





“But the societies which achieve the most spectacular progress in the shortest period of time are not the most tightly controlled, the biggest in size, or the wealthiest in material resources. They are societies that reward initiative and believe in the magic of the marketplace. *Trust the people—that’s the secret weapon.*”

*President Reagan || Remarks at the Annual Meeting of the
United States Chamber of Commerce, April 26, 1982*

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Introduction

The conversation about technological superiority in the era of strategic competition has led to major reforms and new initiatives aimed at leveraging America's innovation edge. But as the concept of the **National Security Innovation Base (NSIB)** gained prominence in recent years, there was no way to assess the impact of those reforms and initiatives. The **NSIB Report Card**, published by the Reagan Institute's Center for Peace Through Strength, seeks to fill that gap. It has become an authoritative and anticipated annual evaluation of the national security innovation ecosystem. Now in its third year, the NSIB Report Card is revealing important trends: where we are improving, where we are regressing, and where we are standing still—and therefore, falling further behind.

The NSIB includes a range of actors, including our national security agencies and organizations, various research centers and laboratories, universities and academia, traditional defense “primes,” commercial sector disruptors, venture capital, and the innovative systems of American allies and partners. This report card measures the health, effectiveness, and resilience of that

NSIB ecosystem and proposes recommendations for improvement.

The transition of power in Washington offers an opportunity to approach consensus issues in new ways. There has long been agreement that America's adversaries are cooperating to undermine U.S. interests, security, and prosperity—yet flagrant shortcomings in the NSIB ecosystem remain unaddressed. The dynamism of the American private sector remains the engine of U.S. global leadership in innovation, but public sector inefficacy at coordination, funding, and procurement hinders progress toward technological superiority. While China, America's pacing challenger, continues to outproduce the United States, Washington remains stuck in a self-perpetuating cycle of budgetary and appropriations dysfunction that is threatening its advantage.

This trend is not immutable. The United States has everything it needs to secure its military, economic, and technological superiority: a free and open political system that empowers its best and brightest to innovate, a prosperous economic base, and a military that is the envy

of the world. But the trends identified in this report card highlight glaring areas of weakness that whittle away at America's advantage and provide openings for its adversaries. The pace and gravity of global competition demands decisive action to address these points of vulnerability and mobilize the full potential of the NSIB ecosystem.

The NSIB Report Card is an attempt to identify those strengths and weaknesses—and chart a path forward. As knowledge partners, McKinsey & Company provided the fact base to support this assessment. Eric Snelgrove served as a subject matter expert and was instrumental in the report card's findings and recommendations. The Reagan Institute's NSIB Program Advisory Board is comprised of bipartisan, cross-sector national security stakeholders who provided invaluable input and feedback to shape this assessment. The analysis was also informed by a series of interviews with current and former leaders from both the public and private sectors. We hope this report card serves as an innovative policy tool that is useful to actors across the NSIB ecosystem.

Methodology

Structured, Repeatable Approach

1. Identify the set of indicators that are most diagnostic for assessing the health of the NSIB
2. Formulate key assessment questions and criteria to evaluate each indicator
3. Develop set of key metrics to measure each criterion
4. Assign grading for criteria and indicators based on comprehensive fact base
5. Generate recommendations for improvement
6. Update indicators, fact base, and grades on an ongoing basis

Grading Rubric

- A** Best-in-class performance globally that lives up to U.S. potential; critical source of American distinctiveness
- B** Multiple key areas of strength, with some room for growth
- C** Vulnerabilities and/or inconsistencies identified, with flat-to-declining trendline
- D** Ongoing major vulnerabilities that are significantly undermining health of the NSIB
- F** Catastrophic area of weakness that will have major implications for American technical, military, and/or economic leadership, if unaddressed

Trendline Performance evolution against March 2024 NSIB Report Card

⬆ Improving

↔ Neutral/flat

⬇ Deteriorating

NSIB Report Card grades represent a holistic baseline assessment that incorporates the quantitative and qualitative analysis underlying each indicator while also (where appropriate) benchmarking performance against U.S. potential and/or the performance of other countries. Annual reports measure improvement and/or deterioration from the prior year’s report card—as well as lack of substantive change, which may translate to a lower grade relative to the prior year.

Key Takeaways

Modernization and Acquisition Reform

NSIB ecosystem increasingly operates at two speeds: accelerated progress from the private sector on commercial technology development and capital deployment, but limited government-led progress toward modernization

- Private sector impact scaled across the ecosystem with more new defense tech entrants, strengthened partnerships between disruptors and the traditional players, and increased venture capital investment
- Longstanding government roadblocks persist, with issues like fragmented demand signals, budget delays and uncertainty, and outdated procurement frameworks overshadowing the positive impact of successful pilot programs and adoption of novel acquisition pathways, which remain the exception to the normal course of business

Manufacturing Capacity and Industrial Base

United States struggles to manufacture and field new national security tech at speed and scale

- Gaps in U.S. manufacturing capacity, delays in transitioning from proof of concept to production, and supply chain fragility remain critical risks, while peer competitors are accelerating investment in R&D, manufacturing capacity, and production

Talent Engine

Despite some progress, attracting and retaining both public and private sector NSIB workforce remains a critical national security vulnerability

- Key skill gaps include technology-enabled positions within the military and manufacturing and skilled trades, engineering leadership, and business acumen in the private sector

As complexity of threat environment and pace of global competition reach fever pitch, new leadership in Washington has an opportunity to move faster and be bolder to address these challenges in 2025

Overview of Recommendations

Modernization and Acquisition Reform

- Congress and the Department of Defense (DoD) should reform acquisition bottlenecks and reduce administrative and regulatory burdens to accelerate fielding new technologies to the warfighter.
- Congress should require all applicable DoD new start research, development, test and evaluation and procurement programs to contain unmanned, optionally manned, or autonomous capabilities.
- The DoD should create unmanned weapons systems (UxS) as-a-service contract vehicles.

Manufacturing Capacity and Industrial Base

- When Congress reauthorizes the Defense Production Act, it should refocus the program to its original purpose: meaningfully investing in defense.

Talent Engine

- The DoD should establish a Joint Program Office for Talent Management (JPO-TM).
- Congress should establish a National Security Innovation Base Green Card Recapture Program.

