

Prepared by the National Artificial Intelligence Advisory Committee

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## Introduction

The National Artificial Intelligence Advisory Committee (NAIAC, or the Committee) was established under Section 5104 of the National Artificial Intelligence Initiative Act of 2020 (Pub. L. No. 116-283, the "Act"), signed into law by President Donald J. Trump on December 20, 2019. NAIAC is mandated under this Act to advise the President and the White House on matters related to the National Artificial Intelligence Initiative.

NAIAC members prepared this initial report for the incoming Trump administration with the intention to serve two purposes: (1) to outline near-term actionable steps the administration can take to advance shared AI policy goals that further America's competitiveness and leadership, and (2) to initiate a sustained dialogue with the administration's AI leadership, in compliance with the Committee's mission and purpose.

The recommendations in this report have been developed to align with the administration's stated AI priorities as reflected in referenced actions and reports, and the Committee's continued focus on priorities articulated in the Act and in its deliberations and work since 2022. NAIAC members welcome the opportunity to meet with designated administration officials to hear updated priorities and feedback, and to collaborate further to address key AI policy questions of national importance.

#### **NAIAC's Mandate**

In compliance with its congressional mandate, NAIAC is committed to its duty to provide guidance in the key areas outlined in Section 5104 (d)(1) of the Act, such as the current state of United States competitiveness and leadership in AI research and development, advancement of the science of AI, workforce-related issues, and the development of measures for governance and accountability (see Appendix A for the full list from the NAIAC charter). These areas are consistent with four <u>areas of emphasis</u> established by the first Trump administration: (1) innovation in AI research and development, (2) advancing American industry with AI, (3) workforce development for an AI-enabled economy, and (4) alignment of AI with American values.

In short, the priorities highlighted in this report reflect NAIAC's duty to advise the President and executive branch on ways to address crucial challenges and identify pathways to strengthen the United States' Al leadership and success. To achieve these goals, NAIAC evaluates the societal and economic opportunities and impacts of AI technologies and provides recommendations to support groundbreaking innovation, robust workforce development, interagency coordination, and safety and standards that facilitate broader adoption of AI systems.

### **Priority Issues and Proposed Solutions**

Drawing on the Committee's work to date as well as its stated duty, this report highlights ten (10) timely AI policy issues and proposed solutions, which collectively provide an opportunity for the administration to achieve its goals to advance the United States' continued AI leadership and competitiveness. These ten priority policy issues are:

- 1. Al and the Workforce
- 2. Al Awareness and Literacy
- 3. Al in Education

- 4. Al in Science
- 5. Al in Health
- 6. Al in Government
- 7. Al to Empower Small Business, Entrepreneurs & Nonprofits
- 8. Al Governance
- 9. Al for the American People
- 10. Al in Law Enforcement

### **Cross-Cutting Priorities for AI Policy**

This report addresses the highlighted priorities separately to provide action-oriented guidance. However, these are complex, interrelated issues that cross multiple domains and ultimately require an integrated approach in developing comprehensive solutions. As such, these recommendations are anchored in five essential crosscutting priorities:

- 1. Promoting U.S. Competitiveness and Innovation: U.S. AI leadership, in both economic and societal domains, requires a vast, well-prepared workforce, across each region and sector in this country. We need pathways to bring AI benefits to all of "Main Street" America. To achieve this goal, we will need to develop and scale AI readiness through workforce programs that prioritize skill development, ensure dignity, and provide a strong support system for small businesses and entrepreneurs. These efforts could be tied together in a "GI Bill" for AI skills and education that equips Americans with the capabilities essential for thriving in an AI-driven economy.
- **2. Increasing Government Capacity and AI Literacy:** Governing AI effectively requires a nation with a strengthened capacity, by both citizens and government, for understanding and using as well as governing AI. Expanding AI literacy and expertise within government agencies is essential to understanding, managing, and deploying AI with appropriate governance and guardrails.<sup>2</sup>
- **3. Advancing National Priorities:** Al has transformative potential across critical sectors, including education, small business, entrepreneurship, healthcare, and science. Special attention to these foundational areas is necessary for our country's continued success and leadership.<sup>3</sup>

<sup>1</sup> Executive Order 13859 ("Maintaining American Leadership in Al"), issued by President Trump in February 2019, highlights American workforce development and AI readiness as one of the five fundamental principles of the American AI Initiative (Section 1(c)). EO 13859 also outlines a strategic objective for federal agencies to support training and education initiatives in pursuit of this goal (Sections 2(e), 7).

<sup>2</sup> Executive Order 13960 ("Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government"), issued by President Trump in December 2020, establishes a framework for using AI to improve Government operations while "foster[ing] public trust...and remain[ing] consistent with all applicable laws, including those related to privacy, civil rights, and civil liberties" (Section 2(a)). Section 7 of the Order outlines several initiatives intended to improve AI implementation expertise in government. In addition, President Trump issued Executive Order 13932 ("Modernizing and Reforming the Assessment and Hiring of Federal Job Candidates") in June 2020 to promote skills- and competency-based federal hiring practices that better meet evolving federal workforce needs.

<sup>3</sup> Executive Order 13859 highlights the need for technological breakthroughs in AI to promote scientific discovery, economic competitiveness, and national security; this is the first principle of the American AI initiative outlined in the Order (Section 1(a)). The Order then establishes a strategic objective for federal agencies to advance this principle through investment in AI R&D and applications of AI (Sections 2(a), 4, 5). Building on this, President Trump's FY 2021 Budget included a significant increase in nondefense AI R&D investments across a wide range of agencies. The Networking & Information Technology Research & Development (NITRD) Supplement to the President's FY2021 Budget provides more details on these investments.

