

**CENTER FOR SPACE
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**PROJECT NORTH STAR: STRATEGIC
FORESIGHT FOR U.S. GRAND STRATEGY**

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Summary

The United States is facing unprecedented uncertainty and change in the global environment. Never before in humanity's existence has it seen the degree of emergent behavior and unanticipated impacts, largely driven by rapid technological expansion and growing connectivity of the eight billion people that live on this planet. As the United States (U.S.) attempts to navigate key questions facing its near- and long-term future, the growing disunity within the nation and its inability to reach a generally agreed upon direction for its future are limiting the country's ability to reach its full potential. The United States is in a period where evolution from the strategic approaches of the past may not be sufficient as national leaders look towards shaping the futures they want. In order for the nation to adeptly navigate the changing landscape, it needs to employ enhanced approaches to its strategic formulation and decisionmaking. Strategic foresight is a disciplined approach to managing uncertainty, imagining possible futures, and informing better decisionmaking as a result. Many of the tools, methods, and frameworks strategic foresight harnesses could prove beneficial in helping the nation create more innovative and resilient strategies for its future.

The Strategic Foresight Team at The Aerospace Corporation led an independently funded, yearlong, nonpartisan pathfinder study, titled "Project North Star," to develop and explore a framework for U.S. National Grand Strategy formulation which incorporates strategic foresighting approaches to enhance the nation's long-term planning. In the pilot study, over 50 futurists, strategists, and thought leaders with diverse backgrounds from around the nation participated in a series of collaborative sessions guided by structured foresighting tools. The team identified 28 key enabling elements that map to strategic choices and inform potential "grand strategies" that are resilient across multiple future states. Such enabling elements can provide a pathway for the nation to continually progress towards its "North Star" aspirations, even in the face of uncertain environments or significant political discord. The team concluded that with sufficient time, effort, support for varying viewpoints, and well-designed facilitation, the use of foresighting methodologies presents a viable novel approach to developing U.S. National Grand Strategy.

Introduction

The world we live in today is increasingly characterized as volatile, uncertain, complex, and ambiguous—a set of characteristics commonly abbreviated by the term “VUCA.” As humanity stands on the edge of an intelligence age, increasing global networks, the rapid pace of change, and emergent complexities are creating unpredictable and nonlinear disruptions.¹ The shifting landscape, moving faster and at a scale that humanity has never before seen, is presenting immense opportunities and challenges.² This VUCA environment has significant impact on the effectiveness of U.S. strategy and could complicate or obscure attempts to achieve U.S. national objectives ranging from economics to politics to security to domestic social well-being. As seen with the unanticipated rippling impacts of the COVID-19 pandemic and the Russian invasion of Ukraine, disruption is already here and intensifying—so U.S. strategy, and the processes used to develop it, needs to adapt.³ While disruption is an inevitable part of the strategic landscape, one could argue the VUCA era we now live in requires us to develop approaches for navigating uncertainty with heightened priority. These examples of recent disruptions compel us to reflect on a critical question for our nation’s well-being: *How do we continue to develop, advance, and reinforce the core values we believe in as a nation as we look at ourselves now and towards wildly uncertain futures?*

In response to these challenging and urgent issues, we explored the concept of U.S. National Grand Strategy and investigated whether strategic foresighting methodologies could be used to formulate grand strategies that are resilient in the VUCA environment. Strategic foresight is a diverse and structured set of tools, techniques, and methods that generate greater awareness about plausible outcomes in the future to inform better decisionmaking today.⁴ With an expanded definition of grand strategy and the strategic foresighting discipline working in concert, the team

hypothesized that it may be possible to identify and explore collective long-term goals for the nation through the lens of the core interests and values outlined in the Constitution. These “North Star” aspirations and the range of adaptive and resilient approaches to achieve them could form the foundation of a new way to develop and deploy a U.S. National Grand Strategy.

The purpose of this paper is to highlight methodology and findings of a wide-ranging pilot program, Project North Star, that leveraged strategic foresight to explore and possibly advance the nation’s perspectives and strategies for the future.

