Considering Strategic Foresight at the Department of State

A report prepared on behalf of
The Bureau of Budget and Planning
in partnership with
The Office of Personnel Management



The author would like to express warm gratitude for the knowledge and support of the following individuals:

> Anthony Mazzoccoli Eric Popiel Boots Poliquin George Foresman Lucy Bassett

Disclaimer:

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other entity.

On my honor as a student, I pledge that I have neither given nor received help on this report.

Ellen Bealm

Table of Contents

Acronyms	iv
Glossary	V
Executive Summary	vi
Introduction	1
What is Strategic Foresight?	1
The History of Strategic Foresight	3
Current Department of State Planning Processes	6
Literature Review	7
The Theoretical Origins of Strategic Foresight	7
Corporate Foresight	7
Anticipatory Government	8
Policy Options	10
Option 1: Maintaining the Status Quo	11
Option 2: FSI Training from the Ground Up	11
Option 3: The Fold-In	12
Option 4: New Office of Strategic Foresight	13
Evaluative Criteria	13
Evaluation	17
Option 1: Maintaining the Status Quo	17
Option 2: FSI Training from the Ground Up	17
Option 3: The Fold-In	19
Option 4: New Office of Strategic Foresight	20
Summary	21
Recommendation	22
Limitations	23
Conclusion	24
References	25

Acronyms

APP: Applied Policy Project

BP: Bureau of Budget and Planning, US Department of State

BP/OPP: Office of Performance and Planning, Bureau of Budget and Planning, US Department

of State

DARPA: Defense Advanced Research Projects Agency, US Department of Defense

DOS: US Department of State

DTRA: Defense Threat Reduction Agency

ERM: Enterprise Risk Management

F: Office of the Director of Foreign Assistance Resources, US Department of State

FBS: Functional Bureau Strategy

FFCOI: Federal Foresight Community of Interest

FSI: Foreign Service Institute **FSO:** Foreign Service Officer

FTE: full-time equivalent (employee)

GS: General Schedule

ICS: Integrated Country Strategy

INR: Bureau of Intelligence and Research, US Department of State

JRS: Joint Regional Strategy

JSP: Joint Strategic Plan

M/PRI: Office of Management Policy, Rightsizing, and Innovation, US Department of State

NGO: non-governmental organization **OPM:** Office of Personnel Management

PSP: planning, strategy, and policy

QDDR: Quadrennial Diplomacy and Development Review

S: Office of the Secretary of State

SES: Senior Executive Service **S/P:** Office of Policy Planning

US: United States

USAID: US Agency for International Development

USCG: US Coast Guard **USG**: US government

Glossary

Backcasting is a method of strategic foresight in which futurists define and describe a potential future and then work backwards to identify actions and circumstances needed to reach the future vision (Forward Thinking Platform, 2014; Centre for Strategic Futures & Civil Service College Singapore, 2015). This allows for connections between scenarios and strategies (Centre for Strategic Futures & Civil Service College Singapore, 2015).

The **Delphi method** involved using several rounds of input from diverse groups of experts on a particular subject to reach a decision. In between rounds, anonymous input from the previous round is shared with all participants to inform their thought processes until a consensus is reached (Forward Thinking Platform, 2014; Centre for Strategic Futures & Civil Service College Singapore, 2015).

Enterprise risk management is the practice of finding key threats that may impact an organization and identifying ways to manage risks to remain within an acceptable level so that the organization can still follow its mission (University of California Office of the President, n.d.).

Environmental scanning involves identifying and analyzing "weak signals" or trends using a diversity of existing information that indicate latent interruptions, dangerous threats, budding opportunities, or emerging issues (Forward Thinking Platform, 2014; Centre for Strategic Futures & Civil Service College Singapore, 2015).

Futures: See *strategic foresight*.

Horizon scanning: See environmental scanning.

A **policy** is a principle that guides organizational decision making and strategy (S, 2015).

Scenario-based planning is the practice of envisioning at least one potential future environment to examine the challenges, opportunities, risks, and needs an organization may face in such circumstances (Centre for Strategic Futures & Civil Service College Singapore, 2015).

Strategic foresight is a philosophy and set of practices for systematically considering different possible futures in order to inform present-day planning, strategy, and policy using a variety of systematic methods and input from a wide range of sources (Kedge, 2017).

Strategic planning is the process of identifying and communicating an organization's short-and medium-term goals and priorities, steps to take towards those goals, and ways to measure success (Centre for Strategic Futures & Civil Service College Singapore, 2015; Balanced Scorecard Institute, 2017).

A **strategy** describes the overarching steps an organization will take in order to achieve its goals or carry out its policies (S, 2015).

Executive Summary

Strategic foresight is a philosophy for systematically considering different possible futures in order to inform present-day planning, strategy, and policy. This is done using methods such as scenario-based planning, environmental scanning, or backcasting. Foresight has been used for several decades by major private companies and, more recently, by government agencies in the United States and abroad. *The goal of strategic foresight, or futures, is to act as a tool to help organizations understand and manage change and risk in a complex and volatile operating environment.*

The Department of State's planning and strategy framework is currently limited to joint strategic plans, joint regional strategies, integrated country strategies, functional bureau strategies, and the Quadrennial Diplomacy and Development Review. There is no institutionalized means at the Department for looking more than four years into the future. By lacking strategic foresight, the Department is assuming the following consequences:

- Increased uncertainty regarding medium to long term outcomes of international relations and geopolitics.
- Unmanaged and/or unidentified *risk* in the medium and long terms.
- Unactualized *value* of taxpayer dollars and human capital due to the inefficient or improper allocation of resources to meet tomorrow's challenges or seize tomorrow's opportunities.
- Concession of a strategic "first mover" *advantage* in foreign affairs to both allies and nearpeer competitors who have more advanced foresight capacity.
- Maintenance of an often *reactive* posture as opposed to a proactive positioning.

This report recommends that the Department of State take action towards incorporating strategic foresight into its policy, strategy, and planning framework in order to avoid the negative repercussions of lacking institutionalized long-term thinking. One *feasible*, *cost-effective*, *and sustainable* way to do this is by hiring at least one expert in strategic foresight and equipping him or her with a small operating budget to oversee a small but impactful futures program to inform and improve State policy, strategy, and planning. This option is estimated to cost around \$270,000 for its first year of operation, including the hiring of a new full-time equivalent employee for the Bureau of Budget and Planning or the Office of US Foreign Assistance Resources.

There are other considerations for increasing the return on investment in strategic foresight at the Department of State. One involves giving the program the proper time to prove its value, which may take years due to the nature of strategic foresight. A robust evaluation process is critical to assessing the success and value-added of futures at the Department. Lastly, championing strategic foresight provides beneficial opportunities to engage and partner with other federal agencies and non-governmental organizations.

Introduction

The world is constantly changing. It is nearly impossible to know with certainty what threats, challenges, and opportunities we, as humankind or as the United States of America (US), will face in five, twenty, or one hundred years. The Department of State (DOS), as the diplomatic corps of the US Government (USG), plays a critical role in US diplomacy and security abroad but also operates with considerable uncertainty about the future of international relations, conflict, trade, and security. How will the rise of China play out? Will Arctic exploration act as an opportunity for economic expansion, a flashpoint for international conflict, or a combination of the two? What role will artificial intelligence play in business, warfare, education, and our everyday lives? When and where will the next major civil war break out?

All of these questions, and so many more, will critically define and influence the role and power of the US on the global stage over the next several decades. As a public entity charged with serving the interests of the American people abroad, the Department of State has an obligation to manage uncertainty, change, and risk with efficiency, grace, and creativity. Without considering what could potentially happen five or ten years in the future, the Department will be unable to reap the greatest value out of its resources, both human and fiscal; to gain a competitive advantage over potential adversaries in building strategic political and economic relations with other countries; or to set itself up for success in handling major changes or sudden catastrophes rather than being purely reactive. One of the most effective ways for an organization to manage risk and consider potential future realities is by integrating the practice of strategic foresight into its toolbox to inform planning, strategy, and policy (PSP).

What is Strategic Foresight?

Strategic foresight, or futures, is a general term for the framework or philosophy of considering

"US POLICY, TO MEET TODAY'S REALITIES, REQUIRES COMPLEX ANALYSIS THAT IS FORWARD THINKING AND FOCUSED ON THE LONG TERM."

