013 to February 2015 and as a U.S. senator, representing his home state of Nebraska, from 1997 to 2009. He is the only enlisted soldier and Vietnam War veteran to serve as secretary of defense. Hagel previously served as cochair of the President’s Intelligence Advisory Board, distinguished professor at Georgetown University, chairman of the Atlantic Council, deputy administrator of the Veterans Administration, and president and CEO of the World USO.

SOLEDAD O’BRIEN is founder and CEO of Starfish Media Group, a media production and distribution company. She reports for HBO’s Real Sports with Bryant Gumbel; hosts the National Geographic Bee; and has produced reports and documentaries for CNN, Al Jazeera, and NBC. She previously reported for CNN, anchoring American Morning, Starting Point, and the CNN Presents and In America documentaries.

LIONEL C. JOHNSON is a senior executive with more than three decades of experience in international business, public policy, and sustainable development. He serves as president of the Pacific Pension Institute, a not-for-profit organization that facilitates dialogue among North American, Asian, Latin American, and European pension funds, corporations, financial institutions, and endowments. He has also held positions with the U.S. Chamber of Commerce and the Departments of Treasury and State.

GERALD L. PARSKY is founder and chairman of Aurora Capital Group, a Los Angeles–based investment firm. From 1977 to 1992, he was affiliated with the law firm of Gibson, Dunn & Crutcher, where he was a senior partner and a member of the executive and management committees. From 1974 to 1977, Parsky served as assistant secretary of the U.S. Treasury. He is a former chairman of the University of California Board of Regents and a former trustee of Princeton University.

A full list of trustees can be found on page 65 of this report.
In 2015, gifts from donors continued to help RAND initiate new studies and extend the impact of our research and analysis on a range of critical issues. Five projects supported by philanthropy are described in detail earlier in this report’s “Research and Analysis” section. Generous gifts also made it possible for RAND researchers to study other key challenges, such as

- protecting military space systems
- understanding the roots of income inequality
- designing policies to prevent gun-related suicides
- laying down the laws of cyber war.

Two additional donor-supported projects described on these pages demonstrate how flexible philanthropic gifts allow us to tackle hot-button topics that require immediate attention.

**Anticipating the Effects of Today’s Economic Policies on Tomorrow’s Stock Markets**

Trillions of dollars of individual and institutional wealth are tied up in the U.S. stock markets. When introducing a new economic policy or regulation, therefore, decisionmakers must consider the many ways in which changes could shape investor behavior and move these markets. If a new policy shakes investor confidence, for instance, it could set off a chain of events that sends markets spiraling, potentially putting national stability and security at risk.

To address this information need, RAND researchers teamed up with Lawrence Livermore National Laboratory, home to some of the fastest supercomputers in the world, to develop a high-performance model that can simulate the implications of potential policies and regulations before those changes are introduced. The model provides an investor-level simulation of U.S. stock markets, showing how specific policies and regulations would shape the behavior of various market participants, from individuals to institutional investors and high-frequency traders. The ability to model these effects—combined with the power to fine-tune policies to achieve specific goals—will help policymakers increase market stability and security by improving economic decisionmaking and minimizing unintended consequences.
An investment in RAND people and ideas is an investment in a better world: Philanthropic support helps us tackle challenges and questions that aren’t yet the subject of focused research and analysis.

Modeling the Effects of Public Pension Reform on Teacher Retention

To address large unfunded liabilities in public pension plans, many state governments have legislated reductions in teacher retirement benefits for new and future employees. How will these unprecedented pension reforms, combined with broader changes to teacher compensation, affect teacher turnover and experience, and, in turn, the cost and efficacy of the public education system?

Adapting an approach first developed at RAND to study the effects of military compensation on personnel retention, researchers developed a model that facilitates analysis of the relationship between compensation (including retirement benefits) and retention in the careers of Chicago public school teachers. Unlike existing tools, RAND’s new model makes it possible to understand compensation and retention patterns over the length of a teacher’s career, from entry to exit, and to predict how retention might shift in response to changes in compensation. In the coming months and years, researchers could apply the model to other school districts, add a costing component that models the costs of alternative policy changes, and augment the model with data on school and student characteristics and teacher effectiveness.
Ways to Engage

The RAND Policy Circle is a community of engagement-minded individuals who are committed to nonpartisan analysis, smarter decisionmaking, and a more prosperous world. In 2015, Policy Circle programs addressed such issues as the Paris terror attacks, California’s drought, challenges in implementing new education standards and assessments in Pennsylvania, women in special operations and combat roles, and the “dark side” of technology. Member gifts of $1,000 or more support RAND’s Investment in People and Ideas program and make possible innovative work on new and emerging policy challenges.

