

The National AI Research Resource & The National AI Initiative

LYNNE PARKER, DIRECTOR, NATIONAL AI INITIATIVE OFFICE,
WHITE HOUSE OFFICE OF SCIENCE AND TECHNOLOGY POLICY

What is a National AI Research Resource?

Vision: A shared computing and data infrastructure that would provide AI researchers and students across scientific fields with access to a holistic advanced computing ecosystem. This would include:

- Secure, high-performance, privacy-preserving computing frameworks;
- High-quality, representative datasets; and
- Appropriate educational tools and user support mechanisms.

Why: democratize access to the cyberinfrastructure that fuels AI research and development, enabling all of America's diverse AI researchers to participate in exploring innovative ideas for advancing AI, including communities, institutions, and regions that have been traditionally underserved.

NAIRR Task Force Mandate

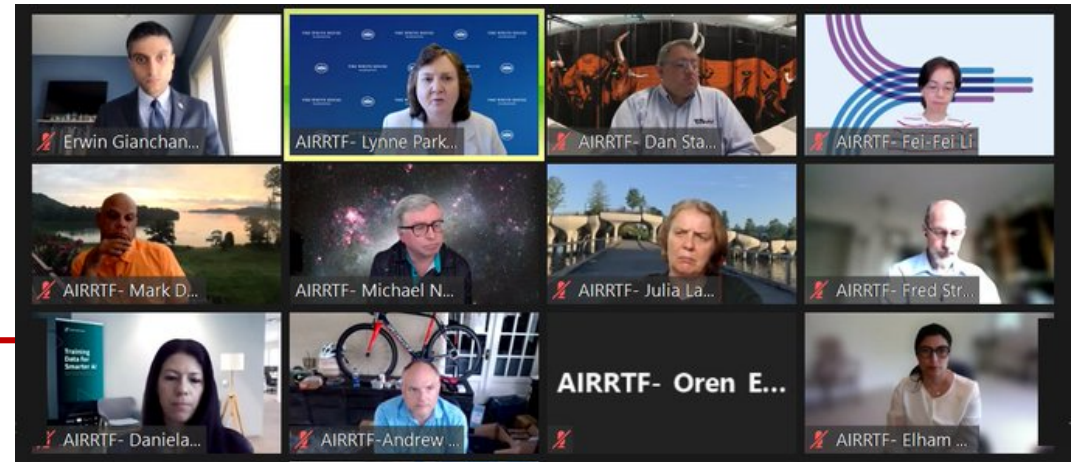
Objective: to investigate the feasibility and advisability of establishing and sustaining a National Artificial Intelligence Research Resource; and to propose a roadmap detailing how such resource should be established and sustained.

Membership: The Task Force is composed of 12 members selected by the co-chairpersons of the Task Force from among technical experts in artificial intelligence or related subjects, of whom—

- 4 are representatives from government
- 4 are representatives from institutions of higher education
- 4 are representatives from private organizations



NAIRR Task Force Membership



Government:

Lynne Parker, OSTP
(co-chair)

Erwin Gianchandani,
NSF (co-chair)

Frederick Streitz, DOE

Elham Tabassi, NIST

Academia:

Julia Lane, NYU

Fei-Fei Li, Stanford U

Michael Norman, UCSD

Dan Stanzione, U Texas-
Austin

Private organizations:

- Daniela Braga, DefinedCrowd
- Mark Dean, formerly IBM
- Oren Etzioni, Allen Institute for AI
- Andrew Moore, Google Cloud

What are the objectives of establishing a NAIRR?

- The strategic objective of a NAIRR would be to strengthen the U.S. AI innovation ecosystem by
 - (i) supporting fundamental AI research
 - (ii) advancing use-inspired AI research including innovations that accelerate discovery in other fields, and
 - (iii) increasing the number and diversity of AI researchers and organizations.
- It would do so by:
 - Lowering barriers to entry
 - Supporting innovative and novel efforts in AI research and the broad adoption of AI
 - Reinforcing the viability of academic career paths in AI
 - Advancing the development and training of the AI workforce

Fundamental Questions

- What are the metrics of success?
- Who are the intended users?
- How will access be adjudicated and finite resources allocated to a diverse group of users in an equitable manner?
- What capabilities will be provided?
- How will the resources come together to create the NAIRR?
- How will users access the NAIRR?
- How will the NAIRR be funded and managed?
- How will the NAIRR address concerns around the ethical and responsible development of AI?
- What are other associated issues?

Implementation Plan

Congress directed the task force to include the following in its implementation plan:

- i. Appropriate agency or organization responsible for implementation and administration
- ii. A governance structure.
- iii. Capabilities required to create and maintain a shared computing infrastructure to facilitate access to computing resources for researchers across the country, including scalability, secured access control, resident data engineering and curation expertise, provision of curated data sets, compute resources, educational tools and services, and a user interface portal.
- iv. An assessment of, and recommended solutions to, barriers to the dissemination and use of high-quality government data sets
- v. An assessment of security requirements and a recommendation for a framework for the management of access controls.
- vi. An assessment of privacy and civil rights and civil liberties requirements
- vii. A plan for sustaining the Resource, including through Federal funding and partnerships with the private sector.
- viii. Parameters for the establishment and sustainment, including agency roles and responsibilities and milestones to implement the Resource

Implementation Plan

Congress directed the task force to include the following in its implementation plan:

- i. Appropriate agency or organization responsible for implementation and administration
- ii. A governance structure.
- iii. Capabilities required to create and maintain a shared computing infrastructure to facilitate access to computing resources for researchers across the country, including scalability, secured access control, resident data engineering and curation expertise, provision of curated data sets, compute resources, **educational tools and services**, and a user interface portal.
- iv. An assessment of, and recommended solutions to, barriers to the dissemination and use of high-quality government data sets
- v. An assessment of security requirements and a recommendation for a framework for the management of access controls.
- vi. An assessment of privacy and civil rights and civil liberties requirements
- vii. A plan for sustaining the Resource, including through Federal funding and partnerships with the private sector.
- viii. Parameters for the establishment and sustainment, including agency roles and responsibilities and milestones to implement the Resource

Implementation Plan

Congress directed the task force to include the following in its implementation plan:

- i. Appropriate agency or organization responsible for implementation and administration
- ii. A **governance** structure.
- iii. Capabilities required to create and maintain a shared computing infrastructure to facilitate access to computing resources for researchers across the country, including scalability, secured access control, resident data engineering and curation expertise, **provision of curated data sets**, compute resources, educational tools and services, and a user interface portal.
- iv. **An assessment of, and recommended solutions to, barriers to the dissemination and use of high-quality government data sets**
- v. An assessment of security requirements and a recommendation for a framework for the management of access controls.
- vi. An assessment of privacy and civil rights and civil liberties requirements
- vii. A plan for sustaining the Resource, including through Federal funding and partnerships with the private sector.
- viii. Parameters for the establishment and sustainment, including agency roles and responsibilities and milestones to implement the Resource

Implementation Plan

Congress directed the task force to include the following in its implementation plan:

- i. Appropriate agency or organization responsible for implementation and administration
- ii. A governance structure.
- iii. Capabilities required to create and maintain a shared computing infrastructure to facilitate access to computing resources for researchers across the country, including scalability, **secured access control**, resident data engineering and curation expertise, provision of curated data sets, compute resources, educational tools and services, and a user interface portal.
- iv. An assessment of, and recommended solutions to, barriers to the dissemination and use of high-quality government data sets
- v. **An assessment of security requirements and a recommendation for a framework for the management of access controls.**
- vi. An assessment of privacy and civil rights and civil liberties requirements
- vii. A plan for sustaining the Resource, including through Federal funding and partnerships with the private sector.
- viii. Parameters for the establishment and sustainment, including agency roles and responsibilities and milestones to implement the Resource

Implementation Plan

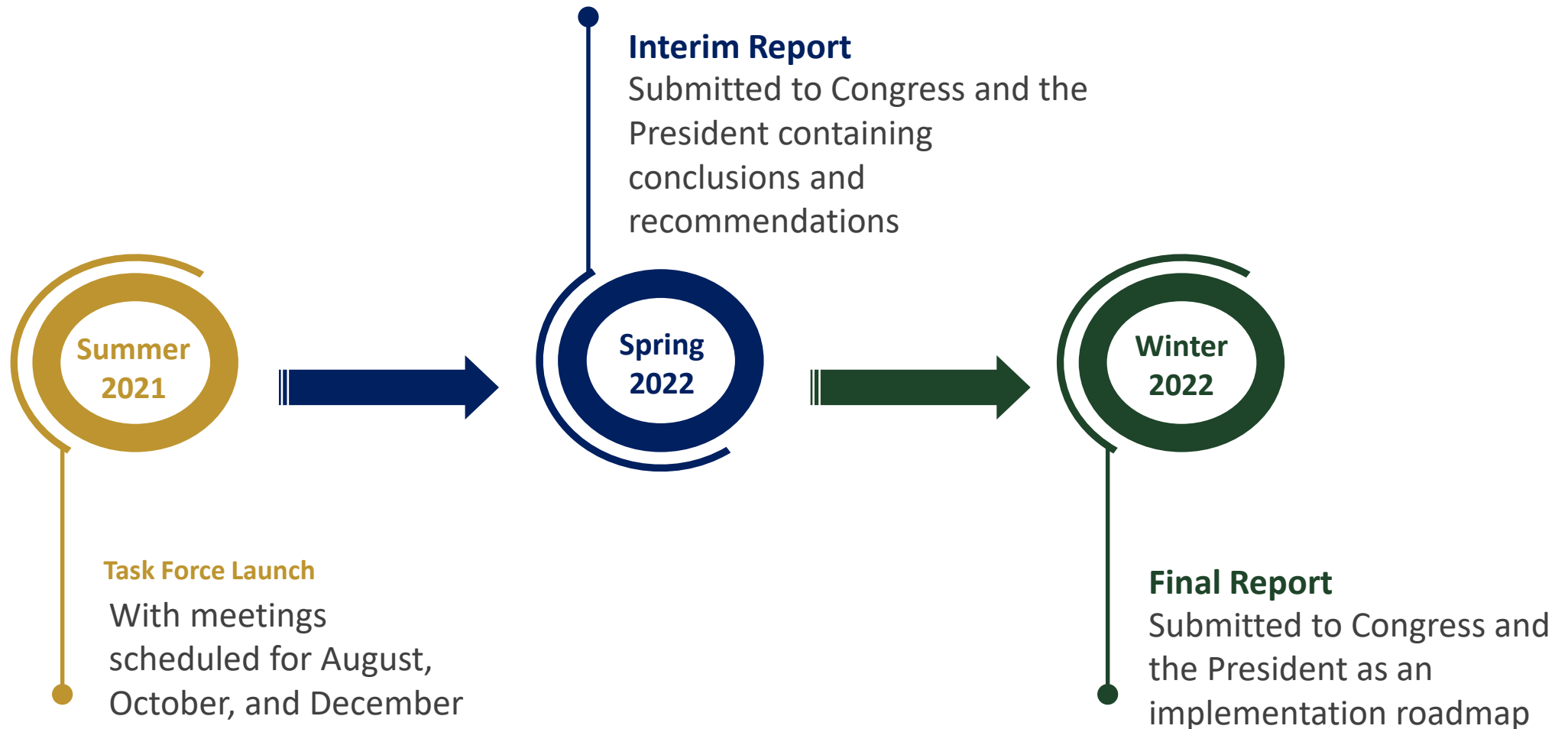
Congress directed the task force to include the following in its implementation plan:

- i. Appropriate agency or organization responsible for implementation and administration
- ii. A governance structure.
- iii. Capabilities required to create and maintain a shared computing infrastructure to facilitate access to computing resources for researchers across the country, including scalability, secured access control, resident data engineering and curation expertise, provision of curated data sets, compute resources, educational tools and services, and a user interface portal.
- iv. An assessment of, and recommended solutions to, barriers to the dissemination and use of high-quality government data sets
- v. An assessment of security requirements and a recommendation for a framework for the management of access controls.
- vi. An assessment of privacy and civil rights and civil liberties requirements**
- vii. A plan for sustaining the Resource, including through Federal funding and partnerships with the private sector.
- viii. Parameters for the establishment and sustainment, including agency roles and responsibilities and milestones to implement the Resource

External Consultations

- (1) The National Science Foundation.
- (2) The Office of Science and Technology Policy.
- (3) The National Academies of Sciences, Engineering, and Medicine.
- (4) The National Institute of Standards and Technology.
- (5) The Director of National Intelligence.
- (6) The Department of Energy.
- (7) The Department of Defense.
- (8) The General Services Administration.
- (9) The Department of Justice.
- (10) The Department of Homeland Security.
- (11) The Department of Health and Human Services.
- (12) Private industry.
- (13) Institutions of higher education.
- (14) Civil and disabilities rights organizations.
- (15) Such other persons as the Task Force considers appropriate