- **4. Leveraging Public-Private Partnerships:** Public-private partnerships that engage communities in harnessing the power of AI will enhance program design and public trust in AI applications. These partnerships should engage a wide range of stakeholders (e.g., government officials, workers, teachers, and students) in decision-making and policy discussions. Advancements should be pursued through an accelerated effort that prioritizes the future of our students and workforce; the safety of our citizens; and the overall success of industry, small businesses, entrepreneurs, and nonprofits. Administration policies should foster AI opportunities for our entire country and uphold economic advancement for families, states, and communities—leaving no one behind.
- **5. Advancing American Leadership in AI Governance:** Nations worldwide are developing policies to govern AI development and use. The U.S. has undertaken important and ongoing AI governance efforts led by the National Institute of Standards and Technology (NIST) and other agencies. A comprehensive and unified U.S. policy on AI governance is essential to safeguard American competitiveness, innovation, and values. Governance of AI is critical to sustaining a healthy business and innovation environment, and to protecting rights.<sup>5</sup>

### **Next Steps**

NAIAC members look forward to meeting with the administration to discuss the near-term recommendations outlined in this report and to identify additional AI-related priorities on which the Committee can offer ongoing guidance. This report has outlined actionable steps the administration can take to advance AI policy goals and offers the foundation for ongoing partnership with executive branch agencies. The Committee looks forward to continuing to collaborate to address key AI policy questions of national importance.

<sup>4</sup> President Trump's 2019 update to the <u>National AI Research and Development Strategic Plan</u> introduces the strategic priority of expanding public-private partnerships to accelerate advances in AI. The NITRD <u>Supplement to the President's FY2021 Budget</u> affirms this priority.

<sup>5</sup> Several core principles of the American AI Initiative outlined in President Trump's Executive Order 13859 promote American leadership in AI governance by calling for the United States to (1) ensure **public trust** in AI technologies and "protect civil liberties, privacy, and American values in their application"; (2) advance **technical standards** alongside the safe testing and deployment of AI technologies; and (3) foster an **international environment** conducive to American research and industry (Section 1). The Order also outlines a governance-related strategic objective for the federal government, requiring it to pursue technical standards that "reflect Federal priorities for innovation, public trust, and public confidence in systems that use AI technologies; and develop international standards to promote and protect those priorities" (Section 2(d)). Executive Order 13960 builds on these principles and strategic objectives by outlining a framework for trustworthy AI use *within* the federal government "that fosters public trust and confidence while protecting privacy, civil rights, civil liberties, and American values" (Section 1).

# Insights at a Glance

#### **FOCUS AREA 1: WORKFORCE**

#### **ISSUE:**

Realizing the benefits and mitigating the risks of Al's influence on work and the workforce requires robust administration leadership and investment. This will ensure that American workers secure meaningful work, enjoy smooth transitions between jobs, expand future career opportunities on the job, and contribute their talents to the nation's economic growth and success.

#### **READ FULL DESCRIPTION**

#### **SOLUTION A:**

Coordinate federal, state, and local collaboration on workforce issues and host an intergovernmental summit on AI and American prosperity within the first year.

#### **SOLUTION B:**

Advance an interagency strategy to streamline workforce development and worker support efforts for people who become, or are at risk of being, displaced by AI technologies.

#### **FOCUS AREA 2: AI AWARENESS AND LITERACY**

#### **ISSUE:**

Lack of AI literacy and fear of AI are significant barriers to its wide-scale adoption in the United States.

#### **READ FULL DESCRIPTION**

#### **SOLUTION:**

Launch a national campaign to promote a basic understanding of AI throughout the U.S. by offering learning materials and programs for all Americans.

#### **FOCUS AREA 3: AI IN EDUCATION**

#### **ISSUE:**

Although AI can enhance educational tools and curricula, obstacles currently prevent many students and teachers from making full use of these advances.

#### **READ FULL DESCRIPTION**

### **FOCUS AREA 3: AI IN EDUCATION, continued**

#### **SOLUTION A:**

Direct the Department of Education to partner with NIST and incorporate input from key stakeholders to develop an AI Risk Management Framework (AI RMF) Profile tailored to education and educators.

#### **SOLUTION B:**

Launch "Education Hackathons" that focus attention and efforts on areas of highest priority, include key stakeholders for direct input, and adopt NIST AI RMF best practices in the development and testing of AI curricula and/or tools.

### **FOCUS AREA 4: AI IN SCIENCE**

#### **ISSUE:**

A lack of sufficient funding for multidisciplinary scientific research in AI creates missed opportunities for AI applications to address problems of great societal importance that private industry lacks sufficient commercial incentives to pursue.

#### **READ FULL DESCRIPTION**

#### **SOLUTION:**

Develop an AI funding strategy that will: (1) evaluate AI investments in funding agencies across the science ecosystem, and (2) task a cross-agency coordinating body with establishing and expanding funding priorities for AI across this ecosystem.

#### **FOCUS AREA 5: AI IN HEALTH**

#### **ISSUE:**

Despite spending significantly more on health care than other advanced economies, the United States does not gain high returns on these investments for health outcomes, satisfaction with care, or administrative efficiencies. The safe and responsible incorporation of AI into the American health sector may present opportunities to lower administrative costs and improve clinical quality for all Americans.

#### **READ FULL DESCRIPTION**

#### **SOLUTION A:**

Recommend that the National Science and Technology Council (NSTC) Select Committee on Artificial Intelligence establish a Subcommittee on Healthcare focused on the safe, responsible use of linked, longitudinal clinical and administrative personal health information (PHI) to enable open access to cost-effective, real-world, evidence-based clinical protocols that healthcare organizations can deploy without IP constraint.

### **FOCUS AREA 5: AI IN HEALTH, continued**

#### **SOLUTION B:**

Reconstitute a Federal Health Information Technology (HIT) Task Force to better coordinate federal agency budgets for Health IT; establish cost benchmarks impacting the health sector; and test, validate, and scale AI-based reforms to healthcare administration systems.