See pages 34-35 for additional details on proposed recommendations

Definitions of Key Indicators

“Outputs” of a Strong NSIB Ecosystem

- 1 Defense Modernization** Translation of innovation into national security capabilities with production at speed and scale through agile acquisition models
- 2 Innovation Leadership** Overall quality of U.S. research and commercialization in priority technologies and status as a center of global knowledge networks
- 3 Pull-Through for Broader National Priorities** “Multiplier” effort of NSIB on broader economy and government effectiveness

“Inputs” Driving U.S. National Security Innovation

- 4 Customer Clarity** Demand signal for customer (government) innovation priorities, including funding and acquisition pathways to match the aspiration
- 5 Innovation Capital** Holistic set of public and private financial capital—along with non-financial assets and infrastructure –available to resource the NSIB
- 6 Private Sector Innovator Base** Broad-based, self-innovating, forward-leaning ecosystem of traditional defense firms, startups, and commercial hyperscalers engaged in NSIB-relevant efforts
- 7 Public and Civil Innovation Base** Defense/national labs, other FFRDCs/UARCs and academic institutions developing (and protecting) national security-oriented research
- 8 Manufacturing Capacity and Industrial Base** Resilient, innovative production base and infrastructure that enables innovators to deliver on NSIB modernization and other strategic priorities
- 9 International Alliances and Partnerships** Level of linkage between U.S. and international partners (e.g., IP rights, data sharing)
- 10 Talent Base** Pipeline of domestic and foreign-born talent trained and working in NSIB-relevant fields across the public and private sector

Grading Summary

	Indicator	2023 Grade	2024 Grade	2025 Grade	Trend	Grading Rationale
Outputs	1. Defense Modernization	C	D	D	→	The adoption of innovative procurement approaches is on the rise. However, concerns remain about the Department's ability to integrate new capabilities into production. Provision of commercial technology is increasing in select portfolios (e.g., space communications), but progress remains stagnant in many others. Meanwhile, domestic production capabilities in core national strategic priorities (e.g., shipbuilding) continue to lag behind strategic competitors, requiring new and innovative approaches.
	2. Innovation Leadership	A-	A-	A-	→	The U.S. remains a global leader in innovation, setting technological standards worldwide and excelling in research, particularly in artificial intelligence. However, it faces critical challenges as Beijing and others invest to close the gap in emerging technologies such as AI, quantum computing, and next-generation wireless connectivity.
	3. Pull-Through for Broader National Priorities	B-	B	B	→	Defense spending continues to drive economic growth, contributing substantially to U.S. GDP. Despite advancements in collaboration (e.g., National Defense Industrial Strategy Implementation Plan and middle-tier acquisition pathways), production scalability and acquisition strategies remain hindered by outdated models and slow transitions from legacy systems.
Inputs	4. Customer Clarity	D	D	D+	↑	"Green shoots" of innovation progress (e.g., PWSA, Replicator) along clear prioritization of emerging technologies like AI, quantum computing, and hypersonics are strengthening the government's demand signals and fostering partnerships to strengthen the NSIB. However, delays in appropriations, workforce constraints, and outsized use of outdated acquisition models continue to impede the speed and scalability needed to address urgent threats, such as counter-UAS, next generation air platforms, and supply chain vulnerabilities.
	5. Innovation Capital	B-	B	B+	↑	Overall, available capital pools remain large and robust, presenting an opportunity to enhance investment efficiency. Government-backed innovation funding is growing and can improve return on investment by streamlining non-financial barriers.

Grading Summary

Indicator	2023 Grade	2024 Grade	2025 Grade	Trend	Grading Rationale
6. Private Sector Innovator Base	B	B	B+	⬆️	The number of new entrants to the NSIB is increasing, as the Department provides significant funding to scale top players and innovators forge partnerships to drive impact. DoD awards to maturing defense startups (e.g., Palantir, SpaceX, Anduril) are accelerating, though these firms still represent a small share of total contract dollars, highlighting the need for broader scalability. Meanwhile, secondary suppliers of materials and parts continue to face financial distress.
7. Public / Civil Innovation Base	B-	C+	C	⬇️	The ratio of national R&D expenditures to GDP is expected to remain around 3%. However, insufficient incentives and bureaucratic hurdles slowing the adoption of new technologies obstruct the full realization of DoD R&D objectives—challenges further exacerbated by sluggish public R&D funding growth. As intellectual property threats from China and Russia grow, bipartisan efforts to strengthen protections continue.
8. Manufacturing Capacity and Industrial Base*	--	--	D		The U.S. has made targeted improvements in production capacity and adaptability through direct support for critical gaps, adoption of innovative manufacturing capabilities, and the establishment of new production facilities. However, fragility persists deeper in the supply chain (e.g., rare earths), while stockpiles of critical weapons remain dangerously low. Meanwhile, China is widening its lead, producing twice the manufacturing output of the U.S.
9. International Alliances and Partnership	C-	C	C	➡️	In 2024, the U.S. made significant strides in strengthening technology linkages with international partners through expanded initiatives in the Indo-Pacific, amendments to ITAR that eased exports to close allies, and NATO's announcement of five new multinational cooperation initiatives. However, the true value of these efforts lies not in intent but in execution. 2025 may be a pivotal year to demonstrate tangible progress in co-developing and co-producing critical technologies.
10. Talent Base	D+	D	C-	⬆️	The aerospace and defense (A&D) talent base is improving and opportunities in advanced manufacturing are expanding. However, significant challenges remain. An estimated 1.9 million manufacturing trade-specific jobs could go unfilled through 2033 due to skill gaps, while 29% of the workforce is at or near retirement age. Additionally, the industry's turnover rate is more than three times the national average, posing a persistent challenge to workforce stability.

Inputs

*This is a new indicator in the 2025 NSIB Report Card



1. Defense Modernization

Overall grade: **D** Trend:

Translation of innovation into national security capabilities with production at speed and scale through agile acquisition models

Summary

The adoption of innovative procurement approaches is on the rise. However, concerns remain about the Department's ability to integrate new capabilities into production. Provision of commercial technology is increasing in select portfolios (e.g., space communications), but progress remains stagnant in many others. Moreover, domestic production capabilities in core national strategic priorities (e.g., shipbuilding) continue to lag behind strategic competitors, requiring new and innovative approaches.

At a glance...