-LEON FUERTH (2013, P. 102)

alternative possibilities for future situations and using these possibilities to inform organizational PSP. The goal of strategic foresight is *not* to predict the future. Instead, it aims to position an organization to take advantage of potential opportunities and to guard against potential disasters in the medium and long terms (Kedge, 2017). Numerous entities, from private companies

like Shell to public organizations such as the military, rely on foresight to make decisions about their budgets, workforces, and goals; to identify and manage changes, uncertainties, and risks; and to improve their likelihood of reaching desired outcomes.

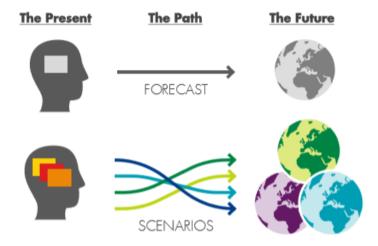
Futures is distinct from PSP and can be thought of as a tool or input to complement the PSP process of an organization. In this report, PSP will be discussed based on the following definitions. A policy is typically a long-term, fixed goal or principle of the organization that guides decisions and strategies (S, 2015). An example of foreign policy may be to champion human rights across the globe. Strategy involves overarching techniques for achieving long-term goals, but the strategies themselves can remain relatively flexible to be able to respond to changing circumstances (S, 2015). Continuing with the above example of promoting human rights abroad as an overall policy, a strategy for achieving this policy may involve Foreign Service Officers (FSOs) in embassies around the world actively developing relationships with local nongovernment organizations (NGOs) who focus on human rights issues. Meanwhile, a strategic plan communicates the organization's goals, the actions it will take to achieve those, and the methods by which success will be evaluated (Balanced Scorecard Institute, 2017). Strategic planning is typically a top-down practice and focuses on the short term (Forward Thinking Platform, 2014). A strategic plan for partnering with NGOs to advance human rights issues could select certain priorities—such as freedom of the media or minority rights—to advance over the next two to four years and set a benchmark for success, such as co-hosting at least five events per year with local NGOs by the end of the chosen time period.

Strategic foresight is an input to broader PSP practices. Foresight practitioners, or futurists, carry out their work using a variety of different methods. One of the most common components of foresight is scenario-based planning, which involves considering possible events in the medium and long terms to identify risks and opportunities with each situation. By analyzing these possibilities, decisionmakers have more information with which to make decisions in the present to be better prepared for this possible future (Centre for Strategic Futures & Civil Service College Singapore, 2015). As just one example, the Government of Singapore publishes national-level scenarios every three to five years to consider different issues in or possibilities for the future of the country (Centre for Strategic Futures & Civil Service College Singapore, 2015). The Department of Veteran Affairs considers scenario-based planning as the "foundation" of strategic planning because the outputs of their foresight process are fed directly to the planning team and into their planning process (Greenblott, O'Farrell, Olson, & Burchard, 2018, p. 10). Figure 1 on the following page shows the contrast between a traditional view of "thinking ahead" and a scenario-based thinking model, as visualized by Royal Dutch Shell.

Another common technique among futurists is horizon or environmental scanning. The goal of this practice is to identify and analyze weak signals or trends using existing conditions that indicate latent interruptions, dangerous threats, budding opportunities, or emerging issues (Centre for Strategic Futures & Civil Service College Singapore, 2015). This practice, and other futures research, can span any number of years, depending on the needs and subject matter of

the organization. One of the furthest-reaching federal foresight programs is run by the US Forest Service, which looks as far as two hundred years ahead to anticipate timber growth and yield (Greenblott, O'Farrell, Olson, & Burchard, 2018).

Figure 1. Forecasting versus Scenario-Based Thinking (Royal Dutch Shell PLC, 2017, p. 7)



Other practices among foresight programs including the Delphi method, backcasting, or the futures wheel (Greenblott, O'Farrell, Olson, & Burchard, 2018). These methods are described in the glossary section at the beginning of this report for the reader's reference.

The Department of State does not currently use any of these techniques for PSP formulation. By lacking strategic foresight, the Department is implicitly accepting unmanaged risk in its posturing that can lead to losing value on taxpayer dollars and personnel time and knowledge as well as a comparative disadvantage in international affairs compared to other nations.

History and Applications of Strategic Foresight

Futures planning has taken hold in the private sector earlier and more easily than it has in any government. Royal Dutch Shell created a Unified Planning Machinery in 1965 that ran models of financial forecasting; the program was shut down within ten years because it was both too far forward-looking for the company and also often wrong. However, the company began to develop futures planning in 1967; their first reports involved scenarios for different oil prices and a "Year 2000" report (Wilkinson & Kupers, 2013). Since then, strategic foresight has become a common practice among businesses. In a survey by Bain, 65 percent of companies reported that they expected to have scenario-based planning by 2011 (Wilkinson & Kupers, 2013).

Many of the potential benefits of strategic foresight are highly applicable to business models. These include maximizing profit and market share, maintaining a capable and relevant workforce, and competing with others (Rohrbeck & Kum, 2018; US Office of Personnel Management, 2018). For example, Hershey has a strategic foresight team in its Advanced Technology Lab. These professionals consider the potential effects of weather trends on cocoa production, transformations in the American retail experience as consumer lifestyles change, and the ability of technology to change production lines (Smith, 2014; Rittenhouse, 2017). These explorations allow Hershey to consider what it needs to begin investing in today—including technology, skilled professionals, and research—so that it maintains or grows its market share and competitive edge over other chocolatiers into the future concurrent with long-term changes. A later section of this report reviews some statistical research on the relationships between strategic foresight, profitability, and market share.

In the public sector, the Government of Singapore is at the forefront of futures planning among federal governments. It incorporated foresight into government operations as early as the 1980s, and the Prime Minister's Office establishing a Strategy Group in 2015 to implement whole-of-government strategic planning for the medium and long term (Centre for Strategic Futures, 2018). The National Security Coordination Secretariat was among the first agency to establish its own internal unit, the Risk Assessment and Horizon Scanning Programme, in 2004. Since then, several other agencies have created future groups for studying and assessing medium- to long-term outcomes, goals, and predictions. Examples of reports on these efforts include "Vision for Frontline Policing 2025" from the Singapore Police Force and "Future of Data" from the Ministry of Trade and Industry in 2007 (Centre for Strategic Futures, 2018). The central unit leading the federal government in foresight planning, the Centre for Strategic Futures, provides training for over one hundred civil servants each year with its FutureCraft program (Centre for Strategic Futures, 2018).

The Government of Canada follows a similar whole-of-government model to that of Singapore's Centre for Strategic Futures. Policy Horizons Canada is an independent federal agency tasked with conducting foresight relevant to a wide swath of Canadian strategy and policy. Horizons grew out of the Policy Research Secretariat, established in 1996, but officially became a foresight center in 2010. As of 2019, their work is focused on three main topics: economic futures, social futures, and governance futures (Policy Horizons Canada, 2019).

Some of the US's near-peer competitors on the global stage also use strategic foresight to consider how the world may change over the long term. For example, the Chinese Ministry of Science and Technology has run research programs looking at changes in technology over the following 10 to 15 years. The Chinese Academy of Social Sciences also engages in strategic foresight (Dreyer & Stang, 2013). Meanwhile, Russia's Institute of World Economy and International Relations is responsible for long-term thinking (Dreyer & Stang, 2013).

Case Study: 2012 Benghazi Attack

On September 11 and 12, 2012, a US Ambassador, an FSO, and two intelligence contractors were killed in a terrorist attack on the US consulate and annex in Benghazi, Libya.

The US Senate Committee on Homeland Security and Governmental Affairs recommended in December 2012 that the Department study different attack scenarios against its staff around the world, regardless of the existence of a specific threat (Lieberman & Collins, 2012).

Additionally, the December 2016 report by the US House of Representatives Select Committee on the Events Surrounding the 2012 Terrorist Attack in Benghazi highlights the lack of foresight in US policy and action in Libya. The surprise attack partly "reflected a general lack of planning for a post-Qaddafi environment" (House of Representatives, 2016, p. 348).

This case study does not argue that the attack would not have happened simply because of the existence of strategic foresight efforts at the Department. However, it is critical to acknowledge the role that institutionalized foresight practices may have in mitigating the risk of danger to American citizens and diplomats abroad in potential future scenarios.