#### **FOCUS AREA 6: AI IN GOVERNMENT**

#### **ISSUE:**

Safe and effective deployment of AI systems requires consistent and timely guidance from the highest levels of government.

#### **READ FULL DESCRIPTION**

#### **SOLUTION:**

Fully staff and resource the National AI Initiative Office (NAIIO) and other key AI leadership roles in the Executive Branch.

#### **ISSUE:**

There is considerable variation in federal agency capacity to integrate modern AI systems without significant upgrades or overhauls.

#### **READ FULL DESCRIPTION**

#### **SOLUTION:**

Establish an AI model evaluation, testing, and assessment framework that builds on the success of the Federal Risk and Authorization Management Program (FedRAMP).

# FOCUS AREA 7: AI TO EMPOWER SMALL BUSINESS, ENTREPRENEURS & NONPROFITS

#### **ISSUE:**

Al tools and technologies often require substantial up-front investment and ongoing maintenance and regulatory compliance costs, which can be prohibitive for small businesses with limited budgets.

#### **READ FULL DESCRIPTION**

#### **SOLUTION:**

Launch a Task Force led by the Small Business Administration (SBA) that works directly with the White House and includes public-private partners to help create a repository of use cases, best practices, and tools for small businesses and nonprofits to learn about and pilot emerging technologies.

#### **FOCUS AREA 8: AI GOVERNANCE**

#### **ISSUE:**

Strengthening American leadership in Al innovation requires advancing the science of Al safety and security.

#### **READ FULL DESCRIPTION**

#### **SOLUTION A:**

Invest in American leadership in AI safety by developing and publicly releasing guidelines and evaluation practices that produce baselines for model security.

#### **SOLUTION B:**

Authorize and increase funding to support NIST and the AI Safety Institute's capacity to advance robust evaluation of AI and the science of AI safety.

#### **ISSUE:**

International AI governance efforts have developed rapidly in recent years and have included a range of approaches, including regulation, global summits, bilateral and multilateral agreements, and national AI safety institutes. Global alignment on AI governance approaches is needed.

#### **READ FULL DESCRIPTION**

#### **SOLUTION:**

The Executive Branch can demonstrate international leadership by facilitating alignment on AI development and governance.

### **FOCUS AREA 9: AI FOR THE AMERICAN PEOPLE**

#### **ISSUE:**

The United States lacks a robust Al innovation ecosystem to support Al advances that would benefit the American people, but which private industry lacks sufficient incentives to pursue. Further action can be taken to steer administration priorities and support toward Al innovations that advance the interests of those who have been left behind by technology.

#### **READ FULL DESCRIPTION**

#### **SOLUTION A:**

At the February 2025 Paris AI Action Summit, announce a list of AI priorities to benefit all Americans, alongside a moonshot effort to build AI-powered solutions for one of those priorities.

#### **SOLUTION B:**

The Office of Science and Technology Policy (OSTP) can launch a public call for comment on Americans' priorities for administration action on AI, accompanied by a commitment to release a national strategy for an "AI for the American People" initiative.

### **FOCUS AREA 10: AI IN LAW ENFORCEMENT**

#### **ISSUE:**

Americans face a growing array of Al-driven and Al-enhanced threats to their personal digital safety.

**READ FULL DESCRIPTION** 

#### **SOLUTION:**

Develop a comprehensive federal plan to protect individual digital safety by establishing a White House-level cross-agency task force that coordinates government agency collaboration to identify and combat these threats.

# Recommendations

#### **FOCUS AREA 1:**

### AI AND THE WORKFORCE

- ▶ **ISSUE:** Artificial intelligence, both directly and indirectly, will have a profound impact on the American economy and pathways for Americans to earn a living. Realizing the benefits and mitigating the risks of Al's influence on work and the workforce requires robust administration leadership and investment. Only then can we ensure that American workers win in the Al age by securing meaningful work, enjoying smooth transitions between jobs, expanding future career opportunities when they are on the job, and contributing their talents to the nation's economic growth and success.
- ► **SOLUTION A:** Coordinate federal, state, and local AI collaboration on workforce issues. Integrate AI policy discussions addressing work and the workforce into the administration's intergovernmental engagement with state and local officials (e.g., governors, mayors and county executives, attorneys general, state legislators, and their national associations). Announce the intent to host an inclusive, multi-stakeholder intergovernmental summit on AI and American prosperity within the first year.

**CONTEXT:** Economic conditions in states, regions, and local communities will determine the effects of AI on American workers. States are already developing AI legislation and regulation, and local networks and institutions are taking action to respond to the needs of employers and workers. A productive all-of-society approach to AI and the workforce starts with bringing everyone together—employers and labor; private enterprise and nonprofit organizations; federal, state, and local governments; advocates and researchers; and frontline workers and executives.

▶ **SOLUTION B:** Streamline workforce development and worker support efforts for people who become, or are at risk of being, displaced by AI technologies. Advance an interagency strategy to provide people impacted by AI with effective workforce training as well as public assistance programs that deliver streamlined administration and excellent customer service. This strategy should ensure that displaced workers can receive critical information and assistance (e.g., application and eligibility support) efficiently and with dignity. The Committee also recommends that the administration seek out opportunities to use data-driven, AI-enabled solutions to make this response more agile, effective, and efficient.

**CONTEXT:** To best contribute to America's growth and success, people facing Al-induced labor disruptions may need support to regain their footing after a job loss or to keep pace with the changing needs of employers. This support not only includes help with skills development in Al and other areas; it also includes help addressing critical needs such as food, health care, and housing as people navigate job transitions. Too often, current worker skills programs are too narrow to be useful, and public assistance programs are too difficult for people to navigate and use. These obstacles can delay workers' reentry to the workforce.