This project proceeded based on an updated and expanded definition of U.S. National Grand Strategy developed by the pilot leaders—which is a much broader interpretation than many historical references:

Grand Strategy is a fusion of national vision and objectives the U.S. intends to achieve, why it needs to achieve them, and the “theory of victory” that outlines how and why the U.S. will succeed in achieving them despite opposition and ill fortune. It should simultaneously include addressing both domestic and international interests, incorporate perspectives from the whole of nation (government, private sector, citizens, etc.), and be an intentional, evolving process that can navigate the uncertain global environment while holding true to national core values and long-term aspirations.

There has been significant debate about how much the United States or any other democratic world power has actually developed and successfully implemented top-down “grand” strategy.⁵ Regardless of perspectives on past applications of grand strategy by the United States, our team chose to stipulate that a more deliberate, intentional, and holistic strategic development process at the national level, fueled by strategic foresighting

approaches, will strengthen the nation’s ability to navigate future uncertainty, enhance resiliency in planning, and prove to be an essential tool to enable success now and in the future.

We need a more deliberate process at the national level, fueled by strategic foresighting approaches to strengthen the nation’s ability to navigate future uncertainty.

The Cold War featured one of the most widely known grand strategies for the U.S. called “containment”^{*} during the 1953 Project Solarium, which was initiated by President Eisenhower to create a “grand strategy” focused on preventing the expansion of Soviet power.⁶ Project Solarium was stood up to provide proof of concept of competing strategies, not necessarily to generate new strategy, against a relatively well-defined lens of countering the Soviet Union. There have been recent calls to reboot a modern-day Project Solarium, however, the current needs of the country and strategic context for which it must develop strategy have changed. The geopolitical environment, the nature of competition, and the mechanisms for wielding power have transformed and should be acknowledged. The approach to how strategies were devised in the past may not be sufficient for the nation’s success in the future. Attention needs to be given to not only what goes into any particular strategy, but *how* we devise strategy itself.

Most strategies to date have been conceived based on a set of fixed assumptions or a singularly predicted future state, which makes them brittle when conditions change—and we are living in an era where those conditions are changing ever more quickly.⁷ Additionally, implementation of grand strategy has been primarily focused on reacting to a near-term threat against the status quo, and not necessarily driven by imagination and the art of the

possible, aspirational thinking, or proactive policymaking. The U.S. is missing its ability to seize bigger opportunities when it only looks at the future through a singular lens and through near-term timelines.

In many cases, components of any U.S. National Grand Strategy to date have not included domestic considerations, but they are critical to a nation’s ability to maintain its own strategic goals, domestically and abroad. In the proposed expanded definition for grand strategy, a nation’s grand strategy might include addressing challenges relating to protecting the currency, ensuring environmental resiliency, building trust in government, understanding the changing landscape of great power competition, or overcoming threats related to new technology. Key opportunities could include incorporating new ideas from social movements, leveraging new actors or regions of power, or evolving core interests globally (democracy, human rights, open markets, etc.).

This pilot study took the approach that grand strategy, at its most “grand” level, should be agnostic to politics. Grand strategy should serve the nation’s North Star objectives, not the ebb and flow of political agendas. While the study recognizes that choices on *how to* implement strategies are often partisan in nature, these choices are largely outside the scope of this effort. This strategic-only level of focus is different from past interpretations of grand strategy development. In fact, it could be argued, past employment of National Grand Strategies was undeniably partisan, and does not represent the advanced definition suggested in this work. By focusing on the nation’s “North Star” aspirations, the pilot was able to explore an exciting question: how would one actually formulate “grand” grand strategy for the nation?

^{*}Conceived by Kennan in 1947.

Grand strategy should serve the nation’s North Star objectives, not the ebb and flow of political agendas.

Given this context, the pilot used the discipline of strategic foresight to enhance U.S. National Grand Strategy formulation for the VUCA environment. Strategic foresight is a discipline which uses proven techniques and methods for understanding uncertain futures to improve decisionmaking today. By assessing changes in the broader global landscape, synthesizing potential challenges and opportunities from those changes, and identifying actions that can

be taken in the present, foresighting empowers active shaping towards preferred future states. The methodology provides a link between future interests, concerns, and expectations to current decisions and can better focus priorities.