Comprehensive planning processes within the US federal government, and particularly in civilian agencies, are relatively new and narrow. In 1997, the National Intelligence Council began publishing an unclassified strategic assessment of key trends and uncertainties for 20 years into the future. The Department of Defense has been a pioneer within the USG in futures planning since it established the Office of Net Assessment in 1973. This office forecasts the future of national defense and security with an annual operating budget of \$15 to \$20 million (US Department of Defense, 2015; Greenblott, O'Farrell, Olson, & Burchard, 2018).

Another example of a long-established foresight program in the federal government is Project Evergreen at the US Coast Guard (USCG). The Coast Guard has used foresight as a tool for PSP since 1998 and has benefitted from the inputs of over 1,000 USCG personnel, foresight experts, and other stakeholders during that time (Popiel, n.d.). Project Evergreen's products have influenced at least 29 published USCG strategic documents, with key successes being its input into USCG Arctic strategy and scenario-based planning for potential maritime engagement with Cuba (Popiel, n.d.).

In recognition of the potential value for strategic foresight in strategic planning across the USG, Circular No. A-11 from the US Office of Management and Budget (2018) suggests that agencies utilize strategic foresight in order to pursue long-term goals and recommends interagency foresight collaboration.

Current Department of State Planning Processes

Currently, agency-level planning at the US Department of State comprises of the Joint Strategic Plan (JSP) published every four years and mandated by law (US Department of State, 2016). The Department produces Integrated Country Strategies (ICS) for 185 countries across the globe to advance diplomatic goals specific to each international relationship. Planners at the Department are also responsible for 46 Functional Bureau Strategies (FBS). Lastly, there are comprehensive Joint Regional Strategies (JRS) for each of the six regions of the world, as defined by DOS, and for international organizations (US Department of State, 2016; A. Mazzoccoli, personal communication, April 30, 2019). Most of these strategies look at the needs and goals of the organizational body in question no more than three years into the future and are connected to budgeting processes (US Department of State, 2016). Recently, Circular No. A-123 required the implementation of Enterprise Risk Management (ERM) across all federal agencies (Donovan, 2016). ERM requires that the Department looking at agency-wide risks, such as cybersecurity (US Department of State, 2016). These sorts of analyses can act in conjunction with other planning techniques, such as horizon scanning.

Beginning in 2009, the Department, in partnership with the US Agency for International Development (USAID), began publishing the Quadrennial Diplomacy and Development Review (QDDR). The second and most recent QDDR, published in 2015, emphasizes developing organizational adaptability and innovation at DOS. It states:

"Our primary goal is to achieve US national interests, regardless of the conditions we face. Achieving those goals requires the ability to identify options and assess policy risks in volatile, complex, and ambiguous circumstances. In the face of uncertainty and changing circumstances, we must encourage informed risk taking and innovation so that the cumulative cost of inaction does not outweigh short-term concerns about an individual course of action." (US Department of State, 2015, p. 56)

The QDDR did not recognize the contribution of strategic foresight to those very goals. This

report will examine the theory behind strategic foresight, review academic research on the value added and lessons learned from applications in the public and private sectors, propose a set of policy options for DOS to consider if implementing strategic foresight, evaluate those options based on a set of criteria, and pose a final recommendation for next steps.

"INDEED, IT IS THE PURPOSE OF POLICY TO PLAN FOR THAT WHICH IS MORE OR LESS PREDICTABLE AND HEDGE AGAINST THAT WHICH IS UNCERTAIN."

-HERMAN KAHN (1973, P. 135)

Literature Review

The Theoretical Origins of Strategic Foresight

The formal study of strategic foresight originated in the 1950s and 1960s as academics and philosophers recognized that understanding society and its future will be a critical endeavor for businesses and decisionmakers at large (Rohrbeck, Battistella, & Huizingh, 2015). The existing literature on the topic has ballooned in recent decades. Today, there are two relevant and distinct schools of thought regarding the efficacy of strategic foresight. The "planning school" posits that organizations which excel at anticipating future changes through systematic forecasting processes and consider these changes in their strategies will benefit from a competitive advantage over their peers. In opposition to this theory is the "learning school," which believes that it is fruitless to try to envision the future with any confidence and instead emphasizes being able to learn from the past and adapt quickly to real change as it occurs (Vecchiato, 2015).

The fundamental problem that organizations face when thinking about the future is uncertainty. According to one early theory, the amount of uncertainty that an organization experiences in decision-making depends less on the type of organization and more on the type of environment. Organizations facing complex (having many factors) and dynamic (in which factors are constantly changing) environments are most likely to face environmental uncertainty (Duncan, 1972). Given these environmental circumstances, organizations that are the first to be able to anticipate and act upon changes in their environment may benefit from a first-mover advantage.

In business, this first-mover advantage is thought to lead to a greater chance of having a larger market share (Suarez & Lanzolla, 2007). Vecchiato (2015) emphasizes that the purpose of strategic foresight is not to attempt to accurately predict the future, but instead to institutionalize forward-thinking processes that put an organization into a position to gain the first-mover advantage when the opportunity arises. This is a hybrid framework of the two schools of thought above, termed "planned learning."

Most of the literature on foresight theory, like that noted here, remains qualitative and lacking in empirical evidence. This gap is discussed further in the limitations section of the report.

Corporate Foresight

Because many foresight practices originated in and have had time to mature in the private sector, researchers have been able to study in-depth these processes, their integration into companies' organization and strategies, and their value-added.

The question of whether strategic foresight impacts corporate success remains without a definitive answer, at least partially because it is hard to measure and prove. One study found that

"vigilant" firms, or those having appropriate corporate foresight practices to meet their needs, had 33 percent greater profitability and 200 percent greater market capitalization growth than their less-prepared peers (Rohrbeck & Kum, 2018). In another study by Rohrbeck & Schwarz (2013), when surveyed about the value creation of their strategic foresight practices, companies differed in their assessment depending on the type of value and the success of the organization. A consistently comparable or larger proportion of top-performing companies (those with the highest sales growth within the sample) reported perceived benefits of strategic foresight compared to lower-performing peers. A third of all companies agreed that foresight led to "gaining insights into changes in the environment," while at least one fifth of each category of firms thought foresight reduced uncertainty (Rohrbeck & Schwarz, 2013).

The same survey reported that companies perceived less of a benefit from foresight in influencing policymakers and decision-making, indicating a gap between systematic forecasting and integrating the outputs of these practices into company strategies (Rohrbeck & Schwarz, 2013). This may be indicative of a larger problem of successfully leveraging the potential advantages of foresight into organizational processes and strategies. A review of experiences in futurist consulting in the private sector notes a "cultural resistance" to or lack of cooperation with futurist practices. Companies who seek futurist experts often hire external consultants and resist attempts to fully integrate foresight methods so that the practice struggles to outlive the consultancy (Hines & Gold, 2015). A resistance to incorporating foresight, the lack of integration of anticipated trends into practical strategies, and difficulty in proving the usefulness of strategic planning remain as barriers to encouraging widespread adoption of foresight methods.

Anticipatory Government

The theories and experiences around foresight in the corporate world can be applied to the public sector. An existing gap in the publicly-available literature on federal foresight exists due to the sensitive nature of many of the government's attempts to anticipate and plan for the future. The

"FORESIGHT HELPS US PLAN FOR TODAY'S MISSION AND POSTURE FOR TOMORROW'S CHALLENGES."

> -GEORGE FORESMAN (personal communication, April 25, 2019)

defense and intelligence agencies have been at the forefront of futures research in the government since the founding of the Defense Advanced Research Projects Agency (DARPA) in 1958, and these bodies retain much of what is likely highly useful literature and research on the practice, use, and value of futures in government (Bengston, 2012). Professionals

from other agencies, like the Environmental Protection Agency and US Department of Agriculture, have formally published research on federal foresight (Greenblott, O'Farrell, Olson, & Burchard, 2018; Hines, Bengston, Dockry, & Cowart, 2018). Still others, such as the US Coast

Guard (n.d.), have been meticulous in publishing their processes and reports from their own foresight practices for public consumption.