#### **FOCUS AREA 2:**

### AI AWARENESS AND LITERACY

- ▶ **ISSUE:** Lack of AI literacy and fear of AI are significant barriers to its wide-scale adoption in the United States. Multiple studies show alarmingly low levels of AI awareness and adoption by average Americans.
- ► **SOLUTION:** Launch a national campaign to promote a basic understanding of AI throughout the U.S. by offering learning materials and programs for all Americans.

**CONTEXT:** Al offers great opportunities for all Americans. However, the readiness of the American public to understand, access, trust, and adapt to an Al-infused world remains limited. Al literacy, which encompasses both familiarity with and adoption of Al by average Americans, can prepare Americans for the challenges and opportunities presented by Al and help people make informed choices about Al in their jobs, businesses, and livelihoods. There is a particularly significant opportunity to prepare those most likely to be left behind as Al advances—including women and underrepresented communities. A campaign to improve Americans' Al literacy could:

- Announce a White House-hosted Al Literacy Summit: Bring together philanthropic leaders, select federal agencies, and key stakeholders convened by NAIAC at its 2023 and 2024 community engagement listening sessions.<sup>1</sup>
- **Convene External Stakeholders and Federal Agencies:** Leverage this collaboration to develop the strongest approach for a national campaign that supports and motivates Americans to learn about AI basics and helps them effectively navigate the opportunities and challenges presented by AI.
- Offer Al Basic Training: Provide Al fundamentals classes, specialized courses, and certifications in Al
  and related fields to prepare students and workers for careers in Al. Such a program could expand on
  presently allocated federal dollars administered by the National Telecommunications and Information
  Administration (NTIA) to support digital literacy.
- **Provide Public Information Resources:** Develop easy-to-understand AI-oriented resources such as websites, online courses, videos, and infographics to educate the general public, with special attention paid toward supporting underrepresented communities.

<sup>1</sup> Minutes of these listening sessions are available at the following links: June 20, 2023 [link], June 22, 2023 [link], June 27, 23 (Session A) [link], June 27, 2023 (Session B) [link], July 9, 2024 [link], July 10, 2024 [link], July 11, 2024 [link]

#### **FOCUS AREA 3:**

### AI IN EDUCATION

- ▶ **ISSUE:** The integration of AI into educational tools and curricula presents an unprecedented opportunity to enhance student learning, prepare the next generation for jobs in an AI-enabled economy, and streamline administrative tasks. However, significant obstacles currently prevent many students and teachers from making full use of AI tools. The administration can play a unique role in increasing AI access and use, supporting state and local school administrators, standardizing safety protocols, suggesting best practices for education-focused AI systems, and encouraging investments that are not currently incentivized in private industry.
- ► **SOLUTION A:** Direct the Department of Education to partner with NIST and incorporate input from key stakeholders to develop an AI Risk Management Framework (RMF) Profile tailored to education and educators. The Department could release the Profile with resources such as FAQs and "myth-buster" guides to help educators and families understand both the possibilities and limitations of AI (see also AI Literacy Solutions, Focus Area 2).
- ► **SOLUTION B:** Launch "Education Hackathons" that focus attention and efforts on areas of highest priority, include key stakeholders for direct input, and adopt NIST AI RMF best practices in the development and testing of AI curricula and/or tools.

**CONTEXT:** The administration is uniquely positioned to strengthen U.S. competitiveness by fostering innovation in educational AI that the market may otherwise not foster. Disparities in access to technology between urban and rural areas, as well as among different socioeconomic groups, too often limit the ability of all students to benefit equally from AI in education.

• Including key stakeholders—teachers, administrators, students in K-12 systems and higher education, and representatives from a broad set of communities (e.g., rural, Native American, urban)—in the planning and execution of the events and materials outlined in these recommendations will ensure the tools created address actual educational needs.

**NIST AI RMF Profile for Education:** Bringing together NIST's expertise in AI risk mitigation and education representatives' subject matter expertise will support the development of a flexible governance framework to monitor existing and new AI education tools, thereby providing coordinated guidance and fostering trust in those tools.

- NIST's expertise in establishing adaptable, stakeholder-informed risk frameworks will be invaluable in establishing governance protocols for educational AI.
- This guidance should explore the use of Large Language Models that do not access the entire internet but instead use fenced off and vetted data sources that provide more reliable results.

**FAQs and Myth-buster Guides:** Misconceptions and unrealistic expectations around AI can hinder its adoption and trust in educational settings. Providing accessible resources, guiding questions, and myth-busting materials will help dispel these misconceptions and support informed decisions on AI use in education.

 An independent expert panel, modeled after the Food and Drug Administration (FDA) <u>advisory committees</u>, could be created to provide ongoing scientific and technical advice on the safety, effectiveness, and value of AI tools in education. This committee could assist in establishing criteria for evaluating AI tools and curricula to help schools make more informed, evidence-based decisions regarding their use. **Al Hackathons:** Programs such as Al hackathons, carefully designed with thoughtful stakeholder engagement, could invite new and cross-sector teams to develop Al-driven educational tools and curricula that respond to the needs of particular communities, integrate robust privacy safeguards, and involve a broad set of stakeholders.

- Hackathons can also provide an opportunity to request that government agencies publish relevant datasets, expanding the corpus of publicly available federal data.
- To support the use of tools developed through Hackathons and other programs that comply with the NIST AI RMF Profile for Education (outlined in Solution A), the government could provide block grants to states to enable their continued participation in the development, testing, and integration of AI systems.

