



December 2021

Strategic Foresight in U.S. Agencies

An Analysis of Long-term Anticipatory
Thinking in the Federal Government

J. Peter Scoblic

Acknowledgments

Thank you to the dozens of people, in particular members of the U.S. Coast Guard, who lent me their expertise and recounted their experiences. I am indebted to John Kamensky for reading this report in its entirety and making many valuable suggestions, as well as to several reviewers who wished to remain anonymous but who sharpened the section on the U.S. national security establishment. Parts of this report draw on my doctoral work at Harvard Business School, and I would like to extend my gratitude to Professors Amy Edmondson and Robin Ely for their mentorship and guidance. Thank you also to the team at New America, particularly Peter Bergen and David Sterman, for making this report possible, as well as to the Smith Richardson Foundation for its support. Finally, in the interest of transparency, I should note that I operate a foresight consultancy, Event Horizon Strategies, and state that it has no business pending with the agencies I profiled.

About the Author(s)

J. Peter Scoblic is an International Security Program fellow with New America, where he researches U.S. nuclear strategy, strategic foresight, and geopolitical forecasting. He is also the co-founder of Event Horizon Strategies, a foresight consultancy, and a fellow at the Harvard Kennedy School.

About New America

We are dedicated to renewing the promise of America by continuing the quest to realize our nation's highest ideals, honestly confronting the challenges caused by rapid technological and social change, and seizing the opportunities those changes create.

About International Security

The International Security program aims to provide evidence-based analysis of some of the thorniest questions facing American policymakers and the public. We are focused on South Asia and the Middle East, extremist groups such as ISIS, al Qaeda and allied groups, the proliferation of drones, homeland security, and the activities of U.S. Special Forces and the CIA.

Contents

Executive Summary	5
Introduction: The Need for Strategic Foresight	8
Strategic Foresight in Practice: The Case of the U.S. Coast Guard	14
Finding 1: Structured Imaginative Tools Demonstrated How to Think About the Future	15
Finding 2: Tools for How to Think About the Future Increased Thinking About the Future	16
Finding 3: Structured Thinking About the Future Improved Operations in the Present	18
Long-term Thinking in U.S. National Security	23
Operations Crowd Out Planning	25
Strategy Documents Often Don't Affect Policy	27
Contingency Planning Is Not Scenario Planning	29
Global Trends Is the Exception (That Proves the Rule)	31
Green Shoots of Strategic Foresight	35
Snapshots	37
The Future of U.S. Foresight	43
Selected Foresight Resources	47

Executive Summary

“Imagination is not a gift usually associated with bureaucracies.... It is therefore crucial to find a way of routinizing, even bureaucratizing, the exercise of imagination.” — The Report of the Commission on the 9/11 Attacks¹

U.S. public policy has traditionally been short-sighted. The ability to anticipate, prepare for, and adapt to the future has long suffered from the pressure to emphasize today over tomorrow, operations over preparations, tactics over strategy. The result is policy that often sacrifices long-term needs to short-term interests. This short-termism not only reduces economic performance, threatens the environment, and undermines national security—to name but a few consequences—it also leaves the United States vulnerable to surprise and limits its ability to manage crises, such as the COVID-19 pandemic.

Unfortunately, this dynamic is likely to worsen. As the world becomes more interdependent, the degree of systemic complexity will grow, as will the amount of irreducible uncertainty. There will be more *future stuff* that simply cannot be predicted and planned for. In response, policymakers will increasingly focus on the short term because it is, relatively speaking, more predictable and therefore more tractable. Amid dizzying change, this short-termism is a coping mechanism, but it is an unhealthy one that sacrifices future gains for immediate rewards. Worse, if short-termism is a response to the uncertainty of the future, then its oft-prescribed remedy—greater emphasis on the future—is nonsensical.

The question, then, is: How can American policymakers adequately value the long term given the inherent uncertainty of the future and the resulting pressure to focus on the short term?

This report explores one potential answer: the practice of strategic foresight, defined as the rigorous examination of imagined alternative futures to better sense, shape, and adapt to the emerging future. The archetypal manifestation of strategic foresight is scenario planning, the structured process of envisioning plausible futures to (among other things) put boundaries around future uncertainty, challenge assumptions about the present, and facilitate strategy formulation. Here, a definitional note is in order: although some researchers conflate the concepts,² this report distinguishes “foresight” from “forecasting,” which is the prediction of future events. The U.S. government has experimented with probabilistic prediction,³ but this study focuses on its use of strategic foresight.

Most notably, this report presents findings of a study that examined the U.S. Coast Guard’s 23-year-old scenario planning program with the goal of

understanding how such an initiative takes root, sustains itself, and influences strategy. The report also presents snapshots of new and expanded strategic foresight programs in other U.S. agencies, and it contrasts such efforts with the strategic *planning* that such agencies perform, focusing on those in the foreign policy establishment. It concludes by proposing a whole-of-government foresight effort.

Key Observations:

- **The root cause of short-termism in the U.S. government is often misdiagnosed.** Short-termism in public policy is usually characterized as a function of structural factors, such as two-year congressional terms, that focus policymakers on the present. But short-termism is also a mechanism for coping with the uncertainty of the long-term future. Even if incentives are overhauled, short-termism will remain attractive unless policymakers learn how to better manage the uncertainty of the future. Strategic foresight is one solution.
- **Through repeated scenario planning exercises, the U.S. Coast Guard provided its leaders with a structure for *how* to think about the future that has increased *how much* they think about the future.** This effort, spanning more than 20 years, has given service members and civilian officials a tool for engaging and managing the uncertainty of the long term. By giving them the means to address the future, these exercises both directly and indirectly prompted more attention to the future.
- **The Coast Guard’s scenario planning impacted not only long-term thinking but also short-term action.** Although a focus on the present often detracts from the ability to consider the future, the Coast Guard’s efforts showed that increased attention to the future can empower action in the present. Different time horizons can be complementary rather than competing.
- **Strategic foresight efforts can yield dividends disproportionate to the resources invested.** It is often difficult to measure the return on investment of foresight efforts, such as scenario planning exercises, but even skeptics believed the Coast Guard exercises had value, and the cost was modest. By contrast, not engaging in strategic foresight can have great costs because an organization may fail to prepare for the range of plausible futures it faces.
- **U.S. government agencies, particularly those in the foreign policy establishment, produce a lot of “strategy,” but that strategy is rarely informed by strategic *foresight*.** Instead, operations often displace planning, planning rarely informs operations, and contingency planning

takes the place of scenario planning. The National Intelligence Council does produce the foresightful *Global Trends* report, but that report is the exception that proves the rule, having little direct impact on policy.

. **There is a surge in strategic foresight efforts across the U.S. government.** Although difficult to quantify, interest in strategic foresight appears to be growing in federal agencies. However, these programs are connected to each other only through informal networks, and their impact on policy is episodic. There is no whole-of-government effort.

. **The president should establish an office to lead strategic foresight efforts at the national level.** Although such an organization could take various shapes—presidential support, not institutional form, is the key determinant of influence—this report proposes a structure akin to other high-level independent advisory bodies that report directly to the Executive Office of the President. The President’s Foresight Advisory Board could be led by political appointees and staffed by a rotating set of officials seconded from federal agencies.

Introduction: The Need for Strategic Foresight

The U.S. government has long found itself at the mercy⁴ of what Dean Acheson called “the thundering present.”⁵

There is widespread agreement—from scholars and practitioners, from the private sector and the public sector, from liberals and conservatives—that U.S. policymakers are too focused on short-term gains at the expense of the long term. Researchers have observed this bias in a slew of domains—from the budget to infrastructure to climate change—and cataloged the damage it has wrought.⁶ Politicians lament that decisions made today are doing a disservice to future generations, and CEOs remind us that focusing on the short term to the exclusion of the long term is bad for both national policy and business.⁷ The tendency to discount the future not only reduces economic performance, threatens the environment, and undermines national security—to name but a few consequences—it also leaves the United States vulnerable to surprise and limits its ability to respond to crises, a failing on stark display in 2020 and 2021 as the nation has struggled to combat the COVID-19 pandemic after underinvesting in its public health infrastructure.⁸

Lest this myopia be seen as a function of government inefficiency or ineffectiveness, it is worth noting that the situation in the private sector is no better and by some measures worse. Despite a sense that firms should aim to create long-term value,⁹ many companies privilege the short term over the long. For example, to meet quarterly earnings expectations, CEOs often forgo projects that have a positive net present value.¹⁰ Such behavior has prompted decades of concern about short-termism’s drag on the U.S. economy, and recent studies show that long-termism does, in fact, improve performance.¹¹ One such report found that, if companies were more oriented toward the long term, they could reap an additional \$1.5 trillion in return on invested capital.¹² Larry Fink, the CEO of BlackRock, the world’s largest asset manager, has frequently lamented the dangers of short-termism¹³; the Business Roundtable issued a statement in 2018 saying that “short-termism is unhealthy for America’s public companies and financial markets”¹⁴; and the following year, 181 American CEOs committed to “generating long-term value for shareholders.”¹⁵

This complaint of short-termism, public and private, is striking in its persistence, its breadth, and its unanimity. It is difficult, if not impossible, to find anyone who thinks that organizations and their leaders are *too farsighted*, and concern is growing as the present seems to clamor for evermore attention even as awareness of long-term dangers rises.¹⁶ As the *Financial Times* put it, “By early 2020, short-termism was being attacked by everyone from executives at Davos to environmentalists at not-for-profit groups such as the World Wide Fund for Nature.”¹⁷

The question is, what can we do about it?

To answer that, we must first understand why public and private organizations choose to prioritize the present at the expense of the future.¹⁸ Business scholars cite investor priorities, executive compensation, shareholder activism, and earnings expectations,¹⁹ while political scientists note that democracies incentivize politicians to focus on the costs and benefits of the current electoral cycle; the concerns of voters, who eschew short-term pain and insist on immediate results; and the demands of special-interest groups, whose objectives can undercut efforts at more sustainable policy.²⁰ Researchers also cite the tyranny of the in-box, the relentlessness of the news cycle, and the press of social media.²¹

Advocates of long-termism generally focus on ameliorating such pressures. Business researchers have suggested changing incentive structures by eliminating the demand for quarterly earnings guidance²² or by altering the structure of CEO compensation.²³ And there are many proposals that would encourage policymakers to accord greater value to the future: legally mandating that they safeguard the interests of future generations; strengthening the voting power of the young, and weakening that of the old (one recent proposal suggested making the voting age zero)²⁴; and granting legislators more time in office and requiring them to set long-term goals. There are even proposals to establish a “Secretary of the Future” or, internationally, a “UN High Commissioner for the Future.”²⁵ These remedies share a common goal: incentivize decision-makers to pay more attention to the long term by amplifying its salience.

It is an intuitive solution. Attention to the future would seem to be a prerequisite for appropriately valuing it. But implicit in these remedies—implicit in the idea that policymakers would more accurately value trade-offs between the long and short terms if only they could escape the noise of the present—is the belief that it is possible to see the future clearly. After all, every policy is effectively a prediction that a certain government action will have a certain effect, so arguing that longer-term policy would be *better* policy assumes the ability to accurately foresee those effects. The suggested fixes for short-termism, therefore, equate long-termism with prediction, which is to say they conflate *thinking* about the future with *knowing* the future.

Yet thinking more about the future is obviously no guarantee of accurate anticipation. One could slow the pace of elections and abolish Twitter, but the future would still become less certain the further one moved from the present. Although it is possible to attach meaningful probabilities to political and economic events in the short term,²⁶ the amount of uncertainty increases with the length of the time horizon,²⁷ degrading our predictive abilities to the point where we are nearly guaranteed to be surprised by some events 10 years or more into the future.²⁸ (See below: Change Over 10 Years)

Absent the ability to predict the long run, a focus on the short run is not simply a function of incentives. It is an understandable, if unfortunate, way to cope with uncertainty. Organizational scholars Richard Cyert and James March argue that firms “avoid the requirement that they correctly anticipate events in the distant future by using decision rules emphasizing short-run reactions to short-run feedback rather than anticipation of long-run uncertain events.”²⁹ Given the option, corporations tend to concentrate on *exploiting* existing capabilities, engaging in suboptimal levels of *exploration*—i.e., they concentrate on incrementally improving the widgets they make at the expense of thinking about what widget they should make next.³⁰ Put differently, they sacrifice the future for the present because it is more controllable. As March wrote, exploitation dominates in companies because its “returns are positive, proximate, and predictable,” whereas the wages of exploration are “uncertain, distant, and often negative.”³¹

The same is true of public policy. Political scientist Jonathan Boston asked, “Why ... are policymakers willing to inflict potentially significant costs on those living in the future for short-term advantage?”³² His answer:

Many policy problems ... exhibit a cost-benefit asymmetry: governmental action to address them requires the imposition of short-term costs, yet most of the benefits accrue later. Moreover, while the costs are often relatively direct, certain, visible, and tangible, the benefits are less direct, more uncertain, less visible, and perhaps intangible.³³

If a focus on the (more predictable) short term is a mechanism for coping with the uncertainty of the long term, then attempting to cure short-termism by increasing the attention devoted to the long term is nonsensical, reinforcing the very problem it is designed to avoid. Earnest calls for more long-term thinking are effectively calls for policymakers to take on more uncertainty when uncertainty is the very thing policymakers are trying to avoid. One might as well suggest that a house-bound agoraphobe spend more time in open spaces. The prescription conflates the cure with the disease. To the extent that the challenge facing policymakers is formulating strategy under uncertainty, encouraging them to focus on the long term begs the question. The necessary question is not (or not only) *how much* to think about the future, but rather *how* to think about the future when prediction is not a fruitful option.

It is a question made more vexing by the need to simultaneously attend to the present. After all, the short term is not merely a refuge from uncertainty. Surviving the short term is a prerequisite for thriving in the long term. This challenge, too, is qualitative as well as quantitative. It is certainly true that organizations must appropriately balance the amount of exploration with the

amount of exploitation. (Per Daniel Levinthal and James March, “The basic problem confronting an organization is to engage in enough exploitation to ensure the organization’s current viability and to engage in enough exploration to ensure future viability.”)³⁴ But, the bigger problem is that these activities are thought to be *in tension*: Exploration and exploitation are different activities that demand different ways of thinking and different organizational structures, and therefore, the need to do both ostensibly creates a paradox.³⁵ In addition to asking how firms think about the future, we must therefore also ask how they do so *while still attending to the present*.

Unfortunately, the disconnect between present and future is only going to widen. The world is becoming more volatile, uncertain, complex, and ambiguous.³⁶ There are many reasons for this, including the increasing speed of technological change and the growing degree of interdependence, whereby the variables that define our economic, social, and political systems have multiplied and developed greater potential to affect other variables. This means that the amount of irreducible uncertainty—the number and range of future phenomena to which we cannot assign meaningful probabilities—is going to grow. Changes in the short term are likely to become ever-more salient—the present is not going to quiet down—even as the long term becomes murkier. Although the sophistication of predictive technologies may increase, the only certainty is that there will be surprises.

For American policymakers, then, the question is, how can the U.S. government get beyond the thundering present? How can it appropriately value and invest in the long term, given the demands of the short term? How can the U.S. government deal with the uncertainty of the long-term future, given the inherent limits to prediction and planning?

This report proposes that one answer is the practice of strategic foresight, specifically the imagination of alternative futures to better sense, shape, and adapt to emerging events. Strategic foresight methods, such as scenario planning, are intended to loosen participants’ assumptions and encourage the development of more robust strategies, thereby improving resilience to rapid change. Strategic foresight assumes a high degree of future uncertainty, and by providing structured methods for engaging with the uncertainty of the long term, it enables more constructive thinking about the long term, while simultaneously providing a mechanism for gleaning short-term insights. That is, it addresses how to think about the uncertainty of the long-term future while also acting in the present.

Unfortunately, the United States has no whole-of-government mechanism for strategic foresight. As Leon Fuerth, the national security adviser to former Vice President Al Gore, has written: “There is no mechanism at the national level for bringing foresight and policy into an effective relationship. The absence of such a system impairs the ability of the government to think and act strategically.”³⁷

To illustrate what a successful strategic foresight effort looks like, the next section of this report examines the case of the U.S. Coast Guard's Project Evergreen, a series of scenario planning exercises that have been used to inform strategic planning. The subsequent section examines strategic foresight—as distinct from strategic planning—in the U.S. national security establishment. It maintains that operations frequently crowd out planning, that the planning there is frequently fails to influence operations, and that much of what passes for strategic foresight is (less impressively) contingency planning. The chief exception is the *Global Trends* report, which the National Intelligence Council produces every four years. However, as an intelligence community product, that report makes no policy recommendations, and it is unclear how much influence it has on policymakers. Overall, the upper echelons of the national security establishment have seemingly failed to integrate the uncertainty of the future into high-stakes decisions, even though at lower levels, there is significant attention to alternative futures, particularly within the Department of Defense.