Burrows & Gnad (2018) argue that, if done well, strategic foresight can act as an antidote to the "constant crisis management," "muddling through," or the fundamentally reactive nature of the government in addressing critical and difficult policy issues. This sentiment is echoed by Leon Fuerth, a celebrated scholar at the forefront of applying the concept of foresight to the public sector. Fuerth (2013) champions the term "anticipatory governance" and points out three necessary steps towards achieving such a concept. These include institutionalizing the interplay between long-term thinking and decision-making in the moment, adopting a "whole-of-government" approach to uncertainty and complexity, and ensuring organizational learning based on observed outcomes (Fuerth, 2013). As agencies in the public sector grapple with understanding the potential uses of strategic foresight to their work, much of the literature focuses on a review of existing practices and lessons learned.

Foresight is still a relatively nascent and low-resourced practice in most federal agencies. According to a survey of 15 federal offices that are members of the Federal Foresight Community of Interest (FFCOI), the median full-time equivalent employees (FTEs) an agency commits to these practices is two and the median annual extramural funding for these efforts is \$225,000 (Greenblott, O'Farrell, Olson, & Burchard, 2018). There is a significant disparity between the resources expended in civilian and defense-intelligence agencies, as represented in Table 1 below.

Table 1. Personnel and Funding for Strategic Foresight Efforts across US Federal Agencies (Greenblott, O'Farrell, Olson, & Burchard, 2018, p. 5)

	Minimum	Maximum	Median	N
FTEs				
Civilian	0.5	4	1	9
Defense-	1	15	7.5	6
intelligence				
Overall			2	15
Extramural funding				
Civilian	\$0	\$750,000	\$50,000	9
Defense-	\$500,000	\$20,000,000	\$1,590,000	4
intelligence				
Overall			\$225,000	13

Research has also identified areas for improvement in federal efforts as different agencies develop and improve their forecasting methods. Although most agencies rely on contractors for their foresight programs, federal futurists caution against this trend and fear that it may prevent

institutional knowledge and internal capacity for strategic foresight (Greenblott, O'Farrell, Olson, & Burchard, 2018). This is an echo of the similar issue found in private corporations using futurist consultants discussed above.

Another critique involves the time horizons in question by forecasters in federal agencies. A breakdown of horizon scanning "hits" by futurists at the US Forest Service found that most (42 percent) of them fall within the most immediate time horizon, indicating the difficulty of identifying trends and signals far into the future within a complex environment (Hines, Bengston, Dockry, & Cowart, 2018). This problem is not unique to the USG. Surveys and interviews by van der Duin, Oirschot, Kotey, & Vreeling (2009) across the Dutch government revealed that most (38 percent) futures research occurs for the time horizon of 5-10 years; fewer than 9 percent of processes look beyond 15 years into the future. Independent qualitative research confirms this tendency and warns that shortened time horizons may also restrict the creativity and innovation of anticipation, both of which are critical components of effective forecasting (Bauer, 2018).

Lastly, governments tend towards a narrow scope of available forecasting processes they use. More than 90 percent of respondents in the Dutch Ministries survey reported using scenario planning, while only three other forecasting methods were used by more than 25 percent of offices (van der Duin, Oirschot, Kotey, & Vreeling, 2009). This is similar to the USG's reliance on horizon scanning and scenario planning methods: only seven of eighteen agencies surveyed use any other technique besides these two (Greenblott, O'Farrell, Olson, & Burchard, 2018).

The study of Dutch Ministries also reveals that government agencies face a similar problem to corporations in using the outputs of their forecasting processes. While 31 percent of survey respondents claimed that the research was used for strategic functions, only five percent of them used it for policy functions (van der Duin, Oirschot, Kotey, & Vreeling, 2009). One potential solution to this problem is involving decision-makers in the processes and outcomes as early as possible, especially given that futures research can be interpreted as a challenge to the status quo (Burrows & Gnad, 2018). Another suggestion involves incorporating forecasting procedures into the existing, accepted, and institutionalized policy analysis procedures that occur across the federal government to more closely link futures and policymaking and raise the probability that policies will be more robust due to the consideration of futures (van Dorsser, Walker, Taneja, & Marchau, 2018).

Policy Options

The below options represent three of the potential methods the Department could use in order to integrate strategic foresight into its operations. They span a spectrum of financial costs and

organizational commitment, depending on the ability of the Department to fund a new endeavor and sustain organizational and cultural change. This report also evaluates a continuation of present trends, or the absence of strategic foresight at DOS, in order to provide a baseline comparison.

Option 1: Maintaining the Status Quo

This option would involve no change to the Department's planning operations and no institutionalized integration of strategic foresight processes into planning, policy, or strategy. This would represent a continuation of the current strategic PSP framework and philosophy at the Department.

Option 2: FSI Training from the Ground Up

One way to introduce futures to the Department of State and work towards an institutionalization of foresight culture and practice is to train Department employees in the theory behind strategic foresight, its potential value added, and practical ways they can integrate futures into their work. This would involve a collaboration between the Bureau of Budget and Planning (BP), the Office of US Foreign Assistance Resources (F), and/or the Foreign Service Institute (FSI) and the use of professional contractors and/or consultants with foresight expertise to develop a curriculum for training.

The training could either be an independent course at FSI or a module added on to existing courses. FSI already offers at least one relevant course that could incorporate a practical workshop on foresight practices. *Tomorrow Now: American Diplomacy in a World of Rapid Change* is a five-day classroom course for mid-level practitioners in both the civil and foreign services. After a week in the classroom, the course also involves opportunities for the students to apply lessons learned into their work and report back to their instructors and peers as to their success. According to the course description, it "is designed to hone participants' strategic foresight skills – that is, the capacity to discern potential future events and possibilities in such a way as to take full advantage of opportunities, as well as prepare for any possible adversity" (Foreign Service Institute, 2019).

The course is currently designed with a case-study framework where the participants identify and analyze major changes or challenges the Department may grapple with in the future, such as the rise of big data (Foreign Service Institute, 2019). The course could be changed or amended to teach how to conduct futures techniques for civil and foreign servants who are responsible for their bureau or mission's strategic planning.

Once the personnel of bureaus and embassies learn about the process of futures planning and see the value of considering strategic foresight in their missions, it could potentially become entrenched in the Department's culture and lead to an agency-wide acceptance of and desire for institutionalized futures planning in the long term. This would also contribute to developing an organic and internal capability for strategic foresight among current and future officials in Washington and at embassies abroad.

Option 3: The Fold-In

The Department could begin a dedicated effort to "fold in" futures practices into its strategic planning, policy, and strategy by hiring foresight experts to provide futures work for consideration in existing planning processes. A minimum of one FTE would be responsible for the following:

- Communicating and providing the output of at least one strategic foresight technique (i.e. horizon scanning, backcasting, etc.) to current strategic planning processes and senior leadership.
- Collaborating with BP, F, the Office of Management Policy, Rightsizing, and Innovation (M/PRI), the Office of Policy Planning (S/P), the Bureau of Intelligence and Research (INR), and other stakeholders as relevant to conduct and disseminate futures output.
- Supporting individual bureaus and missions in incorporating futures into their strategic planning processes.
- Participating in inter-agency exercises, discussions, and/or working groups involving strategic foresight.
- Introducing and advocating for the idea of futures planning throughout the Department.

This employee(s) would most likely be housed in the BP or F, given their integral roles in department-wide strategic planning, policy, and decision making (US Department of State, 2018; US Department of State, 2019c). Hiring at least one FTE—or ideally a small team of three to five people—dedicated to strategic foresight would assist the office in achieving these goals and the Department in pursuing its long-term diplomatic mission around the world.

Additionally, this option should consider providing extramural funding, or a budget outside of employee salary and benefits, to spend on strategic foresight efforts. As a benchmark, the median extramural funding that US civilian federal agencies commit to strategic foresight is \$50,000 per year, while the median across all government organizations with foresight research is \$225,000 (Greenblott, O'Farrell, Olson, & Burchard, 2018). These funds could go towards consulting outside experts or soliciting professionally-produced scenarios in order to bolster the success of foresight at DOS.