Timeline & Deliverables



Phases of Work and Timeline



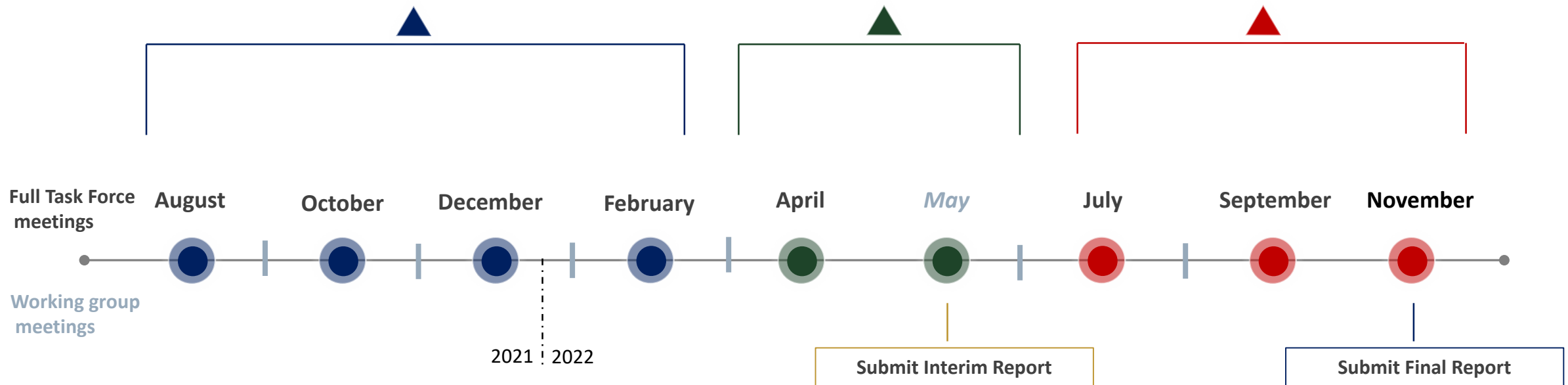
Assessment Phase



Interim Report Development



Final Report Development



Request for Information on the NAIRR Implementation Plan: *Public Input*

- OSTP and NSF released this RFI on July 23 (86 FR 39081)
- Comments due October 1, 2021 (was Sept. 1):
 1. What options should the Task Force consider for any of roadmap elements, and why?
 2. Which capabilities and services provided through the NAIRR should be prioritized?
 3. How can the NAIRR and its components reinforce principles of ethical and responsible research and development of AI, such as those concerning issues of racial and gender equity, fairness, bias, civil rights, transparency, and accountability?
 4. What building blocks already exist for the NAIRR, in terms of government, academic, or private-sector activities, resources, and services?
 5. What role should public-private partnerships play in the NAIRR? What exemplars could be used as a model?
 6. Where do you see limitations in the ability of the NAIRR to democratize access to AI R&D? And how could these limitations be overcome?

The screenshot shows the Federal Register notice for the Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource. The notice is dated 07/23/2021 and is issued by the National Science Foundation and the Science and Technology Policy Office. The notice includes a comment period that ends in 35 days (09/01/2021) and a button to submit a formal comment. The document details include the agency (White House Office of Science and Technology Policy and National Science Foundation), the action (Request for information), the summary (The Office of Science and Technology Policy and the National Science Foundation are issuing this Request for Information (RFI) to inform the work of the National Artificial Intelligence Research Resource (NAIRR) Task Force ("Task Force"). The Task Force has been directed by Congress to develop an implementation roadmap for a shared research infrastructure that would provide Artificial Intelligence (AI) researchers and students across scientific disciplines with access to computational resources, high-quality data, educational tools, and user support.), and the dates (To be considered, responses and comments must be received, no later than 11:59 p.m., EDT on September 1, 2021.).

FEDERAL REGISTER
The Daily Journal of the United States Government

Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource

A Notice by the National Science Foundation and the Science and Technology Policy Office on 07/23/2021

This document has a comment period that ends in 35 days. (09/01/2021) [SUBMIT A FORMAL COMMENT](#)

PUBLISHED DOCUMENT

AGENCY:
White House Office of Science and Technology Policy and National Science Foundation.

ACTION:
Request for information.

SUMMARY:
The Office of Science and Technology Policy and the National Science Foundation are issuing this Request for Information (RFI) to inform the work of the National Artificial Intelligence Research Resource (NAIRR) Task Force ("Task Force"). The Task Force has been directed by Congress to develop an implementation roadmap for a shared research infrastructure that would provide Artificial Intelligence (AI) researchers and students across scientific disciplines with access to computational resources, high-quality data, educational tools, and user support.

DATES:
To be considered, responses and comments must be received, no later than 11:59 p.m., EDT on September 1, 2021.

DOCUMENT DETAILS

Printed version: [PDF](#)

Publication Date: 07/23/2021

Agencies: National Science Foundation, Office of Science and Technology Policy

Dates: To be considered, responses and comments must be received, no later than 11:59 p.m., EDT on September 1, 2021.

Comments Close: 09/01/2021

Document Type: Notice

Document Citation: 86 FR 39081

Page: 39081-39082 (2 pages)

Document Number: 2021-15660

Lessons Learned from Federal Cloud Pilots



NIH's STRIDES Initiative aims and goals



Helping advance biomedical research by delivering access to industry-leading cloud providers.

The STRIDES Initiative aims to help NIH and its institutions accelerate biomedical research by reducing barriers in utilizing commercial cloud services. This initiative aims to harness the power of the cloud to accelerate biomedical discovery. NIH and NIH-funded researchers can take advantage of STRIDES benefits.

