AMENDMENT NO. ________ Calendar No. ________

Purpose: In the nature of a substitute.

IN THE SENATE OF THE UNITED STATES—118th Cong., 2d Sess.

S. 2714

To establish the National Artificial Intelligence Research Resource, and for other purposes.

Referred to the Committee on _______________ and
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended
to be proposed by Mr. Young

Viz:

1 Strike all after the enacting clause and insert the fol-
2 lowing:

3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the “Creating Resources
5 for Every American To Experiment with Artificial Intel-
6 ligence Act of 2024” or the “CREATE AI Act of 2024”.

7 SEC. 2. FINDINGS.

8 Congress finds the following:

9 (1) Cutting-edge artificial intelligence research
10 relies on access to computational resources and large
11 datasets.
(2) Access to the computational resources and datasets necessary for artificial intelligence research and development is often limited to very large technology companies.

(3) The lack of access to computational and data resources has resulted in insufficient diversity in the artificial intelligence research and development community.

(4) Engaging the full and diverse talent of the United States is critical for maintaining United States leadership in artificial intelligence and ensuring that artificial intelligence is developed in a manner that benefits all people of the United States.

SEC. 3. NATIONAL ARTIFICIAL INTELLIGENCE RESEARCH RESOURCE.

(a) In General.—The National Artificial Intelligence Initiative Act of 2020 (15 U.S.C. 9401 et seq.) is amended by adding at the end the following:

“TITLE LVI—NATIONAL ARTIFICIAL INTELLIGENCE RESEARCH RESOURCE

“Sec. 5601. Definitions.
“Sec. 5602. Establishment; governance.
“Sec. 5603. Resources of the NAIRR.
“Sec. 5604. NAIRR processes and procedures.

“SEC. 5601. DEFINITIONS.

“In this title:

“(1) ADVISORY COMMITTEE.—The term ‘Advisory Committee’ means any Advisory Committee established under section 5602(e).

“(2) AI TESTBED.—The term ‘AI testbed’ means a testbed described in section 22A(g) of the National Institute of Standards and Technology Act (15 U.S.C. 278h–1(g)).

“(3) EXECUTIVE AGENCY.—The term ‘Executive agency’ has the meaning given such term in section 105 of title 5, United States Code.

“(4) NATIONAL ARTIFICIAL INTELLIGENCE RESEARCH RESOURCE; NAIRR.—The terms ‘National Artificial Intelligence Research Resource’ and
‘NAIRR’ have the meaning given the term ‘National Artificial Intelligence Research Resource’ in section 5106(g).

“(5) OPERATING ENTITY.—The term ‘Operating Entity’ means the Operating Entity selected by the Program Management Office as described in section 5602(b)(3)(A).

“(6) PROGRAM MANAGEMENT OFFICE.—The term ‘Program Management Office’ means the Program Management Office established under section 5602(b).

“(7) RESOURCE OF THE NAIRR.—The term ‘resource of the NAIRR’ means a resource described in section 5603(b).

“(8) SELECT COMMITTEE ON AI.—The term ‘Select Committee on AI’ means the Interagency Committee.

“(9) STEM.—The term ‘STEM’ means science, technology, engineering, and mathematics, including computer science.

“SEC. 5602. ESTABLISHMENT; GOVERNANCE.

“(a) ESTABLISHMENT.—Not later than 1 year after the date of enactment of the Creating Resources for Every American To Experiment with Artificial Intelligence Act of 2024, the Director of the National Science Foundation
shall establish the National Artificial Intelligence Research Resource to—

“(1) spur innovation and advance artificial intelligence research and development;

“(2) advance the development of trustworthy artificial intelligence;

“(3) improve access to artificial intelligence resources for researchers and students of artificial intelligence, including groups historically underrepresented in STEM;

“(4) improve capacity for artificial intelligence research in the United States; and

“(5) support the testing, benchmarking, and evaluation of artificial intelligence systems developed and deployed in the United States.

“(b) PROGRAM MANAGEMENT OFFICE.—

“(1) ESTABLISHMENT.—The Director of the National Science Foundation shall establish within the National Science Foundation a Program Management Office to oversee the day-to-day functions of the NAIIRR and shall appoint an individual to head the Program Management Office.

“(2) STAFF.—

“(A) IN GENERAL.—The head of the Program Management Office may identify staff
and direct all employees of the Program Management Office, in accordance with the applicable provisions of title 5, United States Code.