RANDNext convenes early- to mid-career professionals for exclusive opportunities to connect with RAND experts, key policy influencers, and other young professionals while supporting RAND with philanthropic contributions.

Distinguished Chairs

Philanthropy supports distinguished chairs for outstanding researchers recognized as world-class among peers. Distinguished chairs, listed below, pursue bold, new ideas; help deliver RAND’s findings and recommendations to influential audiences; and mentor junior policy analysts.

AIR AND SPACE POLICY
Natalie W. Crawford

DIPLOMACY AND SECURITY
James Dobbins

EDUCATION INNOVATION
John F. Pane

EDUCATION POLICY
Rebecca Herman

EDUCATION POLICY
V. Darleen Opfer

EUROPEAN SECURITY
James Dobbins

HEALTH CARE DELIVERY MEASUREMENT AND EVALUATION
Steve Larrabee

HEALTH CARE PAYMENT POLICY
Cheryl L. Damberg

HEALTH CARE SERVICES
Robert H. Brook

INTERNATIONAL ECONOMIC POLICY
Krishna Kumar

INTERNATIONAL ECONOMICS
Charles Wolf, Jr.

LABOR MARKETS AND DEMOGRAPHIC STUDIES
James P. Smith

PAUL O’NEILL-ALCOA CHAIR IN POLICY ANALYSIS
Deborah Freund

POLICY ANALYSIS
Susan L. Marquis

SAMUELI INSTITUTE CHAIR IN POLICY FOR INTEGRATIVE MEDICINE
Ian Coulter

STATISTICS
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In November 2015, leaders in business, philanthropy, government, academia, and media gathered in Santa Monica, California, for One Night with RAND: Set Politics Aside and Join the Conversation. The recurring fundraising event featured a panel discussion, moderated by journalist Soledad O’Brien, on America’s Role in the World. Panelists included Chuck Hagel, former U.S. Secretary of Defense; Michael Lynton, CEO of Sony Entertainment; and Michael Rich, president and CEO of RAND.

The discussion touched on cybersecurity, political polarization, and the role of media and entertainment in international affairs. Attendees were invited to participate in the conversation about the strategic choices that will shape the U.S. role in the world for years to come.

The event also honored former defense secretary Harold Brown, whose career includes a 60-year affiliation with RAND, first as a client, and then as a trustee and a philanthropist.

Brown and his wife, Colene, recently made a gift to establish the Harold and Colene Brown Faculty Chair at the Pardee RAND Graduate School. The chair will provide funding for RAND researchers and faculty to be in residence at the school each year, allowing them to work on independent research and provide mentorship and guidance to students. The couple previously established a faculty fellowship that fosters collaboration between RAND researchers and Pardee RAND students on critical policy issues.

RAND’s sixth Politics Aside event will take place in Santa Monica on November 11–12, 2016.
Nobel laureate and RAND alumnus Thomas Schelling visited RAND to reflect on the use of wargaming in policy analysis. “The time I spent at RAND in the late 1950s was instrumental in my later work on nuclear strategy and arms control,” he said. “It’s a pleasure to be back at RAND to talk to a new generation of game-theorists and policy advisors.”

Marc Goodman (left), founder of the Future Crimes Institute, joined RAND information systems analyst Lillian Ablon (right) to discuss the growing threat of cybercrime and the risks it poses as we rely more and more on the “Internet of things.”

President of Grinnell College and RAND alumnus Raynard Kington spoke at RAND about the need for diversity in the biomedical scientific workforce. One solution he offered is a greater number of rigorously studied interventions at every step of the career stage.
Beau Kilmer, codirector of the RAND Drug Policy Research Center, spoke to RANDNext members about the future of marijuana policy, discussing issues voters should consider when determining whether to support initiatives to legalize marijuana.