+22%	Increase in OTA spend
230x	Chinese shipbuilding capacity compared to the U.S.
16	Average number of years for the U.S. to deliver an operational capability



Tailwinds

- + Nascent adoption of novel procurement pathways (e.g., Other Transaction Authorities (OTAs)) continues**
- + Space Force announced new commercial Satcom strategy**

Headwinds

- Numerous platforms hosting priority innovations/components (e.g., next-gen aircraft and ships) continue to face production delays**
- U.S. takes twice as long to deploy new operational capabilities versus China**
- Multi-year procurement continues to prioritize artillery-focused threat environment**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>1.1: NSIB innovations are converted into U.S. national security capabilities.</p>	<p>D </p> <ul style="list-style-type: none"> + RDT&E funding increase into 2024 for select NDS priorities: Select priority areas include Space Control (56%) and CBRN (27%)¹ - Decrease in DoD R&D spend may limit defense modernization capacity: RDT&E budget shrank from \$150 to \$144B in FY25; DoD Future Years Defense Program (FYDP) to shrink by 1% p.a. across the FYDP, which may be further exacerbated by inflation¹ - FY25 S&T is 3% less than FY24 request: Continued lack of funding prioritization for emerging technology areas such as AI/ML, JADC2, microelectronics, cybersecurity, and new experimentation and innovation initiatives¹
<p>1.2: U.S. effectively adopts these capabilities through modernized models for acquisition.</p>	<p>D </p> <ul style="list-style-type: none"> + Space Force announced new commercial strategy for commercial partnerships: Strategy emphasizes integration of commercial space capabilities;² Space Force also expanded commercial Satcom integration funding request to \$134M for FY25 vs. \$71M in FY24¹ + Improved flexible acquisition pathways to accelerate innovation: Proposed expansion of permissible use cases, new Defense Industrial Base Consortium OTA, and increase in OTA spend of 22% to estimated \$15B from 2023 to 2024^{1,3} + DoD is expanding commercial acquisition using FY24 NDAA regulatory changes: Changes aim to increase use of commercial solutions opening (“CSO”) in flexible procurement⁴ - Innovation accelerators fail to meet targets: Most MTA programs are delayed in 2024, resulting in 10-year average development cycles for major capability acquisition programs; Congressional concern that MTAs may not be accelerating delivery⁵
<p>1.3: U.S. effectively produces modernized capabilities at speed and scale.*</p>	<p>D</p> <ul style="list-style-type: none"> + DoD continues to fund Replicator to increase drone production: The FY25 budget requests includes \$500M funding for Replicator, aimed at accelerating rapid iteration and fielding advanced technology;¹ DoD announced second-batch of Replicator awards in November 2024⁶ - Numerous platforms hosting priority innovations/components (e.g., next-gen aircraft and ships) face production delays: DoD is taking steps to close production gap on naval vessels (e.g., \$468M for Shipyard Infrastructure Optimization Program (SIOP) amid \$8B funding for submarine industrial base),¹ however Chinese shipbuilding capacity vastly outpaces U.S.’ by an estimated 230x;⁷ despite continued investment from the CHIPS act (\$468M FY25 specific to DoD),¹ U.S. is projected to hold 14% of global 200mm+ commercial semiconductor fab capacity share vs. China’s 21% in 2032⁸ - U.S. takes twice as long to deploy new operational capabilities versus China: The U.S. takes an average of 16 years to deliver a new operational capability, more than twice as long as China, which achieves the same in just seven years⁹

*This is a new criterion in the 2025 NSIB Report Card



2. Innovation Leadership

Overall grade: **A-** Trend:

Overall quality of U.S. research and commercialization in priority technologies and status as a center of global knowledge networks

Summary

The U.S. remains a global leader in innovation, setting technological standards worldwide and excelling in research, particularly in artificial intelligence. However, it faces critical challenges as Beijing and others invest to close the gap in emerging technologies such as AI, quantum computing, and next-generation wireless connectivity.

At a glance...

61

Number of notable U.S. machine learning models versus China's 15

34%

U.S. share of top 10% most cited research in quantum compute versus China's share of 15%

4X

Amount of PRC licensed spectrum versus the U.S.



Tailwinds

- + U.S. continues to lead in number of notable machine learning models**
- + U.S. is well-positioned to lead in the global quantum technology race**
- + U.S. continues to be the global leader in AI research**

Headwinds

- China is accelerating investment in quantum technologies**
- U.S. is trailing China in 5G and 6G**
- China continues to accelerate Gen AI innovation and supercomputer development**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>2.1: U.S. leads knowledge output based on key indicators (e.g., patent volume/quality). America defines global tech standards and governance frameworks.</p>	<p>B </p> <ul style="list-style-type: none"> + U.S. continues to lead in number of notable machine learning models: U.S. leads with 61 notable machine learning models, followed by China with 15 and France with eight¹ + The U.S. is taking steps to maintain its position as global tech standards-setting leader: U.S. Senate introduced S.3849 to develop technical standards for AI and other emerging technologies;² U.S. continues involvement in international fora (e.g., ITU, 3GPP) and exports a robust set of standards for major global tech firms (e.g., U.S. tech standards for commercial space activity are reflected in many national space standards) + U.S. is well-positioned to lead in the global quantum technology race: <ul style="list-style-type: none"> • U.S. has a strong lead in quantum computing patents, with IBM, Microsoft, Google, Intel, and Northrop Grumman all ranking among the top 10 assignees³ • U.S. has three companies in the top 10 for quantum sensing patents: Lockheed Martin, Honeywell, and Northrop Grumman³ - China is accelerating investment in quantum technologies: China claims over \$15B in public quantum funding, far outpacing the United States (\$4B), although U.S. private investment is higher (\$1.3B) than China (\$44M)³ - U.S. is trailing China in 5G and 6G: China was the first to license the 6 GHz spectrum for 5G deployment in 2023 and invested significantly to increase its global leadership position (e.g., conducted 50+ bilateral engagements to gain global support for spectrum harmonization in the 6 GHz);⁴ China has four times as much licensed midband spectrum as the U.S.; U.S. is ranked 13th of 15 leading nations in licensed midband spectrum⁵
<p>2.2: U.S. is a net knowledge exporter (e.g., global citations, research university rankings).</p>	<p>A </p> <ul style="list-style-type: none"> + U.S. continues to lead in AI research: <ul style="list-style-type: none"> • Among the 100 most cited AI papers, the U.S. leads with 72 of the top-100 cited papers in 2023 (+1% increase from 2022), nearly 3x compared to the next closest country, China⁶ • U.S. universities and companies comprise nine of the top 10 most-cited institutions and were the top five contributors in terms of numbers of papers in the top 100 papers (Microsoft (13), Stanford University (11), Google (10), Carnegie Mellon University (10), Meta (8))⁶ • The top three most cited papers all came from Meta, with a combined +21,000 citations⁶ - China continues to accelerate Gen AI innovation and supercomputer development: China filed +38,000 Gen AI patents between 2014-2023—six times that of the U.S. (~6,300)⁷—and announced a new model (e.g., DeepSeek);⁸ China stopped participating in the Top500 ranking for supercomputers, which obscures ability to track progress and China’s potential leadership position (China previously held 200+ of the top 500 supercomputers, now zero are reflected in 2024)^{9,10}



3. Pull-Through for Broader National Priorities

Overall grade: **B** Trend:

“Multiplier” effect of NSIB on broader economy and government effectiveness

Summary

U.S. defense spending continues to drive economic growth, contributing substantially to U.S. GDP. Despite advancements in collaboration (e.g., National Defense Industrial Strategy Implementation Plan and middle-tier acquisition pathways), production scalability and acquisition strategies remain hindered by outdated models and slow transitions from legacy systems.