"(B) REPRESENTATION.—The staff of the Program Management Office may include representation from other Executive agencies providing support for NAIRR resources.

"(3) DUTIES.—The duties of the Program Management Office shall include—

"(A) in consultation with any relevant Advisory Committee as appropriate—

"(i) overseeing and approving the operating plan for the NAIRR;

"(ii) developing the budget for the NAIRR, in consultation with Executive agencies and offices represented on the Select Committee on AI;

"(iii) developing the funding opportunity and soliciting bids for the Operating Entity, which will be responsible for operation of the National Artificial Intelligence Research Resource;

"(iv) selecting, through a competitive and transparent process, a nongovernmental organization, which may be an
independent legal entity or a consortium of
1 or more partners (which may include
federally funded research and development
centers), to be designated the Operating
Entity;

"(v) overseeing compliance with the
contractual obligations of the Operating
Entity;

"(vi) establishing evaluation criteria,
including key performance indicators, for
the NAIRR;

"(vii) overseeing asset allocation and
utilization;

"(viii) identifying an external inde-
dependent evaluation entity;

"(ix) assessing the performance of the
Operating Entity on not less than an an-
nual basis and, if such performance is uns-
satisfactory, ending the agreement with
such Operating Entity and selecting a new
Operating Entity in accordance with clause
(iv);

"(x) developing funding opportunities
for resources of the NAIRR, in consulta-
tion with Executive agencies and offices,
represented on the Select Committee on AI; and

"(xi) coordinating resource contributions from participating Federal agencies;

"(B) delegating, with appropriate oversight, operational tasks to the Operating Entity, including—

"(i) coordinating the provisioning of resources of the NAIRR;

"(ii) maintaining a portal and associated services for users to access resources of the NAIRR;

"(iii) developing policies and procedures for the NAIRR;

"(iv) hiring and managing a staff (including experts in cyber infrastructure management, data science, research design, privacy, ethics, civil rights and civil liberties, and legal and policy matters) to support the operations of the NAIRR;

"(v) continually modernizing NAIRR infrastructure;

"(vi) annually reviewing and cataloging the performance of the NAIRR (including performance on the key perform-
ance indicators established under subparagraph (A)(vi), the resources of the NAIRR, and the NAIRR governance structure;

"(vii) establishing and administering training to new users on accessing a resource of the NAIRR, research design, and issues related to privacy, ethics, civil rights and civil liberties, safety, and trustworthiness of artificial intelligence systems;

"(viii) facilitating connections to AI testbeds; and

"(ix) making educational resources of the NAIRR available to other Executive agencies, and to Congress and agencies in the legislative and judicial branches, for the purpose of educating Federal Government officials and employees about artificial intelligence;

"(C) developing an annual report, transmitted to the Director of the Office of Science and Technology Policy, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Science, Space, and Technology of the House of Representatives.
and made available to the public, on the
progress of the NAIRR that includes—

"(i) a summary of the information
collected under subparagraph (B)(vi);

"(ii) a list of projects that used the
NAIRR during the reporting period, in-
cluding, as appropriate, relevant details
about the projects that demonstrate the
value to the public provided by the
projects; and

"(iii) any recommendations for
changes to the NAIRR; and

"(D) overseeing a periodic independent as-
seessment of the NAIRR.

"(c) ADVISORY COMMITTEES.—

"(1) ESTABLISHMENT.—The head of the Pro-
gram Management Office, acting through the Direc-
tor of the Operating Entity, may establish 1 or more
Advisory Committees to provide advice to the Oper-
ating Entity and the Program Management Office.
Any such Advisory Committees shall be comprised of
members from government agencies, the private sec-
tor, academia, and public interest groups.

"(2) DETERMINATION REGARDING APPLICA-
BILITY OF FACA.—The Director of the National
Science Foundation may determine that the requirements of chapter 10 of title 5, United States Code, shall not apply with respect to a specific Advisory Committee established under paragraph (1).

"SEC. 5603. RESOURCES OF THE NAIRR.