Krishna Kumar, director of RAND Labor and Population, moderated a panel on technology and the on-demand workforce at the RAND Behavioral Finance Forum Fall 2015. Hosted in partnership with the Aspen Institute and in collaboration with the Institute for the Future, the forum focused on consumer financial decisionmaking.

At the UCLA-RAND Center for Law & Public Policy 2015 Conference, Chief Justice of California Tani G. Cantil-Sakauye (center) joined other judicial, academic, business, and policy leaders to discuss how court-resourcing problems and other fiscal constraints are affecting communities across the United States.
The scholarly objectives of expanding knowledge, illuminating issues, and developing new ideas are only the first step in RAND’s mission to help improve policy and decisionmaking through research and analysis. We also strive to reach key decisionmakers, practitioners, and the broader audience of thought leaders to help inform choices and enrich the quality of public debate.

**RAND Review**

RAND’s flagship magazine, *RAND Review*, helps readers stay ahead of the curve on the issues that matter most. Stories in 2015 featured homegrown terrorism, profiling in law enforcement, scientific workforce diversity, food trucks, and the costs of dementia. The magazine is now issued six times a year and available as an app for smartphones and tablets. The app, which presents the full version of each issue along with videos and interactive features, was hailed by D. B. Hebbard of *Talking New Media* as “brilliantly simple.” The magazine is online at www.randreview.org, where you can also subscribe to the digital edition.

**Social Media**

RAND’s digital audience swelled in 2015, as more and more people looked to us on social media for a dose of objectivity in an often polarized space. By year’s end, RAND was closing in on 25,000 followers on Facebook and 30,000 on LinkedIn. On Twitter, @RANDCorporation gained about 25,000 followers, reaching the 100,000 milestone. Our followers were among the first to get RAND’s latest research and analysis, as well as real-time insights from the experts on the year’s defining events: the terror attacks in Paris, the Iran nuclear deal, ongoing implementation of the Affordable Care Act, the Syrian refugee crisis, the historic international climate accord, and more.

**An Outreach Exemplar: Rolling Out RAND’s Study of the Costs of Conflict**

In 2015, RAND researchers wrapped up the most comprehensive accounting of the economic costs of the Israeli-Palestinian conflict ever undertaken (see page 25 of this report). But another challenge lay ahead: communicating their findings in a way that would help move the conversation forward. On a single day in early June, researchers spoke before policymakers and the press in both Jerusalem and Ramallah. Over the next week, they presented their study results to audiences in Brussels, London, and Washington, D.C., and conducted scores of media interviews (including a briefing to the editorial board of *The Economist*). The rollout strategy resulted in the following:

- **10,000 downloads of the report and executive summary**
- **24,000 page views from around the globe**
- **1,000 media mentions**
- **1,200 social media mentions**
- **an estimated 2.3 billion people reached.**
Congressional Briefings
RAND experts visit Capitol Hill to inform policymakers about research and analysis that is relevant to current legislative debates. Video and audio recordings of Hill briefings on topics ranging from education to nuclear proliferation are available at www.rand.org/congress.

Congressional Testimony
RAND experts are frequently invited to testify before Congress. Testimonies are available at www.rand.org/testimony. Highlights from 2015 include the following:

- **The Growing Strategic Threat of Radical Islamist Ideology** | Rick Brennan, Jr. | presented before the House Foreign Affairs Committee | February 12, 2015
- **Higher Education Benefits for Post-9/11 Military Service Members and Veterans** | Gabriella C. Gonzalez, Laura L. Miller, Peter Buryk, Jennie W. Wenger | submitted before the House Veterans’ Affairs Committee, Subcommittee on Economic Opportunity | March 17, 2015
- **Breaking the Bank: Undermining Terrorist Financing** | Seth G. Jones | presented before the House Financial Services Committee, Task Force to Investigate Terrorist Financing | April 22, 2015
- **An Assessment of the Counter-ISIL Campaign: One Year After Mosul** | Linda Robinson | presented before the House Armed Services Committee, Subcommittee on Emerging Threats and Capabilities | June 24, 2015
- **Perspective on 2015 DoD Cyber Strategy** | Lara Schmidt | presented before the House Armed Services Committee | September 29, 2015
- **What Works Best When Conducting Security Cooperation?** | Christopher Paul | presented before the House Armed Services Committee | October 21, 2015
- **The Impact of Sanctions Relief on Iran** | Alireza Nader | presented before the House Oversight and Governmental Reform Committee, Subcommittee on National Security | November 5, 2015
- **The Syrian Refugee Crisis and U.S. National Security** | Seth G. Jones | presented before the House Judiciary Committee, Subcommittee on Immigration and Border Security | November 19, 2015
- **Reforming the American Military Officer Personnel System** | Bernard D. Rostker | presented before the Senate Armed Services Committee | December 2, 2015
- **The Role of Oil in ISIL Finances** | Keith Crane | presented before the Senate Energy and Natural Resources Committee | December 10, 2015
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- Consumer Financial Protection Bureau
- Department of Defense
  - Defense Security Cooperation Agency
  - Defense Threat Reduction Agency
  - Department of the Air Force
  - Department of the Army
    - Medical Research Acquisition Activity
  - Department of the Navy
    - Marine Corps
    - Naval Postgraduate School
  - Joint Special Operations Command
  - Joint Staff
- Office of the Secretary of Defense
  - Office of the Director, Cost Assessment and Program Evaluation
- Under Secretary of Defense for Acquisition, Technology, and Logistics
  - Defense Advanced Research Projects Agency
- Under Secretary of Defense for Personnel and Readiness
  - Department of Defense Education Activity
  - National Institute on Aging
  - National Institute on Alcohol Abuse and Alcoholism
- National Institute of Allergy and Infectious Diseases
- National Institute of Diabetes and Digestive and Kidney Disorders
- National Institute on Drug Abuse
  - National Institute of Environmental Health Sciences
- National Institute of Mental Health
  - National Institute on Minority Health and Health Disparities
- National Institute of Nursing Research
  - National Institute for Occupational Safety and Health
- Office of the Assistant Secretary for Preparedness and Response
- Department of Homeland Security
  - Science and Technology
- U.S. Coast Guard
- Department of Education
  - Institute of Education Sciences
- Department of Energy
  - National Renewable Energy Laboratory
  - Pacific Northwest National Laboratory
  - Department of Health and Human Services
    - Agency for Healthcare Research and Quality
    - Centers for Disease Control and Prevention
    - National Institute for Occupational Safety and Health
  - Centers for Medicare and Medicaid Services
  - Health Resources and Services Administration
- National Institutes of Health
  - Eunice Kennedy Shriver National Institute of Child Health and Human Development
  - National Cancer Institute
  - National Center for Complementary and Alternative Medicine
  - National Heart, Lung, and Blood Institute
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### Non-U.S. Governments, Agencies, and Ministries

- Commonwealth of Australia
  - Royal Australian Navy
- Denmark
  - Ministry of Defence
- European Commission
  - Directorate-General for Employment, Social Affairs and Inclusion
  - Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
  - Directorate-General for Migration and Home Affairs
  - Directorate-General for Research and Innovation
- European Defence Agency
- European Union
  - Consumers, Health, Agriculture, and Food Executive Agency
  - Research Executive Agency
- Iraq
  - Kurdistan Regional Government
- Israel
  - Prime Minister's Office
- Japan
- Mongolia
  - Ministry of Labour
- Environmental Protection Agency
- Federal Communications Commission
- Federal Reserve Bank of Boston
- Intelligence Community
- National Aeronautics and Space Administration
- National Science Foundation
- Office of the Director of National Intelligence
- Social Security Administration
- United States Agency for International Development
The Netherlands
Ministry of Defence
Research and Documentation Centre
People’s Republic of China
Department of Housing and Urban-Rural Development of Guangdong Province
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Defence Science and Technology Laboratory
Department for Business, Innovation & Skills
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International Organizations
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Foundations
The California Endowment
Carnegie Corporation of New York
Una Chapman Cox Foundation
The Colorado Health Foundation
The Commonwealth Fund
Communities Foundation of Texas
The Community Foundation for Greater New Haven
The Ford Foundation
Bill and Melinda Gates Foundation
Good Ventures
Howard Heinz Endowment
The Helmsley Charitable Trust
The William and Flora Hewlett Foundation
Higher Education Funding Council for England
The Robert Wood Johnson Foundation
JPMorgan Chase Foundation
Ewing Marion Kauffman Foundation
W.K. Kellogg Foundation
George Lucas Educational Foundation
Henry Luce Foundation
MacArthur Foundation
McCormick Tribune Foundation
NCMIC Foundation
New York State Health Foundation
Qatar Foundation
The Rockefeller Foundation
Rosenberg Foundation
Alfred P. Sloan Foundation
The Stanton Foundation
United Health Foundation
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IZA (Institute for the Study of Labor)
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Juniper Networks
Kaiser Permanente
Kidney Disease Program of Glendale
Leonardo Technologies, Inc.
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Renova Therapeutics
Resolution Economics
SanBio
Siemens Corporation
TeleTracking
Truven Health Analytics
Ukraine Investment Alliance
United Healthcare Services, Inc.
The Vitality Group
VitalityHealth