At a glance...

+2%

Growth in A&D contribution to U.S. GDP, though overall share stayed flat 2022 to 2023

\$450B

Pledged in private investment from ~100 companies for U.S. semiconductors and electronics manufacturing

\$4B

Projected private investment in DoD critical technology areas from SBA licensed funds








Tailwinds

- + A&D share of GDP rose slightly**
- + U.S. government continued to bolster critical national security technologies through OSC and CHIPS Act**
- + First round of Small Business Investment Company Critical Technology Initiative awards announced**

Headwinds

- Impact on private sector U.S. innovation base remains unclear**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>3.1: NSIB innovation improves American economic and competitiveness outcomes.</p>	<p>B+ </p> <ul style="list-style-type: none">  A&D share of GDP rose slightly: A&D’s contribution to GDP rose +2% from 2022 to 2023 to \$425B, approximately 1.6% of nominal U.S. GDP (consistent with 1.6% in 2022); the Aerospace Industries Association reports A&D accounts for 1.4% of the U.S. workforce with salaries 50% higher than the national average¹  U.S. government support continued to bolster development of critical national security technologies: CHIPS Act resulted in ~100 companies pledging \$450B in private investment for U.S. semiconductors and electronics manufacturing and \$19B of incentives have been allocated across 20 states;² Office of Strategic Capital’s (OSC) first Notice of Funding Availability (NOFA) for the \$984M was appropriated to accelerate commercialization and scale production for critical technologies³  Long-term analysis continues to suggest U.S. defense spending carries a positive multiple: Analysis revealed a \$1 increase in U.S. defense spending is estimated to generate up to \$1.20 in GDP growth⁴  Impact on private sector U.S. innovation base growth remains unclear: There is no coordinated reporting to assess the impact of early-stage national security funding (e.g., AFWERX/DIU SBIR grants, IQT investments, NSIN fellowships) on private sector growth
<p>3.2: NSIB innovation advances government efficiency/effectiveness across non-defense priorities.</p>	<p>C </p> <ul style="list-style-type: none">  Small Business Administration (SBA) announced its first round of Small Business Investment Company Critical Technology (SBICCT) Initiative awards: The SBICCT Initiative selected 13 funds, which are projected to invest over \$4B in nearly 1,700 portfolio companies focused on DoD critical technology areas; these funds plan to invest across asset classes including seed, venture, growth, buyout, direct lending, special situations, and fund-of-funds⁵  National Defense Industrial Strategy Implementation Plan (NDIS-IP) recommended more cross-government collaboration: Avenues identified for further partnership include the Departments of Commerce, Energy, Justice, State, and Treasury across topics in production and supply chains, as well as cybersecurity⁶



4. Customer Clarity

Overall grade: **D+** Trend:

Demand signal for customer (government) innovation priorities, including funding and acquisition pathways to match the aspiration

Summary

“Green shoots” of innovation progress (e.g., Proliferated Warfighter Space Architecture (PWSA), Replicator) along clear prioritization of emerging technologies like AI, quantum computing, and hypersonics are strengthening the government’s demand signals and fostering partnerships to strengthen the NSIB. However, delays in appropriations, workforce constraints, and outsized use of outdated acquisition models continue to impede the speed and scalability needed to address urgent threats, such as counter-UAS, next generation air platforms, and supply chain vulnerabilities.

At a glance...

+32%

**Increase to DIU allocation in FY25
(\$1.3B vs. \$1B in FY24)**

45

**States that have enacted their own AI
regulatory legislation**

174

**Days the DoD operated under
Continuing Resolutions in FY24**


Tailwinds

- + DoD continued to pilot and grow novel acquisition pathways**
- + Continued demand for non-traditional primes in 2024**

Headwinds

- Lack of congressional action and funding continues to constrain progress on major initiatives**
- Novel acquisition pathways launched but remain exceptions over norm**
- Unclear commitment from Congress to scale acquisition pathways in outyears**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>4.1: U.S. government clearly communicates critical technology priorities needed to support national security missions.</p> <p>B </p>	<ul style="list-style-type: none">  DoD leadership sought to clarify roles of various innovation agencies through partnerships and executive orders: Multiple executive orders clarified CDAO’s position as an AI-coordinator; multiple novel acquisition pathways (e.g., Replicator, QTS) were founded or will receive continued support in FY25^{1,2}  Important partnerships formed: CDAO and DIU signed MOU with high-level areas of focus;³ Pentagon announced the creation of Artificial Intelligence Rapid Capabilities Cell (AI RCC) under the oversight of CDAO^{3,4}  OSC releases FY25 investment strategy: The investment strategy defines how it will assess national security impact to provide clarity to potential awardees⁵  NDS-aligned markets receive lower priority in FY25 vs. FY24: Broader push for sustainment, readiness, and top-line budget growth restrictions from FRA; priority NDS markets such as UGVs and USV & UUV received -15% and -50% in outyear FYDP funding¹  States accelerated AI legislation, but lack coordination: In absence of comprehensive federal guidelines on AI, in FY24 45 states (up from 31 in FY23) introduced a total of 700 AI-related bills (compared to ~190 in FY23), with 113 enacted into law⁶
<p>4.2: U.S. government provides sufficient and stable funding to acquire and scale critical technology solutions, while making needed tradeoffs.</p> <p>F- </p>	<ul style="list-style-type: none">  Continued demand for non-traditional primes: Unclassified obligations for the top 10 nontraditional primes grew 78% in 2024 (\$2.5B) versus 2023 (1.4B);¹ additionally, new contract announcements include: ~\$250M for Anduril to deliver advanced air capabilities⁷ and \$100M for Vannevar Labs to deliver digital intelligence assets⁸  Novel acquisition pathways launched but remain exceptions over norm: Replicator only has confirmed obligations through FY25, which muddies overall demand signal¹  AI spend is disaggregated across the budget with limited oversight from CDAO: Of \$1.8B allocated for AI innovation in discrete, unclassified “AI” budget lines for FY25, \$715M exist under unique programs while \$1.1B is embedded in program sub-lines without direct oversight from the CDAO¹
<p>4.3: Acquisition pathways that operate at the speed of relevance are available and well-utilized.</p> <p>C- </p>	<ul style="list-style-type: none">  Discrete contract opportunities remain aligned to legacy technology and nascent pathways have yet to prove they can move beyond the pilot stage and acquire capabilities at scale: Initiatives to field critical technologies at speed (e.g., Replicator, PWSA) have delivered pilot capabilities, but remain early stage. Many (e.g., Replicator) have yet to receive funding guarantees beyond 2025, despite the need to spiral future tranches^{1,9,10,11,12}  DoD has had only one, on-time, full appropriation since 2011: Some critical innovation priorities (e.g., CCA) have now been delayed by multiple consecutive budget delays, resulting in significant (>1 year) overall program delays¹³