[Enroll Now](#)

Gain access to

- Discounts on partner services
- Professional services consultations
- Access to training
- Potential collaborative engagements

115
Petabytes of Data

100M
Compute Hours

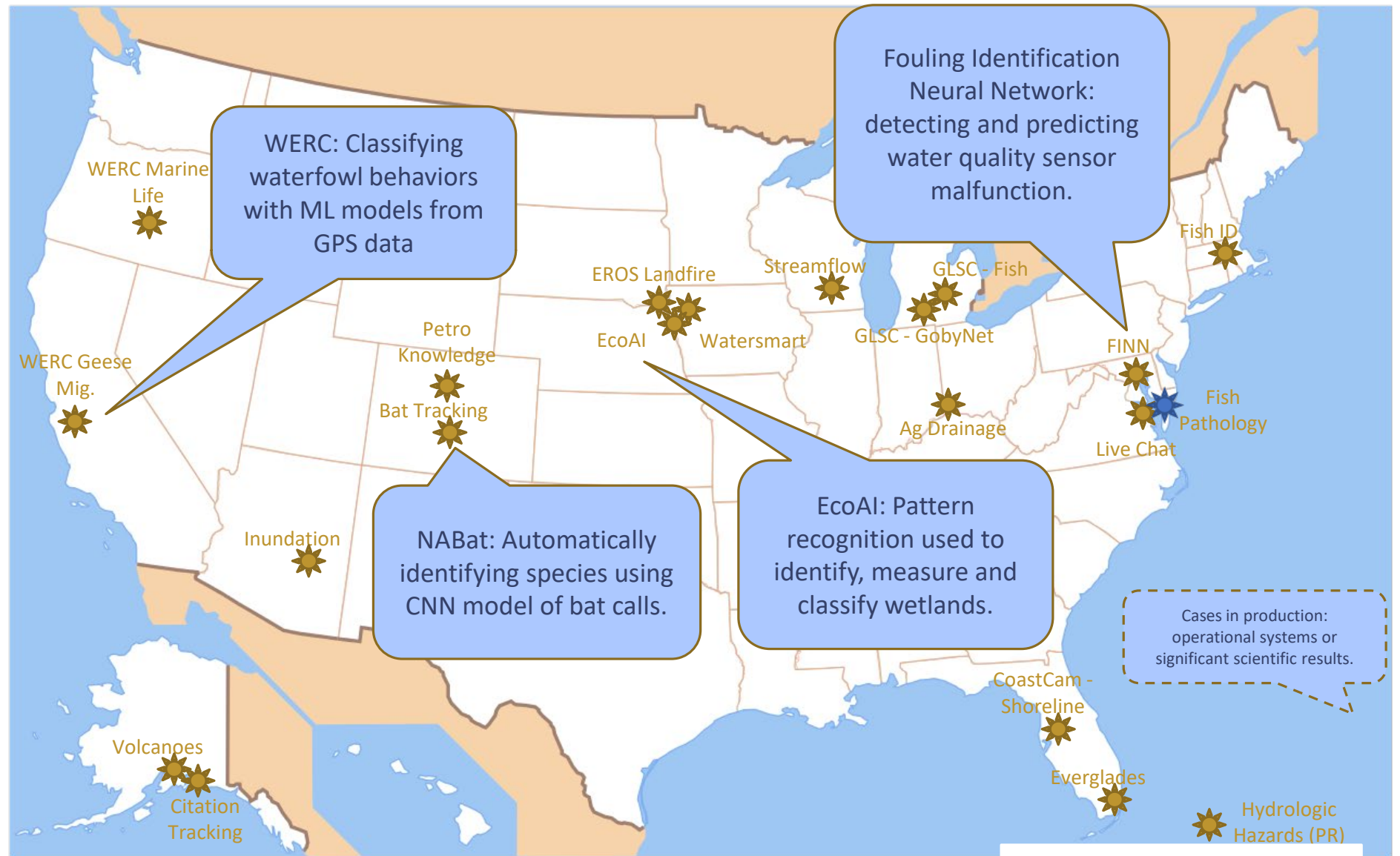
>500
Research
Institutions and
Programs

>\$19M
Cost Savings

>3500
People Trained

USGS Cloud Program

- Launched in June 2020
- Dedicated AI/ML support team established in August 2020
- 29 current AI/ML use cases



Lessons Learned

- ❑ Access controls
- ❑ Cloud administration teams
- ❑ Skills gaps
- ❑ Impact that can be achieved

Challenges

- ❑ Researcher authentication and access
- ❑ Privacy and security safeguards
- ❑ Awareness of data resources
- ❑ Billing and charging

Desired Characteristics

- ❑ Single sign-on access privileges across platforms
- ❑ Common user interfaces
- ❑ Automated self-discovery of data and other resources
- ❑ Pre-computed resources and workflows
- ❑ Further development of management and administration practices



National Artificial Intelligence Initiative

National AI Initiative Act of 2020 (NAIIA)

- Became law on January 1, 2021
 - As part of the “*William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021*”, H.R. 6395, Division E.
- Bipartisan legislation defining National AI Initiative, with purpose of:
 - Ensuring continued U.S. leadership in AI research and development (R&D);
 - Leading world in development and use of trustworthy AI systems in public and private sectors;
 - Preparing present and future U.S. workforce for integration of AI systems across all sectors of economy and society; and
 - Coordinating AI research, development, and demonstration activities among civilian agencies, Department of Defense, and Intelligence Community to ensure that each informs work of the others.

DIVISION E—NATIONAL ARTIFICIAL INTELLIGENCE INITIATIVE ACT OF 2020

SEC. 5001. SHORT TITLE.

This division may be cited as the “National Artificial Intelligence Initiative Act of 2020”.



National AI Initiative Office – Central Hub for Coordinating Federal Activities, Outreach

- Launched January 2021, per NAI Act
- Charged with overseeing and implementing the National AI Initiative
- Serves as central hub for Federal coordination and collaboration in AI research, development, and demonstration, as well as with private sector, academia, and other stakeholders involved in the initiative
- Conducts regular public outreach
- Promotes access to the technologies, innovations, best practices, and expertise derived from the National AI Initiative to agency mission and systems across the Federal Government



Agencies Coordinate AI Programs and Activities



National AI Initiative

Prioritize AI R&D

Grow and sustain U.S. research leadership and capacity

**Prioritize
AI R&D**

Leverage AI for Government and National Security

Apply AI to improve national security and provision of government services

**Leverage
AI for Gov. &
National
Security**

Strengthen AI Research Infrastructure

Enhance access to high quality data, models, and computing resources

**Strengthen
AI Research
Infrastructure**

Promote International AI Engagement

Engage with like-minded allies to promote a global AI environment supportive of democratic values

**Promote
International
AI
Engagement**

Advance Trustworthy AI

Modernize governance and technical standards for AI-powered technologies, protecting privacy, civil rights, civil liberties, and other democratic values

**Advance
Trustworthy
AI**

**Train
AI-Ready
Workforce**

Train AI-Ready Workforce

Provide AI-ready education at all levels: K-12, college, re-training, re-skilling, R&D workforce

**U.S.
Leadership
in AI**



AI Research Institutes

- Program launched in Oct. 2019
- Seeks to fund national hubs
- Multi-disciplinary, multi-sector research, innovation, education
- Each AI Institute is \$20M over five years