Option 4: New Office of Strategic Foresight

In order to maximize its initial commitment to strategic foresight, DOS could create a new office or division with a small team responsible for futures planning and its integration into strategy and policy. This office would be comparable to precedents in other US federal agencies, including the Army Futures Command, the Office of Emerging Policy at USCG, or the Global Futures Office at the Defense Threat Reduction Agency (DTRA). Ideally, this office would be a stand-alone team housed directly under S to ensure access to and buy-in from senior leadership. It could also be created within BP, S/P, F, or INR, but additional bureaucratic layers would reduce its connection to the leadership. The tasks of the office would include the following:

- Running consistent, high-quality futures exercises to inform all levels of strategic planning, from the quadrennial agency-wide plans to the plans of embassies and missions.
- Ensuring that the results of foresight are considered during planning, strategy, and policy development at the Department through collaboration with BP, M/PRI, S/P, and others.
- Providing training to DOS employees involved in strategic planning or working with FSI to do so.
- Participating in any intra- or inter-agency process involving planning, strategy, policy, or innovation.
- Joining and engaging with the FFCOI and other national or international organizations dedicated to furthering the use and success of strategic foresight.

Evaluative Criteria

In order to analyze the feasibility and effectiveness of each of the policy alternatives, the four options above will be evaluated in terms of the following criteria. These criteria emphasize the importance of effectiveness, responsibility, and sustainability in changing the Department's internal policy towards strategic foresight.

The criteria are introduced in order of descending relative importance. Political feasibility, as defined below, is the most critical factor to consider when proposing a change to the Department's structure and mechanisms. If senior leaders do not approve a proposal due to a question of the value of the program or the level of resources requested, the effort is unlikely to succeed. The second criterion in terms of importance is cost. Every dollar counts in the DOS budget, and cost-effectiveness is critical for maintaining a responsible use of public funds. Cost also informs the political feasibility of an option.

The last two criteria are given less weight than political feasibility and cost because they have to do with the effectiveness of the proposed option once it is in place rather than potential barriers

to implementing it at all. Although these factors are considered less important in this context, they are still critical to evaluating the medium- to long-term success of futures and the benefits of strategic foresight at DOS.

Criterion 1: Political feasibility. How likely is this proposal to be approved and supported by senior decisionmakers at the Department? This involves effectively communicating the value of strategic foresight to organizational PSP and minimizing barriers to implementation. This criterion is critical to requesting investment by or the re-organization of DOS because decisionmakers are not inclined to accept risk by implementing major changes without any certainty that they will receive a return on their investment. Feasibility will be measured on a qualitative scale from "low" to "high" as described below.

Low political feasibility: Low political feasibility describes a situation that requires more investment in organizational change than the option can prove it is worth. This involves requesting significant resources—or more than one hundred-thousandth (0.00001) of a percent, or around \$400,000, of the Department's annual operating budget of \$40 billion for fiscal year 2020 (US Department of State, 2019a)—and introducing notable change to the PSP process without a guarantee on the value of the outcomes. Additionally, a low politically feasible option would not have feasible mechanisms for evaluation or course correction.

Medium political feasibility: To earn a ranking of medium, an option would require some resources but no more than one hundred-thousandth of a percent of the Department's annual operating budget. This program would also require organizational change but may build on changes already in progress or may do so in a way that creates positive externalities for the Department. An option of medium political feasibility would offer at least a mechanism for adjusting operations at certain benchmarks regardless of the ability to evaluate success.

High political feasibility: An option with high political feasibility requires little organizational change; this includes requesting zero additional resources. To the extent that there is change, there are verifiable benchmarks and an established process by which the program's success can be regularly evaluated and actions taken if the program is underperforming.

Criterion 2: Cost. How much will the policy option cost the Department? As with any use of taxpayer funding, the integration of strategic foresight at DOS should be accomplished at the least cost possible while also maximizing the potential benefits. The relatively small budget of

the Department, especially compared to other Departments like Homeland Security or Defense, also highlights the importance of cost saving. Given that the implementation of strategic foresight has already faced obstacles over the years—whether budgetary, practical, or cultural—it is important that a final recommendation minimizes barriers to implementation. Cost is the most easily quantifiable of these.

The costs used in this report represent one year—most accurately, the first year—of implementation of any of the options. All estimates have been standardized to March 2019 US dollars using the Consumer Price Index from the Bureau of Labor Statistics (2019). These costs also recommend relatively conservative estimates for each option. For example, the FSI Training option cost could be scaled up or down to fit the needs and goals of the Department, and the cost would also decrease or increase depending on the changes to the implementation.

In an ideal scenario, the cost of each option would be considered against a quantifiable benefit of the option. However, this is not possible for the scope of this study, given the intangible and immeasurable nature of the benefits of strategic foresight. More attention will be paid to this issue in the limitations section of this report.

Lastly, it should be noted that the cost estimates produced in this report rely mostly on open-source materials and are not an authoritative source on the actual costs of any of the proposed options. If seriously considering implementation, the Department should run a robust and comprehensive cost estimation in order to anticipate better the true costs of a program.

Criterion 3: Organizational commitment and sustainability. How likely is it that DOS will remain committed to the proposed course of action following initial implementation? One of the themes of the literature, stemming from both private and public organizations working with strategic foresight, is that it is hard to implement these processes in such a way that the organization remains committed to them and has its own organic capabilities to sustain them after initial implementation. This will be measured on a qualitative scale from "low" to "high," with additional information on the benchmarks used to evaluate the options against this criterion described here.

Low organizational commitment: An option with low commitment and sustainability would use contractors or consultants without any attempt to build organic capability for strategic foresight within DOS. Another factor resulting in low chances of sustainability would be the lack of an established lifespan or evaluation mechanism for a program, meaning it could more easily be cut on a whim with a change in leadership or political will. Because of the importance of leadership buy-in, an option resulting in strategic

foresight being three or more layers removed from the most senior decisionmakers at DOS would be considered lowly sustainable. Lastly, a low-resourced option also begets little commitment.

Medium organizational commitment: This refers to an option with some attempt at developing grassroots-level familiarity with, knowledge of, and support for strategic foresight at DOS. It also provides an argument for securing a minimum lifespan for the program and evaluation methods by which to evaluate its value to the organization to guarantee at least short-term sustainability. In order to have a medium chance at organizational commitment, this option would need to sit one or two layers away from S-level leadership. A program with medium levels of resources is also likely to receive a medium level of commitment, since decisionmakers may be more willing to wait to reap medium-term benefits or adjust to seek more value if there has already been some investment in the program.

High organizational commitment: The option for implementing strategic foresight with the highest likelihood of organizational commitment and sustainability would have direct access to senior leadership and be legitimized by high resource investments. This option would also involve either hiring foresight experts or intensely training select staff members at DOS to an advanced proficiency in futures practices so that these skills remain within the Department over the long term.

Criterion 4: Integration into planning, strategy, and policy (PSP). How successfully does this option ensure that the outputs of strategic foresight will be used in the Department's existing PSP framework? This considers whether futures processes will have any impact on strategy and policy once an option for futures is implemented. One of the dangers of taking the leap to incorporate strategic foresight at DOS is that it is not accepted by the existing organizational culture and process that feed into the Department's various levels of PSP. The optimal alternative would build seamlessly integrate foresight efforts into existing PSP practices by ensuring cooperation with and proximity to planners, strategists, and policymakers. The below descriptions elaborate on the qualitative scale of "low" to "high" used for evaluation.

Low integration: This option would have considerable bureaucratic distance between the strategic foresight operations and the existing PSP staff (horizontally separate) as well as senior policymakers (more than three vertical layers), resulting in poor access to and familiarity with these personnel and their priorities. Additionally, an option with low integration would lack a specified mechanism by which the outputs of futures research would feed into JSP, JRS, and other existing plans and strategies.

Medium integration: For an option to be considered to have medium success in integrating strategic foresight into the existing PSP framework, the foresight work must be done at least horizontally equal to existing PSP staff and/or within one to two layers of senior policymakers. It should also include ways for futurists to cooperate with PSP staff and ensure the inclusion of their work in strategies and plans.

High integration: An ideal option with high integration would be either horizontally equivalent with PSP staff and/or directly responsible to S-level leadership. This option would include a restructuring of the existing PSP process to be based on the output of strategic foresight practices at DOS.

Evaluation

It is important to systematically, objectively, and logically assess the four options above according to the described criteria. This evaluation will be critical in producing a final recommendation to DOS on how to strive towards reaping the full benefits of strategic foresight given available resources.