Strategic foresight can help address existing challenges in U.S. National Grand Strategy development. Table 1 summarizes some of the common challenges that exist with traditional approaches to strategy formulation and how integrated foresight can be used to overcome these challenges.

Table 1: Comparing Traditional Approaches to Formulating Strategy with an Integrated Strategic Foresight Approach		
	Traditional Approaches	Integrated Strategic Foresight
Considered Future States	A single predicted future state or modest variations around the status quo.	Intentionally thought-provoking scenarios that probe corner cases of possible future states.
Diversity of Perspectives	Select, small number of subject matter experts with similar backgrounds and professional experience.	Wide variety of diverse perspectives across political, demographic, and professional spectrums.
Transparency	Strategies formulated by a small number of experts and decisionmakers with limited visibility into why or how those decisions were made.	Systematic and methodological approaches that are documented and traceable inputs for decisionmaking.
Addressing Ideologic Differences	Typically relies on consensus from the participating parties, which can limit creative output and silence opposing viewpoints.	Encourages harmonization, not consensus, around common long-term interests and deliberately illuminates critical areas of disagreement.
Adaptability	Singular view of the future that is brittle to a changing environment.	Allows for agility and adaptation of the strategy, which can be strong on vision but flexible in implementation.

The context set above presents three main questions for the nation as it looks ahead to build a grand strategy: Where are we now? Where do we want to go? How do we get there?

Foresighting methodologies are designed to help uniquely answer all three of these questions as we face a VUCA environment.

Scope, Objectives, and Assumptions

The team established a broad objective for this effort:

Demonstrate through an independent, nonpartisan study how foresighting methodologies can be used to inform and develop strategies to advance U.S. well-being, national security, and other aspects of U.S. national power.

The objective of this project was *not* to create or propose a singular Grand National Strategy for the United States, but to explore a process that could facilitate more effective grand strategy development in the future.

Underneath this overarching objective, the pilot program focused on four goals:

- ◆ Demonstrate the efficacy of foresighting for national-level and grand strategic formulation.
- ◆ Identify “North Star” aspirations that highlight core principles among a diverse and balanced set of national perspectives regardless of the course for achieving them.
- ◆ Work through the process of formulating candidate grand strategies and explore how to compare their resiliency across multiple possible future states.
- ◆ Document lessons learned and recommendations that could motivate the establishment of a formal

body that integrates foresighting processes into national decisionmaking.

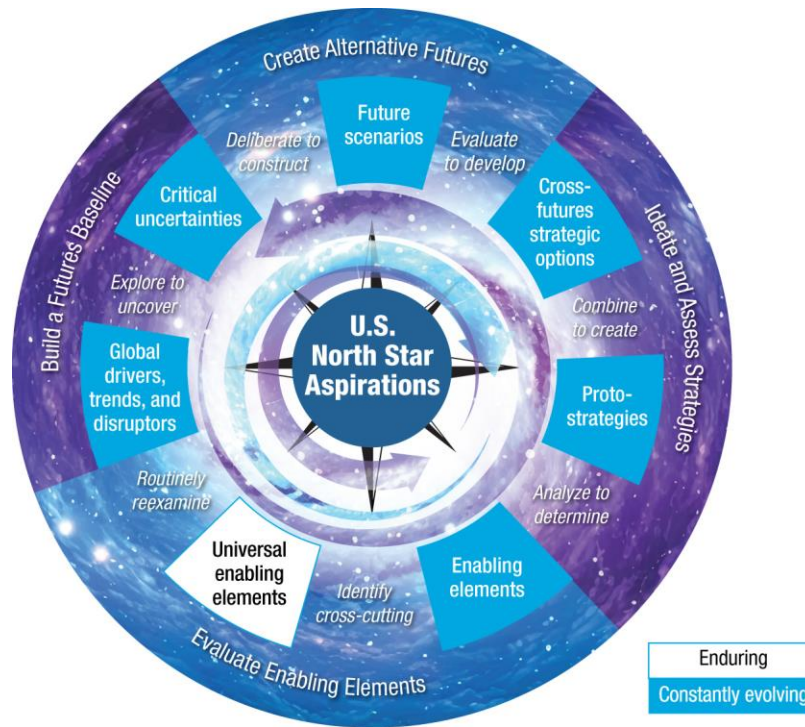
This project started with several key assumptions beyond the foundational concept of the VUCA environment and value of creating a U.S. National Grand Strategy to navigate it:

- ◆ United States leadership and democracy as a form of governance, broadly defined, are net positive influences in the world worth fostering and improving.
- ◆ The United States, as a government based on the current Constitution, would still be an entity 100 years from now.
- ◆ While the United States will continue to be based on the nation’s founding principles, there will be further evolution, interpretation, and modification.

Not all participants agreed that every one of these assumptions would hold over the next 100 years, but the assumptions were determined to be foundational to the purpose and applicability of this project.

Approach and Methodology

The pilot study of Project North Star progressed through a series of four workshops utilizing over 50 world-class foresighting experts, strategists, artists, historians, scientists, entrepreneurs, authors, artists, philanthropists, and educators of various academic backgrounds, ages, genders, ethnicities, religions, geolocations, and political affiliations. The workshops were purposefully designed to capture a wide variety of national perspectives, challenge assumptions, and push creative bounds in thinking. Intentional inclusion of participants with varying backgrounds, beliefs, and perspectives drove rich discussions. Foresighting tools were used to maximize collaborative engagement, identify



IDENTIFY NATIONAL “NORTH STAR” ASPIRATIONS

- ◆ Compose a set of aspirational end points and enduring core values representative of the people of the United States that could be built into the objectives of a National Grand Strategy.

BUILD A FUTURES BASELINE

- ◆ Scan observed changes across a wide variety of Societal, Technological, Environmental, Economic, and Political (STEEP) topics for common understanding of drivers, trends, and emerging disruptors that could shape the future strategy environment for the nation. An important part of this step is to look beyond the obvious trends and not focus too narrowly on a single lens (technology, for example, is often the dominant area of attention).
- ◆ Deliberate on critical uncertainties and their potential range of possibilities that are believed to be most crucial in driving future trajectories relevant to achieving North Star aspirations.

CREATE ALTERNATIVE FUTURES

- ◆ Develop divergent future scenarios that represent “corner cases” of potential future states, including both U.S. and international trends captured from horizon-scanning and input from participants.

IDEATE AND ASSESS STRATEGIES

- ◆ Analyze impacts, opportunities, and challenges across considered future states that can inform creative and viable strategic options.
- ◆ Construct multiple strategic options and evaluate them across factors such as power state posture, economics, social well-being, technology and innovation, and political dynamics.
- ◆ Combine strategic options to make “proto-strategies” and analyze potential resiliency and viability across alternate futures that could inform grand strategy formulation.

EVALUATE ENABLING ELEMENTS

- ◆ Identify enabling elements for each resilient and viable proto-strategy.
- ◆ Distinguish which enabling elements are “universal” or areas of investment and action that serve to advance progress across multiple viable proto-strategies. These universal enabling elements can be used to reinforce or narrow down guiding objectives that are more resilient. Progress of these enablers can be benchmarked and assessed over time.

Figure 1: National Grand Strategy formulation framework.

important friction points, deepen insights, and facilitate co-creation of new ideas.

The team started by building a common baseline of current and anticipated future states for the nation. This included analysis on anticipated trajectories and critical uncertainties around a wide variety of societal, technological, economic, environmental, and political (STEEP) framework topics. The process focused both on where the U.S. stands across a vast range of issues and national characteristics, and on the history and direction of U.S. National Grand Strategy itself. The pilot leaders consulted on which criteria to explore and through convening a panel discussion of experts on the past, present, and future of grand strategy in the United States.