News Release 19-021

NSF leads federal partners in accelerating the development of transformational, AI-powered innovation

New funding opportunity anticipates \$200 million in long-term investments in AI research and education over the next 6 years

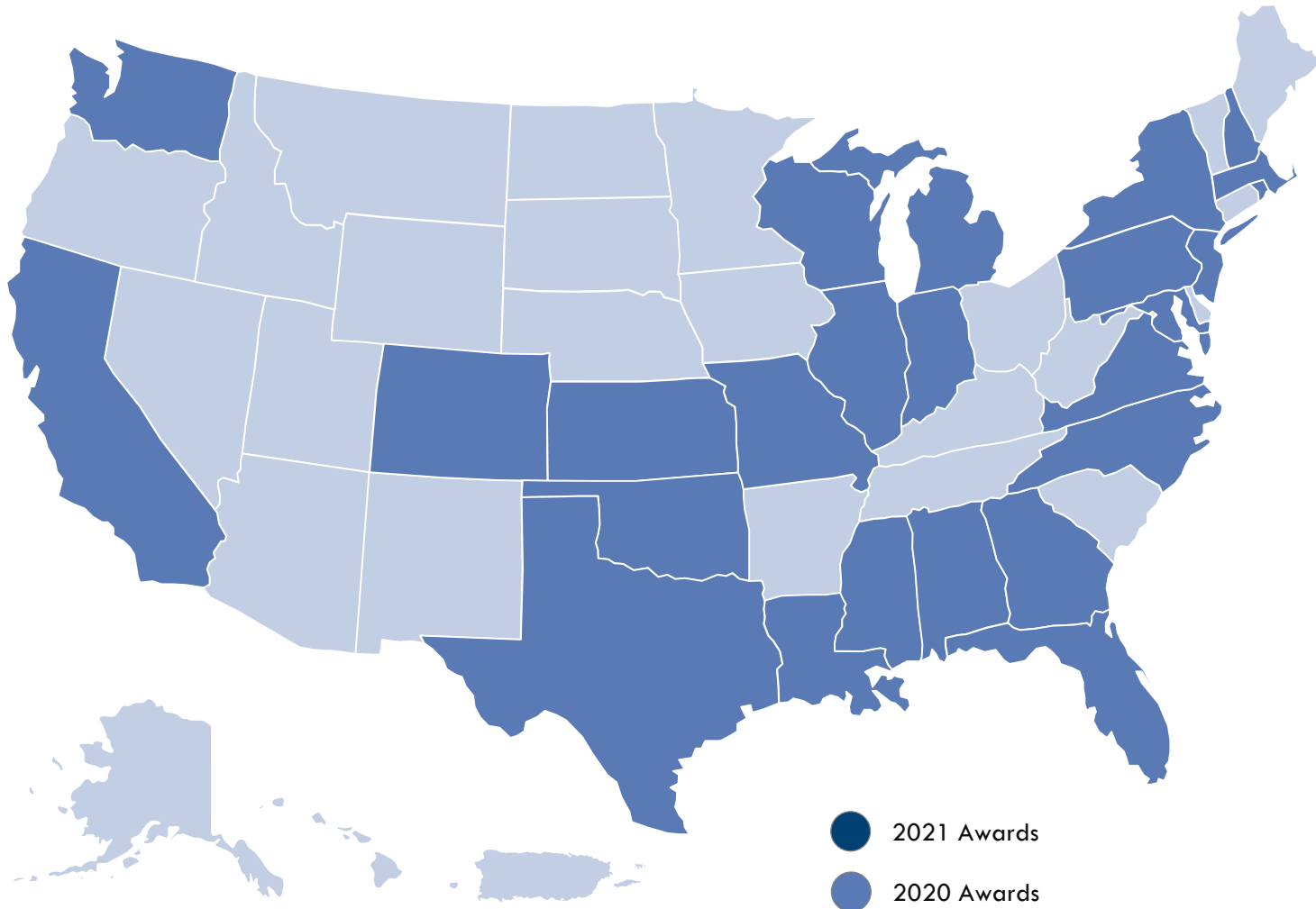


NSF's AI Research Institutes program will support longer-term research than typical grants.

[Credit and Larger Version](#)



AI Research Institutes (2020)