Option 1: Maintaining the Status Quo

Criterion 1: Political feasibility. The status quo requires no actions, no organizational change, and no allocation of resources. This makes it a *highly feasible* option, and this is one of the reasons why strategic foresight has not taken hold in DOS prior to this assessment.

Criterion 2: Cost. Because this option represents no change in operations or resources, there are *no costs* associated with maintaining the status quo. While it is feasible to think that there is an opportunity cost associated with the lack of strategic foresight, neither researchers nor practitioners have offered a practical and defendable way to quantify the value of foresight. This gap in the academic research on strategic foresight is addressed in the limitations section towards the end of this report.

The third and fourth criteria, organizational commitment and integration into PSP, deal with the effectiveness of the integration of foresight into Departmental culture and processes. Because the status quo represents a total lack of strategic foresight at DOS, these criteria do not apply.

Option 2: FSI Training from the Ground Up

Criterion 1: Political feasibility. Among the three options recommending a change to the status quo, this option is the most politically feasible. It requires no additional personnel, and the funding required (as described below) is less than 0.000006 percent of the Department's

annual budget of \$40 billion for fiscal year 2020 (US Department of State, 2019a). Lastly, it does not require major organizational change since the FSI and its ability to add new courses and train new students is already well-established. Additionally, providing a training program for mid- to high-level professionals will cultivate the skillsets of a relatively wide swath of Department employees, thus providing additional benefits in the form of more highly-skilled and versatile personnel. Because of these considerations, this option is rated *medium* in political feasibility.

Criterion 2: Cost. The cost for this option was calculated for one year based on a number of assumptions that will be described here. The dollar estimate for one instructional hour at the FSI is \$219.71. This amount is based on an interview with a former director of the FSI, Ambassador Brandon H. Grove, who reported that the FSI spent \$16 million on 1.6 million instructional hours every year, or a cost of \$100 per hour in the late 1980s dollars (Association for Diplomatic Studies & Training, 2016). This estimate was then converted into March 2019 dollars.

This report then set a realistic but arbitrary goal of training five percent of DOS employees in strategic foresight theory and techniques. This training would be limited to Civil Service employees below the Senior Executive Service (SES) level, of which there were 9,974 in 2018, and generalist FSOs at or below of the FS01 level, of which there are around 7,170 (US Department of State, 2019b). Five percent of these groups is 858 employees. The employees chosen for training would be the one with the greatest need for strategic foresight training and those already responsible for planning for their bureaus and embassies. Additional assumptions include five hours of instruction time devoted to foresight and a class size of about 25. Based on all of these specifications, the cost of foresight training at FSI is estimated to be \$37,667.08 in March 2019 dollars.

Lastly, it is also important to recognize the value of the time employees would be giving up by taking the training that they could otherwise be using on other priorities, responsibilities, or initiatives; this is also known as opportunity cost. This calculation uses the hourly base pay from the 2019 Federal General Schedule (GS) Payscale of a Step 1 GS-14 employee, or \$43.42, as an average hourly wage (FederalPay.org, 2019). Multiplying this by the target number of employees (858) and the number of instructional hours per employee (five) gives an estimate of \$186,271.80 for the value of the time devoted to foresight training. Together with the cost of providing the training from the previous paragraph, an estimated cost per year for this option is \$223,928.88. Because of the number of assumptions behind it, this estimate could easily be scaled up or down depending on the Department's needs, priorities, and resources.

Criterion 3: Organizational commitment and sustainability. This option presents a *low to medium* guarantee for organizational commitment and sustainability. Ideally, the training would

create a small cadre of Department professionals that are familiar with the basic concepts behind strategic foresight, and these students could then begin to incorporate medium- to long-term thinking into their offices' PSP. However, in practice, these trainings will have limited influence on the Department's planning culture. Regardless of the quality of instruction, the students will not be experts in strategic foresight after five, twenty, or fifty hours of training. Additionally, it will take time to socialize strategic foresight throughout the bureaucracy and build familiarity, skills, and support for the concept.

For these reasons, it is recommended that, prior to implementation, decisionmakers choose a minimum timespan, such as three years, during which the training cannot be curtailed or cancelled to allow time for strategic foresight skills to develop among Department officials. Additionally, the personnel involved with the course at FSI should develop surveys and feedback mechanisms to measure whether the students perceive any benefits of their training in basic foresight and whether there is any interest in additional "advanced" courses. These evaluation processes will give DOS a reliable basis upon which to decide later whether to scale back or scale up the training program.

Criterion 4: Integration into PSP. Because of many of the same considerations mentioned above, this option will likely lead to *low* integration of foresight into existing PSP practices. In this case, employees will be trained in basic concepts and may be nudged towards shifting their thinking around planning, but there will be no accountability mechanisms to ensure that they use their training in their work in PSP.

Option 3: The Fold-In

Criterion 1: Political feasibility. This option is likely to have *low to medium* political feasibility at DOS. While hiring one additional employee, at a minimum, does not require an unjustifiable amount of funding or organizational change, it necessitates additional approval mechanisms and efforts to welcome an accomplished futurist to the Department.

Criterion 2: Cost. The cost of hiring one new employee would be about \$220,000 for the first year. This figure is derived from the Fiscal Year 2020 Congressional Budget Justification for DOS (US Department of State, 2019a). While this is the minimum amount needed to begin foresight work at the Department by hiring one FTE, the employee would be able to make a greater impact with additional funding to spend on external support, such as hiring a contracting firm to contribute to writing scenarios or environmental scanning. Securing additional resources should be discussed during the implementation of this alternative. For analytical purposes, this report will consider budgeting an additional \$50,000 per year for strategic foresight, or the median

amount among other civilian agencies with foresight programs (Greenblott, O'Farrell, Olson, & Burchard, 2018), thus bringing the total estimated annual cost of this alternative to \$270,000.

Criterion 3: Organizational commitment and sustainability. Hiring at least one new employee whose sole responsibility is advancing strategic foresight at DOS is a positive step in ensuring that the effort will not fall to the wayside among busy personnel with competing draws for time and attention. At the same time, having one or two employees responsible for the entire Department's strategic foresight will limit the amount and extent of the impact of these initial efforts on DOS PSP as a whole. Given these realities, this option has a *medium* level of organizational commitment and sustainability.

Criterion 4: Integration into PSP. Folding in strategic foresight, tasked to at least one public servant hired for his or her skills and experience in this field, to the office and processes currently responsible for strategic planning and policy coordination in BP or F is the most beneficial factor of this option. The new employee will sit among those responsible for producing strategic plans, budget justifications, and performance evaluations, meaning that he or she can remain looped into these conversations and have the opportunity to cover his or her own equities in these processes. However, because of the same constraints mentioned in the discussion of this option's level of organizational commitment, it is impractical to assume that there will be perfect integration into PSP. This option is likely to have *medium to high* integration of strategic foresight into PSP.

Option 4: New Office of Strategic Foresight

Criterion 1: Political feasibility. Because of the amount of resources and organizational change required to begin a new office at the Department, this option has *low* political feasibility. Due to the inability to quantitatively prove or point to the value of strategic foresight, and because there is no demonstrable precedent of strategic foresight creating benefits for DOS, it remains difficult to justify high expenditures of money or personnel time to beginning a full-fledged strategic foresight program.

Criterion 2: Cost. This option has the highest anticipated costs of any of the alternatives considered in this report. The expected cost of running a new office for one year is approximately \$1,700,000. This estimate is based off internal communications and documentation from the Bureau of Budget and Planning's Office of Performance and Planning (BP/OPP). Approximately half of this funding would be spent on hiring four personnel for the office. As with the other two options, there is some flexibility in the implementation of this option that could result in lower or higher costs. However, it is clear that this effort will require significantly more resources than any of the other alternatives considered in this report. This request is equivalent to about 0.00004

percent of the Department's annual budget of around \$40 billion (US Department of State, 2019a). It is worth noting that this option, if implemented well, would be able to provide the highest amounts of unquantifiable benefits to the Department's PSP and mission advancement.

Criterion 3: Organizational commitment and sustainability. Creating a new team housed under S to produce futures research represents a *high* level of organizational commitment and potential sustainability over the years. One of the most attractive features of this option is the choice, if possible, to place this new office under S. This will help make strategic foresight a priority at the Department and contribute to the continued buy-in and interest of senior leaders. Additionally, since it requires time and effort to create the office and hire the personnel, it will also require time and effort to disband it in the event that circumstances or priorities change.