Other Nonprofit Organizations
Alzheimer’s Society
American Institutes for Research
Beaver Valley Intermediate Unit
Brilliant Corners
California Mental Health Services Authority
Cedars-Sinai Medical Center
Center for Court Innovation
Children’s Hospital Boston
Cincinnati Business Committee
Collaborative Spine Research Foundation
College for All Texans Foundation
Decision Research
Economic Mobility Corporation
ExpandED Schools
Gulf of Mexico Alliance
Himalayan Cataract Project
International Initiative for Impact Evaluation (3ie)
Kaiser Foundation Research Institute
Kentucky Valley Educational Cooperative
Korea Institute for Defense Analyses
Leading Educators
Mayor’s Fund to Advance New York City
Memorial Sloan Kettering Cancer Center
Merck Childhood Asthma Network, Inc.
The MITRE Corporation
National Academy of Sciences
National Bureau of Economic Research
National Committee for Quality Assurance
National Education Association
New Jersey Hospital Association
New Leaders for New Schools
NYC Leadership Academy
Patient-Centered Outcomes Research Institute
Public Policy Institute of California
Seattle Children’s Research Institute
Silicon Valley Community Foundation
Single Stop USA
Stockholm Environment Institute
Taos Pueblo
TNTP
TRACE International
United Way of Greater Cincinnati
The Urban Child Institute
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The Water Institute of the Gulf
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Additional Reading

To find out more about the 2015 research and activities highlighted on pages 4–33, see the following or visit www.rand.org.

The Big Picture


The Adoption of New Smart-Grid Technologies: Incentives, Outcomes, and Opportunities, Christopher Guo, Craig Bond, and Anu Narayanan, RAND Corporation, 2015.


Continued Progress: Promising Evidence on Personalized Learning, John F. Pane et al., RAND Corporation, 2015.

On Health


From Coverage to Care: Strengthening and Facilitating Consumer Connections to the Health System, Laurie T. Martin and Jill E. Luoto, RAND Corporation, 2015.

Adults Newly Exposed to “Know the Signs” Campaign Report Greater Gains in Confidence to Intervene with Those Who Might Be at Risk for Suicide Than Those Unexposed to the Campaign, Rajeev Ramchand et al., RAND Corporation, 2015.


“Diet and Perceptions Change with Supermarket Introduction in a Food Desert, but Not Because of Supermarket Use,” Tamara Dubowitz et al., Health Affairs, Vol. 34, No. 11, November 2015.

Hotspots

What Factors Cause Youth to Reject Violent Extremism? Results of an Exploratory Analysis in the West Bank, Kim Cragain et al., RAND Corporation, 2015.

Costs of Selected Policies to Address Air Pollution in China, Keith Crane and Zhimin Mao, RAND Corporation, 2015.


On Security


The Days After a Deal with Iran: Continuity and Change in Iranian Foreign Policy, Alireza Nader, RAND Corporation, 2014.

The Days After a Deal with Iran: Regional Responses to a Final Nuclear Agreement, Dalia Dassa Kaye and Jeffrey Martini, RAND Corporation, 2014.


Those Who Serve


Authorities and Mechanisms for Purchased Care at the Department of Veterans Affairs, RAND Health, RAND Corporation, 2015.


Resources and Capabilities of the Department of Veterans Affairs to Provide Timely and Accessible Care to Veterans, RAND Health, RAND Corporation, 2015.
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