The series of workshops was designed around the U.S. National Grand Strategy Formulation Framework, which was developed by the pilot leads. The Framework, as shown in Figure 1, highlights key components that build into strategic planning and their networked relationships across possible future states. A resilient U.S. National Grand Strategy is built off a combination of multiple strategic options. In order to generate those strategic options, a series of exploratory exercises was used to articulate components of the framework. The design of the framework is intentionally cyclical, having no required beginning or end, but rather emphasis is on the continual iteration of the process. The North Star and universal enabling elements have more of an enduring quality than the other components and should be relatively stable through time. The cycle itself should be refreshed and revisited based on a certain evolution of time or “trigger” events, such as disruptive global events and/or proof of a failed strategy. The North Star aspirations, as depicted in the framework, sit at the center and should serve to guide the entire process. Each of the components in the framework is briefly summarized in Figure 1 in the order they were addressed in the pilot study.

While the pilot and framework are intentionally shaped around a focus on the United States and its future, the approach of weaving foresight into decisionmaking is widely applicable for any organization needing to navigate the VUCA environment. In fact, strategic foresight is already used by several governments, global organizations, and Fortune 500 companies around the world with measured success.^{8,9}

Key Findings

Since the intent of this summary paper is to highlight the process and key insights for which the pilot study of Project North Star was employed, the in-depth details of preliminary pathfinder findings will not be presented. This is in part because a scaled effort will be needed to adequately integrate a wide and balanced set of perspectives to form robust and viable U.S. National Grand Strategy options. However, there are notable takeaways that showcase how a scaled effort could provide value by enhancing and better enabling U.S. National Grand Strategy formulation.

Finding 1: Agreement of diverse viewpoints on a national “North Star” is hard. The team approached the process seeking understanding and harmonization rather than full consensus. This was key to unveiling potential North Star aspirations that encapsulated major aspirations of the group. The interests, viewpoints, and terminology used by participants differed, sometimes significantly, between those who identified as “strategists,” those that focus on the formulation and implementation of strategy, versus as “futurists,” those that focus on systematically exploring possibilities of the future. Although the attempted melding of these different perspectives sometimes posed challenges in finding consistency and common ground in the workshop discussions, the interaction, guided by strategic foresight activities, often resulted in creative ideation and new approaches that might not have been unveiled by each perspective alone.

Throughout the pilot, participants disputed even the most basic definitions. For example, who should the “North Star” be for? U.S. persons? U.S. citizens? All like-minded partners and allies who believe in the institutions of democracy? Something broader than that?

As a result of this discourse and varying perspectives of pilot participants, a simple and intentionally ambiguous proposed North Star statement was devised:

Ensuring enduring prosperity, freedom, and democratic equality for all its people.

Just talking about those differences in opinion made it easier for the group to identify and work through friction points. This process allowed the team to clearly recognize where it did and did not agree, and where it had more work to do. Highlighting and exploiting these differences helped advance discussions on U.S. National Grand Strategy collectively, collaboratively, and more inclusively.

During the pilot, participants identified and generally agreed on a core set of future priorities for the nation based on the North Star statement. These areas were: trust in public institutions, education, democracy, equality, exploration, the right to own property, sustainability, prosperity, and health and well-being.

The participants also explored desired end points, albeit with less agreement. A few exemplar statements are highlighted below:

- ◆ The nation leads by example to global abundance and flourishing.
- ◆ Freedom, democracy, and opportunity for all is achievable in a sustainable way.
- ◆ The nation leads an enlightenment on sustainability.

- ◆ If required, the U.S. helps transition new global power states peacefully.
- ◆ Interdependence and cooperation guide us towards collective desired futures, not individual self-interest.
- ◆ The nation’s people are able to reach self-actualization.
- ◆ The nation as a protector of planetary diversity and ensures the continuing of the human species.
- ◆ The U.S. is a welcoming, distributed planetary democracy.

Finding 2: The expected future is radically different from today’s reality. Workshop participants explored a range of drivers, trends, emerging disruptors, and critical uncertainties shaping the global environment across a wide variety of topics, including but not limited to education, resources, health and medicine, global business, technology, innovation, governance, demographics, equity, immigration, religion, law, societal norms, security, defense, supply chain, climate, ethics, food and agriculture, and elections.

The future state for the nation will be radically different over the next 50 to 100 years from where it is today.