Because of the nature of the office and its work, there should be an agreement upon initiating this process that the office be allowed to operate for at least five or ten years before it can be terminated. By definition, strategic foresight practices do not provide immediate results, so the team should be given the necessary time to prove its value to the Department's positioning and posturing while also creating a realistic and practical timeframe during which to evaluate the office's success and decide whether to continue investing in such a program.

Criterion 4: Integration into PSP. This option is ranked as *medium to high* in terms of integration into PSP, but for different reasons than the previous alternative. By existing as a separate office and thus not horizontally equivalent, this team will have to compete for the time and attention of planners, strategists, and policymakers. Factors as simple as changing priorities or personality clashes could hinder the new team's ability to cooperate with and integrate into existing PSP practices. However, the new office's proximity to senior leadership acts as a potential counterbalance to the distance from PSP staff. Additionally, since the new team will represent a new stakeholder in the PSP process, its introduction would be served by a revamping of the current PSP timeline and framework in order to incorporate strategic foresight into these processes.

Summary

The discussions above are summarized in Table 2 below. The criteria are organized from top to bottom in order of descending relative importance to the success of the option. Within the table, a darker color indicates a value that is more favorable to the outcome in question, while a lighter color is relatively less favorable to that option. The implications of this evaluation will be discussed further in the next section.

Table 2. Evaluation of Policy Options according to the Specified Criteria

	Status Quo	FSI Training	Fold-In	New Office
Political feasibility	high	medium	low-medium	low
Expected cost (per year)	\$0	\$223,938.88	\$270,000	\$1,700,000
Organizational commitment	n/a	low-medium	medium	high
Integration into PSP	n/a	low	medium-high	medium-high

Recommendation

Based on the above research and evaluation, this report recommends that the Department fold in strategic foresight to existing PSP processes by hiring at least one full-time equivalent employee dedicated to futures into an office relevant to these efforts in BP or F. This option requires relatively little in terms of resources or change to existing mechanisms, but, by bringing in at least one foresight expert to the Department, the benefits of looking over the horizon into the medium- and long-terms will begin to impact the operations and outputs of our esteemed diplomats in Washington and abroad.

Ideally, this will only be the beginning of a dialogue around the State Department's efforts to advance its medium- and long-term goals and efficacy and to manage risk and uncertainty in the shadow of a constantly changing international environment. While hiring a single employee is a reasonable and worthwhile starting point, there are numerous opportunities for the growth of futures research at DOS in the coming years. Securing extramural funding for the employee to put towards strategic foresight efforts, as many other federal agencies have done, will add to the potential benefits

Additionally, based on the research and assessments above, this report also suggests that the Department consider the following, regardless of what—if any—steps it initially takes to incorporate strategic foresight into its operations.

• *Limit reliance on contractors and external organizations*. While there is a wealth of valuable knowledge and resources in the private sector and among think tanks, the Department should avoid drawing too much on external sources in favor of developing capabilities, knowledge, and support among its own personnel.

- Seek partnerships among other US federal agencies with existing and nascent strategic foresight programs. The Department should make a concerted effort to develop relationships with futurists across the spectrum of the federal government, from DTRA to the Bureau of Prisons, to learn from the successes and failures of these organizations' efforts to incorporate strategic foresight into their PSP. Another potential opportunity would be to establish a more formal partnership with another public agency, such as the Office of Personnel Management, who is currently in the process of establishing strategic foresight in its operations (US Office of Personnel Management, 2018). These offices could share knowledge and support each other through their individual efforts to advance foresight efforts at each organization.
- *Join the Federal Foresight Community of Interest (FFCOI)*. The Department should join and engage with the FFCOI regardless of the level of implementation of strategic foresight at DOS in the near future. The FFCOI offers resources and quarterly meetings among practitioners and experts in foresight from across the federal government.
- *Give strategic foresight time to succeed.* With the incorporation of strategic foresight into the Department's PSP framework, it will take time—years—to begin to see any affects of this tool on DOS' ability to manage risk in the long term. This is by definition and by design. Any implementation of foresight practices at DOS should be granted sufficient time to begin to flourish, and the Department has an interest in building in effective mechanisms for evaluation, learning, and feedback from the very beginning so that it can seek evidence of the value-added of strategic foresight in the future.

Limitations

This report means to serve only as an initial attempt to investigate the potential value-added of strategic foresight to the Department of State and the means of incorporating these efforts into DOS operations. There are a handful of limitations that hinder the ability of this research to draw conclusions and make recommendations.

The largest of these limitations is the inability to quantitatively prove the benefits of strategic foresight. This issue is prevalent in many areas of the social sciences. In general, trying to quantify the value-added of strategic foresight, or the cost of omitting this practice from the Department's PSP, would necessitate identifying counterfactuals. This is nearly impossible. However, this limitation does not negate the usefulness of conversations about strategic foresight or its potential benefits to an organization.

As a comparison, the same limitation faces the military strategy of deterrence, where it is nearly impossible to say with any certainty what or how many potential attacks from other state or non-state actors the US has managed to deter through diplomatic, information, military, or economic methods. This has not prevented deterrence from being the bedrock of US policy towards nuclear proliferation and warfare, terrorism, or great power confrontation for many decades.

Conclusion

Strategic foresight has the potential to become a valuable tool in the Department of State's PSP framework. If implemented well, strategic foresight will help DOS manage long-term risk, shift from being reactive to proactive on key issues of foreign policy and international relations, and improve upon the value of its resource expenditures. The Department would be joining the ranks of at least 19 federal agencies who have accepted the potential value-added of strategic foresight and worked to incorporate this practice into their existing processes in pursuit of long-term benefits. This would also narrow the gap between the ability of the US, its allies, and its adversaries to consider a longer-term time horizon in their PSP, something which other countries have already proved an exceptional capacity to do so.

With the passing of time comes increasing uncertainty, and with uncertainty comes risk. Strategic foresight offers the ability to reduce uncertainty and manage risk in the medium to long terms, and it is in the Department's best interests to seize this opportunity.

References

- Association for Diplomatic Studies & Training. (2016, May). Moments in U.S. diplomatic history:

 The battle to create the Foreign Service Institute. Retrieved from

 https://adst.org/2016/05/the-battle-to-create-the-foreign-service-institute/
- Balanced Scorecard Institute. (2017). Strategic planning basics. Retrieved from https://www.balancedscorecard.org/BSC-Basics/Strategic-Planning-Basics
- Bauer, A. (2018). When is the future? Temporal ordering in anticipatory policy advice. *Futures*, *101*, 36-45. https://doi.org/10.1016/j.futures.2018.06.002
- Bengston, D. N. (2012, November). Futures research: A neglected dimension in environmental policy and planning. In *Environmental Futures Research: Experiences, Approaches, and Opportunities* [PDF]. Retrieved from https://www.fs.fed.us/nrs/pubs/gtr/gtr_nrs-p-107.pdf
- Burrows, M. J., & Gnad, O. (2018). Between 'muddling through' and 'grand design': Regaining political initiative The role of strategic foresight. *Futures, 97*, 6-17. https://doi.org/10.1016/j.futures.2017.06.002
- Centre for Strategic Futures & Civil Service College Singapore. (2015). Foresight: A Glossary [PDF].

 Retrieved from https://www.csf.gov.sg/docs/default-source/default-document-library/csf-csc-foresight--a-glossary.pdf
- Centre for Strategic Futures. (2018). Conversations for the future, vol. 2 [PDF]. Retrieved from https://www.csf.gov.sg/files/media-centre/publications/conversations_vol2-publication-web.pdf
- Donovan, S. (2016, July 15). *OMB Circular No. A-123, Management's Responsibility for Enterprise Risk Management and Internal Control* [PDF Memorandum]. Retrieved from https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2016/m-16-17.pdf

- Dreyer, I., & Stang, G. (2013). Foresight in governments practices and trends around the world [PDF]. *Yearbook of European Security*. Retrieved from https://wfsf.org/resources/leala-pedagogical-resources/reports-by-un-and-other-international-organisations/113-foresight-in-governments-eu-2013/file
- Duncan, R. B. (1972, September). Characteristics of organizational environments and perceived environmental uncertainty. *Administrative Science Quarterly*, *17*(3), 313-327.
- FederalPay.org. (2019). GS-14 pay scale: General Schedule 2019. Retrieved from https://www.federalpay.org/gs/2019/GS-14
- Foreign Service Institute. (2019). PP540 Tomorrow Now: American Diplomacy in a World of Rapid Change. Retrieved from https://fsitraining.state.gov/Catalog/CourseDetails/PP540
- Forward Thinking Platform. (2014). A glossary of terms commonly used in futures studies [PDF].