### **FOCUS AREA 4:**

### AI IN SCIENCE

- ▶ **ISSUE:** Insufficient funding for multidisciplinary scientific research in AI creates missed opportunities for AI applications to address problems of great societal importance that private industry lacks sufficient commercial incentives to pursue.
- ➤ **SOLUTION:** Develop an AI funding strategy that will: (1) evaluate AI investments by funding agencies across the federal science ecosystem, including the National Science Foundation (NSF), NIST, National Institutes of Health (NIH), Department of Energy (DOE), Department of Transportation (DOT), United States Department of Agriculture (USDA), and the Department of Defense and Defense Advanced Research Projects Agency (DOD/DARPA), and (2) task a cross-agency coordinating body with establishing and expanding funding priorities for AI, including robust AI evaluation, across this ecosystem.

**CONTEXT:** Investment in AI research has produced multiple benefits to the AI ecosystem. Many of the building blocks from which powerful AI systems are built come from fundamental research published in journals and shared at conferences. This progress in turn has advanced national priorities that further the public interest, including American innovation and competitiveness and economic and national security. Several key efforts are needed to sustain these contributions to national priorities:

- Expanding AI expertise across a wider spectrum of scientific inquiry to enrich human capital within industry, government, academic, and nonprofit spheres, extending beyond the expertise offered by researchers trained at AI-focused research institutions.
- Advancing the science of AI testing and evaluation by (1) building on NIST leadership in this area, including the <u>AI Safety Institute</u>, (2) addressing critical sociotechnical issues in AI deployment and use, and (3) exploring emerging AI directions, including agentic AI and embodied/robotic AI.
- Investing in the computational and data infrastructure to support AI for scientific discovery, including extending and further funding programs such as the <a href="National Artificial Intelligence Research Resource">National Artificial Intelligence Research Resource</a> (NAIRR) pilot.
- Increasing funding to train graduate students (e.g., by funding Integrative Graduate Education Research and Traineeship (IGERT) programs) who will contribute to US competitiveness in Al-enabled discovery across all sciences.

#### **FOCUS AREA 5:**

### AI IN HEALTH

- ▶ **ISSUE:** The United States spends significantly more on health care than other advanced economies but does not gain high returns on these investments for health outcomes, satisfaction with care, or administrative efficiencies. Although the Health Information Technology for Economic and Clinical Health (<u>HITECH</u>) Act invested over \$30 billion to facilitate widespread adoption of certified electronic health records, the health sector stubbornly remains one of the only sectors to see productivity decline. NAIAC sees great opportunities to safely and responsibly incorporate AI in lowering administrative costs and improving clinical quality for all Americans.
- ► **SOLUTION A:** Recommend that the National Science and Technology Council (NSTC) <u>Select Committee</u> <u>on Artificial Intelligence</u> establish a Subcommittee on Healthcare focused on the safe, responsible use of linked, longitudinal clinical and administrative personal health information (PHI) to enable open access to cost-effective, real-world, evidence-based clinical protocols that healthcare organizations can deploy without IP constraint.

**CONTEXT:** Healthcare generates exabytes of data annually, but only a tiny fraction of that information has been used to train generative AI models. There are many reasons for this: the fragmented nature of the healthcare market, regulatory barriers on responsible data use, the relatively high cost of data curation, and the variety of data types, among other challenges. Making health data available for model development can help realize the full potential of AI in the healthcare market by unleashing a marketplace of tools to detect disease progression, personalize treatment recommendations, uncover rare patterns in health data, and accelerate research. A "whole of government" committee can work to address the myriad legal, regulatory, ethical, commercial, and privacy considerations associated with this effort.

▶ **SOLUTION B:** Reconstitute a Federal Health Information Technology (HIT) Task Force to better coordinate budgets for Health IT at agencies such as the Veterans Health Administration, Department of Defense, and Centers for Medicare and Medicaid Services (CMS). This task force could (1) establish administrative cost benchmarks impacting the health sector, and (2) test, validate, and scale AI-based reforms to improve performance in areas such as prior authorization.

**CONTEXT:** Excess administrative costs in healthcare are estimated to account for over \$100 billion that could otherwise lower consumer out-of-pocket costs, employer premiums, and government budgets. The industry would benefit from benchmarks on administrative costs, opportunities for regulatory reform to accelerate savings opportunities, and research test beds to develop alternative approaches to administrative transactions, all of which it currently lacks. A focused effort that is led by the White House and uses a "whole of government" approach can (1) leverage the federal government's capacity as an operator of insurance and provider networks to establish administrative cost baselines that benefit the private sector and (2) harness its roles as a regulator and R&D investor to accelerate the development of AI-powered products and services that lower those administrative costs.

#### **FOCUS AREA 6:**

### AI IN GOVERNMENT

- ▶ **ISSUE:** Safe and effective deployment of AI systems requires consistent and timely guidance from the highest levels of government. AI also presents important opportunities to improve the efficiency and effectiveness of government operations in serving the needs of the American people.
- ► **SOLUTION:** Fully staff and resource the National AI Initiative Office (NAIIO) and other key AI leadership roles in the Executive Branch.

**CONTEXT:** The administration should fill key leadership roles to capitalize on the potential for AI to enhance government effectiveness and efficiency and provide needed leadership and oversight. NAIAC recommends supporting U.S. leadership with a fully staffed and resourced <u>National AI Initiative Office</u> (NAIIO), which was established under law signed by President Trump in 2019. Committee members also believe that the incoming administration could benefit from assigning a senior leader in the Executive Office of the President to oversee AI-related activities. For example, the administration might appoint a Chief Technology Officer (CTO) as the prior Trump administration did with the appointment of Michael Kratsios.