"(a) IN GENERAL.—The head of the Program Management Office, acting through the Director of the Operating Entity and in consultation with relevant Executive agencies and offices represented on the Select Committee on AI and any relevant Advisory Committee, shall—

"(1) coordinate and provision resources of the NAIRR;

"(2) establish processes to manage the procurement of new resources of the NAIRR, and intake of in-kind contribution of resources of the NAIRR, from Executive agencies or other entities;

"(3) establish policies on and review resources of the NAIRR for concerns related to ethics, privacy, civil rights, and civil liberties;

"(4) retire resources of the NAIRR no longer available or needed; and

"(5) publicly report a summary of categories of available resources of the NAIRR, categories of sources of such resources of the NAIRR, and issues related to resources of the NAIRR."
"(h) Resources of the NAIRR.—The NAIRR shall offer resources that include, at a minimum, all of the following, subject to the availability of appropriations:

"(1) A mix of computational resources that shall include—

"(A) on-premises, cloud-based, hybrid, and emergent resources;

"(B) public cloud providers providing access to popular computational and storage services for NAIRR users;

"(C) an open source software environment for the NAIRR; and

"(D) an application programming interface providing structured access to artificial intelligence models.

"(2) Data, including by—

"(A)(i) in coordination with the National Institute of Standards and Technology and consistent with the guidance of the National Science and Technology Council titled 'Desirable Characteristics of Data Repositories for Federally Funded Data,' dated May 2022, or any successor document, publishing interoperability standards for data repositories based on the data sharing and documentation standards
and guidelines produced under section 22A of
the National Institute of Standards and Techn-
ology Act (15 U.S.C. 278h–1); and

"(ii) selecting and developing, through a
competitive bidding process, data repositories to
be available to NAIRR users;

"(B) establishing acceptable criteria for
datasets used as resources of the NAIRR;

"(C) identifying and providing access to
existing curated datasets of value and interest
to the NAIRR user community;

"(D) establishing an artificial intelligence
open data commons to facilitate community
sharing and curation of data, code, and models;
and

"(E) coordinating with the Interagency
Council on Statistical Policy to explore options
to make Federal statistical data available to
NAIRR users, including through the standard
application process established under section
3583(a) of title 44, United States Code.

"(3) Educational tools and services, including
by—

"(A) facilitating and curating educational
and training materials;
“(B) providing technical training and user support; and

“(C) providing outreach and programming for groups historically underrepresented in STEM.

“(4) AI testbeds and high-performance computing testbeds, including by—

“(A) in coordination with the National Institute of Standards and Technology, facilitating access to artificial intelligence testbeds through which researchers can measure, benchmark, test, or evaluate engineering or algorithmic developments; and

“(B) developing a comprehensive catalog of open AI testbeds.

“SEC. 5604. NAIRR PROCESSES AND PROCEDURES.

“(a) USER ELIGIBILITY.—

“(1) ELIGIBLE USERS.—Subject to paragraph (3), the following users shall be eligible for access to the NAIRR:

“(A) A researcher, educator, or student based in the United States that is affiliated with an entity described in paragraph (2).
"(B) An employee of an entity described in clause (iii) or (iv) of paragraph (2)(B) with a demonstrable mission-need.

"(2) ENTITIES DESCRIBED.—An entity described in this paragraph is an entity that—

"(A) is based in the United States; and

"(B) is one of the following:

"(i) An institution of higher education.

"(ii) A nonprofit institution (as such term is defined in section 4 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3703)).

"(iii) An Executive agency, Congress, an agency of the legislative branch, or an agency of the judicial branch.

"(iv) A federally funded research and development center.

"(v) A small business concern (as such term is defined in section 3 of the Small Business Act (15 U.S.C. 632), notwithstanding section 121.103 of title 13, Code of Federal Regulations) that has received funding from an Executive agency, including through the Small Business In-
novation Research Program or the Small Business Technology Transfer Program (as described in section 9 of the Small Business Act (15 U.S.C. 638)).

"(vi) A category of entity that the Director of the National Science Foundation and the Director of the Office of Science and Technology Policy determine shall be eligible.

"(vii) A consortium composed of entities described in clauses (i) through (vi).

"(3) EXCLUDED ENTITIES.—

"(A) IN GENERAL.—No individual is authorized to be an eligible user under paragraph (1) if the individual is employed by a foreign country that is listed in section 4872(d)(2) of title 10, United States Code, or is otherwise authorized by such country to act for or on its behalf.

"(B) ENFORCEMENT.—The Director of the National Science Foundation shall ensure that individuals authorized as eligible users meet the requirements of subparagraph (A).

"(4) USER ACCESS SELECTION.—The head of the Program Management Office, acting through the
Director of the Operating Entity, shall establish an application process for eligible users to request access to the NAIRR.