5. Innovation Capital

Overall grade: **B+** Trend:

Holistic set of public and private financial capital—along with non-financial assets & infrastructure—available to resource the NSIB

Summary

Overall, available capital pools remain large and robust, presenting an opportunity to enhance investment efficiency. Government-backed innovation funding is growing and can improve return on investment by streamlining non-financial barriers.

At a glance...

+4%

Projected increase in federal R&D funding from FY24 to FY25

\$31B

Defense tech VC investments in 2024—four consecutive quarters of growth

3%

Projected 2024 ratio of the defense budget to GDP, considerably lower than Cold War era of 9%

Tailwinds

- + U.S. leads other countries with the highest gross domestic expenditures on R&D**
- + Projected federal R&D is expected to grow by +4% in FY25**
- + Private capital is re-accelerating its investment in defense tech**

Headwinds

- Defense awards for innovative NSIB players remain a fraction of defense spending overall**
- Defense spend as a ratio of GDP is historically small given DoD-stated security priorities**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>5.1: Economy-wide R&D investment is sufficient to drive desired national security outcomes.</p>	<p>A- </p> <ul style="list-style-type: none">  U.S. leads in the highest gross domestic expenditures on R&D: In 2021, the U.S. had the highest total expenditure of \$806B, followed by China with \$667B¹  Projected federal R&D is expected to grow by +4% in FY25: DoD ranks second in R&D growth, up +2%, with HHS leading with an +8% increase²  Growth was seen in R&D expenditures by U.S. academic institutions and federally funded R&D centers (FFRDCs): Academic institution R&D spend increased to \$108B in 2023, a +11.2% increase over 2022;³ FFRDCs spent \$29B, increasing +12.7% over 2022⁴
<p>5.2: Ample capital exists across sources for incremental and “breakthrough” R&D.</p>	<p>B+ </p> <ul style="list-style-type: none">  Public funding for innovation progresses: SBICCT selected first group of licensees and Green Light Approved funds;⁵ OSC released RFI for the \$1B loan program⁶  Private capital is re-accelerating: Four consecutive quarters of defense tech VC growth in 2024, growing from \$4.4B in Q1 to \$14.7B in Q4⁷  Defense tech VC investment increasingly tied to AI: Investments associated with AI, a modernization priority, rose from 44% in 2023 to 55% of total defense tech VC in 2024; all defense-tech fundraising rounds greater than \$1B were related to AI⁷  Non-CVC defense tech VC appetite remains high: Investments in this area grew by +33% in 2024 to \$31B from \$23B in 2023⁷
<p>5.3: Sufficient capital and other resourcing (e.g., infrastructure) is available to scale companies with national security applications.</p>	<p>C+ </p> <ul style="list-style-type: none">  Defense primes continue to invest in innovators: Corporate VC (CVC) by primes grew +38% p.a. between 2018-2024;⁷ multiple defense primes are partnering with disruptors, including Lockheed Martin’s acquisition of Terran Orbital (satellite bus mfg.),⁸ RTX partnering with AMD (next-gen multi-chip packaging),⁹ and AeroVironment’s acquisition of BlueHalo (CUAS, laser comms)¹⁰  Defense awards for innovative NSIB players remain a fraction of defense spending overall: Top-10 VC-backed defense company awards represent <1% of defense obligations in 2024 and are concentrated in the top-3 startups¹¹  Defense spend as a ratio of GDP is historically small given the threat level faced by potential adversaries: 2024 defense spending is ~3% of GDP amidst growing security concerns from China, Russia, Iran, and North Korea, which stands in stark contrast to the Cold War era of 9%¹²  Critical non-financial barriers facing disruptors persist (e.g., lengthy acquisition cycles) and emerging DoD support programs do little to address these non-financial challenges¹³



6. Private Sector Innovator Base

Overall grade: **B+** Trend:

Broad-based, self-innovating, forward-leaning ecosystem of traditional defense firms, startups, and commercial hyperscalers engaged in NSIB-relevant efforts

Summary

The number of new entrants to the NSIB is increasing, as the Department provides significant funding to scale top players and innovators forge partnerships to drive impact.

DoD awards to maturing defense startups (e.g., Palantir, SpaceX, Anduril) are accelerating, though these firms still represent a small share of total contract dollars, highlighting the need for broader scalability. Meanwhile, secondary suppliers of materials and parts continue to face financial distress.

At a glance...

+72%	Growth in DoD awards for top-10 defense-tech companies
64%	Publicly held A&D component suppliers showing financial distress in a 2024 sample
3.6%	Five-year CAGR for total R&D across top defense primes



Tailwinds

- + Contract awards for nontraditional players are growing**
- + Defense primes/integrators are partnering with innovators to deliver contracts**
- + Defense innovators are taking risks to develop products ahead of demand**