With a fully staffed NAIIO (including a Director who reports to the CTO), the CTO can more effectively execute the administration's priorities. These efforts could build on collaboration with other federal entities, such as (1) the US Chief Information Officer (CIO) when federal agencies implement AI, (2) the Office of Science and Technology Policy (OSTP) Director to guide R&D investments, (3) the Office of Information and Regulatory Affairs (OIRA) within OMB to inform economically significant regulations that lower burdens and maximize benefits, and (4) the NSTC Select Committee on AI to ensure tighter agency collaboration and coordination in service to these priorities.

Additionally, this AI leadership structure in the Executive Office of the President could oversee agency action on numerous key issues including:

- Positioning the U.S. as the Global AI Leader.
- **Creating a Centralized Oversight Body:** Serve as Chair of the NSTC Select Committee on AI to ensure consistent implementation of AI policies across all agencies.
- **Developing a Federal AI Data Strategy:** Produce a data governance framework to align and drive agency participation in the collection, management, and sharing of high-quality, standardized, and coordinated data through platforms such as <u>data.gov</u>.
- **Increasing Inter-Agency Collaboration:** Continue to foster collaboration between agencies to share best practices, lessons learned, and resources.
- **Supporting Public-Private Partnerships:** Engage with industry leaders, academia, and nonprofits to stay ahead of AI advancements, integrate responsible AI practices into federal use cases, and facilitate collaborative voluntary agreements on responsible AI development.
- **Enhancing Innovation.** Balance innovation and risk management with the help of agency CAIOs, empowering agencies that may otherwise see AI integration purely from the risk perspective.
- **Continuing Implementation of AI Ethics Guidelines:** Building on the Trump Administration's Executive Order on Promoting the Use of Trustworthy AI in Government, OSTP's AI Bill of Rights, and

NIST's <u>AI RMF</u>, continue to develop and enforce comprehensive guidelines for AI use within the federal government, including mechanisms for continuous oversight and the mitigation of bias in AI systems.

- ▶ **ISSUE:** There is considerable variation in federal agency capacity to integrate modern AI systems without significant upgrades or overhauls.
- ► **SOLUTION:** Establish an AI model evaluation, testing, and assessment framework that builds on the success of the <u>Federal Risk and Authorization Management Program</u> (FedRAMP) in democratizing federal agency access to modern, safe, and secure cloud computing platforms.

**CONTEXT:** While Al presents a great opportunity to improve government efficiency and effectiveness, the implementation challenges in realizing this potential in a smart, timely, and risk-managed way are also significant. Despite variation in federal agency operations, there is nevertheless precedent for identifying ways to safely, responsibly, and consistently deploy technology across agencies.

Rather than each agency addressing these issues on their own, progress could occur more quickly and safely by providing consistent approaches that can be instituted *across* agencies. FedRAMP provides precedent for this model of a shared set of standards for federal agency technology, offering benefits to agency operations and private sector technology providers alike.

In moving to accelerate the implementation of AI tools and solutions in government, the CTO, in collaboration with the CIO and Chief Performance Officer (CPO) of OMB, could identify high priority digital services (e.g., applying for veteran benefits, enrolling in Social Security, filing federal taxes) to serve as benchmarks for judging the performance of public or private AI models.

#### **FOCUS AREA 7:**

# AI TO EMPOWER SMALL BUSINESS, ENTREPRENEURS & NONPROFITS

- ▶ **ISSUE:** Al tools and technologies often require substantial up-front investment, which can be prohibitive for small businesses with limited budgets. Further, maintaining Al systems and following associated laws and regulations can require additional expenses beyond that of the initial purchase.
- ➤ **SOLUTION:** Launch a Task Force led by the Small Business Administration (SBA) that works directly with the White House and includes public-private partners (e.g., National Economic Council, Departments of Labor and Commerce, U.S. Chamber of Commerce, National Council of Nonprofits) to help create a repository of use cases, best practices, and tools for small businesses and nonprofits to learn about and pilot emerging technologies.

**CONTEXT:** Small businesses and nonprofits will need guidance on a range of AI-related topics such as avoiding harms (e.g., AI bias), ensuring compliance with regulations such as data privacy and security laws, and promoting the responsible use of AI in hiring, workplace management, and other business practices. Many small businesses and nonprofits lack in-house AI expertise, making it difficult to implement and manage AI solutions effectively. Employees may also require specialized training to use AI tools, adding to the overall cost

and time investment associated with AI. The SBA has the opportunity to address these challenges and support small business, entrepreneurs, and nonprofits in navigating both the use of AI and the regulatory landscape, which can be challenging without legal and other resources.

To establish this Task Force, SBA should consider (1) naming a Task Force director within the first 180 days of the administration and (2) building a permanent Task Force structure with other agencies that will provide resources and support by:

- Developing partnerships between small businesses, nonprofits, and academic institutions to provide expertise, internships, and collaborative projects focused on AI adoption.
- Creating low-interest loan programs specifically for small businesses and nonprofits that want to invest in AI solutions.
- Providing tax credits or deductions for investments in Al-related technologies, R&D, and employee training to make Al adoption more financially feasible.
- Establishing targeted grants for the adoption of AI technologies, helping to offset the high initial costs.
- Aligning with National Artificial Intelligence Research Resource (NAIRR) research opportunities and funding for small business and nonprofits.
- Creating education and awareness tools to help business owners understand their responsibilities under existing laws, so they benefit from the safe and responsible use of AI.
- Implementing NAIAC's <u>Year 1 Report</u> recommendation to "Create a multi-agency task force to develop frameworks for small- and- medium-sized organizations to adopt trustworthy AI."<sup>2</sup>

SBA should also consider sharing a Task Force plan with the White House by September 2025.

### **FOCUS AREA 8:**

### AI GOVERNANCE

- ▶ **ISSUE:** Strengthening American leadership in AI innovation requires advancing the science of AI safety and security.
- ► **SOLUTION A:** Invest in American leadership in AI safety by developing and publicly releasing guidelines and evaluation practices that provide baselines for model security.
- ► **SOLUTION B:** Authorize and increase funding to support NIST and the AI Safety Institute's capacity to advance robust evaluation of AI and the science of AI safety.