Although much of this report concerns foresight in national security, many of the U.S. government's most promising foresight efforts are occurring in civilian departments and agencies. The penultimate section provides an overview of such initiatives, including four snapshots of new or newly expanded foresight efforts that suggest a growing interest in the method across the federal government. The report concludes by recommending that the president take advantage of this momentum to establish a whole-of-government foresight effort through an advisory body that would report directly to him.

→ CHANGE OVER 10 YEARS

One challenge in preparing for the future lies in underestimating the degree of change that occurs over the long term. Five months before the September 11 attacks, Lin Wells, a Pentagon official, wrote a memo in preparation for the 2001 Quadrennial Defense Review, noting how radically the international situation changed every decade. Reviewing the past century's developments, he noted:

If you had been a security policymaker in the world's greatest power in 1900, you would have been a Brit, looking warily at your age-old enemy, France.

By 1910, you would be allied with France, and your enemy would be Germany.

By 1920, World War I would have been fought and won, and you'd be engaged in a naval arms race with your erstwhile allies, the U.S. and Japan.

By 1930, naval arms limitation treaties were in effect, the Great Depression was underway, and the defense planning standard said "no war for ten years."

Nine years later, World War II had begun. ...

All of which is to say, it's not clear what 2010 will look like, but it's certain to be very little like we expect, so we should plan accordingly.¹⁵¹

In the spirit of that memorandum, consider the following:

If you had been a national security policymaker in the world's greatest power in the fall of 1991, you would have been an American, reveling in the U.S. military's efficient expulsion of Iraq from Kuwait, celebrating the collapse of the Soviet Union, and anticipating the post-Cold War peace dividend.

By the fall of 2001, you would be erecting a new national security establishment with unprecedented powers at home and abroad following the deadliest attack on the homeland since Pearl Harbor, and invading Afghanistan in the first step of a "global war on terrorism."

By the fall of 2011, you would be withdrawing from a protracted war in Iraq, you would be only halfway through a 20-year occupation of Afghanistan, and you would be declaring the age of great power conflict over.

By the fall of 2021, you would be declaring that a new age of great power conflict had begun, while fighting a global pandemic that had claimed over 700,000 American lives.

All of which is to say, it's not clear what 2031 will look like, but it's certain to be very little like we expect, so we should plan accordingly.

The only way to "plan accordingly" given the tremendous uncertainty of even a 10-year time horizon is to use a method that accounts for that uncertainty. That is one reason strategic foresight is crucial.

Strategic Foresight in Practice: The Case of the U.S. Coast Guard

The U.S. Coast Guard³⁸ is a maritime military, regulatory, intelligence, and law-enforcement organization that traces its origins to a 1787 proclamation by Alexander Hamilton.³⁹ It has approximately 50,000 full-time employees (42,000 active-duty military and 8,000 civilians), and its budget is roughly \$12 billion, making it tiny by comparison with, say, the U.S. Navy. It is led by a four-star admiral who serves as commandant, but unlike the other military services, the Coast Guard is part of the Department of Homeland Security.⁴⁰

The Coast Guard presents an interesting case study of strategic foresight for three reasons.

First, the organization traditionally focused on the short term because it is highly operational. The Coast Guard has 11 statutorily mandated missions, ranging from fisheries protection to port security, and it is often called upon in emergencies, such as Hurricane Katrina and the Deepwater Horizon oil spill, forcing it to maintain a state of constant readiness.⁴¹

Second, foresight practitioners in the U.S. government often refer to the Coast Guard's Project Evergreen—a cyclical scenario planning exercise—as the “gold standard” among federal agencies, not only because it has been in continuous operation longer than any other comparable effort,⁴² but also because it has demonstrated success in linking future thought to present action. Other organizations, such as the Federal Emergency Management Agency, have sought to emulate its work.⁴³

Third, although a predecessor exercise, Project Long View, was held in 1998 and 1999, Project Evergreen began operating in 2003, at a time when the Coast Guard was under extreme organizational stress. The Homeland Security Act of 2002 had shifted it from the Department of Transportation to the newly formed Department of Homeland Security, its budget grew dramatically, and the balance and scope of its mission set changed radically. The Coast Guard thus represents an extreme case of an organization addressing future uncertainty while still operating in the present.

The following case study is based upon interviews with more than 20 people associated with Projects Long View and Evergreen, most of them current and former high-ranking Coast Guard officers, as well as upon documents produced by each iteration of the scenario planning exercise. Where useful, this data was supplemented with congressional testimony, U.S. government reports, practitioner articles, and press accounts.

Three principal findings emerge from this research:

1. By providing a structured mechanism for addressing the uncertainty of the future, Projects Long View and Evergreen addressed the question of **how to think about the future**.
2. By providing a framework for how to think about the future, Projects Long View and Evergreen helped the Coast Guard increase **how much the organization attended to the future**.
3. In establishing a structure to think about the future and increasing how much the organization attended to the future, Projects Long View and Evergreen **enabled action in the present, including improved organizational adaptability**.

Finding 1: Structured Imaginative Tools Demonstrated How to Think About the Future

When Admiral James Loy became commandant in 1998, he wanted to transform the Coast Guard's culture from one of short-term reactivity to one that incorporated long-term strategy while retaining a high level of operational responsiveness. The challenge, as posed earlier, is that short-term thinking is, in many ways, a mechanism for coping with the uncertainty of the long term, so to change what members of the organization thought about (i.e., the future vs. the present), they had to be shown how to manage the uncertainty of the long term. As a retired commander who worked on Evergreen explained:

[The short term] is our comfortable anchor spot that we will go back to. So, even if we eliminate those drivers, we are still, as people, hardwired to look at just the next week, next hour ... and so we have to overcome that and create a mechanism where they can actually think long-term.⁴⁴

That was where strategic foresight came in—specifically in the form of a scenario planning exercise dubbed Project Long View.⁴⁵ Scenario planning is a disciplined method of imagining alternative futures so as to better sense, shape, and adapt to the emerging future. Or, as Loy put it, “Can you articulate half a dozen scenarios that are part of both your daily toil and your long-term future so you can define the capabilities and resources you will need to do what’s expected of you when the defecation is in the blades?”⁴⁶

To facilitate the exercise, the Coast Guard hired The Futures Group, a strategic foresight consultancy, which worked with Loy's Office of Strategic Analysis to draft scenarios set 20 years in the future—scenarios that were not meant to predict the future but rather to encompass the range of plausible futures.⁴⁷ To do this, the consultants led a team of Coast Guard personnel, who first considered

forces of change that could have a significant but uncertain impact on the service's future operating environment. Ultimately, they settled on four: the role of the federal government (limited or substantial), U.S. economic vitality (strong or weak), threats to U.S. society (low or high), and the demand for maritime services (low or high). Juxtaposing the values for these variables yielded 16 different combinations, of which five were selected as representing a diverse set of potential futures. These combinations were then translated into brief narratives—each given a name—expounding on what each world would look like and how it might come about. So, for example, “Balkanized America” described a world riven by regional and ethnic conflict, in which terrorists struck the United States frequently, and “Taking on Water” described a future in which the American economy struggled amid significant environmental degradation.⁴⁸

These scenarios then served as the basis for a series of workshops, where Coast Guard participants identified 10 “robust” strategies—i.e., strategies that could be pursued immediately and that would serve the organization well no matter how the future unfolded. The Coast Guard incorporated those recommendations into its 1999 Strategic Plan,⁴⁹ but at first, it did not pursue most of them. That changed after the September 11 attacks, when the Coast Guard leadership ordered a “Long View review.” That effort found that, had the service implemented Long View’s 10 strategic initiatives more rapidly, it would have been better positioned to respond to the attacks and the expanded mission set that followed.⁵⁰ With that realization, the Coast Guard institutionalized a scenario planning process, now dubbed “Project Evergreen,” that runs on a quadrennial cycle of sensing, envisioning, workshopping, and strategizing. The first iteration, Evergreen I, started in 2003, and Evergreen V is currently underway.

By generating plausible far-future scenarios and enabling strategic conversations about their implications, Long View and Evergreen showed Coast Guard personnel “how” to think about the future. As a former vice admiral said: “The whole idea behind Evergreen was to have some sort of structured way to address these difficult-to-get-your-hands-around uncertainties in the future.”⁵¹ The scenario planning exercises offered a “framework,”⁵² a “tool,”⁵³ and a “process”⁵⁴ for grappling with the long-term future.

Finding 2: Tools for How to Think About the Future Increased Thinking About the Future

By providing a mechanism for *how* to think about the future, Long View and Evergreen reoriented the service away from its tight focus on short-term operations, opening the Coast Guard’s temporal aperture so that it could also attend to long-term strategy. In other words, it helped resolve the problem of *how*

much to think about the future. This change manifested in individuals, programs, and the organization as a whole.

Over the program's 23-year history, over 1,000 members of the organization are estimated to have participated in formulating strategy under uncertainty via Long View and Evergreen. Their experiences then affected the organization in several ways. First, those individuals emerged from the exercises with a new outlook—a new set of cognitive tools—that allowed them to engage the uncertainty of the future more easily. A command master chief petty officer said that the process “provided me many more opportunities to continue to look forward” and then recounted a recent conversation with a colleague:

He and I were in my office here this morning talking about, 25 years from now, what is the Coast Guard Reserve component going to look like? He's an Evergreen guy. ... I would never have been able to talk to him about 20, 25 years down the road because I just wouldn't understand how to think that way had it not been for being part of a couple Evergreens.⁵⁵

Individuals who had been through Long View and Evergreen also transmitted their new facility with the future to their colleagues. One retired captain, a former helicopter pilot and self-described “pointy-end-of-the-spear operator” who initially doubted the value of Evergreen, impressed the exercise's lessons on his subordinates so that future-thinking would become part of the organization:

My opportunity when I got back to the field was to make sure that my wardroom—my officers and the commanding officers that worked for me—were starting to think that way. I made them all read Evergreen. ... I was trying to make that next generation of guys who worked for me think strategically, and I think it was perhaps successful because my senior officers all went on to commands. ... I think that strategic thinking has [now] become part of the Coast Guard ethos at the leadership level.⁵⁶

Evergreen also influenced how much the organization attended to the future. Its efforts informed a range of policy documents from the 1999 Strategic Plan to the service's Arctic strategy (2013), Western hemisphere strategy (2014), and cyber strategy (2015). Most recently, the 2018 Strategic Plan, issued shortly after Admiral Karl Schultz became commandant, explicitly highlighted Evergreen as a “long-term strategic planning effort” connected to management of the service.⁵⁷ As one former officer who headed the Office of Strategic Analysis and initially expressed skepticism about scenario planning, said, “For me, the work of Evergreen—and Long View before that—directly played into our ability to

ultimately get to the point when the Coast Guard issued enterprise-level strategies.”⁵⁸

In sum, by giving Coast Guard personnel a tool for *how* to engage the uncertainty of the long-term future, Long View and Evergreen increased *how much* they did so, despite persistent operational demands. This break with short-termism constituted an “inflection point” for the organization as one former Coast Guard executive put it.⁵⁹ Of course, per the earlier discussion of the tension between planning and operations, it is fair to ask whether changing how and how much the Coast Guard attended to the future actually affected policy. Here, the record is mixed. Many strategies derived from Evergreen were never translated into policy. That said, Evergreen has clearly influenced operations in the present.

Finding 3: Structured Thinking About the Future Improved Operations in the Present

Thinking about the future is not a goal in and of itself. One key purpose of strategic foresight efforts is to enable better policy in the present, as Long View and Evergreen intended.⁶⁰ But, as discussed earlier, organizations often see the two activities—future thought and present action—as being in tension even though they must do both. Admiral Thad Allen, who served as commandant from 2006 to 2010, put the matter bluntly:

The question is, can you walk and chew gum at the same time? Can you multitask to deal with the tyranny of the present, and then try and understand the implications of the future and the risk associated with the future and how you minimize the risk of what might happen in the future while you’re managing the tyranny of the present. You have to do both, and if you don’t do both, you’re going to fail.⁶¹

Interestingly, in the Coast Guard, instead of there being a trade-off between present and future, the two became complementary. As Evergreen managers and workshop participants returned to the field, resuming their operational responsibilities, they not only considered the future more, but they also layered their newfound future-oriented strategic sensibility onto the challenges they faced in their day-to-day work. One retired vice admiral said: “Smart people that came back from the Evergreen experience and then were embedded back in programs would say, ‘Hey, I think there’s some real good that came out of that that we can take advantage of.’”⁶²

One retired senior Coast Guard leader explained: “I would have to credit some of what was done with the Evergreen process to the forward thinking I was able to do in getting the Coast Guard ready for whatever threats we’d have to confront

out in the Pacific region,”⁶³ citing Evergreen I’s recommendation to cultivate partnerships and increase situational awareness at sea⁶⁴:

We forged bilateral relationships with six key Pacific Island countries to expand information sharing, conduct professional exchanges to enhance their nascent capabilities, hold regular joint exercises and operational patrols...

To enhance MDA [maritime domain awareness], we routinely shared information with the countries aligned through the North Pacific CG Forum (coast guards of China, Russia, Canada, South Korea, Japan, and U.S.). As this alliance grew more robust, we coordinated patrol activities, held joint training exercises, shared sighting information (especially to track fishing activity), and tackled issues with formally designated working groups.⁶⁵

This officer concluded: “Evergreen facilitated my ability to prioritize effort through strategic intent as adapted to the uniqueness of the western Pacific. ... I would not have dedicated such energy to outreach and relationship-building without the benefit of the Evergreen initiative.”⁶⁶

Some Evergreen participants applied scenario planning to specific problems. One rear admiral who first participated in Evergreen as a junior officer ran a scenario exercise to address how future challenges in the Great Lakes region should influence procurement. Evergreen, she said, helped her do more than simply extrapolate from the present:

As you have to replace assets, if you haven’t really done some of that deeper long-term thinking, then what happens is your replacements look pretty much like what you had. ... If you have a bigger picture and you’re not constrained by any of that currently, it just makes it so much easier to come up with the right answers.⁶⁷

In the most extreme situations, acting in the present demands responding to radical shifts in the environment. One goal of Long View and Evergreen was to improve the Coast Guard’s ability to adapt to “change and surprise”⁶⁸—“to immunize the organization against a black swan,” as Allen put it.⁶⁹

Immunization is a high bar, but following the September 11 attacks, the Coast Guard found itself with new resources, a new organizational master, and a newly rebalanced mission set. (Previously, port security accounted for 1–2 percent of the service’s daily operations. In the years after 9/11, it consumed some 50–60 percent.)⁷⁰ Project Long View had not anticipated the attacks, but it had

considered a world in which “terrorism strikes frequently and increasingly close to home.”⁷¹ Although the Coast Guard did not immediately adopt Long View’s strategies, the exercise pressure-tested and socialized certain ideas among Coast Guard leaders, enabling the organization to better adapt to the post-9/11 environment. As the Coast Guard’s former chief financial officer said:

When we had 9/11, we had a binder full of plans and ideas that, from 2003 to 2010, everyone said, “You’re right—that’s exactly what we need,” and they started funding it. We watched our budget grow from about \$3 billion to almost \$11 billion in less than a decade. It was all after 9/11, and it was, I would say, largely because some of that thinking and thought that had been done in the Evergreen model before 9/11 that allowed us to roll that out.⁷²

One of those ideas was Maritime Domain Awareness (MDA), defined as “the ability to acquire, track, and identify in real time any vessel or aircraft entering America’s maritime domain.”⁷³ Long View did not create the concept, but it clarified that there was no future in which the Coast Guard would not want a better understanding of who and what was at sea. Long View took an oft-discussed concept and codified it as organizational strategy. As a result, amid post-9/11 concerns that the next terrorist attack could come by water and the resulting imperative to secure U.S. ports, the Coast Guard did not have to waste time vetting or socializing the idea.