 Retrieved from http://www.fao.org/docs/eims/upload/315951/Glossary%20of%20Terms.pdf
- Fuerth, L. (2013, September). Strategic vision: Foresight research for development. In Gale, S., & Jackson, S. (Eds.), *The future can't wait: Over-the-horizon views on development* (pp. 96-103). Retrieved from
 - https://www.usaid.gov/sites/default/files/documents/15396/TheFutureCantWait.pdf
- Greenblott, J. M., O'Farrell, T., Olson, R., Burchard, B. (2018). Strategic foresight in the federal government: A survey of methods, resources and institutional arrangements. *World Futures Review*. https://doi.org/10.1177%2F1946756718814908
- Hines, A., Bengston, D. N., Dockry, M. J., & Cowart, A. (2018). Setting up a horizon scanning system: A U.S. federal agency example. *World Futures Review, 10*(2), 136-151. https://doi.org/10.1177%2F1946756717749613

- Hines, A., & Gold, J. (2015). An organizational futurist role for integrating foresight into corporations. *Technological Forecasting & Social Change, 101*, 99-111.
 http://dx.doi.org/10.1016/j.techfore.2014.04.003
- House of Representatives. (2016, December 7). Final Report of the Select Committee on the Events Surrounding the 2012 Terrorist Attack in Benghazi (Report 114-848) [PDF]. Retrieved from https://www.govinfo.gov/content/pkg/CRPT-114hrpt848/pdf/CRPT-114hrpt848.pdf
- Kahn, H. (1973). The alternative world futures approach. In Tugwell, F. (Ed.), *Search for alternatives: Public policy and the study of the future,* (pp. 103-146). Cambridge, MA: Winthrop.
- Kedge. (2017). Strategic foresight primer [PDF]. Retrieved from http://thefuturesschool.com/wp-content/uploads/2018/01/Kedge-Foresight-Primer.pdf
- Lieberman, J. I., & Collins, S. M. (2012, December 30). Flashing Red: A Special Report on the

 Terrorist Attack at Benghazi [PDF]. Retrieved from

 https://permanent.access.gpo.gov/gpo33519/Flashing%20Red-

 HSGAC%20Special%20Report%20final.pdf

Policy Horizons Canada. (2019). About us. Retrieved from https://horizons.gc.ca/en/about-us/

Popiel, E. (n.d.) Influencing strategic decisions within the Coast Guard: An introduction to scenario-based planning [PowerPoint]. Retrieved from https://www.uscg.mil/Portals/0/Strategy/Evergreen 101.pptx

Rittenhouse, L. (2017, March 11). Go inside Hershey's wildest ideas on how you will shop for food in the future. *TheStreet*. Retrieved from https://www.thestreet.com/story/14026864/1/go-inside-hershey-s-wildest-ideas-on-how-you-will-shop-for-food-in-the-future.html

- Rohrbeck, R., Battistella, C., & Huizingh, E. (2015). Corporate foresight: An emerging field with a rich tradition. *Technological Forecasting & Social Change, 101*, 1-9. https://doi.org/10.1016/j.techfore.2015.11.002
- Rohrbeck, R., & Kum, M. E. (2018). Corporate foresight and its impact on firm performance: A longitudinal analysis. *Technological Forecasting & Social Change, 129*, 105-116. https://doi.org/10.1016/j.techfore.2017.12.013
- Rohrbeck, R., & Schwarz, J. O. (2013). The value contribution of strategic foresight: Insights from an empirical study on large European companies. *Technological Forecasting and Social Change*, 80(8), 1593–1606. https://doi.org/10.1016/j.techfore.2013.01.004
- Royal Dutch Shell PLC. (2017, September 8). Shell scenarios, modelling and decision making.

 Retrieved from <a href="https://www.shell.com/investors/news-and-media-releases/investor-presentations/2017-investor-presentations/shell-scenarios-modelling-and-decision-making-webcast/_jcr_content/par/textimage_158f.stream/1504857536756/4daece03ccaacb3977a6722d9

 be1b745499c3349/scenarios-modelling-and-decision-making-webcast-london-8-september-2017.pdf
- S, S. (2015, June 22). Difference between strategy and policy. Retrieved from https://keydifferences.com/difference-between-strategy-and-policy.html
- Smith, S. (2014, February 24). There's a job contemplating the future of Hershey's Kisses a great sign for America. *Quartz*. Retrieved from https://qz.com/180398/theres-a-job-contemplating-the-future-of-hersheys-kisses-a-great-sign-for-america/
- Suarez, F. F., & Lanzolla, G. (2007). The role of environmental dynamics in building a first mover advantage theory. *Academy of Management Review, 32*(2), 377-392. https://doi.org/10.5465/amr.2007.24349587

- University of California Office of the President. (n.d.). What is ERM?. Retrieved from https://www.ucop.edu/enterprise-risk-management/procedures/what-is-erm.html
- US Bureau of Labor Statistics. (2019). CPI Inflation Calculator. Retrieved from https://www.bls.gov/data/inflation_calculator.htm
- US Coast Guard. (n.d.) Evergreen. Retrieved from https://www.uscg.mil/Strategy/Evergreen/
- US Department of Defense. (2015, May 13). DoD announces appointment of James Baker as Director of the Office of Net Assessment [Press Release]. Retrieved from https://dod.defense.gov/News/News-Releases/News-Releases-View/Article/605502/dod-announces-appointment-of-james-baker-as-director-of-the-office-of-net-asses/
- US Department of State. (2015). Quadrennial Diplomacy and Development Review: Enduring

 Leadership in a Dynamic World [PDF]. Retrieved from

 https://www.state.gov/documents/organization/267396.pdf
- US Department of State. (2016). U.S. Department of State Current and Future Planning Methods [PowerPoint].
- US Department of State. (2018, November 5). Bureau of Budget and Planning (BP) [1 FAM 620].

 Retrieved from https://fam.state.gov/fam/01fam/01fam/020.html
- US Department of State. (2019, March 11). Congressional budget justification: Department of State, foreign operations, and related programs [PDF]. Retrieved from https://www.state.gov/documents/organization/290302.pdf
- US Department of State. (2019, April 4). Department of State Facts about Our Most Valuable Asset –

 Our People (End of Fiscal Year Counts) [PDF]. Retrieved from

 https://www.state.gov/documents/organization/276140.pdf

- US Department of State. (2019). Office of U.S. Foreign Assistance Resources. Retrieved from https://www.state.gov/f/
- US Office of Management and Budget. (2018, June). Circular No. A-11: Preparation, Submission, and Execution of the Budget [PDF]. Retrieved from https://www.whitehouse.gov/wp-content/uploads/2018/06/a11.pdf
- US Office of Personnel Management. (2018, February). 2018 Federal Workforce Priorities Report (FWPR) [PDF]. Retrieved from https://www.opm.gov/policy-data-oversight/human-capital-management/federal-workforce-priorities-report/2018-federal-workforce-priorities-report.pdf
- van der Duin, P., van Oirschot, R., Kotey, H., & Vreeling, E. (2009, November). To govern is to foresee: An exploratory study into the relationship between futures research and strategy and policy processes at Dutch ministries. *Futures, 41*(9), 607-618.

 https://doi.org/10.1016/j.futures.2009.04.008
- van Dorsser, C., Walker, W. E., Taneja, P., & Marchau, V. A. W. J. (2018). Improving the link between the futures field and policymaking. *Futures, 104*, 75-84.

 https://doi.org/10.1016/j.futures.2018.05.004
- Vecchiato, R. (2015, December). Creating value through foresight: First mover advantages and strategic ability. *Technological Forecasting & Social Change, 101*, 25-36. https://doi.org/10.1016/j.techfore.2014.08.016
- Wilkinson, A., & Kupers, R. (2013, May). Living in the Futures. *Harvard Business Review*. Retrieved from https://hbr.org/2013/05/living-in-the-futures