Headwinds

- Limited support for sub-tier new entrants despite financial stress**
- Defense primes are growing R&D slower than U.S. industry average**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>6.1: There exists sufficient breadth and depth in the NSIB to spur innovative outcomes.</p>	<p>A- </p> <ul style="list-style-type: none"> + Big bets on nontraditional players are growing: Awards to the top 10 defense tech players grew by 72% to \$2.5B in 2024 from \$1.4B in 2023 (2022-2023 growth was 19%); defense tech seed funding rounds grew 12% annually over the past two decades (2002-2024), with a notable spike in companies raising seed funding over 2016-2021 and slowdown in recent years^{1,2,3} - Vendor base remains concentrated: Top 100 FY24 contractors accounted for 62% of obligated dollars, same as FY23^{1,3} - Limited support for sub-tier new entrants despite financial stress: Continued acquisition focus on integrators limit new component suppliers from direct DoD funding; 64% of publicly held suppliers showed declining revenue or moderate-high financial risk, down from 73% in FY23⁴
<p>6.2: The NSIB is self-catalyzing innovation ecosystems ahead of direct demand.</p>	<p>B- </p> <ul style="list-style-type: none"> + Defense primes/integrators partnering with innovators: <ul style="list-style-type: none"> • L3 Harris and Palantir are developing intelligent ground system to connect soldiers and sensors⁵ • Booz Allen Hamilton is teaming up with Palantir to improve collaboration among partner nations⁶ • Saildrone and Thales Australia formed a partnership to develop an uncrewed system for anti-submarine missions⁷ + Defense innovators are taking risks ahead of demand: <ul style="list-style-type: none"> • Anduril unveiled the Barracuda family of air-breathing, software-defined expendable autonomous air vehicles⁸ • Lockheed launched Astris AI (secure AI solution for industry) and HEX (hybrid-electric vertical takeoff and landing demonstrator)⁹ • Palantir and Anduril Industries are in talks with about a dozen tech companies to form a consortium that will jointly bid for U.S. government work¹⁰ - Defense primes are growing R&D slower than U.S. industry average: Five-year compound annual growth rate (CAGR) for total R&D across top defense primes (i.e., Boeing, General Dynamics, Lockheed, Northrop, and RTX) was 3.6% from 2018-2023;¹¹ five-year CAGR for R&D across U.S. industries was 4.7% between 2019-2024¹²



7. Public/Civil Innovation Base

Overall grade: **C** Trend: 

Defense/national labs, other FFRDCs/UARCs and academic institutions developing (and protecting) national security-oriented research

Summary

The ratio of national R&D expenditures to GDP is expected to remain around 3%.

However, insufficient incentives and bureaucratic hurdles slowing the adoption of new technologies obstruct the full realization of Department R&D objectives—challenges further exacerbated by sluggish public R&D funding growth.

As intellectual property threats from China and Russia grow, bipartisan efforts to strengthen protections continue.

At a glance...

+0.2%

Growth in public/civil R&D funding 2023-2024, slows vs. 2018-2024 growth of +5.7% p.a.

\$600B

Estimated annual value of intellectual property and technology stolen by the CCP



Tailwinds

- + DoD technology transfer program received Federal Laboratory Consortium recognition**
- + Bipartisan IP protection policy momentum continues with the introduction of the PAID Act**

Headwinds

- Overall public/civil R&D funding growth slows**
- IP threats from China persist and are expected to increase from Russia**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>7.1: There is sufficient funding for public sources of innovation (e.g., government labs, FFRDCs) and research alignment to national security priorities.</p>	<p>B </p> <ul style="list-style-type: none"> + Ratio of R&D expenditure to GDP is expected to remain consistent: The ratio of total national R&D expenditures to GDP increased to 3.44% in 2022, compared to 3.34% in 2021; the ratio is expected to continue to exceed 3% in 2023 and 2024¹ - USD(R&E) Strategic Vision and Critical Technology Areas align R&D goals, but lack incentive structure to drive adoption: Defense Innovation Board’s 2024 study highlighted systematic challenges that drive a culture of risk aversion and complacency within the DoD for technology adoption, including lack of understanding of how industry works, little to no collaboration with warfighters to understand their needs, and deference to legacy bureaucratic expectations² - Overall public/civil R&D funding growth slows: FY24’s federal R&D \$200B spending estimate represents a +0.2% YoY increase from FY23, whereas FY23 increased +10.3% from FY22 and growth between 2018-2024 was +5.7% p.a.³
<p>7.2: Defense/civil labs catalyze scalable NSIB advances, and the research is adequately protected.</p>	<p>C- </p> <ul style="list-style-type: none"> + DoD technology transfer program received recognition: DoD received nine technology transfer awards from the Federal Laboratory Consortium, underscoring DoD’s commitment to accelerating the commercialization of lab technologies⁴ + Bipartisan IP protection policy momentum continued: Two House of Representatives Republicans introduced the Protecting American Innovation and Development (PAID) Act, which is meant to “expose foreign adversaries illegally accessing American IP and to protect U.S. businesses’ competitiveness and our national security”⁵ - Transparency around utilization of federal technology licenses declined: Reporting of the number of active licenses for federally-developed technologies from the National Institute of Standards and Technology (NIST) ceased in FY22⁶ - IP threats from China persist: The United States Trade Representative (USTR) declared China a priority for the 2024 watch list of U.S. trading partners’ protection and enforcement of intellectual property rights⁷ - IP threats from Russia are expected to increase: The National Counterintelligence and Security Center published a bulletin in November 2024 documenting Russian sabotage operations targeting Europe’s DIB, warning such activities increases the risk to U.S. companies at home and abroad⁸



8. Manufacturing Capacity and Industrial Base*

Overall grade: **D**

Resilient, innovative production base and infrastructure that enables innovators to deliver on NSIB modernization and other strategic priorities

Summary

The U.S. has made targeted improvements in production capacity and adaptability through direct support for critical gaps, adoption of innovative manufacturing capabilities, and the establishment of new production facilities.

However, fragility persists deeper in the supply chain (e.g., rare earths), while stockpiles of critical weapons remain dangerously low. Meanwhile, China is widening its lead, producing twice the manufacturing output of the U.S.

At a glance...

95% Import rate for rare earths consumed by U.S.