"(b) PRIVACY, ETHICS, CIVIL LIBERTIES, AND TRUSTWORTHINESS.—

"(1) IN GENERAL.—

"(A) REQUIREMENTS.—The head of the Program Management Office, acting through the Director of the Operating Entity and in consultation with any relevant Advisory Committee, shall establish requirements, a review process for applications, and a process for auditing resources of the NAIRR and research conducted using resources of the NAIRR on matters related to privacy, ethics, civil rights and civil liberties, safety, security, and trustworthiness of artificial intelligence systems developed using resources of the NAIRR.

"(B) FEDERAL STATISTICAL DATA.—Any auditing process required under subparagraph (A) for Federal statistical data included in a resource of the NAIRR shall be completed by the head of a designated statistical agency (as defined in section 3576(e) of title 44, United States Code), in coordination with the Chief
Statistician of the United States, consistent with relevant law.

"(2) CONSISTENCY.—The head of the Program Management Office shall ensure the requirements and processes described in paragraph (1) are consistent with the policies of the Office of Management and Budget policy and relevant policies of other Executive agencies. The head of the Program Management Office shall coordinate with the Senior Agency Official for Privacy and the General Counsel of the National Science Foundation in ensuring compliance with applicable privacy law and policy and Federal laws and regulations.

"(c) SYSTEM SECURITY AND USER ACCESS CONTROLS.—The head of the Program Management Office, acting through the Director of the Operating Entity and in consultation with the Director of the Office of Management and Budget, the Director of the National Institute of Standards and Technology, and the Director of the Cybersecurity and Infrastructure Security Agency—

"(1) shall establish minimum security requirements for all persons interacting with the NAIRR, consistent with the most recent version of the Cybersecurity Framework, or successor document, main-
tain by the National Institute of Standards and
Technology; and

"(2) may establish tiers of security require-
ments and user access controls beyond the minimum
requirements relative to security risks.

"(d) Fee Schedule.—

"(1) In general.—The head of the Program
Management Office, acting through the Director of
the Operating Entity, may establish a fee schedule
for access to the NAIRR. The Operating Entity may
only charge fees in such fee schedule. Such fee
schedule—

"(A) may differ by type of eligible user
and type of affiliated entity described in sub-
section (a);

"(B) shall include a free tier of access
based on appropriated funds and anticipated
costs and demand;

"(C) may include cost-based charges for el-
igible users to purchase resources of the
NAIRR beyond the resources included in a free
or subsidized tier; and

"(D) shall ensure that the primary purpose
of the NAIRR is to support research.

"(2) Retention and Use of Funds.—
“(A) RETAINING OF FUNDS.—Notwithstanding section 3302 of title 31, United States Code, the head of the Program Management Office may retain fees collected under this subsection.

“(B) AVAILABILITY AND USE OF FUNDS.—

Amounts retained under subparagraph (A)—

“(i) shall remain available until expended; and

“(ii) shall be available to the head of the Program Management Office, without further appropriation, for the purposes of this title.

“(e) RESEARCH SECURITY.—The head of the Program Management Office, acting through the Director of the Operating Entity, shall—

“(1) ensure conformance with the requirements of National Security Presidential Memorandum—33 (relating to supported research and development national policy), issued January 2021, and its implementation guidance on research security and research integrity, or any successor policy document or guidance, by establishing NAIRR operating principles that emphasize the research integrity prin-
principles of openness, reciprocity, and transparency; and

"(2) designate a member of the leadership team for the Operating Entity as a research security point of contact with responsibility for overseeing conformance with the National Security Presidential Memorandum–33 and its implementation guidance, or any successor policy document or guidance.

"(f) OPEN SOURCE.—The head of the Program Management Office, acting through the Director of the Operating Entity, shall establish policies to encourage software developed to administer the NAIRR, and software developed using resources of the NAIRR, to be open-source software."

(b) CONFORMING AMENDMENTS.—The table of contents in section 2(b) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116–283; 134 Stat. 3388) is amended by inserting after the items relating to title I.V the following:

"TITLE I.V—NATIONAL ARTIFICIAL INTELLIGENCE RESEARCH RESOURCE

"Sec. 5601. Definitions.
"Sec. 5602. Establishment; governance.
"Sec. 5603. Resources of the NAIRR.
"Sec. 5604. NAIRR processes and procedures."