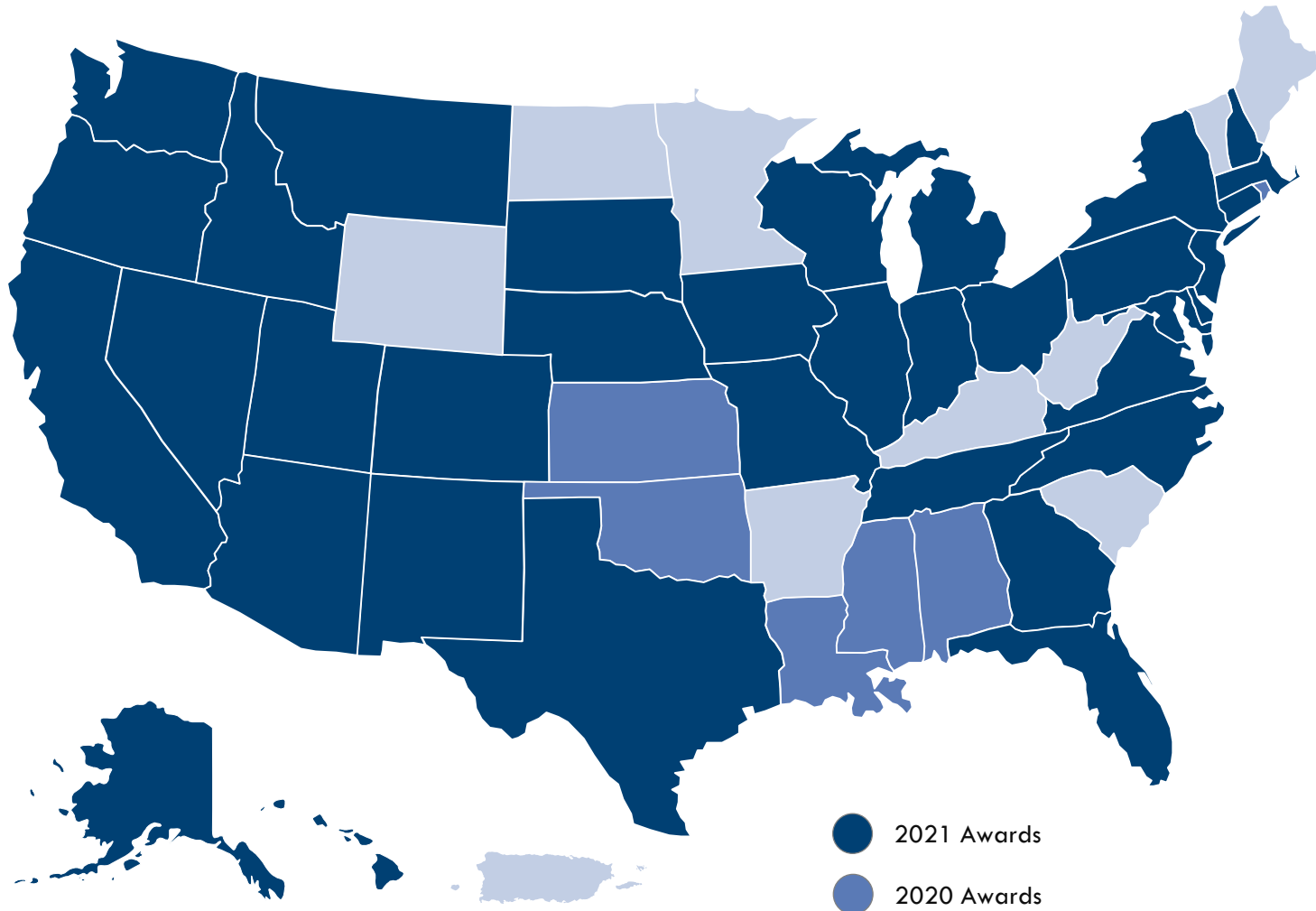


2020 AWARDS

- NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography
- NSF AI Institute for Foundations of Machine Learning
- USDA-NIFA AI Institute for Next Generation Food Systems
- USDA-NIFA AI Institute for Future Agricultural Resilience, Management, and Sustainability (AIFARMS)
- NSF AI Institute for Student-AI Teaming
- Molecule Maker Lab Institute (MMLI): NSF AI Institute for Molecular Discovery, Synthetic, and Manufacturing
- NSF AI Institute for Artificial Intelligence and Fundamental Interactions



AI Research Institutes (2021)



2021 AWARDS

- NSF AI Institute for Collaborative Assistance and Responsive Interaction for Networked Groups (CARING)
- NSF AI Institute for Learning-enabled Optimization at Scale (TILOS)
- NSF AI Institute for Optimization
- NSF AI Institute for Intelligent Cyberinfrastructure with Computational Learning in the Environment (ICICLE)
- NSF AI Institute for Future Edge Networks and Distributed Intelligence (AI-EDGE)
- NSF AI Institute for Edge Computing Leveraging Next-generation Networks (Athena)
- NSF AI Institute for Dynamic Systems
- NSF AI Institute for Engaged Learning
- NSF AI Institute for Adult Learning and Online Education (ALOE)
- USDA-NIFA AI Institute: Agricultural AI for Transforming Workforce and Decision Support (AgAID)
- USDA-NIFA AI Institute: AI Institute for Resilient Agriculture (AIIRA)



National AI Initiative

Prioritize AI R&D

Grow and sustain U.S. research leadership and capacity

**Prioritize
AI R&D**

Leverage AI for Government and National Security

Apply AI to improve national security and provision of government services

**Leverage
AI for Gov. &
National
Security**

Strengthen AI Research Infrastructure

Enhance access to high quality data, models, and computing resources

**Strengthen
AI Research
Infrastructure**

Promote International AI Engagement

Engage with like-minded allies to promote a global AI environment supportive of democratic values

**Promote
International
AI
Engagement**

Advance Trustworthy AI

Modernize governance and technical standards for AI-powered technologies, protecting privacy, civil rights, civil liberties, and other democratic values

**Advance
Trustworthy
AI**

**Train
AI-Ready
Workforce**

Train AI-Ready Workforce

Provide AI-ready education at all levels: K-12, college, re-training, re-skilling, R&D workforce

**U.S.
Leadership
in AI**



NAIIA: Risk Management Framework

- NIST work is underway to develop foundations for risk management framework for trustworthy AI
- Open RFI (86 FR 50326): Public comments due September 15
- Substance of risk management framework for trustworthy AI:
 - **Common definitions and characterizations** for trustworthiness, including explainability, transparency, safety, privacy, security, robustness, fairness, bias, ethics, validation, verification, interpretability, another properties
 - **Standards, guidelines, best practices, methodologies, procedures, and processes** for developing trustworthy AI; assessing trustworthiness of AI; and mitigating risks from AI systems.
 - **Alignment with international standards**, as appropriate.
 - **Incorporates voluntary consensus standards and industry best practices.**
 - **Case studies** of framework implementation.
 - **Technology agnostic** – Does not prescribe/require use of specific information or communications technology products or services.



National AI Initiative

Prioritize AI R&D

Grow and sustain U.S. research leadership and capacity

**Prioritize
AI R&D**

Leverage AI for Government and National Security

Apply AI to improve national security and provision of government services

**Leverage
AI for Gov. &
National
Security**

Strengthen AI Research Infrastructure

Enhance access to high quality data, models, and computing resources

**Strengthen
AI Research
Infrastructure**

Promote International AI Engagement

Engage with like-minded allies to promote a global AI environment supportive of democratic values

**Promote
International
AI
Engagement**

Advance Trustworthy AI

Modernize governance and technical standards for AI-powered technologies, protecting privacy, civil rights, civil liberties, and other democratic values