Perhaps the most surprising finding from the pilot was that participants believed even a conservative prediction of the expected future state for the nation will be radically different and transformed over the next 50 to 100 years from where it is today. Common perspectives on “pragmatic” expectations for the future by participants included the citation of major advancements in biotechnology that will likely lead to radical shifts in life expectancy, reproduction, and living off-world; climate change could render many regions uninhabitable,

generating new migration patterns and types of conflict around the world for food, water, and other valued resources; statistically “inevitable” events, such as a major earthquake in California, will have happened. Most of the world will likely have access to the internet, opening opportunities for education, innovation, business, and social change. Emerging digital mediums might give rise to personal virtual avatars that conduct most of their transactions. Wide-ranging surveillance could be the norm and segments of the population, feeling the increased tensions of the intrusive presence of artificial intelligence, might choose to “opt out.” A significant set of participants even questioned if the U.S. itself would still exist in just 50 years.

Finding 3: Multiple grand strategies can be viable in serving the nation’s North Star aspirations. During the pilot study, we used the Four Futures Model to create corner cases of the future around each archetype storyline: growth, collapse, discipline, and transformation.¹⁰ The participants identified potential challenges and opportunities presented to the United States for each scenario. These opportunity and challenge areas were then used to drive conversation about potential strategic options that could be pursued in each scenario to achieve national North Star aspirations. The participants identified a range of strategic options available: Domestic First, Selected Engagement, U.S. Primacy, Democratize Democracy, Peace as the Pillar, and Enable Global Abundance.

Next, participants were asked to creatively combine these options to create novel “proto-strategies,” first-cut macro strategies believed to be viable and resilient across futures states, that could be refined in time to create a U.S. National Grand Strategy. Eight possible proto-strategies were explored in the pilot program. Figure 2 shows how each of the strategic options map to the proto-strategies the participants developed, with short definitions for each strategy.

Pilot facilitators developed a coarse scoring schema to identify which proto-strategies were applicable in serving identified North Star aspirations across each of the considered future states. Of the proto-strategies explored, four out of eight were evaluated as being viable options across all future states explored in the pilot (proto-strategies #3, #6, #7, and #8 shown in Figure 2). This suggests that some of the identified proto-strategies can provide greater resilience across future uncertainty than others. However, many additional factors and considerations should be incorporated into grand strategy formulation. For example, one scenario might present higher degree of opportunities or threats for the United States, hence be more heavily weighted in the nation’s strategic calculus. Additionally, if the United States had an agreed upon tiered list of North Star aspirations, perhaps those within the highest tier are better served by some of the proto-strategies versus others. Since that level of national debate and discussion does not yet



Figure 2: Notional strategic options and proto-strategies for the U.S.

exist, a coarse scoring across future states is where the pilot started in its evaluation for resiliency.

Finding 4: Enabling elements are perhaps more valuable than grand strategies themselves. Finally, the pilot project developed a list of enabling elements to support all of the proto-strategies, which are categorized in Figure 3. Thirteen of these are rated as “universal” because they apply to six or more strategies (see blue italics in Figure 3).

These universal enablers are significant because they represent possible actions the nation could take today to serve national North Star aspirations, regardless of the particular strategy that is pursued at the time.

Universal enablers help bridge differences in politics or implementation approaches. The eight grand strategies discussed by the participants encompassed a wide range of political values,