Instead, it was able to take the organizational lead at the national level. In January 2002, mere months after the attacks, the White House singled out the Coast Guard’s central role in MDA.⁷⁴ In December 2004, President George W. Bush established MDA as U.S. policy,⁷⁵ and the Coast Guard captain who had managed Evergreen I led the interagency process to develop the first *National Strategy for Maritime Security* and the corresponding *National Plan to Achieve Maritime Domain Awareness*.⁷⁶ Ultimately, these led to deployment of the Nationwide Automatic Identification System for tracking vessels, and today MDA is central to U.S. homeland security.

Despite such examples, many interviewees noted that Long View and Evergreen struggled to translate the concepts and strategies that emerged from the exercises into actionable policy. One Coast Guard official lamented that, too often, the Evergreen reports were seen as “shelfware.” As a recent RAND report put it: “Project Evergreen has not had as great an impact on the Coast Guard as might be desired. A key reason for this appears to be a long-standing disconnect between Evergreen and the processes that it aims to influence.”⁷⁷ It recommended adjusting timing so that Evergreen produced recommendations in time to influence relevant decisions.

The managers of Evergreen V, the most recent iteration, have addressed that critique by instituting “Pinecones”—rapid scenario exercises sponsored by an individual Coast Guard leader to address a specific strategic question. The goal, as one officer explained, has been to generate recommendations that address problems the service’s leadership is facing now—in other words, to more closely link future thought with present action. For example, a Pinecone held in the fall of 2020 examined the future of the Coast Guard’s workforce, finding that, instead of putting service members on a specific track for their careers, the Coast Guard should emphasize both technical know-how and continuous learning to improve employee adaptability. “This is not shocking,” the officer said, “but it is different for the Coast Guard.”⁷⁸

The workshop’s findings caught the eye of Admiral Shultz, who then asked if it was possible to implement some of the recommendations in 2021. As of this writing, the Coast Guard is formulating a strategy to transform its antiquated human resources system into a modern talent management system. Said the official, “I think this is the first [Evergreen] cycle, from what I can tell, where you have a fairly quick return on investment.”⁷⁹

→ LESSONS LEARNED

What can other agencies learn from the Coast Guard’s experience? Some observations about the conditions that have led to the organization’s success:

- **Top leadership support is key ... at the start.** Admiral Loy initiated Project Long View, and Admiral Thad Allen, who served as chief of staff and then became commandant, championed Project Evergreen. Their early efforts were essential to establishing strategic foresight in the Coast Guard. However, even though not all their successors have been as supportive, the program has endured. Evergreen persisted partly because its alumni—some of whom became flag officers—have supported the program, keeping it going even during times of reduced support from top leaders. That said, at one point, Evergreen apparently survived because a single mid-level officer reconfigured the exercise to match the commandant’s interests. Today, the program is enjoying a renaissance.
- **You don’t need to be a foresight expert ... but enlist one.** Evergreen program managers often had little to no experience with scenario planning before being told to run the program. Most, if not all, had operational backgrounds—as pilots, ship drivers, etc. They learned on the job, and they rotated back to the field after their tour at

headquarters. That was possible because the Coast Guard hired outside consultants to advise each iteration of Long View and Evergreen. They played a key role in constructing scenarios and facilitating workshops, and contractor skill influenced how successful any given cycle was.⁸⁰

- **Strategic foresight need not be expensive ... but strategic myopia is.** Although skeptics often question the return on investment of strategic foresight efforts, the investment can be quite small. Evergreen traditionally required two full-time employees (out of 50,000) and approximately \$500,000 a year in contractor fees (i.e., less than one hundredth of one percent in a budget of about \$12 billion). As one officer put it: “The amount of organizational effort required to do Evergreen is tiny. ... I think they spend more time figuring out how to do parking permits at headquarters.”⁸¹ Yet the return is significant. As one interviewee said: “Imagination is a tremendous capability for an organization to have. For the most part, it doesn’t cost anything.”⁸² By contrast, several interviewees pointed out that it is far more expensive to invest in the wrong capability—e.g., to purchase the wrong aircraft—because the organization failed to anticipate its future mission.
-

Long-term Thinking in U.S. National Security

The case of the U.S. Coast Guard shows how strategic foresight can inform strategy, which can in turn influence operations. But foresight, strategy, and operations are distinct activities, whose symbiotic relationship is by no means assured. Organizations may conduct foresight activities but fail to derive strategy from them, and even carefully articulated strategies may have little connection to operations. Based on interviews with current and former U.S. officials, as well as a review of primary and secondary documents, this section disaggregates these activities by examining the American national security establishment, the collection of organizations responsible for protecting the United States at home and advancing its interests abroad. It shows that even a plethora of “strategy” does not necessarily yield policies that connect visions of the future to actions in the present.

The national security establishment stands out in the federal government not only because it is huge—by one estimate the United States spends \$1.25 trillion annually on national security⁸³—but also because, to function properly, it must make an unusual number of high-stakes, long-term decisions without a clear view of what the long term looks like. Cultivating diplomatic arrangements; assuring basing and overflight rights; developing, testing, and fielding military forces; and training and developing a federal workforce that has the appropriate skills are all long-term propositions demanding long-term plans.⁸⁴ As a result, national security practitioners, especially Pentagon officials, are often forward-looking. But long-term plans are only as good as the accuracy of long-term predictions, and as management scholar Henry Mintzberg wrote, it is a fallacy to believe that the world will “hold still while a plan is being developed and then stay on the predicted course while that plan is being implemented.”⁸⁵

The geopolitical far-future is particularly uncertain because of the complexity of the international system, and foreign policy experts have a lousy predictive record.⁸⁶ As Robert Gates said in 2011, while he was serving as President Obama’s secretary of defense, “When it comes to predicting the nature and location of our next military engagements, since Vietnam, our record has been perfect. We have never once gotten it right.”⁸⁷ The U.S. intelligence community has tried to predict the future since Sherman Kent led the Office of National Estimates in the CIA’s early years.⁸⁸ Yet, despite the allocation of significant time, money, and effort, the intelligence community has often failed to anticipate the near-term future, let alone the long-term future. In 1973, Gates—then a young intelligence analyst—wrote for the agency’s in-house journal: “We failed to anticipate the construction of the Berlin Wall, the ouster of Khrushchev, the timing of the invasion of Czechoslovakia, and other events of importance.”⁸⁹ Later surprises would include the Iranian revolution, the fall of the Berlin Wall, and the collapse of the Soviet Union.

(Ironically, when he served as deputy director of the CIA, Gates himself erred on one of the most important judgments the agency faced: whether Mikhail Gorbachev was a reformer.)⁹⁰

The point is not that the foreign policy, defense, or intelligence communities are inept. The point is that, as discussed above, quantity of thought does not necessarily equal quality of thought, let alone accuracy of anticipation. After all, one can think about the future, but think about it badly. In his study of the highly structured “strategic planning” programs that guided large agencies like the Pentagon in the postwar years, Mintzberg asked, “Does formal recognition of the future, let alone formalizing how it is dealt with, necessarily mean the future is properly taken into account?”⁹¹ It does not. Richard Fontaine, the CEO of the Center for a New American Security, gave one conspicuous example, pointing out that thinking about the long term did not yield foreknowledge in the run-up to the Iraq war:

Key movers in the Bush administration did think long-term, but about the wrong things: the potential for a democratic Iraq to spread its political system to other Middle East autocracies, making the region ultimately more democratic, less ridden by terrorists, and better for both the U.S. and people in the region. Their failure was in not thinking about and planning for the other, less attractive scenarios, which were much likelier.⁹²

In some ways, the contention that the U.S. national security establishment fails to adequately account for the uncertainty of the future seems questionable. After all, as sprawling as it is, the departments and agencies that comprise it house multiple policy offices ostensibly dedicated to considering the long term, such as the State Department’s Policy Planning Staff. They are required by Congress to produce various strategic documents, such as the National Security Strategy, that are intended to account for the long term. And the Pentagon uses scenarios to produce one of the most high-profile of those documents: the National Defense Strategy. Besides, there is the National Intelligence Council’s *Global Trends* report, an explicit example of strategic foresight that is widely praised within the foresight community.

Yet, in examining these potential objections to this report’s thesis—namely, that the U.S. government suffers short-termism in part because it fails to use strategic foresight—four cautionary themes emerge:

- Short-term demands often crowd out long-term planning, even in units ostensibly dedicated to the latter;

- Strategy documents often fail to affect policy—i.e., they do not link future-thinking to present-doing;
- Contingency planning, which prepares for a single, well-defined future, often substitutes for true scenario planning, which addresses uncertainty; and
- The *Global Trends* reports are, in many ways, the example that proves the rule, being foresightful but also disconnected from the policymaking process.

These themes are not universal. Any enterprise as complex as the U.S. national security establishment defies easy generalizations. Nevertheless, these dynamics reinforce the case for a whole-of-government approach to strategic foresight.

Operations Crowd Out Planning

In the executive branch, the urgent has long been the enemy of the important. Even when it is not battling crisis—and during the 2020 presidential campaign, Joe Biden said that the United States faced no fewer than five crises⁹³—the grind of daily operations in national security tends to crowd out long-range thinking, even though policymakers have considered long-range thinking vital at least since the United States became a global power at the end of World War II.⁹⁴

In 1947, seeing that day-to-day demands were diminishing opportunities to address broader issues, Secretary of State George C. Marshall established the Policy Planning Staff as a discrete office, instructing its inaugural director, George Kennan—who essentially outlined the U.S. Cold War strategy of containment in his “Long Telegram”⁹⁵ and the “X Article”⁹⁶—to “avoid trivia,” an injunction that became the office’s motto. In his memoirs, Dean Acheson, who succeeded Marshall as secretary of state, wrote that the purpose of the office was “to look ahead, not into the distant future, but beyond the vision of the operating officers caught in the smoke and crises of current battle; far enough ahead to see the emerging form of things to come and to outline what should be done to meet or anticipate them.”⁹⁷

Although this is the very sort of organizational arrangement that supposedly enables an organization to both “exploit” and “explore”⁹⁸—that is, to operate and plan simultaneously by separating the one function from the other—Marshall’s experiment did not work. At least not according to Kennan. In 1949, he quit, dubbing Policy Planning “a failure, like all previous attempts to bring order and foresight into the designing of foreign policy by special institutional arrangements.”⁹⁹ The reason was that, although separating his office from the “line of command” gave Kennan and his staff the freedom to think, it also

deprived them of influence—of the ability to transform their insights into actions.
100

As a result, many of Kennan’s successors have involved themselves (and their staffs) more deeply in the department’s day-to-day operations. How operational Policy Planning varies, depending on the director and their relationship with the secretary. But, at times, the Policy Planning Staff has found itself signing off on the reams of paper—speeches, talking points, policy directives, etc.—that emanate from the secretary of state’s office. The Policy Planning Staff’s mission remains “to take a longer-term, strategic view of global trends and frame recommendations for the Secretary of State to advance U.S. interests and American values.”¹⁰¹ That said, Policy Planning staffers and outside observers have continued to note that operations often dominate planning.¹⁰² At best, the twin risks that Acheson identified—of being “lured into operations” on the one hand, and of succumbing to “encyclopedism” on the other—continue to stress the staff.¹⁰³

Nor is this problem confined to the State Department. Despite the manifest importance of long-term vision to rational policymaking, operations take precedence within the national security apparatus, both in terms of resources devoted and respect accorded. “Doers” are more likely to be promoted and attain leadership positions than “thinkers.”¹⁰⁴ As Aaron Friedberg, a Princeton professor and former adviser to Vice President Dick Cheney, put it:

In this world, the most important people are usually those who are perceived to be most directly involved in the making and implementation of policy on the most pressing issues of the day. Such people are intensely busy with meetings, phone calls, and travel; their focus is on operations rather than planning and on tactics rather than strategy.¹⁰⁵

Richard Haass, himself a “thinker” (he headed Policy Planning under George W. Bush and now runs the Council on Foreign Relations), put it more bluntly: “[A]t the end of the day government is an operational enterprise. It is not a university.”
106

That may be, but given that every policy is effectively a prediction, policymaking without a serious attempt to anticipate the range of plausible futures is nonsensical or worse—a situation that has led to exasperation at the tyranny of the day-to-day. In 2016, Julianne Smith, the former deputy national security adviser to then-Vice President Biden and the current U.S. ambassador to NATO, wrote that, because of operational pressures, “the incredibly talented individuals advising the President find it virtually impossible to think strategically.”¹⁰⁷ Michèle Flournoy, who served as President Barack Obama’s undersecretary of defense for policy, and Shawn Brimley, who served in the Obama White House,

echoed this sentiment: “The reality is that America’s most fundamental deliberations are made in an environment that remains dominated by the needs of the present and the cacophony of current crises.”¹⁰⁸

In short, instead of a bureaucracy that links fluid expectations of the future with concrete actions in the present, the national security establishment risks becoming an adhococracy that deals with the future only as it becomes the present.

Strategy Documents Often Don’t Affect Policy

To counteract the pull of adhococracy, Congress has, at various times, mandated the production of strategic documents. For example, the Goldwater-Nichols Act of 1986, which legislated comprehensive national security reform, required that the White House annually produce a national security strategy, with the idea being that strategic goals would be linked to the budget process, thereby institutionalizing a connection between the future and the present. Similarly, in 1997, Congress required the Department of Defense to submit a Quadrennial Defense Review (QDR)—and, later, the National Defense Strategy (NDS)—that laid out a strategy with an eye toward determining military force requirements and informing the annual budget process.

Emulating the Pentagon’s efforts, other departments with national security responsibilities have conducted quadrennial reviews of their own.¹⁰⁹ As a result, between 2010 and 2020 alone, the White House produced three National Security Strategies (2010, 2015, 2017); the Defense Department produced two Quadrennial Defense Reviews (2010, 2014) and a National Defense Strategy (2018); the State Department produced two Quadrennial Diplomacy and Development Reviews (2010, 2015); and the Department of Homeland Security produced two Quadrennial Homeland Security Reviews (2010, 2014).

By some measures, then, Washington’s national security policymakers would seem to be soaked in strategic thinking, suggesting a healthy respect for the long term. Reviewing all these documents and the processes that produced them is beyond the scope of this report. However, the key point is this: at best, their impact on policy is unclear, and at times they may reinforce rather than repair the divide between the future and the present.

A conspicuous example is the National Security Strategy. As Rebecca Friedman Lissner, currently the National Security Council’s director for strategic planning, wrote in 2017, “The NSS is supposed to map out a strategy, but over time, the project has devolved into a rhetorical exercise, characterized by grandiose ambitions and laundry lists of priorities.”¹¹⁰ For grandiose ambitions, few documents top President George W. Bush’s emphasis on “ending tyranny” in the 2006 National Security Strategy.¹¹¹ And many national security strategies read like a laundry list. For example, President Bill Clinton’s 1999 strategy concluded:

Our international leadership focuses on President Clinton's strategic priorities: efforts to promote peace and security in key regions of the world; to create more jobs and opportunities for Americans through a more open and competitive trading system that also benefits others around the world; to increase cooperation in confronting security threats that threaten our critical infrastructures and our citizens at home and abroad, yet often defy borders and unilateral solutions; to strengthen international arms control and nonproliferation regimes; to protect the environment and the health of our citizens; and to strengthen the intelligence, military, diplomatic and law enforcement tools necessary to meet these challenges.¹¹²

A large gap separates such lofty goals from the detail needed to translate them into action. Paul Lettow, who served as the NSC's senior director for strategic planning from 2007 to 2009, reviewed the national security strategies issued since the beginning of the Cold War, finding that many failed to connect planning with operations.¹¹³ Contrasting recent efforts with those of President Eisenhower, who emphasized the need to link day-to-day problems with an overarching set of principles, he concluded that recent national security strategies had emphasized style more than substance. As a result, even those who complain about the lack of strategic planning often do not consider the NSS helpful.¹¹⁴ As Lettow wrote, the national security strategy is produced "primarily for public consumption, and mostly disconnected from rigorous planning processes—a cross between a speech and a check-the-box exercise."¹¹⁵ Lissner concurred: "Rather than forcing the U.S. government to engage in serious strategic planning, it has become a case study in the failure to do so."¹¹⁶

The quadrennial departmental reviews also often fail to connect strategy to action. In a comprehensive study of the reports produced by the departments of Defense, State, Homeland Security, and Energy, Jordan Tama, a professor of international relations at American University, concluded that while the four-year exercises were forward-looking, they emphasized vision over action. Some were intended to serve as guides to subsequent reviews that would tackle implementation, but those follow-on efforts rarely happened. As Tama explained, "Strategic planning fatigue often sets in after the completion of a quadrennial review, and the effort to operationalize the review's ideas is often rushed and far less robust than the review process."¹¹⁷

Former officials have been particularly withering in their critiques of the QDR. In 2015, Flournoy, who was the principal author of the 1997 QDR, testified to the Senate that strategic planning is essential but that the QDR had become a "glossy coffee table brochure written primarily for outside audiences," in part because it was publicly released as an unclassified document. She said: "Over the years, the QDR has become a routinized, bottom-up staff exercise that includes hundreds of participants and consumes many thousands of man-hours, rather than a top-

down leadership exercise that sets clear priorities, makes hard choices and allocates risk.”¹¹⁸ Defense expert Anthony Cordesman wrote the QDR was “a document decoupled from a real-world force plan, from an honest set of decisions about manpower or procurement.”¹¹⁹ Former Sen. John McCain agreed, writing in December 2017 that “defense strategy documents [had become] increasingly divorced from the strategic realities confronting the United States.”¹²⁰

That month, Congress charged the Pentagon with producing the National Defense Strategy to address these and other issues, but while the NDS may resolve some of the QDR’s problems—among other things, its contents are largely classified, ostensibly permitting a more honest assessment—it did not address one of the most fundamental: the importance of incorporating uncertainty into national security planning.