**Advance
Trustworthy
AI**

**Train
AI-Ready
Workforce**

Train AI-Ready Workforce

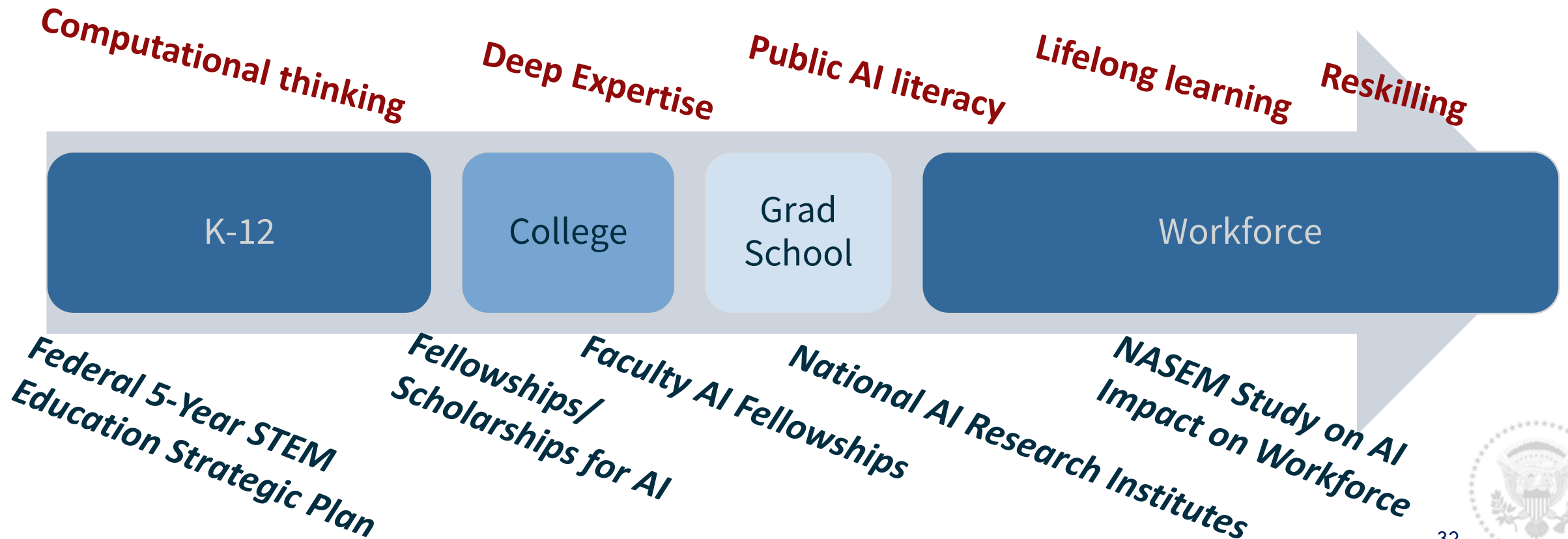
Provide AI-ready education at all levels: K-12, college, re-training, re-skilling, R&D workforce

**U.S.
Leadership
in AI**



Educating and Training AI-Ready Workforce

- AI promises great benefits for workers, with the potential to improve safety, increase productivity, and create new industries of the future.
- However, the U.S. urgently needs a larger and more diverse, inclusive, and knowledgeable STEM workforce.



National AI Initiative

Prioritize AI R&D

Grow and sustain U.S. research leadership and capacity

**Prioritize
AI R&D**

Leverage AI for Government and National Security

Apply AI to improve national security and provision of government services

**Leverage
AI for Gov. &
National
Security**

Strengthen AI Research Infrastructure

Enhance access to high quality data, models, and computing resources

**Strengthen
AI Research
Infrastructure**

Promote International AI Engagement

Engage with like-minded allies to promote a global AI environment supportive of democratic values

**Promote
International
AI
Engagement**

Advance Trustworthy AI

Modernize governance and technical standards for AI-powered technologies, protecting privacy, civil rights, civil liberties, and other democratic values

**Advance
Trustworthy
AI**

**Train
AI-Ready
Workforce**

Train AI-Ready Workforce

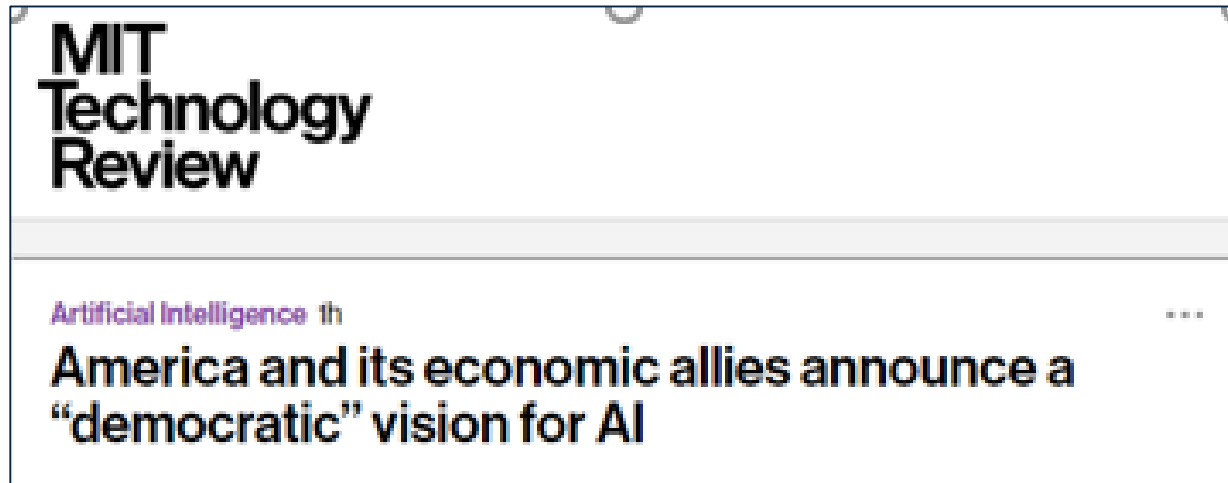
Provide AI-ready education at all levels: K-12, college, re-training, re-skilling, R&D workforce

**U.S.
Leadership
in AI**



International Collaboration on AI: *OECD AI Principles*

An historic intergovernmental, consensus statement of AI principles, now agreed to by 44 nations. G20 also adopted same principles.



May 2019

<https://www.oecd.org/going-digital/ai/principles/>

OECD.org Going Digital Toolkit

OECD.AI Policy Observatory

AI Principles Policy areas Trends & data Countries & Initiatives About

OECD AI Policy Observatory

We provide data and multi-disciplinary analysis on artificial intelligence. Our diverse global community of partners makes this platform a unique source of information and dialogue on AI.

Shape and share public policies for responsible, trustworthy and beneficial AI

- OECD AI Principles**
Wondering what standards to apply to AI policies and practices?
The AI Principles give guidance for a human-centred trustworthy approach.
- AI Policy areas**
Explore how AI affects everything from transport to jobs and education.
Find out about AI's impact on work innovation, productivity and skills.
- COVID 19**
AI-powered live news, data-viz, data for AI
- Countries & initiatives**
Explore over 300 AI policy initiatives from over 60 countries.
Find the latest AI initiatives from business, technologists and others.
- Trends & data**
Keep up with the latest AI developments and trends.
Explore live news, data and research from the OECD and its partners.
- Video**
The Launch of the OECD AI Policy Observatory

This image is a screenshot of the OECD AI Policy Observatory website. It features a dark blue header with the OECD.AI logo and navigation links. The main content area is white and contains a grid of six colorful cards, each representing a different aspect of the observatory's work: OECD AI Principles, AI Policy areas, COVID 19, Countries & initiatives, Trends & data, and Video. Each card includes a brief description of the content.