<p>National Strategy and Implementation</p> <ul style="list-style-type: none"> ◆ Continuity of investments ◆ Minimize ad-hoc and cultivate proactive/anticipatory approaches to national strategy ◆ National operating system to anticipate surprises ◆ A sufficient part of the population willing/dedicated to entering public service (not just “I trust USG” but I want to work for USG”) ◆ <i>Protect U.S. crown jewels (IP, innovation, education, etc.)</i> 	<p>Diplomacy, Partnerships, and Global Well-being</p> <ul style="list-style-type: none"> ◆ Assured access to key resources ◆ <i>Enable interactive/diplomacy across geographies</i> ◆ <i>Continuous evaluation/enhancement of deterrence strategy</i> ◆ <i>Enhance critical thinking of global citizens</i> ◆ <i>Establish universal education literacies of global persons</i> 	<p>Domestic Well-being</p> <ul style="list-style-type: none"> ◆ Empower those with ability to act on North Star ◆ Enhance critical thinking of U.S. persons ◆ Literacies of U.S. persons (digital, infrastructure, foresight, sustainability) ◆ Meet basic needs of U.S. citizens (food, water, shelter, education, health) ◆ <i>Foster abundance mindset</i> ◆ <i>Established rules-based order for world</i> ◆ <i>Maximize individual agency to achieve north stars</i> ◆ <i>Establish universal access to internet/connectivity</i>
<p>Innovation</p> <ul style="list-style-type: none"> ◆ Foster “fail-fast” environment in the USG ◆ Foster national network of innovation ecosystems (government, academia, nonprofit, private, etc.) ◆ <i>Providing opportunities for all to contribute and pursue their ideas</i> 	<p>Economic</p> <ul style="list-style-type: none"> ◆ <i>Financial means necessary to deliver on needs, wants, and dreams of U.S. persons</i> ◆ <i>New economic models for U.S. persons to thrive in the world</i> 	<p>Public Trust</p> <ul style="list-style-type: none"> ◆ Establish/maintain trusted, unbiased information sources ◆ Foster transparency of information and decisionmaking ◆ Means to counter or dispel misinformation ◆ <i>Protect individual privacy</i>

Figure 3: List of universal enabling elements from the pilot.

visions for the ideal future, and notions of what activities and objectives should be prioritized. Identifying enabling elements that appeared across all or many diverse strategies can help find common ground and seed progress on essential foundational areas to deliver North Star aspirations. Therefore, this process for identifying commonalities to manage and measure progress could be key in overcoming conflicting viewpoints that will arise in future U.S. National Grand Strategy development efforts. Study findings suggest that continual progress in these enabling elements is even more valuable than progress on the grand strategies themselves.

Next Steps

The Project North Star pathfinder successfully demonstrated that integrating foresight practices into grand strategy development is useful in identifying key areas of national focus that can weather political changes and broader global uncertainty to better deliver on aspirations for the nation. However, pathfinders are just that, experiments to test out a hypothesis. For such an approach to successfully scale to a national level, there are several attributes to consider.

First, there should be a *formal role in the government* to advise on policies and investments that position the United States to reach a broader set of North Star aspirations and a strategic vision for the nation. Such an organization must have the dedicated responsibility and resources for integrating holistic strategic insights into national priorities. The absence of authority will limit the impact and effectiveness of the process, therefore such an entity would likely need to reside in the government as an independent agency free from partisan and election cycles. Other implementation options, for example, the private sector or civil

groups leading a set of consortiums, could be viable if mechanisms are put in place to maintain objectivity and seed meaningful outcomes. Whether governmental or nongovernmental, such authority will need to assess progress toward national North Star aspirations by monitoring progress of universal enablers against near-, mid-, and long-term milestones. They would also need to monitor key national decisions to evaluate change as key signposts come to fruition.

Second, a *trusted and “honest broker”* is required to expertly architect a rigorous and transparent strategic foresight process, facilitate collaborative discussion with diverse perspectives, and analyze and balance findings from foresight activities while upholding objectivity. The role of an honest broker is essential for building and maintaining integrity and trust in the process. Those facilitating the process should be free of conflict of interest or specific agendas that could drive outcomes that do not truly reflect the balance of perspectives of the nation. While decisionmakers will ultimately make choices based on a variety of factors, maintaining an objective, nonpartisan process for examining the nation’s options to shape the future will provide better results for the United States.

Third, *diverse and inclusive participation* that reflects the wide-ranging views and perspectives across the United States is needed, that also harnesses the genius and creativity that can emerge from the collective interactions. As shown in Figure 4, this should include participation from every facet of America: citizens, private corporations, government institutions, academia, etc. While the pilot program summarized in this paper incorporated a diverse set of participants, a broader set of stakeholders is needed to more wholly represent the nation’s North Star aspirations.