Contingency Planning Is Not Scenario Planning

The U.S. national security establishment has traditionally failed to adequately account for the uncertainty of the future—a shortcoming that prevents it from generating strategy that will provide advantage over a full range of plausible futures.

This failure may be the most conspicuous and, paradoxically, the most difficult to discern in the Department of Defense. On the one hand, the Pentagon embraces strategic foresight in many initiatives that use scenario planning to explore uncertainty through alternative futures. (See below: Strategic Foresight Within the Pentagon) On the other hand, its principal strategic document, the National Defense Strategy (and, previously, the Quadrennial Defense Review), does not incorporate scenario planning in this way, even though scenarios play a role in its formulation. In these documents, Pentagon leaders have used scenarios less to formulate strategy than to assess the capabilities needed to implement existing strategy in situations they consider most likely. In short, they are doing contingency planning rather than scenario planning.

Pentagon officials regularly acknowledge the uncertainty of the future, suggesting they would benefit greatly from scenario planning, which stretches participants’ imagination by challenging their assumptions and helps them formulate strategy robust to many futures. As defense analyst Michael Fitzsimmons has written, “Scenario planning *should be* one of the Department of Defense’s (DoD) most important tools for developing strategy under uncertainty.”¹²¹ And, in 2002, the department did formalize a process for generating scenarios to inform strategic planning. The problem is that it then used the same process to identify the capabilities the U.S. military would need to prevail in those situations. That calculation required the scenarios to be highly detailed, making them arduous to produce and limiting the number that could

reasonably be considered. So, Pentagon leaders would choose a limited set of scenarios based on their understanding of strategic aims and anticipated obstacles to them. A 2019 RAND Corporation study explained the process this way:

Traditionally, the Office of the Secretary of Defense (OSD) identifies its defense strategy and investment priorities. OSD then selects scenarios that reflect the central elements of the anticipated security environment, the chosen defense strategy, and office priorities. The results of the analysis of the selected scenarios inform OSD on the size and mix of forces and capabilities called for to implement the chosen defense strategy within expected fiscal limits.¹²²

Put differently, the key difference between the way that the drafters of the QDR/NDS have used scenarios and the way that, say, the Coast Guard conducts scenario planning is that *strategy spawns scenarios rather than the other way around*.

Admittedly, this seemingly backward process, in which strategy drives scenario selection, is partly a function of logistical and organizational necessity. The Pentagon needs to make minutely detailed decisions about force structure, and that is difficult absent a clear idea of what that force will be used for. Nevertheless, as it exists, the process worsens the very problem strategic foresight is designed to ameliorate: the tendency to make decisions based on prior assumptions about the future absent due consideration of alternatives. Fitzsimmons explained the tension:

A consensus view of the future is actually vital because you have to make all these choices about policy and programs. But the place where it's weak is in the robustness of the policy to uncertainty in the future. That's where everything falls apart. That's where the weakness is: planning for a singular future versus planning for a range of plausible futures.¹²³

This might be less concerning if the U.S. military had a better track record of anticipating the next major conflict. But it does not.¹²⁴ To the extent one is eliding uncertainty and instead operating based on assumptions, however well-founded, one is engaging in contingency planning, not scenario planning. That is, one is preparing for a challenge one has already imagined. As one defense expert explained, "Scenarios [for the QDR/NDS] are not a mechanism for preparing for a wide range of possible futures. ... It's more, under the rubric of the possible future, there are various contingencies."¹²⁵

Consider the 2018 National Defense Strategy, which showcases a particular vision of the future in which the chief threats to the United States are China and (to a lesser extent) Russia—most notably the danger that China will seize Taiwan or that Russia will invade the Baltics, presenting the United States with a *fait accompli* to which it cannot respond effectively.¹²⁶ The document itself acknowledges the uncertainty of the future,¹²⁷ but the NDS presents a consensus about the world the U.S. military will face over the long term. To its credit, contrary to many “strategic” documents, the NDS prioritizes threats, acknowledging that the United States will have to make trade-offs in military commitments and spending. But this focus also means that the United States is doubling down in its preparations for a particular future—one in which it must counter the “*fait accompli* strategy,” most notably *vis-à-vis* China. As Elbridge Colby, an author of the 2018 NDS, testified to the Senate in 2019, “The NDS is specifically designed to deal with this challenge.”¹²⁸

The point is not that this diagnosis is wrong but rather that, over the long term to which the document refers, the geopolitical situation could change radically. To be sure, it would be foolish to ignore the threat that China seems to pose today, but the country’s ascendance is not assured, nor are its leaders’ goals immutably expansionist.¹²⁹ Rather than address this uncertainty, the report effectively codifies the current conventional wisdom. To the extent that it considers multiple futures, they are variations on a theme: regional aggression by China.¹³⁰ In 2018, Mara Karlin—then a defense expert at the Brookings Institution and currently the assistant secretary of defense for strategies, plans, and capabilities—wrote: “The NDS’s diagnosis of the future security environment is consonant with today’s commonly accepted analysis across the defense community, as is its prescription for operating in it effectively.”¹³¹ It is a diagnosis that Karlin, who is in charge of the 2022 NDS, has brought to the Pentagon: “I believe that the force planning construct should prioritize and focus on China unless and until the security environment changes dramatically,” she wrote in August 2021.¹³²

Pentagon planning for the future is therefore characterized by homogenization rather than imagination. To be sure, the conventional wisdom is often right, extrapolation is often an accurate method of anticipating the short-term future, and many indicators suggest that China is a threat. But, over time, the United States will almost certainly be surprised by a different threat. And it must be prepared to respond with agility.

Global Trends Is the Exception (That Proves the Rule)

The *Global Trends* report, which the National Intelligence Council (NIC) has produced every four years since 1997, is perhaps the closest thing that the United States has to a national foresight document. Other, more predictive products, such as the CIA’s Annual Threat Assessment, analyze short-term dangers.

However, when it comes to sketching a range of plausible scenarios about what the long-term future might look like—which is to say, when it comes to producing foresight products aimed at the U.S. government broadly (as opposed to a single department)—there are few, if any, equivalents to *Global Trends*.

In March 2021, the NIC released *Global Trends 2040: A Contested World*.¹³³ The report analyzes potential large-scale changes, running from the highly likely (demographic shifts and climate effects) to the less certain (increasing economic complexity). The report wrestles with the question of how such trends might interact within societies, among states, and in the international system, predicting a “more conflict-prone and volatile geopolitical environment.”¹³⁴ Finally, it presents five alternative far-futures, ranging from “Renaissance of Democracies,” in which the United States leads a wave of economic growth and technological development that rests on strong and open public institutions, to “A World Adrift,” in which the West is locked in competition with China in a largely anarchic international system, leaving global problems like climate change to fester. In short, *Global Trends 2040* is an archetypal example of foresight. The School of International Futures, a non-governmental organization that recently published case studies of foresight efforts in eight countries, deemed *Global Trends* “a bedrock document for American foresight work...used by systems across the world.”¹³⁵

That said, although officials throughout the U.S. national security establishment are often quick to laud *Global Trends*, they also tend to downplay its influence—or at least its direct influence—over strategy and policy. The Pentagon, for example, does not incorporate the NIC’s scenarios into its work,¹³⁶ nor does the White House use them to guide policy.¹³⁷ As one defense analyst said, “It does get people thinking. But there’s no evidence to say that it has made a difference to U.S. planning or policy.”¹³⁸ The degree of abstraction—the distance between imagined tomorrows and the demands of today—is too great.

The NIC’s work may be most valuable in encouraging policymakers to consider trends outside their area of expertise and in lifting their gazes to more distant time horizons. For example, late in his second term, President George W. Bush established the National Security Policy Planning Committee to focus on issues that lay “beyond the near term,” to monitor emerging trends, and to examine “plausible, high-impact scenarios.”¹³⁹ Supported by Stephen Hadley, then the national security adviser, the committee consisted of representatives from across the U.S. national security establishment, including the lead author of the 2008 *Global Trends* report. The committee met twice a month, and its work reportedly encouraged consideration of the long-term future, both by National Security Council staff as well as the high-level officials who read the committee’s products, which included a strategy paper and a set of contingency plans. According to one committee participant, those documents did not directly influence policy, but by emphasizing long-term trends, like demographic shifts

and climate change, they helped reorient how policymakers saw future national security challenges.¹⁴⁰

Because the *Global Trends* reports, while valuable, do not seem to alter top-level decision-making, the reports have sometimes anticipated developments that policymakers failed to address. After the NIC released *Global Trends 2040*, which highlights the potential threat from China,¹⁴¹ Mathew Burrows, the principal author of three previous reports, wrote, “I wish that the warnings about an independently minded China, particularly in *Global Trends*, had been heeded a decade or more ago, when there was good reason to worry.”¹⁴² Although the purpose of scenarios is not to predict the future,¹⁴³ this example shows how the *Global Trends* reports are the exception that proves the rule: The report is the federal government’s most comprehensive strategic foresight exercise—an attempt to deal with the uncertainty of the long-term future by detailing trends and painting a range of plausible futures—but its foresight is a function of its freedom from both operations and planning. It is separated not only from the need to act in the present, but also from the need to develop an “official” view of the future because it does not represent the views of the administration or the Intelligence Community.¹⁴⁴ It is a thought exercise, not a strategy document.

Global Trends, then, would seem to support the notion that “thinking” comes at the expense of “doing.” To “explore,” the U.S. government not only had to separate thought from action, but it also had to downplay the goal of influencing action. (*Global Trends 2040*’s modest ambition is to serve as an “analytic framework for policymakers.”¹⁴⁵) Yet, as we see in the Coast Guard case, it is possible for future-thought to impact present-day action. Indeed, there are signs that foresight is becoming increasingly connected to policy throughout the U.S. federal government.

→ STRATEGIC FORESIGHT WITHIN THE PENTAGON

Notwithstanding the pale version of foresight that drove the Quadrennial Defense Review and that now animates the National Defense Strategy, the Department of Defense is a hotbed of foresight activity at lower levels—within the services, at various commands, in specific offices, and among the military schools. The problem is that these efforts are not necessarily linked to policy. A (non-exhaustive) list would include Army Futures Command and Training and Doctrine Command (TRADOC), which has published a series of reports on the future operating environment, based on analyses of alternative future scenarios.¹⁴⁶ TRADOC also houses the Mad Scientist Laboratory—a “marketplace of ideas” that features speakers, hosts conferences, and maintains a blog on the future of war.¹⁴⁷ The Air Force has Air Force Futures,

which recently published a report featuring alternative geopolitical futures.¹⁴⁸ The Pentagon is also home to the storied (if secretive) Office of Net Assessment, which says it “has continually provided long-term comparative assessments of trends, key competitions, risks, opportunities, and future prospects of U.S. military capability to the Secretary of Defense.”¹⁴⁹ Courses that address foresight have recently been taught at the Air Force’s School of Advanced Air and Space Studies, the Army’s School of Advanced Military Studies, and the National War College.¹⁵⁰

Green Shoots of Strategic Foresight

The U.S. government's interest in strategic foresight has waxed and waned over the decades, and today there are signs of a renewed interest in exploring alternative futures to make sense of the present. As foresight expert Amy Zalman wrote in 2019, "Foresight activities once again [have] emerged into national security and Federal Government consciousness."¹⁵² A 2018 study found evidence of strategic foresight at 19 federal agencies:

- Bureau of Prisons (Department of Justice)
- Bureau of Safety and Environmental Enforcement (Department of the Interior)
- Central Intelligence Agency
- Department of Veterans Affairs
- Environmental Protection Agency
- Federal Bureau of Investigation
- Federal Emergency Management Agency
- Forest Service (Department of Agriculture)
- Government Accountability Office
- National Aeronautics and Space Administration
- National-Geospatial Intelligence Agency
- National Guard Bureau
- National Intelligence Council
- Office of Management and Budget
- Office of Net Assessment
- Office of Personnel Management

- U.S. Air Force
- U.S. Coast Guard
- U.S. Marine Corps¹⁵³

However, the fortunes of strategic foresight efforts can shift abruptly, often when an organization’s leadership changes, so some of these programs no longer exist or now find themselves in institutional limbo. For example, the status of the Marine Corps’ Futures Assessment Division, which had produced the creative report *Science Fiction Futures: Marine Corps Security Environment Forecast: 2030–2045*,¹⁵⁴ is now in flux, pending a decision on the future of foresight within the service.

Nevertheless, in the past three to four years, several organizations have started strategic foresight programs or accelerated existing efforts. Drawing principally on interviews with federal officials, this section chronicles the recent history of programs at four federal agencies: the Centers for Disease Control and Prevention, the National Institute for Occupational Safety and Health, the Office of Personnel Management, and the U.S. Secret Service. These snapshots suggest the spread of foresight methods throughout the federal government, but they also show the challenges such efforts face. As Mathew Burrows has written, “Strategic foresight has gained prominence and greater popularity in the U.S. bureaucracy, but, so far, attempts to fully incorporate foresight have failed.”¹⁵⁵

→ FEDERAL FORESIGHT COMMUNITY OF INTEREST

One reason for—and one reflection of—the proliferation of government foresight efforts is the establishment and growth of the Federal Foresight Community of Interest (FFCOI), a network through which government officials, as well as scholars and private-sector practitioners, convene to “share best practices, foster cross-agency support, and develop new and innovative ways to apply and improve the use of Strategic Foresight within the Federal Government.”¹⁵⁶ The FFCOI was founded in 2013 by James-Christian Blockwood, whom the Department of Veterans Affairs (VA) had hired in 2011 as the director of strategic studies and charged with creating a foresight capability. At the time, the department was unsure how to care for the increasing number of veterans returning from the wars in Iraq and Afghanistan,¹⁵⁷ and Eric Shinseki, then the secretary of veterans affairs, wanted to extend the organization’s planning horizon from one or two years to 10 or 20 years.¹⁵⁸ To jumpstart and inform his work, Blockwood searched

for similar initiatives around the federal government and founded the FFCOI as an informal network, initially gathering only a handful of representatives to share their work.¹⁵⁹ In 2015, to promote the nascent organization, the VA joined forces with the Justice Department’s Bureau of Prisons, which had had a foresight effort since 2000.¹⁶⁰ Today, hundreds of foresight experts, from both within government and without, attend the FFCOI’s meetings, which feature guest speakers, trainings, and opportunities to learn about other initiatives.