Global Partnership on AI (GPAI)

<https://gpai.ai/>

- GPAI: multi-stakeholder initiative aiming to **bridge the gap between theory and practice** of AI.
- Launched in June 2020, and built around a **shared commitment** to the OECD Recommendation on AI.
- Like-minded nations are working together to encourage development of AI in line with **shared democratic values**.
- Brings together expertise from science, industry, civil society, governments, international organizations, and academia to **foster international cooperation**.



THE GLOBAL PARTNERSHIP
ON ARTIFICIAL INTELLIGENCE

Member nations:

- *Founding members:* Australia, Canada, France, Germany, India, Italy, Japan, Mexico, New Zealand, the Republic of Korea, Singapore, Slovenia, the United Kingdom, the United States and EU
- *Additional members:* Brazil, the Netherlands, Poland, Spain



U.S.-UK Declaration of Cooperation in AI R&D (Sept. 2020)

- Cooperation agreement includes:
 - Recommending priorities for AI R&D cooperation
 - Promoting AI R&D focusing on fundamental advances and challenging technical issues
 - Coordinating the planning and programming of relevant research activities, including promoting researcher and student collaborations and public-private partnerships

<https://2017-2021.state.gov/declaration-of-the-united-states-of-america-and-the-united-kingdom-of-great-britain-and-northern-ireland-on-cooperation-in-artificial-intelligence-research-and-development-a-shared-vision-for-driving/index.html>

The image shows a screenshot of the U.S. Department of State website. The top navigation bar includes links for Press, Business, Employees, Job Seekers, Students, and Travelers. Below this, there are dropdown menus for POLICY ISSUES, COUNTRIES & AREAS, ABOUT, and BUREAUS & OFFICES. The main content area features the title "Declaration of the United States of America and the United Kingdom of Great Britain and Northern Ireland on Cooperation in Artificial Intelligence Research and Development: A Shared Vision for Driving Technological Breakthroughs in Artificial Intelligence" with three stars above it. Below the title, it says "MEDIA NOTE" and "OFFICE OF THE SPOKESPERSON".

Below the screenshot is a summary graphic with a blue background. It includes the logos and names of three departments: Department for Business, Energy & Industrial Strategy; Department for Digital, Culture, Media & Sport; and Office for Artificial Intelligence. The text on the graphic reads: "Guidance Declaration of the United States of America and the United Kingdom of Great Britain and Northern Ireland on Cooperation in Artificial Intelligence Research and Development Published 25 September 2020".

National AI Initiative

Prioritize AI R&D

Grow and sustain U.S. research leadership and capacity

**Prioritize
AI R&D**

Leverage AI for Government and National Security

Apply AI to improve national security and provision of government services

**Leverage
AI for Gov. &
National
Security**

Strengthen AI Research Infrastructure

Enhance access to high quality data, models, and computing resources

**Strengthen
AI Research
Infrastructure**

**U.S.
Leadership
in AI**

**Promote
International
AI
Engagement**

Promote International AI Engagement

Engage with like-minded allies to promote a global AI environment supportive of democratic values

Advance Trustworthy AI

Modernize governance and technical standards for AI-powered technologies, protecting privacy, civil rights, civil liberties, and other democratic values

**Advance
Trustworthy
AI**

**Train
AI-Ready
Workforce**

Train AI-Ready Workforce

Provide AI-ready education at all levels: K-12, college, re-training, re-skilling, R&D workforce



National AI Advisory Committee

- Will advise President and National AI Initiative Office on:
 - State of U.S. competitiveness and leadership in AI
 - Progress made in implementing Initiative
 - State of AI science
 - AI and U.S. workforce issues
 - How to leverage Initiative resources to streamline and enhance government operations
 - Need to update the Initiative
 - Balance of activities and funding across Initiative
 - Whether strategic plan is helping U.S. leadership in AI
 - Management, coordination, and activities of the Initiative
 - Whether ethical, legal, safety, security, and other societal issues of AI are adequately addressed by the Initiative
 - Opportunities for international collaboration with strategic allies on AI
 - Accountability and legal rights, including oversight
 - How AI can enhance opportunities for diverse geographic regions of the U.S.

- Open call for nominations
- Applications due by 5PM ET, October 25, 2021
- See FRN 86 FR 50326



Key Messages – U.S. National AI Initiative

- **AI R&D:** The U.S. will sustain investment in AI R&D to maintain U.S. leadership in AI.
- **AI Infrastructure:** The U.S. will broaden access to cutting edge computational resources and high-quality datasets to advance AI R&D.
- **Trustworthy AI:** The U.S. will lead the world in the development and use of trustworthy AI systems in the public and private sectors by supporting relevant research, technical standards, risk management frameworks, and guidance that protects privacy, civil rights, and civil liberties.
- **Education/workforce:** The U.S. will fill the AI talent gap and prepare U.S. workers for jobs of the future by implementing policies that ensure a diverse, inclusive, and knowledgeable workforce.
- **International engagement:** The U.S. will work with like-minded international allies to advance the development and use of AI in line with our shared democratic values.
- **AI in government:** The U.S. will promote the innovation and use of AI, where appropriate, to improve Government operations and ensure national security, consistent with established principles and ethics frameworks for trustworthy AI.



For more info, check out AI.gov!

An official website of the United States government [Here's how you know](#) ▾

ABOUT ▾ STRATEGIC PILLARS ▾ DOCUMENTS ▾ NEWS ▾ ADVISORS ▾ NAIIO ▾ Search AI.gov 🔍

NATIONAL ARTIFICIAL INTELLIGENCE INITIATIVE

OVERSEEING AND IMPLEMENTING THE UNITED STATES NATIONAL AI STRATEGY

Welcome to *AI.gov*, home of the National AI Initiative and connection point to ongoing activities to advance U.S. leadership in AI. The **National AI Initiative Act of 2020** became law on January 1, 2021, providing for a coordinated program across the entire Federal government to accelerate AI research and application for the

RECENT REPORTS

- **Recommendations for Leveraging Cloud Computing Resources for Federally Funded Artificial Intelligence Research and Development.** 11/17/2020
- **NITRD Supplement to the President's FY2021 Budget.** 08/14/2020





Thank you!

Lynne Parker, Ph.D.

Director, National Artificial Intelligence Initiative Office

September 2021