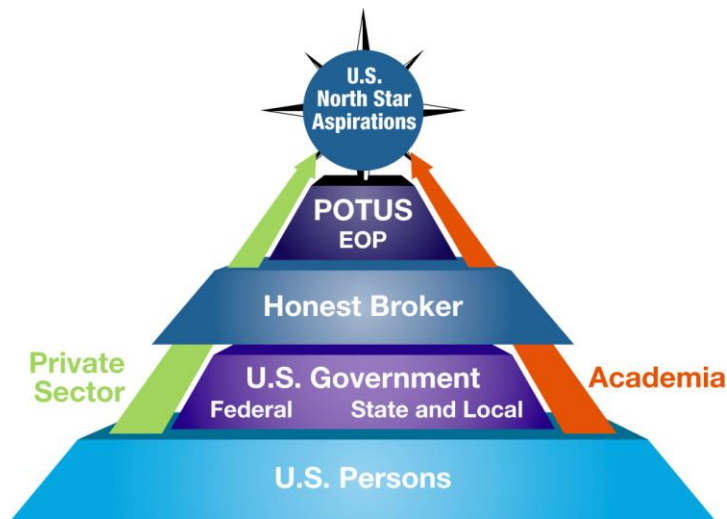


Figure 4: Notional national foresight collective.

Conclusion

A comprehensive assessment completed by New America unveiled just how much the U.S. is in its infancy in practicing and incorporating foresight into its decisionmaking.¹¹ Implementing strategic foresighting for strategy development in the United States is undoubtedly challenging given today's environment of political volatility, stovepipes, and tendency to focus on the near term. But we also must ask ourselves, without establishing a capability for foresight, can we actually maintain our democratic values and advance toward our dreams for the future in this VUCA environment? Without better methods to identify, articulate, and seed the futures we want collectively, we likely will never realize those futures. This pilot study demonstrates that structured foresight approaches can strengthen the nation's ability to develop U.S. National Grand Strategy, which will allow it to better shape and navigate toward its aspirational futures.

Acknowledgments and Participants

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References

- ¹ Roger Spitz, “The Future of Decision-Making,” *Journal of Futures Studies*, <https://jfsdigital.org/2020/07/26/the-future-of-strategic-decision-making> (July 28, 2020).
- ² Jose Kerbel, “It’s True the World Has Always Been Complex, but Not Like This,” *The Hill* (9 May 2022), <https://thehill.com/opinion/national-security/3478119-its-true-the-world-always-has-been-complex-but-not-like-this/>.
- ³ Jacques Bughin and Jonathan Woetzel, “Navigating a World of Disruption,” McKinsey Global Institute (22 January 2019), <https://www.mckinsey.com/featured-insights/innovation-and-growth/navigating-a-world-of-disruption#part1>. January 22, 2019.
- ⁴ Kara Cunzeman and Robin Dickey, “Strategic Foresight for the Space Enterprise,” The Aerospace Corporation (November 21, 2021), <https://csp.aerospace.org/papers/strategic-foresight-space-enterprise>.
- ⁵ Christopher Nichols and Andrew Preston, “Rethinking American Grand Strategy,” Oxford University Press (2021).
- ⁶ Office of the Historian, U.S. State Department, <https://history.state.gov/milestones/1945-1952/kennan>.
- ⁷ Christopher Nichols and Andrew Preston, “Rethinking American Grand Strategy,” Oxford University Press (2021).
- ⁸ René Rorhbeck and Menes Etingue Kum, “Corporate Foresight and Its Impact on Firm Performance: A Longitudinal Analysis,” *Technological Forecasting and Social Change*, Volume 129, Pages 105-116 (April 2018).
- ⁹ “IBM: 100 years of Foresight” *IBM*, https://www.slideshare.net/th_convergence/ibm-100-years-of-foresight (June 2011).
- ¹⁰ Jim Dator, “Alternative Futures at the Manoa School,” *Journal of Futures Studies*, 14(2): 1-18 (November 2009).
- ¹¹ Peter Scoblic, “Strategic Foresight in U.S. Agencies,” *New America*, <https://www.newamerica.org/international-security/reports/strategic-foresight-in-us-agencies/> (December 15, 2021).