Snapshots

The CDC Gives Staff the Tools to Explore Futures

The Centers for Disease Control and Prevention (CDC) is part of the U.S. Department of Health and Human Services. As the nation’s health protection agency, it has a wide array of responsibilities, from combating infectious disease to ensuring occupational safety. The COVID-19 pandemic has naturally focused attention on the agency’s *forecasting* abilities, particularly Congress’s recent creation of the Center for Forecasting and Outbreak Analytics, which will use quantitative models and other epidemiological tools to predict and track disease outbreaks, rapidly providing data to decision-makers.¹⁶¹ However, the CDC has also been experimenting with *foresight*. Inspired by the United Kingdom’s use of strategic foresight at the national level and by the National Institute for Occupational Safety and Health’s experimentation with the method (see below), the CDC’s Office of the Associate Director for Policy and Strategy (OADPS) initiated an organization-wide effort in 2019 to train personnel in futures methods.¹⁶²

A real-world example had provided early proof-of-concept. In 2018 and 2019, an increase in head injuries and deaths caused by the growing use of e-scooters took the public health community by surprise, according to a senior OADPS official. The office approached the Association of State and Territorial Health Officials, a nonprofit organization representing local health agencies, and in scanning the academic literature and popular media, they discovered that the “weak signals” of e-scooter use—that is, early signs of an incipient trend—were present in 2014, years before e-scooters had become a public health concern. That meant officials had missed an opportunity to stave off the problem before it manifested in visits to the emergency room. This realization prompted OADPS to ask what other topics might catch public health officials off-guard and whether strategic foresight could identify them.¹⁶³

In September 2019, the CDC held an event attended by several hundred staff members, featuring Andy Hines, a strategic foresight expert who runs a certification program at the University of Houston. Hines' presentation struck a chord with CDC leadership, according to the official, and subsequently, OADPS sponsored an online version of his Houston course for 80 people, including several CDC leaders. (An additional 50 people learned only about "scanning," which Hines has defined as "an effort to uncover emerging trends and issues that may have important implications" for an organization.¹⁶⁴) As part of the course, participants identified 10 potential strategic foresight projects the agency could explore, suggesting an opportunity to leverage the method to the CDC's advantage.

To begin to institutionalize foresight at the CDC, OADPS established a "Strategic Foresight Learning & Action Network," which began work on two of those projects: one on the future of evidence amid the proliferation of information online, and one on the future of emergency lab preparedness.¹⁶⁵ Throughout the spring and summer of 2021, teams of 10 to 12 staffers met regularly and generated scenarios using the four-archetypes method, a technique by which the future is explored under four general conditions: continuation, collapse, new equilibrium, and transformation.¹⁶⁶ The Center for Preparedness and Response managed the lab-preparedness exercise and, according to the CDC, is already using the results to inform its strategic thinking.¹⁶⁷ Other ongoing foresight projects include a scanning effort to explore the future of agency grantmaking. (The CDC provided \$19.5 billion to support public health initiatives last year.¹⁶⁸) The OADPS official noted that the use of strategic foresight is spreading more quickly than expected among CDC offices, which took to the technique once given the language and the tools to think systematically about the future.¹⁶⁹

National Institute for Occupational Safety and Health Explores the Future of Work

The mission of the National Institute for Occupational Safety and Health (NIOSH), which is part of the Centers for Disease Control and Prevention (CDC), is to research worker health and safety and to translate findings into practice.¹⁷⁰ Though both organizations were established in 1970, NIOSH is distinct from the Occupational Safety and Health Administration, which is a regulatory agency.

NIOSH has traditionally been a forward-looking organization, identifying research priorities in 10-year cycles, as reflected in its National Occupational Research Agenda.¹⁷¹ Well before the COVID-19 pandemic exacerbated such concerns, NIOSH leaders recognized that the nature of work had been changing radically, requiring new thinking about the best ways to protect employees.¹⁷² According to one NIOSH official, the institute's interest in strategic foresight emerged "almost organically" in 2019 as NIOSH was establishing its Future of Work Initiative.¹⁷³ Around that time, NIOSH Director John Howard also established the Office of Research Integration (ORI) to promote collaboration

among and maximize the impact of communities researching occupational safety and health (OSH).¹⁷⁴

ORI became home to a new NIOSH strategic foresight unit, led by the NIOSH associate director for research integration and the ORI deputy director, both of whom completed the University of Houston's strategic foresight certification course. That unit, in collaboration with internal and external scientists, systematically reviewed future-of-work scenarios in the academic and popular literature, publishing a paper which noted that future workers were likely to face "longstanding hazards in new jobs (e.g., psychosocial stress due to technological displacement); and new hazards in new jobs (e.g., collisions with robots, discriminatory monitoring of workers through wearable sensors, and human-machine role ambiguity)."¹⁷⁵ In a subsequent paper, NIOSH officials wrote that many organizations had used scenarios to explore the future of work, but few had focused on strategic foresight's potential contributions to occupational safety and health: "This future-oriented way of thinking and planning can help OSH professionals more actively anticipate, and even shape, the systems influencing the future of worker safety, health, and well-being."¹⁷⁶

In September 2020, University of Houston instructors conducted an abbreviated virtual version of their strategic foresight training for some 30 NIOSH senior leaders and scientists. ORI then began a pilot exercise whereby a range of subject matter experts constructed scenarios around the future of occupational safety and health. ORI completed those scenarios in September 2021, and according to institute officials, NIOSH plans to publicly disseminate them through presentations and publications, beginning in January 2022. NIOSH has also engaged the University of Houston, the RAND Corporation, and the Oxford Scenarios Programme as collaborators to derive strategic lessons from the scenarios, linking visions of the future to actions the institute might take now.¹⁷⁷

ORI hopes to institutionalize foresight efforts and build a more robust organizational ability to explore possible futures and their impacts for occupational safety and health.¹⁷⁸ According to Sarah A. Felknor, the NIOSH associate director for research integration, "One of our major objectives is to promote and sustain capacity in foresight at NIOSH...to get us to pivot and think more broadly about what might be coming, and to find a way to systematically organize that information so we can more proactively prepare for the future."¹⁷⁹ ORI aims to create a cadre of foresight supporters within NIOSH. "A year from now, certainly, we hope to have a core group of foresight practitioners at NIOSH who can apply strategic foresight principles to identify strategic options for OSH."¹⁸⁰ At the same time, according to Felknor, NIOSH also hopes to encourage the use of foresight techniques within the broader OSH community and, to that end, is assembling an instructional toolkit for anyone interested in using foresight to advance worker health and safety.¹⁸¹

OPM Shows How Future Thought Can Quickly Influence Present Action

The Office of Personnel Management (OPM) created a Foresight and Methods Division in 2014 to monitor topics affecting the future of the federal workforce. But uneven leadership support for foresight and fluctuations in staffing resulted in only fitful efforts, the high point of which was a conference on the future of work that OPM held in 2017.¹⁸²

In 2018, OPM hired its first full-time strategic foresight program analyst to inform strategic planning within OPM and across the federal government. Although his remit is broader, the analyst's primary task over the past two years has been to lead a foresight project for the U.S. Chief Financial Officers Council (CFOC).¹⁸³ Congress established the CFOC in 1990 to improve financial management throughout the government.¹⁸⁴ It is chaired by a senior official from the Office of Management and Budget (OMB) and comprises the chief financial officers of 24 federal agencies, ranging from the Small Business Administration to the Department of Defense. In 2019, with the 30th anniversary of its founding approaching, the group noted that “national and global events, the rapid advancement of technology, and a shift in financial mindset have radically altered how the Federal Government addresses fiscal challenges.”¹⁸⁵ The financial management workforce needed the skills to adapt to those changes, and the CFOC needed “a roadmap for navigating an uncertain future.”¹⁸⁶

So, working with the OPM analyst, the CFOC developed a set of seven strategies by conducting a scenario exercise based on the University of Houston's strategic foresight methodology.¹⁸⁷ Specifically, it developed a 2x2 matrix to envision four plausible future worlds based on two uncertainties: how the government would collect and use data (efficiently or inefficiently), and how it would implement new technology (slowly or rapidly). This generated a range of futures—from one in which the financial management community leveraged the COVID-19 pandemic to develop a world-class data analytics capability, to one in which political appointees did not prioritize technologically modernizing government systems. Working independently, the teams that had built each future world then identified strategic goals, defined as “an insight or course of action that if pursued, would make the FM [financial management] workforce successful in the context of the scenario.”¹⁸⁸ The council then identified which goals were most important and actionable.

When President Joe Biden took office in January 2021, the White House froze many Trump administration efforts,¹⁸⁹ pending review and release of the President's Management Agenda (PMA), an initiative started by President George W. Bush to make government more efficient and effective.¹⁹⁰ However, anticipating that the new PMA would likely include efforts to modernize the federal workforce, OMB chartered an executive steering committee to implement the goals that the Workforce Modernization Working Group had identified.¹⁹¹ Efforts underway as of this writing include launching a data analytics training program and calling for outside vendors to create a “Career

Planning & Training Initiative”—an online portal to enable continuous learning for financial management employees, and (ultimately) all federal employees.¹⁹² OPM’s work with CFOC—much like the Coast Guard’s recent “Pinecone” exercise—shows that it is possible to move quickly from foresight to strategy to implementation, providing a clear example of future thought influencing present-day action.

The U.S. Secret Service Leverages Foresight to Inform Strategy

The U.S. Secret Service (USSS) was founded in 1865 as an arm of the Treasury Department to investigate currency counterfeiting, which was rampant after the Civil War.¹⁹³ It was not until the assassination of President William McKinley in 1901 that Congress tasked the Secret Service with protecting the president. Today, the agency, which is now part of the Department of Homeland Security (DHS), continues to investigate financial crimes and to protect political VIPs.

In the early 2010s, several high-profile incidents called into question the Secret Service’s effectiveness, leading to the director’s resignation and multiple audits of the agency’s performance.¹⁹⁴ A 2015 bipartisan report by the House Committee on Oversight and Government Reform portrayed the Secret Service as an agency “in crisis,” resistant to change, and beset by personnel shortages, low morale, and poor leadership.¹⁹⁵ According to a report issued the following year by the National Academy of Public Administration (NAPA), an independent advisory agency established by Congress, the Secret Service had begun to address its shortcomings, including what a DHS panel termed the need for “dynamic leadership that can move the Service forward into a new era and drive change in the organization.”¹⁹⁶ According to NAPA, one important reform was the establishment of the Office of Strategic Planning and Policy to “focus the agency on the mission moving forward as it evolves and needs to respond to new and emerging threats.”¹⁹⁷ In short, external criticism prompted the agency to consider the longer-term future in a more structured way.

In 2016, the Office of Strategic Planning and Policy reached out to the intelligence community to help it assess the future security and economic environment.¹⁹⁸ As Gregory Try, then the acting chief for net assessment, explained: “People come up constantly with different ways of harming other individuals. ... As we look at the future, those threats are going to continue to evolve. People are going to continue to find different ways of manipulating either environments or the types of tools that could harm somebody.”¹⁹⁹ Similarly, currency issues have evolved from the counterfeiting of paper money to financial cybercrime. Ultimately, the office produced a strategy document looking 10 years into the future, examining a range of trends, which it presented to the chief strategy officer. According to Try, the document used an analogy to help agency leaders understand the need to continuously anticipate the evolving nature of threats:

When you think about physical protection of people or facilities, you think about it in terms of concentric rings. We built an analogy for strategic foresight that uses the same type of thought process. Essentially, what we did is describe strategic foresight as our outer ring, and then that helped people understand that we were dealing with a time and space challenge.²⁰⁰

In 2019, Try, now the organization's chief strategy officer, hired a strategic foresight specialist and scenario planner to head the Enterprise Strategy Division. The Secret Service now has a speaker series focusing on future trends, such as the metaverse and cryptocurrency, as well as a foresight newsletter, through which it is socializing strategic foresight concepts throughout the organization. It also partnered with the Army Cyber Institute and Arizona State University to host a "threatcasting" event on the future of financial cybercrime.²⁰¹

Most significantly, in October 2021, the Secret Service conducted a scenario-based planning exercise modeled after the Coast Guard's Project Evergreen, in which it examined four drivers of future change: the USSS budget (abundant vs. insufficient), USSS technology (leading vs. lagging), U.S. privacy concerns (strong vs. weak), and U.S. government effectiveness (high vs. low). By juxtaposing combinations of these drivers, the Secret Service created four possible future worlds, ranging from "A Legacy of Resilience" (in which a post-pandemic United States is thriving economically, socially, and politically) to "Smoke and Mirrors" (in which the United States is politically polarized, economically struggling, and locked in conflicts abroad that undermine law enforcement efforts at home).²⁰²

The Secret Service says it intends to use the results from the scenario-based planning workshop to shape its upcoming strategic plan. According to Try, the long-term thinking done in strategic foresight will feed into the medium-term strategic plan, which in turn informs the annual budgeting process, thereby connecting future anticipation to present action.²⁰³

The Future of U.S. Foresight

Over the past decade, scholars and practitioners have called for the U.S. government to institutionalize strategic foresight at the highest levels. In 2012, Leon Fuerth published a detailed proposal for restructuring the U.S. government to link foresight with policymaking, including establishment of a dedicated component within the Executive Office of the President.²⁰⁴ In 2016, the National Academy of Public Administration called for the incoming White House team to integrate foresight with policymaking government-wide²⁰⁵—an idea that Jordan Tama echoed in his report on quadrennial departmental reviews. He recommended establishing “new offices and positions throughout the government dedicated to conducting long-range analysis, and creating a position or unit based in the White House with responsibility for promoting the development and coordination of government-wide foresight activities.”²⁰⁶ Also in 2016, in a report on fragile states, William Burns, Michèle Flournoy, and Nancy Lindborg called for the establishment of a strategic foresight cell within the National Security Council. In their 2017 book, *Warnings*, Richard A. Clarke and R.P. Eddy suggested creating a National Warning Office in the White House that would scan the horizon for dangers, drawing on future-oriented officials from every cabinet agency.²⁰⁷ And, in 2019, futurist Amy Webb called for the president to create “a centralized office championing strategic foresight,” focused on scientific and technological developments.²⁰⁸

In addition to these suggestions, other countries offer a plethora of institutional models for incorporating foresight into policymaking.²⁰⁹ For example, Policy Horizons is a federal organization whose “mandate is to help the Government of Canada develop future-oriented policy and programs that are more robust and resilient in the face of disruptive change on the horizon.”²¹⁰ Finland has foresight processes tightly linked with the legislative and executive branches, including via the Foresight Centre in parliament, and the government is required to produce a report on the future that articulates long-term strategy.²¹¹ Singapore has perhaps the world’s most well-developed strategic foresight system in its Center for Strategic Futures, which uses scenario planning and other tools to influence national policy.²¹² Also notable is the European Commission (EC), which issued its first strategic foresight report in 2020, emphasizing the role that foresight could play in improving resilience to disruptions like the COVID-19 pandemic.²¹³ The EC’s Directorate-General for Research and Innovation issued a report in August 2021, providing not only a set of scenarios, but also a guide to “future-proofing” policies.²¹⁴

It is difficult to avoid the conclusion that the United States lags many of its friends and allies in leveraging strategic foresight to improve policymaking. Fortunately, for the moment, there appears to be less reason for concern that the United States is falling behind its competitors. Setting aside flawed caricatures of a long-

term Chinese strategy to achieve global hegemony,²¹⁵ Beijing's foresight capabilities significantly trail those of Western nations, including the United States. Analyst Paul Charon reports that there are apparently no political or military organizations dedicated to strategic foresight: "[T]his reluctance to engage in foresight research can be ascribed in large part to the weight of the Chinese Communist Party's ideology which discourages such speculation about the evolution of the international system."²¹⁶ By contrast, Russia has a strong interest in foresight, incorporating it into planning documents that have 10- or even 20-year time horizons, but policymaker consensus seems to have converged on a single future in which the West declines over the medium to long term, with the United States struggling to retain primacy.²¹⁷ The point, then, is not that there is a "foresight gap" but that the United States is unnecessarily leaving itself vulnerable to surprise and disruption.

That sets the stage for strategic disadvantage, particularly amid international crises. Fuerth argues that the United States needs to stop bouncing from crisis to crisis and instead find a way of dealing with modern challenges and the uncertainty of the future: "The United States is confronted by a new class of complex, fast-moving challenges that are straining the capacity of national leadership to 'win the future.'"²¹⁸ Washington is failing to exploit the benefits that institutionalized strategic foresight provides. According to Flournoy, a national foresight function could provide the White House a "low-cost, high-value" way to "look over the horizon and try to anticipate what's coming ... and [it] might give them a much broader and more effective set of options to engage early, rather than waiting until it hits them in the face and it's a crisis."²¹⁹

This report proposes formalizing such efforts through a President's Foresight Advisory Board (PFAB)—an entity resembling other external commissions, such as the President's Intelligence Advisory Board (PIAB), which Dwight Eisenhower established in 1956 to provide institutionally independent advice on U.S. intelligence, or the President's Council of Advisors on Science and Technology (PCAST), which can also trace its lineage to the Eisenhower administration.²²⁰ In such a model, the president would appoint the board's members, who could be staffed by officials seconded from throughout the U.S. government. Although, as discussed earlier, the White House national security staff has at times incorporated foresight into its work, institutionalization increases the chance of influence. An advisory board offers several structural benefits.