**CONTEXT:** NIST and the AI Safety Institute are charged with advancing the science, practice, and adoption of AI safety across a spectrum of risks, including those to national security, public safety, and individuals.

• Without assurances and benchmarks for AI safety, the market for AI will struggle due to lack of trust by investors and end users. A shared understanding of safety guardrails in model development and deployment will promote innovation. As recommended in the AI in Science section of this memo

<sup>2</sup> NAIAC, Year 1 Report, (May 2023), p. 28.

(see Focus Area 4), federal funding of robust evaluation and Al safety research—through support to NIST and to the science agencies investing in peer-reviewed work to advance measurement science—could yield significant downstream benefits for the growth of U.S. Al innovation to support the public interest.

- The AISI plays a central role in translating research into the practices of AI safety across a spectrum of risks and working in collaboration with international safety institute partners to advance global practices of AI safety. To fulfill this role, the AISI needs greater capacity and the ability to hire highly sought, highly skilled talent. The AISI's current budget is approximately \$10 million; according to the World Economic Forum, venture capital investment in AI over the last five years was approximately \$290 billion. Promoting American leadership in AI safety will require a significant increase in AISI's budget.
- ▶ **ISSUE:** International Al governance efforts have developed rapidly in recent years and have included a range of approaches, including regulation, global summits, bilateral and multilateral agreements, and national Al safety institutes. Global alignment on Al governance approaches is needed.
- ► **SOLUTION:** The Executive Branch can demonstrate international AI leadership by facilitating alignment on AI development and governance.

**CONTEXT:** The wide range of recent global AI governance initiatives includes:

- The United Nations High-Level Advisory Body on Al's "Governing Al for Humanity," which includes 7 recommendations for advancing inclusive, global governance of Al (September 2024).
- Publication by the Group of Seven (G7) of <u>Guiding Principles</u> to promote global AI safety, as well as a <u>Code of Conduct</u> for organizations developing advanced AI systems (October 2023).
- The UK AI Safety Summit, during which participating countries signed the <u>Bletchley Declaration</u> on AI Safety (November 2023).
- Adoption by the European Parliament of the European Union (EU) Al Act (March 2024).
- The AI Seoul Summit, during which participating countries signed the <u>Seoul Ministerial Statement</u> for advancing AI safety, innovation, and inclusivity (May 2024).
- The inaugural <u>convening</u> of the International Network of AI Safety Institutes, hosted by the U.S. AI Safety Institute (November 2024).

NAIAC proposes several recommendations intended to promote international cooperation in the development of effective, trustworthy AI governance, some of which have been previously published as NAIAC recommendations (cited below):

- Internationalize the NIST AI RMF to establish a common global language on AI risk and risk management. Harmonized approaches to risk management can also promote regulatory cooperation across borders, facilitating compliance by companies in the U.S. and allied countries.<sup>3</sup> The UN High-Level Advisory Body on AI (HLAB AI) final report, with a recommendation to "Create an AI Standards Exchange," reiterates the importance of a standardized approach to risk management to ease international collaboration.<sup>4</sup>
- Establish a U.S.-based Multilateral AI Research Institute (MAIRI) to expand international cooperation on AI R&D and to ensure that AI is built safely and responsibly worldwide. The National Science Foundation could lead this effort with the Department of State, and the U.S. government could

<sup>3</sup> NAIAC, <u>Year 1 Report</u> (May 2023) p. 56.

<sup>4</sup> UN High-Level Advisory Body on Al, Governing Al for Humanity (September 2024), Recommendation 3, p. 13.

fund the initial startup cost, including the establishment of a physical center in the U.S.<sup>5</sup> The UN HLAB AI <u>final report</u> recommends a complementary body: an international scientific panel on AI, similar to the Intergovernmental Panel on Climate Change.<sup>6</sup>

- Ensure the participation of emerging economies in global AI summits to support the inclusive exchange of perspectives, global knowledge sharing, and collaborative problem-solving. These dialogues will provide opportunities to address inequities, promote responsible AI deployment, and foster inclusive innovation and growth, producing shared benefits for all nations involved.<sup>7</sup>
- **Propose a Global AI Capacity Development Network,** potentially at the February 2025 AI Action Summit in France, to expand AI-related knowledge, resources, and capabilities worldwide, particularly in regions with limited AI access. This network would link international centers to share expertise, resources, and policies, making AI development more inclusive and reducing the global digital divide. Such an initiative would support the UN's focus on addressing AI's potential to widen disparities while fostering capacity-building and equitable access to AI benefits across diverse regions, and aligns with the recommendation in the UN HLAB AI <u>final report</u> to create and fund an international capacity development network.<sup>8</sup>
- **Help establish a global network of AI Lead Response Teams** to report on and mitigate AI risk incidents, parallel to the US effort to create a network of computer emergency response teams (CERTs) for information security risk tracking.

## FOCUS AREA 9:

### AI FOR THE AMERICAN PEOPLE

- ▶ **ISSUE:** The United States lacks a robust Al innovation ecosystem to support Al advances that would benefit the American people, but which private industry lacks sufficient commercial incentives to pursue. Further action can be taken to steer broad administration priorities and support toward Al innovations that advance the interests of those who have been left behind by technology.
- ► **SOLUTION A:** At the February 2025 Paris AI Action Summit, announce a list of AI priorities to benefit all Americans, alongside a moonshot effort to build AI-powered solutions for one of those priorities.
- ► **SOLUTION B:** OSTP can launch a public call for comment on Americans' priorities for administration action on AI, accompanied by a commitment to release a national strategy for an "AI for the American People" initiative.