32% China's share of global manufacturing output, 2023

1 Estimated number of weeks until U.S. critical stockpile depletion in a potential conflict with China

Tailwinds

- + U.S. defense and space production output grew to a five-year high
- + New production facilities protecting national interests are being funded and built in 2024

Headwinds

- Sustained supply chain risks include availability of raw materials and parts
- U.S. manufacturing capacity is far outstripped by Chinese capacity
- Simulations reveal fragility in U.S. stockpile

*This is a new indicator in the 2025 NSIB Report Card

Criteria Details

Criteria Grades	Datapoints since last report card
<p>8.1: The Industrial Base has sufficient capacity to respond to NSIB needs.</p>	<p>D</p> <ul style="list-style-type: none"> + Nearshoring and supply chain diversification progress continued: DoD’s Manufacturing Capability Expansion and Investment Prioritization (MCEIP) Office issued awards totaling \$285.7M across areas such as domestic mining and production of lithium, which supports the commitment to onshore materials and minerals critical for defense applications¹ + Defense production continues to rise: U.S. defense and space equipment output, measured by the Federal Reserve’s monthly industrial production (IP), grew to a five-year high in 2024;² commitments to send military assistance to Ukraine, Taiwan and Israel and the resulting need to restock the U.S. armory are contributing factors³ + New production facilities protecting national interests are being funded and built in 2024: Intel was awarded up to \$3B under CHIPS to expand manufacturing of leading-edge semiconductors for the U.S. government;⁴ Bell announced a new Texas facility to ramp up production of the U.S. Army’s Future Long Range Assault Aircraft (FLRAA)⁵ – Sustained sub-tier supply chain risks: The USGS 2024 Mineral Commodity Summaries reported that the U.S. imported >95% of the total rare earths that it consumed;⁶ China announced new export bans on key semiconductor commodities (e.g., antimony, gallium, germanium)⁷ – U.S. manufacturing capacity is far outstripped by Chinese capacity: In 2023, China held 31.6% of global manufacturing output, growing from 28% in 2018; U.S.’ 2023 share was 15.9%, and 18% in 2018, suggesting China has been extending its lead and eating into U.S. share;⁸ China has 230x more building capacity than the U.S. – The U.S. supply chain is not equipped for a potential conflict with China: If such a conflict occurred in the near future, the U.S. is projected to run out of munitions and expend its entire inventory of LRASMs in one week^{9,10}
<p>8.2: The Industrial Base is modernizing manufacturing techniques to respond to NSIB needs, shocks and global competition.</p>	<p>D</p> <ul style="list-style-type: none"> + Major U.S. defense manufacturers are leaning into additive manufacturing: SpaceX utilized additive manufacturing, reducing Raptor 3 parts by ~50%;¹¹ Lockheed announced strategic additive manufacturing initiatives for Mako hypersonic missile system¹² – Little to no improvement on DoD adoption of additive manufacturing: No major capabilities have been added since DoD announced its Additive Manufacturing Strategy in 2021¹³ – The U.S. outsources critical manufacturing techniques to China: Nearly all forgings and castings for U.S. weapons systems are outsourced to China¹⁰



9. International Alliances and Partnerships

Overall grade: **C** Trend:

Level of linkage between U.S. and international partners (e.g., IP rights, data sharing)

Summary

In 2024, the U.S. made significant strides in strengthening technology linkages with international partners through expanded initiatives in the Indo-Pacific, amendments to ITAR that eased exports to close allies, and NATO's announcement of five new multinational cooperation initiatives.

However, the true value of these efforts lies not in intent but in execution. 2025 may be a pivotal year to demonstrate tangible progress in co-developing and co-producing critical technologies.

At a glance...

+46% Increase in U.S. FMS vs. 2023

+28% Increase in U.S. DCS vs. 2023

Tailwinds

- + New initiatives were announced with allies in the Indo-Pacific region**
- + ITAR reform is underway to speed up the rate of technology transfer**

Headwinds

- U.S. Foreign Military Sales (FMS) processes are interfering with core national security and foreign policy objectives**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>9.1: There are strong linkages between the U.S. and allies/partners in priority technology areas.</p>	<p>C+ →</p> <ul style="list-style-type: none"> ⊕ Alliances continue to show early signs of progress against tech development objectives: NATO Innovation Fund announced its first investments in four companies in June;¹ NATO launched five new multinational cooperation initiatives that enhance deterrence and defense² ⊕ 2024 U.S. Foreign Military Sales (FMS) reached record levels: FY24 FMS totaled \$118B, which represents a 46% increase from FY23 levels³ ⊕ 2024 Direct Commercial Sales (DCS) increased year-over-year: FY24 DCS totaled \$201B, which represents a 28% increase from FY23 levels³ ⊕ U.S. announced initiatives to bolster defense and security cooperation in the Indo-Pacific: U.S.-Japan alliance announced new initiatives in 2024, including Japan’s acquiring operational capability of the Tomahawk Land Attack Missile (TLAM) system and co-development of cutting-edge technologies;⁴ DoD signed memorandum with Singapore to advance defense innovation;⁵ Taiwan launched a new agency, modeled after the DIU, to accelerate domestic development of defense tech;⁶ National Science Foundation and India’s Department of Science and Technology allocated \$5M to fund joint tech development projects (known as iCET)⁷ ⊕ U.S. continues to strengthen AUKUS trilateral security partnership: U.S. made investments in shared marine industrial base;⁸ Lockheed announced Thales Australia will manufacture rocket motors and warheads for guided multi-launch rocket system missiles⁹
<p>9.2: U.S. balances protection of national security and IP while fostering innovation.</p>	<p>C- →</p> <ul style="list-style-type: none"> ⊕ Efforts to speed up the rate of technology transfer are underway: In May 2024, State Department amended ITAR to expedite the licensing of select defense articles and services to Australia, UK and Canada; significant unlock to the cumbersome framework¹⁰ ⊖ U.S. Foreign Military Sales (FMS) processes are interfering with core national security and foreign policy objectives: FMS Tiger Task Force’s report identified numerous cases of delays that directly endanger U.S. national security (e.g., \$22B of FMS to Taiwan approved by Congress, but not set for delivery until 2027)¹¹



10. Talent Base

Overall grade: **C** Trend: 

Pipeline of domestic and foreign-born talent trained and working in NSIB-relevant fields across the public and private sector

Summary

The aerospace and defense (A&D) talent base is improving, and opportunities in advanced manufacturing are expanding.

However, significant challenges remain. An estimated 1.9 million manufacturing trade-specific jobs could go unfilled through 2033 due to skill gaps, while 29% of the workforce is at or near retirement age. Additionally, the industry's turnover rate is more than three times the national average, posing a persistent challenge to workforce stability.

At a glance...