- A PFAB would have a direct line to the president. The strength of that connection would be a function of the president's interest in foresight, but that would be true of any effort to institutionalize imagination: it will be only as valuable as the president wants it to be. An advisory board structure eliminates the organizational layer that would exist between, say, a strategic foresight cell on the NSC and the president.

- As an advisory board, the PFAB would be able to avoid operations, avoiding the push-and-pull of tactics and strategy. That said, to improve its effectiveness, the board would need to remain apprised of operational issues, whether through regular briefings or liaising with operational staff.
- Unlike the National Intelligence Council, which produces the *Global Trends* reports, the PFAB would be able to make policy recommendations. It could therefore more explicitly tie conceptions of the future to decisions in the present.
- Although much of this report has focused on foresight in national security, the future is not simply a national security issue, and foresight can aid domestic policy formulation, as demonstrated by the four snapshots in the previous section. Putting a foresight cell within the National Security Council staff would restrict its scope. While a lot of surprise lurks abroad, the United States has encountered many surprises at home, too.
- Over the years, rotating the staff of the PFAB would create a cadre of government officials who have had direct strategic foresight experience. Project Evergreen showed both that it is not necessary for such staffers to have prior experience and that, once they have that direct experience, they often bring it back to their home institutions.

Presidential advisory boards do not present a perfect model. The PIAB's influence has varied over the years, it has occasionally been used as a convenient place for presidents to stash unqualified political patrons,²²¹ and its productivity is difficult to measure because so much of its work is classified. That said, one thorough academic analysis found: "[T]he board has made important recommendations—the establishment of the DIA [Defense Intelligence Agency], the CIA's Directorate of Science and Technology, and the Defense Attaché system—that have clearly improved the intelligence community. At times the board's recommendations have been important factors in intelligence-related policy decisions."²²² One reviewer for the CIA's in-house journal wrote, "the PIAB has a reputation for providing insights into National Security decision-making and producing useful assessments on the future of intelligence."²²³

Ultimately, the institutional form that a national-level strategic foresight body takes matters less than presidential support of it. The White House is constantly beset by the press of current events, so it will take leadership from the Oval Office to look up from "the smoke and crises of current battle," as Dean Acheson put it.²²⁴ But looking up—peering beyond the present—is sensible only if one has the instruments to penetrate the fog of the future—the cloud of uncertainty that encourages a return to the relative clarity of the present.

Strong forecasting practices can help transform much short-term uncertainty into probabilistic risk, but policymakers must make many decisions under conditions of irreducible uncertainty, at which point they require foresight. It is neither true nor useful to say that anything could happen—nor is it feasible to prepare for every conceivable eventuality—but policymakers need tools for building guardrails of plausibility around potential futures. Strategic foresight provides the tools needed to imagine alternative futures. By using them—indeed, by coordinating their use among the federal agencies already using and experimenting with them—the U.S. government would find itself far stronger. Scenario planning and other foresight techniques offer no guarantees, but the costs of avoiding the long-term future are manifest and manifold: lost GDP, higher unemployment, failing infrastructure, environmental catastrophe, weakened security, and increased susceptibility to surprise. Given the modest cost of foresight efforts, the return will therefore almost certainly dwarf the investment. Imagination has traditionally been a woefully undervalued strategic resource, but there is no reason the United States need continue that tradition.

Selected Foresight Resources

Jonathan Boston, *Governing for the Future: Designing Democratic Institutions for a Better Tomorrow* (Bingley, U.K.: Emerald, 2017).

Richard A. Clarke and R.P. Eddy, *Warnings: Finding Cassandras to Stop Catastrophes* (New York: Ecco, 2017).

Leon Fuerth with Evan M. H. Faber, *Anticipatory Governance: Practical Upgrades: Equipping the Executive Branch to Cope With Increasing Speed and Complexity of Major Challenges* (Washington, DC: National Defense University Press, October 2012), https://www.dropbox.com/s/z7jjk626ddf5100/Anticipatory_Governance_Practical_Upgrades.pdf?dl=0.

Joseph M. Greenblott, Thomas O'Farrell, Robert Olson, and Beth Burchard, "Strategic Foresight in the Federal Government: A Survey of Methods, Resources, and Institutional Arrangements," *World Futures Review* 11, no. 3 (2019): 245–66. (See also: Foresight in the Federal Government: Supplemental Information, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6750717/bin/NIHMS1523455-supplement-sup_1.pdf.)

John M. Kamensky et al., *Bringing Strategic Foresight to Bear in Policy Planning and Management*, (Washington, DC: National Academy of Public Administration, 2016), <https://s3.us-west-2.amazonaws.com/napa-2021/T16-StratForesightRecsFINAL-as-posted-on-web.pdf>.

National Intelligence Council, *Global Trends 2040: A More Contested World* (National Intelligence Council, March 2021), https://www.dropbox.com/s/z7jjk626ddf5100/Anticipatory_Governance_Practical_Upgrades.pdf?dl=0.

J. Peter Scoblic, "Learning from the Future: How to Make Robust Strategy in Times of Deep Uncertainty," *Harvard Business Review*, 98, no. 4 (2020): 38-47, <https://hbr.org/2020/07/learning-from-the-future>.

School of International Futures, *Features of Effective Systemic Foresight in the Governments Around the World* (London: SOIF, April 2021), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/985279/effective-systemic-foresight-governments-report.pdf.

Amy Webb, *A National Office for Strategic Foresight Anchored in Critical Science and Technologies* (Stanford, CA: Freeman Spogli Institute for Institutional Studies, October 17, 2019), <https://fsi.stanford.edu/publication/national-office-strategic-foresight-anchored-critical-science-and-technologies-o>.

Notes

- 1 National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: Norton, 2004), Executive Summary, 2.
- 2 Confusingly, scholars of business strategy equate *foresight* with *forecasting*, defining *strategic foresight* as the ability to predict the outcome of a course of action such that a firm can identify strategy that provides a competitive advantage over time. See, for example, Gautam Ahuja, Russell W. Coff, and Peggy M. Lee, “Managerial Foresight and Attempted Rent Appropriation: Insider Trading on Knowledge of Imminent Breakthroughs,” *Strategic Management Journal* 26, no. 9 (2005), 791-808 or Giovanni Gavetti and Anoop Menon, “Evolution Cum Agency: Toward a Model of Strategic Foresight,” *Strategy Science* 1, no. 3 (2016), 207–33.
- 3 Michael C. Horowitz, Julia Ciocca, Lauren Kahn, and Christian Ruhl, “Keeping Score: A New Approach to Geopolitical Forecasting” (Philadelphia: Perry World House, February 2021).
- 4 This section draws, in part, on J. Peter Scoblic, “Learning from the Future: Three Essays on Uncertainty, Foresight, and the Long Term” (DBA dissertation, Harvard Business School, 2020), 89–95.
- 5 As cited in Amy B. Zegart, “Why the Best Is Not Yet to Come in Policy Planning” in Daniel W. Drezner, ed., *Avoiding Trivia: The Role of Strategic Planning in American Foreign Policy* (Washington, DC: Brookings Institution Press, 2009), 115–116.
- 6 “American Prosperity Project: A Framework for Long-Term Investment” (Washington, DC: The Aspen Institute, December 2016); William A. Galston and Elaine C. Kamarck, “More Builders and Fewer Traders: A Growth Strategy for the American Economy” (Washington, DC: The Brookings Institution, June 2015); Ben Ritz, “Defunding America’s Future: The Squeeze on Public Investment in the United States” (Washington, DC: Progressive Policy Institute, October 2018); National Research Council, *Choosing the Nation’s Fiscal Future* (Washington, DC: National Academies Press, 2010).
- 7 See, for example, Barack Obama, “Remarks by the President at UN Climate Change Summit” (UN Climate Change Summit, New York, September 23, 2014); and Jamie Dimon and Warren E. Buffett, “Short-Termism Is Harming the Economy,” *Wall Street Journal*, June 7, 2018.
- 8 Esther K. Choo and Aaron E. Carroll, “Public Health, Pandemic Response, and the 2020 U.S. Election,” *The Lancet Public Health* 5, no. 10 (2020), e515-e516. [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(20\)30206-1/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30206-1/fulltext).
- 9 Michael E. Porter, “Capital Disadvantage: America’s Failing Capital Investment System,” *Harvard Business Review* 70, no. 5 (October 1992), 65–82.
- 10 John R. Graham, Campbell R. Harvey, and Shiva Rajgopal, “The Economic Implications of Corporate Financial Reporting,” *Journal of Accounting and Economics* 40, no. 1 (December 1, 2005), 3–73.
- 11 Dominic Barton, James Manyika, Timothy Koller, Robert Palter, Jonathan Godsall, and Joshua Zoffer, “Measuring the Economic Impact of Short-Termism” (New York: McKinsey Global Institute, February 2017); Dominic Barton, James Manyika, and Sarah Keohane Williamson, “Finally, Evidence That Managing for the Long Term Pays Off,” *Harvard Business Review*, February 7, 2017, <https://hbr.org/2017/02/finally-proof-that-managing-for-the-long-term-pays-off>.
- 12 Bhakti Mirchandani, Steve Boxer, Allen He, Evan Horowitz, and Victoria Tellez, “Predicting Long-term Success for Corporations and Investors Worldwide” (Boston: FCLTGlobal, September 2019).
- 13 See, for example, “BlackRock CEO Larry Fink Tells the World’s Biggest Business Leaders to Stop Worrying About Short-Term Results,” *Business*

Insider, April 14, 2015, <https://www.businessinsider.com/larry-fink-letter-to-ceos-2015-4>.

14 Business Roundtable, “Business Roundtable Supports Move Away from Short-Term Guidance,” June 7, 2018, <https://www.businessroundtable.org/business-roundtable-supports-move-away-from-short-term-guidance>.

15 Business Roundtable, “Business Roundtable Redefines the Purpose of a Corporation to Promote ‘An Economy That Serves All Americans,’” August 19, 2019, <https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans>.

16 According to one study, 96 percent of managers complained they had too little time for strategic thinking. As cited in Dorie Clark, “If Strategy Is So Important, Why Don’t We Make Time for It?” *Harvard Business Review*, June 21, 2018, <https://hbr.org/2018/06/if-strategy-is-so-important-why-dont-we-make-time-for-it>.

17 Sarah Murray, “How to Take the Long-Term View in a Short-Term World,” *Financial Times*, February 26, 2021.

18 Short-termism is also an individual phenomenon. For example, humans tend to hyperbolically discount the future—that is, to value the future less than the present in an economically irrational way. For a review, see Shane Frederick, George Loewenstein, and Ted O’Donoghue, “Time Discounting and Time Preference: A Critical Review,” *Journal of Economic Literature* 40, no. 2 (2002), 351–401.

19 Rachelle C. Sampson and Yuan Shi, “Are U.S. Firms Becoming More Short-Term Oriented? Evidence of Shifting Firm Time Horizons from Implied Discount Rates, 1980–2013,” *Strategic Management Journal* (forthcoming).

20 Michael K. MacKenzie, “Institutional Design and Sources of Short-Termism,” *Institutions for Future Generations* (Oxford: Oxford University Press, 2016).

21 Zegart, “Why the Best Is Not Yet to Come in Policy Planning.”

22 Barton et al., “Finally, Evidence That Managing for the Long Term Pays Off.”

23 See, for example, Ariel Babcock, Matt Brady, Matt Leatherman, and Victoria Tellez, *The Risk of Rewards: Tailoring Executive Pay for Long-Term Success* (Boston: FCLTGlobal, March 2021), <https://www.fcltglobal.org/resource/executive-pay/>.

24 Lyman Stone, “The Minimum Voting Age Should Be Zero,” *New York Times*, September 1, 2021, <https://www.nytimes.com/2021/09/01/opinion/politics/kids-right-to-vote.html>.

25 Except for eliminating the voting age, these proposals are catalogued in Jonathan Boston, “Governing for the Future: How to Bring the Long-Term into Short-Term Political Focus” (Washington, DC: Center for Environmental Policy, School of Public Affairs, American University, 2014) and Jonathan Boston, *Governing for the Future: Designing Democratic Institutions for a Better Tomorrow* (Bingley, U.K.: Emerald, 2017).

26 Philip E. Tetlock and Dan Gardner, *Superforecasting: The Art and Science of Prediction* (New York: Crown, 2015).

27 Rafael Ramírez and Cynthia Selin have rightly criticized the notion that the amount of uncertainty increases at a steady rate as we move further into the future, as suggested by the often-used “futures cone”: “To our knowledge, no empirical evidence supporting this assumption has been developed. For all we know, in some situations the future is tetrahedral and in others it takes the form of a teddy bear.” Rafael Ramírez and Cynthia Selin, “Plausibility and Probability in Scenario Planning,” *Foresight* 16, no. 1 (2014), 56. That said, the probability of any

- given event increases over time. Believing an event is equally likely whether the time horizon is 1 year or 10 years is an example of what research psychologists call “scope insensitivity.” See Tetlock and Gardner, *Superforecasting*, 234–236 and Daniel Kahneman and Shane Frederick, “Representativeness Revisited: Attribute Substitution in Intuitive Judgment,” in Thomas Gilovich, Dale W. Griffin, and Daniel Kahneman, *Heuristics and Biases: The Psychology of Intuitive Judgment* (New York: Cambridge University Press, 2002), 49–81.
- 28 Tetlock and Gardner, *Superforecasting*, 243–244.
- 29 Richard M. Cyert and James G. March, *A Behavioral Theory of the Firm* (Englewood Cliffs, NJ: Prentice-Hall, 1963), 119.
- 30 Juha Uotila, Markku Maula, Thomas Keil, and Shaker A. Zahra, “Exploration, Exploitation, and Financial Performance: Analysis of S&P 500 Corporations,” *Strategic Management Journal* 30 (February 2009), 221–31.
- 31 James G. March, “Exploration and Exploitation in Organizational Learning,” *Organization Science* 2, no. 1 (1991), 85.
- 32 Boston, *Governing for the Future*, 65.
- 33 Boston, *Governing for the Future*, 87.
- 34 Daniel A. Levinthal and James G. March, “The Myopia of Learning,” *Strategic Management Journal* 14, no. S2 (1993), 105.
- 35 Wendy K. Smith and Michaelusbmān, “Managing Strategic Contradictions: A Top Management Model for Managing Innovation Streams,” *Organization Science* 16, no. 5 (2005), 522–536.
- 36 Judith Hicks Stiehm, *U.S. Army War College: Military Education in a Democracy* (Philadelphia: Temple University Press, 2010).
- 37 Leon Fuerth, “Operationalizing Anticipatory Governance,” *PRISM* 2 no. 4 (September 2011), 31.
- 38 This case study draws, in part, on Scoblic, “Learning from the Future,” 96–138. For a different take on Project Evergreen, see Abbie Tingstad et al., *Developing New Future Scenarios for the U.S. Coast Guard’s Evergreen Strategic Foresight Program* (Washington, DC: Homeland Security Operational Analysis Center operated by the RAND Corporation, 2020).
- 39 In Federalist No. 12 (1787), Hamilton wrote: “A few armed vessels, judiciously stationed at the entrances of our ports, might at a small expense be made useful sentinels of the laws.” After becoming the nation’s first secretary of the treasury in 1789, he sought to shore up the nation’s economic position through a system of tariffs and duties. In 1790, Congress authorized Hamilton’s proposal to build 10 cutter ships to enforce those tariffs, marking the birth of the Revenue Cutter Service, which ultimately became the U.S. Coast Guard.
- 40 In wartime, the president may shift operational command to the U.S. Navy, a component of the Department of Defense.
- 41 The Coast Guard motto is “Semper Paratus” or “Always Ready.”
- 42 The National Intelligence Council has been publishing its *Global Trends* report since 1997, but as discussed below, this effort is not analogous to the Coast Guard’s because it does not make strategic recommendations.
- 43 Federal Emergency Management Agency, *Crisis Response and Disaster Resilience 2030: Forging Strategic Action in an Age of Uncertainty* (2012).
- 44 Olenchock, Tom. Interview by J. Peter Scoblic. Telephonic. September 20, 2019.
- 45 Project Long View was named for Peter Schwartz’s *The Art of the Long View* (New York:

- Doubleday/Currency, 1991). Schwartz had been a scenario planner for Royal Dutch/Shell, which pioneered the use of scenarios in business as a way of considering the uncertainty of the future. For more, see: Bretton Fosbrook, “How Scenarios Became Corporate Strategies: Alternative Futures and Uncertainty in Strategic Management” (Ph.D. Dissertation, Toronto, York University, 2017); Art Kleiner, *The Age of Heretics: A History of the Radical Thinkers Who Reinvented Corporate Management*, 2nd ed. (San Francisco, CA: Jossey-Bass, 2008); Pierre Wack, “Scenarios: Uncharted Waters Ahead,” *Harvard Business Review* 63, no. 5 (1985), 73–89; Pierre Wack, “Scenarios: Shooting the Rapids,” *Harvard Business Review* 63, no. 6 (1985), 139–50.
- 46 Loy, James. Interview by J. Peter Scoblic. Telephonic. September 9, 2019.
- 47 Today, the firm is known as The Futures Strategy Group.
- 48 U.S. Coast Guard, *Project Long View: Coast Guard Strategies for 2020: Executive Overview* (1999).
- 49 U.S. Coast Guard, *United States Coast Guard Strategic Plan 1999: Ready Today ... Preparing for Tomorrow* (1999).
- 50 Kennedy, Peter. Interview by J. Peter Scoblic. Telephonic. September 3, 2019. Thomas, Charles. Interview by J. Peter Scoblic. Telephonic. September 4, 2019.
- 51 Neffenger, Peter. Interview by J. Peter Scoblic. Telephonic. December 16, 2019.
- 52 Olenchock, Tom. Interview by J. Peter Scoblic. Telephonic. September 20, 2019.
- 53 Allen, Thad. Interview by J. Peter Scoblic. Telephonic. September 9, 2019.
- 54 Allan, Tom, Interview by J. Peter Scoblic. Telephonic. January 8, 2020.
- 55 Williamson, George. (Speaking in personal capacity.) Interview by J. Peter Scoblic. Telephonic. November 4, 2019.
- 56 Benton, Lance. Interview by J. Peter Scoblic. Telephonic. October 25, 2019.
- 57 U.S. Coast Guard, *Coast Guard Strategic Plan 2018–2020* (2018), 7–8.
- 58 Neffenger, Peter. Interview by J. Peter Scoblic. Telephonic. December 16, 2019.
- 59 Wehrenberg, Steve. Interview by J. Peter Scoblic. Telephonic. September 23, 2019.
- 60 “The purpose of Evergreen is to provide the Coast Guard with the essential tools, knowledge and insights to act effectively despite much greater uncertainty about the future. The process is not designed to supersede or diminish the tradition of rapid response and tactical flexibility that has been [a] hallmark of the Coast Guard. Rather, its purpose is to complement and build on that proud legacy.” U.S. Coast Guard, *Creating and Sustaining Strategic Intent in the Coast Guard: Version 1.0* (2005), 1.
- 61 Allen, Thad. Interview by J. Peter Scoblic. Telephonic. September 9, 2019.
- 62 Neffenger, Peter. Interview by J. Peter Scoblic. Telephonic. December 16, 2019.
- 63 Former senior Coast Guard officer. Interview by J. Peter Scoblic. Telephonic. December 12, 2019.
- 64 U.S. Coast Guard, *Creating and Sustaining Strategic Intent in the Coast Guard*, 24.
- 65 Former senior Coast Guard officer. Correspondence with J. Peter Scoblic. March 12, 2020.
- 66 Former senior Coast Guard officer. Correspondence with J. Peter Scoblic. March 12, 2020.

67 Nunan, Joanna. Interview by J. Peter Scoblic. Telephonic. October 23, 2019.

68 U.S. Coast Guard, *Creating and Sustaining Strategic Intent in the Coast Guard*, 1.

69 Allen, Thad. Interview by J. Peter Scoblic. Telephonic. September 9, 2019.

70 White House, "Securing America's Borders Fact Sheet: Border Security," (January 25, 2002), <https://georgewbush-whitehouse.archives.gov/homeland/01.html>.

71 U.S. Coast Guard, *Project Long View*.

72 Allan, Tom. Interview by J. Peter Scoblic. Telephonic. January 8, 2020. (Allan was chief financial officer when this interview was conducted. As of this writing, he is commander of the First Coast Guard District.)

73 U.S. Coast Guard, *Project Long View*, 7.

74 White House, "Securing America's Borders Fact Sheet."

75 George W. Bush, *National Security Presidential Directive-41/Homeland Security Presidential Directive-13*, December 21, 2004.

76 U.S. Department of Homeland Security, *The National Strategy for Maritime Security*, 2005; U.S. Department of Homeland Security, *National Plan to Achieve Maritime Domain Awareness for the National Strategy for Maritime Strategy*, 2005.

77 Tingstad et al., *Developing New Future Scenarios for the U.S. Coast Guard's Evergreen Strategic Foresight Program*, 14.

78 Coast Guard official. Interview by J. Peter Scoblic. Telephonic. September 16, 2021.

79 Coast Guard official. Interview by J. Peter Scoblic. Telephonic. September 16, 2021.

80 Full disclosure: I am the co-founder of a strategic foresight consultancy, Event Horizon Strategies, that provides scenario-planning training and services.

81 Higgins-Bloom, Kate. Interview by J. Peter Scoblic. Telephonic. December 2, 2019.

82 McClellan, Dan. Interview by J. Peter Scoblic. Telephonic. December 20, 2019.

83 William D. Hartung and Mandy Smithberger, "The U.S. Is Spending \$1.25 Trillion Annually on War," *Truthout*, May 7, 2019, <https://truthout.org/articles/the-us-is-spending-1-25-trillion-annually-on-war/>.

84 I am indebted to Micah Zenko for making this point so concisely.

85 Henry Mintzberg, "The Fall and Rise of Strategic Planning," *Harvard Business Review* 72, no. 1 (1994), 110.

86 Philip E. Tetlock, *Expert Political Judgment: How Good Is It? How Can We Know?* (Princeton, NJ: Princeton University Press, 2005).

87 Robert M. Gates (speech at the U.S. Military Academy, West Point, NY, February 25, 2011). Various high-ranking military officers have echoed this sentiment. For examples, see Micah Zenko, "100% Right 0% of the Time," *Foreign Policy*, October 16, 2012, <https://foreignpolicy.com/2012/10/16/100-right-0-of-the-time/>.

88 J. Peter Scoblic. "Beacon and Warning: Sherman Kent, Scientific Hubris, and the CIA's Office of National Estimates," *Texas National Security Review* 1, no. 4 (2018).

89 Robert M. Gates, "The Prediction of Soviet Intentions," *Studies in Intelligence* 17, no. 1 (Fall 1973), https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol16no4/html/v17i1a06p_0001.htm.

90 See, for example, David E. Hoffman, *The Dead Hand: The Untold Story of the Cold War Arms Race and Its Dangerous Legacy* (New York: Doubleday, 2009), 189–190.

91 Henry Mintzberg, *The Rise and Fall of Strategic Planning: Reconceiving Roles for Planning, Plans, Planners* (New York: The Free Press, 1994), 18.

92 J. Peter Scoblic, “We Can’t Prevent Tomorrow’s Catastrophes Unless We Imagine Them Today,” *Washington Post*, March 18, 2021, <https://www.washingtonpost.com/outlook/2021/03/18/future-forecasting-strategic-planning/>.

93 These were a “public health crisis,” an “economic crisis,” a “racial justice crisis,” a “climate crisis,” and a “caregiving crisis.” Democratic National Committee, “Trump has Failed Young Americans,” <https://joebiden.com/trump-has-failed-young-americans/>.

94 Scoblic, “We Can’t Prevent Tomorrow’s Catastrophes Unless We Imagine Them Today.”

95 “George Kennan’s Long Telegram,” February 22, 1946, <https://digitalarchive.wilsoncenter.org/document/116178.pdf>.

96 George F. Kennan, “The Sources of Soviet Conduct,” *Foreign Affairs* 25 (July 1947), 566–582.

97 Dean Acheson, *Present at the Creation: My Years in the State Department* (New York: Norton, 1969), 214.

98 Michael L. Tushman and Charles A. O’Reilly, III, “Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change,” *California Management Review* 38, no. 4 (1996), 8–30.

99 George F. Kennan, *Memoirs: 1925–1950* (Boston: Little, Brown and Company, 1967), 467.

100 Kennan, 467.

101 U.S. Department of State, “Policy Planning Staff: Our Mission,” <https://www.state.gov/bureaus-offices/secretary-of-state/policy-planning-staff/>.

102 Former State Department officials. Interviews by and correspondence with J. Peter Scoblic. Also: Daniel W. Drezner, ed., *Avoiding Trivia: The Role of Strategic Planning in American Foreign Policy* (Washington, DC: Brookings Institution Press, 2009).

103 Acheson, *Present at the Creation*, 214. See also Richard Fontaine and Brian M. Burton, “Eye to the Future: Refocusing State Department Policy Planning,” (Washington, DC: Center for a New American Security, 2010).

104 Zegart, “Why the Best Is Not Yet to Come in Policy Planning”; Bruce Jentleson, “An Integrative Executive Branch Strategy,” in Drezner, ed., *Avoiding Trivia*.

105 Aaron L. Friedberg, “Strengthening U.S. Strategic Planning,” in Drezner, ed., *Avoiding Trivia*.

106 Richard Haass, “Planning for Policy Planning” in Drezner, ed., *Avoiding Trivia*.

107 Julianne Smith, “Our Overworked Security Bureaucracy,” *Democracy* 40 (Spring 2016), <https://democracyjournal.org/magazine/40/our-overworked-security-bureaucracy/>.

108 Michèle Flournoy and Shawn Brimley, “Strategic Planning for National Security,” *Joint Forces Quarterly* 41 (April 2006), 81.

109 For a review of these documents, see Jordan Tama, *Maximizing the Value of Quadrennial Strategic Planning* (Washington, DC: IBM Center for the Business of Government, 2016).

110 Rebecca Friedman Lissner, “The National Security Strategy Is Not a Strategy,” *Foreign Affairs*, December 19, 2017, <https://www.foreignaffairs.com/articles/united-states/2017-12-19/national-security-strategy-not-strategy>.

111 The White House, “The National Security Strategy of the United States of America,” March 2006, 3.

112 The White House, “A National Security Strategy for a New Century,” December 1999, <https://clintonwhitehouse4.archives.gov/media/pdf/nssr-1299.pdf>.

113 Paul Lettow, “U.S. National Security Strategy: Lessons Learned,” *Texas National Security Review* 4, no. 2 (Spring 2021), 117–54.

114 See, for example, Julianne Smith and Jacob Stokes, “Obama Needs a New National Security Strategy,” *Politico Magazine*, March 10, 2014.

115 Lettow, “U.S. National Security Strategy: Lessons Learned,” 120.

116 Lissner, “The National Security Strategy Is Not a Strategy.”

117 Tama, *Maximizing the Value of Quadrennial Strategic Planning*, 26.

118 Michèle Flournoy, “Testimony before the Senate Armed Services Committee,” December 8, 2015.

119 Anthony H. Cordesman, “Reforming Defense Decisionmaking: Taking Responsibility and Making Meaningful Plans,” Center for Strategic and International Studies, March 11, 2009, <https://www.csis.org/analysis/reforming-defense-decisionmaking>.

120 John McCain, “What America Deserves from the National Defense Strategy,” *War on the Rocks*, December 21, 2017, <https://warontherocks.com/2017/12/america-deserves-national-defense-strategy/>.

121 Emphasis added. Michael Fitzsimmons, *Scenario Planning and Strategy in the Pentagon* (Carlisle Barracks, PA: United States Army War College Press, January 2019), xi.

122 Michael J. Mazarr, Katherina Ley Best, Burgess Laird, Eric V. Larson, Michael E. Linick, and Dan Madden, *The U.S. Department of Defense’s Planning Process: Components and Challenges* (Santa Monica, CA: RAND Corporation, 2019), 2–3.

123 Fitzsimmons, Michael. Correspondence with J. Peter Scoblic. November 2, 2021.

124 Zenko, “100% Right 0% of the Time.”

125 Defense expert. Interview by J. Peter Scoblic. Telephonic. October 2, 2021.

126 The full text of the National Defense Strategy is classified, but the Pentagon released an unclassified synopsis signed by Jim Mattis, then the secretary of defense. Jim Mattis, *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military’s Competitive Edge*. On the “fait accompli” strategy, see Elbridge Colby, “Testimony Before the Senate Armed Services Committee Hearing on Implementation of the National Defense Strategy,” January 29, 2019.

127 “Force posture and employment must be adaptable to account for the uncertainty that exists in the changing global strategic environment,” Mattis, *Summary of the 2018 National Defense Strategy*, 7.

128 Colby, “Testimony Before the Senate Armed Services Committee.”

129 On different schools of thought regarding China’s intentions and capabilities, see J. Peter Scoblic, Christopher Karvetski, and Philip E. Tetlock, “Did Sino-American Relations Have to Deteriorate? A Better Way of Doing Counterfactual Thought Experiments,” *War on the Rocks*, July 16, 2021, <https://warontherocks.com/2021/07/did-sino-american-relations-have-to-deteriorate-a-better-way-of-doing-counterfactual-thought-experiments/>.

130 See, for example, Elbridge Colby and Jim Mitre, “Why the Pentagon Should Focus on Taiwan,” *War on*

the Rocks, October 7, 2020, <https://warontherocks.com/2020/10/why-the-pentagon-should-focus-on-taiwan/>.

131 Mara Karlin, “How to Read the 2018 National Defense Strategy,” Brookings Institution, January 21, 2018, <https://www.brookings.edu/blog/order-from-chaos/2018/01/21/how-to-read-the-2018-national-defense-strategy/>.

132 Mara E. Karlin, letter to Senator Josh Hawley, August 6, 2021, <https://www.hawley.senate.gov/sites/default/files/2021-08/20210806%20Mara%20Karlin%20Letter%20to%20Sen%20Hawley.pdf>.

133 National Intelligence Council, *Global Trends 2040: A More Contested World* (National Intelligence Council, March 2021).

134 *Global Trends 2040*, 8.

135 School of International Futures, *Features of Effective Systemic Foresight in Governments Around the World* (London: SOIF, April 2021), 69.

136 Burrows, Mathew. Interview by J. Peter Scoblic. Telephonic. September 14, 2021.

137 White House official. Interview by J. Peter Scoblic. Telephonic. October 3, 2021.

138 Defense expert. Interview by J. Peter Scoblic. Telephonic. October 2, 2021.

139 George WBush, “National Security Presidential Directive/NSPD-60,” August 28, 2008. Although Bush signed the directive in August 2008, the committee had informally begun meeting a year earlier.

140 Former White House official. Interview by J. Peter Scoblic. Telephonic. October 5, 2021.

141 Four of the five alternative futures in *Global Trends 2040* accord China a central role, suggesting

they offer an extrapolation of current concerns as much as a panorama of plausible futures.

142 “Scenarios are hard to get right. I can think back to some home runs, such as the one envisioning a caliphate years before ISIS put it into practice, which was featured in *Global Trends 2020*. There was also the ‘Pax Americana’ scenario in the same 2005 report, in which an American president must deal with a public turned off by the United States being the world’s policeman. But there were others that were not as prescient.” Mathew Burrows, “Reading Between the Lines of the U.S. Intelligence Community’s Latest Reports,” *New Atlanticist*, April 16, 2021, <https://www.atlanticcouncil.org/blogs/new-atlanticist/reading-between-the-lines-of-the-us-intelligence-communitys-latest-reports/>.

143 If the reports’ authors did intend to predict the future, they were wrong much of the time. Michael C. Horowitz and Philip E. Tetlock, “Trending Upwards: How the Intelligence Community Can Better See into the Future,” *Foreign Policy*, September 7, 2012, <https://foreignpolicy.com/2012/09/07/trending-upward/>.

144 “Global Trends reflects the National Intelligence Council’s perspective on these future trends; it does not represent the official, coordinated view of the U.S. Intelligence Community nor U.S. policy.” National Intelligence Council, *Global Trends 2040*, vi.

145 *Global Trends 2040*, v.

146 See, for example, TRADOC Deputy Chief Staff, “The Operational Environment (2021–2030): Great Power Competition, Crisis, and Conflict,” September 9, 2021, <https://oe.tradoc.army.mil/2021/10/04/the-operational-environment-2021-2030-great-power-competition-crisis-and-conflict-2/>.