**CONTEXT:** The federal government currently sponsors several relatively small programs that support technological innovation for problems not currently addressed by private technology companies. For instance, the NAIRR (NSF) and Frontiers in Artificial Intelligence for Science, Security and Technology (FASST) (DOE) programs are piloting federally funded technical infrastructure for researchers, while programs such as NSF's Responsible Design, Development, and Deployment of Technologies support applied research. However, in

<sup>5</sup> NAIAC, <u>Year 1 Report</u> (May 2023) p. 58-59; see also, Stanford University Institute for Human-Centered Artificial Intelligence, <u>Enhancing International Cooperation in AI Research</u>: The Case for a Multilateral AI Research Institute (May 2022).

<sup>6</sup> UN HLAB AI, *Governing AI for Humanity*, Recommendation 1, p.10.

<sup>7</sup> NAIAC, <u>Recommendation for Participation of Emerging Economies in a Global AI Summit</u> (August 18, 2023).

<sup>8</sup> UN High-Level Advisory Body on Al, *Governing Al for Humanity* (September 2024), Recommendation 4, p. 15.

the face of concentrated market forces that prioritize *commercial* success, the government should play a far more robust role in creating and sustaining an AI ecosystem that supports other needs of the American people, including the need for "public AI" systems and infrastructures.

In February of 2025, the government of France will host the AI Action Summit, a continuation of the international "AI Safety Summit" series that began with the UK's <u>November 2023</u> gathering at Bletchley Park. This event presents an opportunity for the new administration to stake out an international leadership role in a far-reaching vision for AI, both by articulating a short list of transformative goals and also by launching one specific, galvanizing initiative to demonstrate that commitment concretely.

Over the longer term, OSTP could play a central role both in developing the framing of a broad commitment to AI that benefits all, and outlining the short list of administration priorities to advance AI for all Americans. Groups such as NAIAC could inform this effort through public briefings and conversations, as appropriate.

#### **FOCUS AREA 10:**

### AI IN LAW ENFORCEMENT

- ▶ ISSUE: Americans face a growing array of Al-driven and Al-enhanced threats to their personal digital safety.
- ➤ **SOLUTION:** Develop a comprehensive federal plan to protect individual digital safety by establishing a White House-level cross-agency task force that coordinates government agency collaboration to identify and combat these threats.

**CONTEXT:** The use of widely available AI tools exacerbates identity theft, scams, blackmail, stalking, and other illicit behavior. Federal agencies have begun to address these threats to personal digital safety, but the country needs a comprehensive cross-government strategy. To meet this growing threat, NAIAC recommends that the administration establish and empower a White House-level task force with authority to convene government agencies and other stakeholders to develop, coordinate, and implement solutions to the problem of AI-fueled threats to individual digital safety.

Within one year, NAIAC suggests that this task force comprehensively scope and publish information about the different threats Americans face, including best evidence about their likelihood and potential to harm. The Committee further recommends that the task force consider technological, regulatory, educational, and enforcement-based solutions, including but not limited to: (1) tools to identify the provenance of information, (2) legal frameworks that empower individuals to control the use of their biometric information, (3) regulatory agency authorities to investigate and prosecute illegal robocallers and scammers, (4) techniques to improve reporting about, and reduce circulation of, illegal online materials, (5) regulation of dangerous AI tools, such as those with nudifying capabilities, (6) new approaches to protecting children online, (7) resources for victims of digital crime, and (8) potentially novel enforcement tactics. At the same time, this task force must recognize potential threats to First Amendment freedoms, risks of overcriminalization, and potential encroachment on other rights and liberties. Public engagement and input will thus be critical to the success of the task force.

## **Appendix A: NAIAC Mandate**

Section 5104(d)(1) of the <u>National Artificial Intelligence Initiative Act of 2020</u> outlines the duties of NAIAC as follows:

DUTIES.—The Advisory Committee shall advise the President and the Initiative Office on matters related to the [National Artificial Intelligence] Initiative, including recommendations related to—

- 1. the current state of United States competitiveness and leadership in artificial intelligence, including the scope and scale of United States investments in artificial intelligence research and development in the international context:
- 2. the progress made in implementing the Initiative, including a review of the degree to which the Initiative has achieved the goals according to the metrics established by the Interagency Committee under section 5103(d)(2);
- 3. the state of the science around artificial intelligence, including progress toward artificial general intelligence;
- 4. issues related to artificial intelligence and the United States workforce, including matters relating to the potential for using artificial intelligence for workforce training, the possible consequences of technological displacement, and supporting workforce training opportunities for occupations that lead to economic self-sufficiency for individuals with barriers to employment and historically underrepresented populations, including minorities, Indians (as defined in 25 U.S.C. 5304), low-income populations, and persons with disabilities.
- 5. how to leverage the resources of the initiative to streamline and enhance operations in various areas of government operations, including health care, cybersecurity, infrastructure, and disaster recovery;
- 6. the need to update the Initiative;
- 7. the balance of activities and funding across the Initiative;
- 8. whether the strategic plan developed or updated by the Interagency Committee established under section 5103(d)(2) is helping to maintain United States leadership in artificial intelligence;
- 9. the management, coordination, and activities of the Initiative;
- 10. whether ethical, legal, safety, security, and other appropriate societal issues are adequately addressed by the Initiative;
- 11. opportunities for international cooperation with strategic allies on artificial intelligence research activities, standards development, and the compatibility of international regulations;
- 12. accountability and legal rights, including matters relating to oversight of artificial intelligence systems using regulatory and nonregulatory approaches, the responsibility for any violations of existing laws by an artificial intelligence system, and ways to balance advancing innovation while protecting individual rights; and
- 13. how artificial intelligence can enhance opportunities for diverse geographic regions of the United States, including urban, Tribal, and rural communities.