330k

Estimated unmet demand for welders by 2028

29%

A&D workers in or nearing the retirement-eligible window or older (age 55+)

13%

Average A&D industry turnover versus industry average of 3.8%











Tailwinds

- + The A&D/NSIB-relevant public and private workforce grew +4.8% between 2022-2023**
- + Uptick seen in number of apprenticeships within advanced manufacturing**
- + DIU scaled AI-powered app to better leverage public defense talent across temp work**

Headwinds

- Industry continues to face critical trade skills shortage**
- Retirement bubble remains a major concern**
- Industry turnover is more than three times the national average**

Criteria Details

Criteria Grades	Datapoints since last report card
<p>10.1: U.S. attracts, retains, and develops domestic public and private NSIB talent (e.g., availability, quality, diversity), particularly in STEM and skilled trades.</p>	<p>C </p> <ul style="list-style-type: none">  The A&D/NSIB-relevant public and private workforce* grew +4.8% between 2022-2023, outpacing the national average workforce growth of +1.7%; growth remained inline with prior periods' (+4.9% from 2021-2022)¹  Uptick seen in number of apprenticeships within advanced manufacturing: 59,505 registered apprentices served in the advanced manufacturing industry, a +43% increase over the past 5 years²  A&D/NSIB-relevant jobs are starting to fill faster: Median job posting duration across A&D/NSIB-relevant industries was 26 days (between January to November of 2024), a +10% improvement relative to 2023 (median of 29 days); A&D/NSIB industry median job posting duration remains higher than tech industries** (26 days vs. tech's 22 days from January to November 2024)³  DIU scaling AI-powered app to better leverage public defense talent across temp work: GigEagle, which uses AI to identify specialized talent for Pentagon project on short-term basis, will expand to better serve operations across U.S. military forces⁴  Industry continues to face a critical trade skills shortage: An estimate of 1.9 million manufacturing jobs could remain unfilled through 2033 due to skill gaps;⁵ for example, unmet demand for new welding professionals expected to reach 330,000 jobs by 2028⁶  Retirement bubble remains a major concern: The A&D/NSIB-relevant industries are graying, with 29% in or nearing the retirement-eligible window or older (age 55+) compared to 17% in the tech industry** and 24% in the U.S. (2023)⁷  Industry turnover is more than three times the national average: A&D experiences a 13% turnover rate, excluding retirements, which is considerably higher than the national average of 3.8%⁸
<p>10.2: U.S. leads in attracting and retaining a robust pipeline of foreign talent with in-demand skills needed for national security missions.</p>	<p>D </p> <ul style="list-style-type: none">  Professional, scientific, and technical services industry share of initial H-1B visa approvals increased: Share of total approvals grew to 49.1% in 2024 compared to 47.6% in 2019⁹  Manufacturing industry share of initial H-1B visa approvals decreased: Share of total approvals fell to 9.3% in 2024 compared to 11.5% in 2019⁹  China intensified poaching of top talent globally: Huawei offering to triply pay for top tech talent across global tech hubs in the U.S., Taiwan, and parts of Europe¹⁰

* Industries classified as A&D / NSIB-relevant: Aerospace products and parts manufacturing; ship and boat building; engine, turbine, and power transmission equipment manufacturing; computer and peripheral equipment manufacturing; navigational, measuring, electromedical, and control instruments manufacturing; electronic component and product manufacturing
 ** Telecom, media, and technology (TMT) industries classified as Tech: software publishers; data processing, hosting, and related services, computer systems design and related services

Recommendations for Improvement

Modernization and Acquisition Reform

- 1. Congress and the Department of Defense (DoD) should reform acquisition bottlenecks and reduce administrative and regulatory burdens to accelerate fielding new technologies to the warfighter.** With the current focus on increasing government efficiency and reducing bureaucratic red tape, there is an opportunity to reform procurement and reduce the time and cost it takes to acquire new capabilities. Senator Roger Wicker’s “Restoring Freedom’s Forge: American Innovation Unleashed” proposal, as well as the implementation of the Commission on Planning, Programming, Budgeting, and Execution (PPBE) recommendations, would drastically improve the government’s ability to engage with a broader cross section of the national security innovation ecosystem and boost competition across the defense industrial base.
- 2. Congress should require all applicable DoD new start research, development, test and evaluation and procurement programs to contain unmanned, optionally manned, or autonomous capabilities.** The pace of technological advancement in autonomy, robotics, and artificial intelligence favors unmanned and optionally manned systems. Unmanned systems offer scalability, adaptability, and mass, providing a tactical force multiplier unavailable to manned systems while simultaneously acting as a strategic deterrent.
- 3. The DoD should create unmanned weapons systems (UxS) as-a-service contract vehicles.** Leveraging the FY24 NDAA Section 809 “Pilot Program for Anything-as-a-Service” authorities, the DoD should create dedicated unmanned weapons systems services contracts that allow for the iterative development, real-world training, and fielding-at-scale of UxS. The events in Ukraine, Israel, and throughout the Middle East have demonstrated the value of shortening the feedback loop between end users and UxS weapon system development, design, and delivery. This type of flexibility is challenged in conventional requirements and procurement processes and fails to prepare our service members for the dynamic future threat environment.

Recommendations for Improvement

Manufacturing and Industrial Base

- 4. *When Congress reauthorizes the Defense Production Act, it should refocus the program to its original purpose: meaningfully investing in defense.*** Reauthorization of the Defense Production Act's (DPA) authorities, which are set to lapse in September 2025, offers an opportunity revitalize the core purpose of DPA and address NSIB priorities, including critical gaps in the production and availability of essential materials, components, and munitions needed to maintain military readiness and meet modernization objectives. Congress should provide robust appropriations and loan guarantees for Title III projects tied to explicit national defense priorities to catalyze private sector investment, authorize fast-tracking for permitting for DPA projects, and provide incentives to build and sustain the defense industrial base workforce. This includes passing reforms to the DPA that provide delegated authorities to the SECDEF, access to federal lands and airspace, and streamline the permitting and regulatory approval of approved projects.

Talent Engine

- 5. *The DoD should establish a Joint Program Office for Talent Management (JPO-TM).*** The Office would be responsible for implementing bold reforms to recruitment, retention, and the management of DoD military and civilian personnel to help design a skilled, efficient, and talented workforce of the future. This includes conducting a review of existing hiring authorities created to bypass faults within the standard civilian hiring process and implementing reforms related to personnel security clearances, compensation, experience, and term appointments.
- 6. *Congress should establish a National Security Innovation Base Green Card Recapture Program.*** Congress could maximize the benefits of our immigration system, prevent bureaucratic waste, and boost access to the STEM talent and skilled trades required to propel our innovation ecosystem and bolster the defense industrial base. This program would “recapture” previously unused green cards, including over 100,000 following the COVID-19 pandemic, making them available to individuals with the skills sought after by the NSIB. This would simply ensure that green cards that Congress had allocated in previous years end up being used, per Congressional intent, and are not permanently lost. This recommendation appeared in last year’s report card, and the urgency of implementing this program continues to grow as workforce shortages impact our nation’s manufacturing capacity and research in critical technologies.

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