147 “1. A Marketplace of Ideas About the Future,” *Mad Scientist Laboratory Blog*, November 9, 2017, <https://madsciblog.tradoc.army.mil/hello-world/>.

148 Air Force Warfighting Integration Capability (AFWIC) Strategic Foresight and Futures Branch, “Global Futures Report: Alternative Futures of Geopolitical Competition in a Post-Covid-19 World,” June 2020, https://www.afwic.af.mil/Portals/72/Documents/AFWIC%20Global%20Futures%20Report_FINAL.pdf?ver=2020-06-18-124149-070.

149 U.S. Department of Defense, “Office of Net Assessment (ONA),” <https://www.defense.gov/About/Office-of-the-Secretary-of-Defense/Office-of-Net-Assessment/>.

ONA is frequently cited as a foresightful agency, but since most of its work is classified, it is difficult to judge. The term “net assessment” suggests a snapshot of relative capabilities in the present, not an evaluation of multiple futures, let alone an evaluation of alternative futures that influence policymaking. In their biography of longtime ONA chief Andrew Marshall, Andrew Krepinevich and Barry Watts write, “Because most of the assessments produced by ONA have been highly classified and written primarily for the use of the secretary of defense, any understanding of what Marshall’s office has accomplished over the last four decades has been limited, even within the Defense Department.” Andrew F. Krepinevich and Barry Watts, *The Last Warrior: Andrew Marshall and the Shaping of Modern American Defense Strategy* (New York: Basic Books, 2015), 260–261. ONA does run wargames, but in their survey of foresight in the U.S. government, Joseph Greenblott and colleagues clarify, “In most cases they are trying to explore operational-level military problems, and a scenario is useful in starting the game. The scenarios they use in most cases are short and simply set the play so that it focuses on the right operational problem.” Also, like the NIC, ONA does not make policy recommendations. Joseph M. Greenblott, Thomas O’Farrell, Robert Olson, and Beth Burchard, “Strategic Foresight in the Federal Government: A Survey of Methods, Resources, and Institutional Arrangements [Supplemental Information],” *World Futures Review* 11, no. 3 (2019), SI-41.

150 Full disclosure: I have co-taught the Foresight and Futures course at the School of Advanced Air and Space Studies, and I have guest-lectured at both the School of Advanced Military Studies and the National War College.

151 Lin Wells, “Thoughts for the Quadrennial Defense Review” per Donald Rumsfeld, memo to President George Bush, April 12, 2001, <https://library.rumsfeld.com/doclib/sp/2382/2001-04-12%20To%20George%20W%20Bush%20et%20al%20re%20Predicting%20the%20Future.pdf>.

152 Amy Zalman, “Maximizing the Power of Strategic Foresight,” *Joint Force Quarterly* 4, no. 95 (2019), 18.

153 Joseph M. Greenblott, Thomas O’Farrell, Robert Olson, and Beth Burchard, “Strategic Foresight in the Federal Government: A Survey of Methods, Resources, and Institutional Arrangements,” *World Futures Review* 11, no. 3 (2019), 245–66.

154 August Cole, Charles E. Gannon, Max Brooks, and Trina Marie Phillips, eds., *Marine Corps Security Environment Forecast: Futures: 2030–2045* (Quantico, VA: Marine Corps Warfighting Laboratory, November 2016).

155 Mathew Burrows, *Foresight and Fractured Vision: The United States’ Difficulty in Accepting Multipolarity*, (Luxembourg: European Union Institute for Security Studies, 2021), 1.

156 Federal Foresight Community of Interest, “About Us,” <https://www.ffcoi.org/about/>.

157 Blockwood, James-Christian. Interview by J. Peter Scoblic. Telephonic. September 20, 2021.

158 Greenblott et al., “Strategic Foresight in the Federal Government [Supplemental Information],” SI 14-15.

159 Blockwood, James-Christian. Interview by J. Peter Scoblic. Telephonic. September 20, 2021.

160 Greenblott et al., “Strategic Foresight in the Federal Government [Supplemental Information],” SI 14.

161 Centers for Disease Control and Prevention, “CDC Stands Up New Disease Forecasting Center,” August 18, 2021, <https://www.cdc.gov/media/releases/2021/p0818-disease-forecasting-center.html>. See also: Jeneen Interlandi, “Inside the C.D.C.’s Pandemic ‘Weather Service,’” *New York Times*, November 22, 2021, <https://www.nytimes.com/2021/11/22/magazine/cdc-pandemic-prediction.html>; and Caitlin Rivers and Dylan George, “How to Forecast Outbreaks and Pandemics: America Needs the Contagion Equivalent of the National Weather Service,” *Foreign Affairs*, June 29, 2020, <https://www.foreignaffairs.com/articles/united-states/2020-06-29/how-forecast-outbreaks-and-pandemics>.

162 CDC official. Interview by J. Peter Scoblic. Telephonic. September 15, 2021.

163 All information in this paragraph is from: Senior OAPDS official. Interview by J. Peter Scoblic. Telephonic. September 29, 2021.

164 Andy Hines, “Setting Up a Horizon Scanning System,” *Hinesight* blog, January 24, 2018, <https://www.andyhinesight.com/education/setting-up-a-horizon-scanning-system/>.

165 CDC officials. Correspondence with J. Peter Scoblic. November 8, 2021.

166 These generic scenarios are also referred to as *continued growth, collapse, discipline, and transformation*. Jim Dator, “Alternative Futures at the Manoa School.” *Journal of Futures Studies* 14, no. 2 (2009), 1–18.

167 CDC officials. Correspondence with J. Peter Scoblic. November 8, 2021.

168 Office of Financial Resources, “FY 2020 Assistance Snapshot at CDC,” March 5, 2021, <https://www.cdc.gov/funding/documents/fy2020/fy-2020-ofr-assistance-snapshot-508.pdf>.

169 Senior OAPDS official. Interview by J. Peter Scoblic. Telephonic. September 29, 2021.

170 For details on NIOSH’s mission, see <https://www.cdc.gov/niosh/about/default.html>.

171 For details, see: <https://www.cdc.gov/nora/about.html>.

172 See, for example, National Institute for Occupational Safety and Health, *The Changing Organization of Work and the Safety and Health of Working People* (Cincinnati: NIOSH Publications Dissemination, 2002).

173 NIOSH officials. Interview by J. Peter Scoblic. Telephonic. September 22, 2021. For an overview, see <https://www.cdc.gov/niosh/topics/future-of-work/default.html>. For details, see Sara L. Tamers et al., “Envisioning the Future of Work to Safeguard the Safety, Health, and Well-Being of the Workforce: A Perspective from the CDC’s National Institute for Occupational Safety and Health,” *American Journal of Industrial Medicine* 63, no. 12 (2020), 1065-1084.

174 Sarah A. Felknor, “Research Integration Report (presentation to the National Institute for Occupational Safety and Health Board of Scientific Counselors Meeting),” May 30, 2019.

175 Paul A. Schulte, Jessica M.K. Streit, Fatima Sheriff, George Delclos, Sarah A. Felknor, Sara L. Tamers, Sherry Fendinger, James Grosch and Robert Sala, “Potential Scenarios and Hazards in the Work of the Future: A Systematic Review of the Peer-Reviewed and Gray Literatures” *Annals of Work Exposures and Health* 64, no. 8 (2020), 20.

176 Jessica M.K. Streit, Sarah A. Felknor, Nicole T. Edwards, and John Howard, “Leveraging Strategic Foresight to Advance Worker Safety, Health and

Well-Being,” *International Journal of Environmental Research and Public Health* 18 (2021), 2.

177 NIOSH officials. Interview by J. Peter Scoblic. Telephonic. September 22, 2021.

178 Streit et al., 13.

179 Felknor, Sarah. Interview by J. Peter Scoblic. Telephonic. September 22, 2021.

180 Felknor, Sarah. Interview by J. Peter Scoblic. Telephonic. September 22, 2021.

181 NIOSH officials. Correspondence with J. Peter Scoblic. October 20, 2021.

182 Greenblott et al., “Strategic Foresight in the Federal Government [Supplemental Information],” SI-49.

183 OPM analyst. Interview by J. Peter Scoblic. Telephonic. September 8, 2021.

184 Chief Financial Officers (CFO) Act of 1990 (Public Law 101-576).

185 United States Chief Financial Officers Council, “The CFO of the Future Now: The 2030 Plan,” April 2021, <https://www.cfo.gov/assets/files/Strategic-Plan-Final-Draft-v-1.0-1.pdf>.

186 United States Chief Financial Officers Council, “The CFO of the Future Now,” 2.

187 On methodology and scenarios, see United States Chief Financial Officers Council, “The CFO of the Future Now,” 26–29.

188 United States Chief Financial Officers Council, “The CFO of the Future Now,” 12.

189 See, for example, Ronald A. Klain, “Regulatory Freeze Pending Review: Memorandum for the Heads of Executive Departments and Agencies,” White House, January 20, 2021, <https://www.whitehouse.gov/briefing-room/presidential->

[actions/2021/01/20/regulatory-freeze-pending-review/](https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/regulatory-freeze-pending-review/).

190 OPM analyst. Interview by J. Peter Scoblic. Telephonic. September 8, 2021. On the history of the PMA, see <https://www.govexec.com/management/2020/02/presidents-management-agenda-work-progress-two-decades/163112/>.

191 OPM analyst. Interview by J. Peter Scoblic. Telephonic. September 8, 2021.

192 United States Chief Financial Officers Council, “Workforce Modernization,” <https://www.cfo.gov/workforce-modernization/application-guidance/>.

193 According to the Secret Service, one third to one half of the currency was fake, <https://www.secretservice.gov/about/faq/general>.

194 See, for example, Carol D. Leonnig and David Nakamura, “Julia Pierson Resigns as Secret Service Director After Series of Security Lapses,” *Washington Post*, October 1, 2014, https://www.washingtonpost.com/politics/julia-pierson-resigns-as-secret-service-director/2014/10/01/ea39a396-499f-11e4-891d-713f052086a0_story.html.

195 Brakkton Booker, “House Committee Report Finds Secret Service Is ‘An Agency in Crisis,’” National Public Radio, December 4, 2015, <https://www.npr.org/2015/12/04/458334512/house-committee-report-finds-secret-service-is-an-agency-in-crisis>.

196 Joseph Hagin, Thomas Perrelli, Danielle Gray, and Mark Filip, *Executive Summary to Report from the United States Secret Service Protective Mission Panel* (Washington, DC: USSSPMP, December 14, 2015).

197 Janice Lachance, Thad Allen, Kristine Marcy, Lewis W. Crenshaw, Jr., and Dan Tangherlini, *United States Secret Service: Review of Organizational Change Efforts* (Washington, DC: National Academy of Public Administration, October 31, 2016), 23.

198 Lachance et al., *United States Secret Service: Review of Organizational Change Efforts*, 28.

199 Try, Gregory. Interview by J. Peter Scoblic. Telephonic. May 7, 2021.

200 Try, Gregory. Interview by J. Peter Scoblic. Telephonic. May 7, 2021.

201 For more on “threatcasting,” see <https://threatcasting.asu.edu>.

202 U.S. Secret Service official. Correspondence with J. Peter Scoblic. October 19, 2021.

203 Try, Gregory. Interview by J. Peter Scoblic. Telephonic. May 7, 2021.

204 Leon Fuerth with Evan M. H. Faber, *Anticipatory Governance Practical Upgrades: Equipping the Executive Branch to Cope With Increasing Speed and Complexity of Major Challenges* (Washington, DC: National Defense University Press, October 2012), https://www.dropbox.com/s/z7jjk626ddf51oo/Anticipatory_Governance_Practical_Upgrades.pdf?dl=0. See also Fuerth, “Operationalizing Anticipatory Governance,” 40.

205 John M. Kamensky et al., *Bringing Strategic Foresight to Bear in Policy Planning and Management* (Washington, DC: National Academy of Public Administration, 2016).

206 Tama, *Maximizing the Value of Quadrennial Strategic Planning*, 29.

207 Richard A. Clarke and R.P. Eddy, *Warnings: Finding Cassandras to Stop Catastrophes* (New York: Ecco, 2017), 354–356.

208 Amy Webb, *A National Office for Strategic Foresight Anchored in Critical Science and Technologies* (Stanford, CA: Freeman Spogli Institute for International Studies, October 17, 2019).

209 School of International Futures, *Features of Effective Systemic Foresight in Governments Around the World*, 9.

210 Policy Horizons Canada, “About Us,” <https://horizons.gc.ca/en/about-us/>.

211 School of International Futures, *Features of Effective Systemic Foresight in Governments Around the World*, 59–61.

212 Centre for Strategic Futures, “Who We Are,” <https://www.csf.gov.sg/who-we-are/>.

213 “Over the coming years, establishing a forward-looking culture in policymaking will be crucial for the EU to strengthen its capacity to deal with an increasingly volatile and complex world and to implement its forward-looking political agenda. It will ensure that short-term actions are grounded in long-term objectives and will allow the EU to lead the way in charting its own course and shaping the world around it.” *2020 Strategic Foresight Report: Charting the Course Towards a More Resilient Europe* (Brussels: European Commission, 2020), 4, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2020:493:FIN>.

214 Hanno Focken et al., *Strategic Intelligence Foresight System for European Union Research and Innovation (R&I) SAFIRE* (Luxembourg: Publications Office of the European Union, 2021).

215 See, for example, Michael Pillsbury, *The Hundred-Year Marathon: China's Secret Strategy to Replace America as the Global Superpower* (New York: Henry Holt and Co., 2015).

216 Paul Charon, *Strategic Foresight in China: The Other Missing Dimension* (Luxembourg: European Union Institute for Security Studies, 2021), 1.

217 Andrew Monaghan, *How Russia Does Foresight: Where Is the World Going?* (Luxembourg: European Union Institute for Security Studies, 2021), 4.

218 Fuerth, *Anticipatory Governance*, 3.

219 As quoted in Scoblic, “We Can’t Prevent Tomorrow’s Catastrophes Unless We Imagine Them Today.”

220 Eisenhower established the President’s Board of Consultants on Foreign Intelligence Affairs. President Kennedy changed the name to the President’s Foreign Intelligence Advisory Board, and President George W. Bush changed it to the President’s Intelligence Advisory Board. Eisenhower established the President’s Science Advisory Committee in 1957 in response to the Soviet Union’s launch of Sputnik. The organization changed names several times—and was temporarily abolished by Richard Nixon—before assuming its modern form under President George H.W. Bush. Kenneth M. Evans and Kirstin R.W. Matthews, *Science Advice to the President and the Role of the President’s Council of Advisors on Science and Technology: Membership, Activities, and Impact in the Last Four Administrations* (Houston: James A. Baker III Institute for Public Policy of Rice University, 2018).

221 See, for example, Lee Ferran, “Trump’s Secretive Intelligence Advisory Board Takes Shape with Security Pros and GOP Donors,” ABC News, August 28, 2019, <https://abcnews.go.com/Politics/trumps-secretive-intelligence-advisory-board-takes-shape-security/story?id=65222244>.

222 Kenneth M. Absher, Michael C. Desch, and Roman Popadiuk, “The President’s Foreign Intelligence Advisory Board,” in Loch K. Johnson, ed., *The Oxford Handbook of National Security Intelligence* (New York: Oxford University Press, 2010). See also, Kenneth M. Absher, Michael C. Desch, and Roman Popadiuk. *Privileged and Confidential: The Secret History of the President’s Intelligence Advisory Board* (Lexington: University Press of Kentucky, 2012).

223 Samuel Cooper-Wall, “Privileged and Confidential: The Secret History of the President’s

Intelligence Advisory Board,” *Studies in Intelligence* 57, No. 1 (March 2013), 23.

224 Acheson, *Present at the Creation*, 214.



This report carries a Creative Commons Attribution 4.0 International license, which permits re-use of New America content when proper attribution is provided. This means you are free to share and adapt New America’s work, or include our content in derivative works, under the following conditions:

- **Attribution.** You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

For the full legal code of this Creative Commons license, please visit creativecommons.org.

If you have any questions about citing or reusing New America content, please visit www.newamerica.org.

All photos in this report are supplied by, and licensed to, [shutterstock.com](https://www.shutterstock.com) unless otherwise stated. Photos from federal government sources are used under section 105 of the Copyright Act.