

118TH CONGRESS  
2D SESSION

# S. 5109

To amend section 3520A of title 44, United States Code, to extend the Chief Data Officer Council’s sunset and add new authorities for improving Federal agency data governance, including to enable reliable and secure adoption of emerging technologies and artificial intelligence, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

SEPTEMBER 19, 2024

Mr. PETERS (for himself and Mr. YOUNG) introduced the following bill; which was read twice and referred to the Committee on Homeland Security and Governmental Affairs

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## A BILL

To amend section 3520A of title 44, United States Code, to extend the Chief Data Officer Council’s sunset and add new authorities for improving Federal agency data governance, including to enable reliable and secure adoption of emerging technologies and artificial intelligence, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Modernizing Data  
5 Practices to Improve Government Act”.

1 **SEC. 2. AMENDMENTS.**

2 (a) IN GENERAL.—Section 3520A of title 44, United  
3 States Code, is amended—

4 (1) by striking subsections (d) and (e);

5 (2) by redesignating subsections (a) through (c)  
6 as subsections (b) through (d), respectively;

7 (3) by inserting before subsection (b), as so re-  
8 designated, the following:

9 “(a) DEFINITIONS.—In this section:

10 “(1) ARTIFICIAL INTELLIGENCE.—The term  
11 ‘artificial intelligence’—

12 “(A) has the meaning given that term in  
13 section 5002 of the National Artificial Intel-  
14 ligence Initiative Act of 2020 (15 U.S.C. 9401);  
15 and

16 “(B) includes the artificial systems and  
17 techniques described in paragraphs (1) through  
18 (5) of section 238(g) of the John S. McCain  
19 National Defense Authorization Act for Fiscal  
20 Year 2019 (Public Law 115–232; 10 U.S.C.  
21 4061 note prec.).

22 “(2) DATA GOVERNANCE.—The term ‘data gov-  
23 ernance’—

24 “(A) means the approach of an agency to  
25 managing data during the lifecycle of the data,  
26 from acquisition, to use, to disposal; and

1 “(B) includes—

2 “(i) all actions an agency must take  
3 and the technology and processes an agen-  
4 cy must use to ensure data is secure, pri-  
5 vate, accurate, available, and usable; and

6 “(ii) authorities, roles, responsibilities,  
7 organizational structures, policies, proce-  
8 dures, standards, and resources for the  
9 definition, stewardship, production, secu-  
10 rity provenance, and use of data.

11 “(3) USE CASE.—The term ‘use case’ means a  
12 description of the ways and circumstances in which  
13 a technology is deployed to perform a specific func-  
14 tion.”;

15 (4) in subsection (c), as so redesignated—

16 (A) by redesignating paragraph (5) as  
17 paragraph (6);

18 (B) in paragraph (4), by striking the  
19 “and” at the end; and

20 (C) by inserting after paragraph (4) the  
21 following:

22 “(5) identify opportunities and procedures to  
23 improve data governance to—

1           “(A) ensure the data of agencies are trans-  
2           parent, accessible, and of sufficient quality for  
3           the intended use of the data; and

4           “(B) support agency heads and their ef-  
5           forts to reliably and securely leverage emerging  
6           technologies and artificial intelligence, to ensure  
7           mission outcomes and improve operational effi-  
8           ciency across agencies; and”;

9           (5) in subsection (d)(3), as so redesignated—

10           (A) by striking “The Administrator” and  
11           inserting the following:

12           “(A) ADMINISTRATOR OF THE OFFICE OF  
13           ELECTRONIC GOVERNMENT.—The Adminis-  
14           trator”; and

15           (B) by inserting after subparagraph (A),  
16           as so designated, the following:

17           “(B) APPOINTED MEMBERS.—The Direc-  
18           tor shall appoint a representative from among  
19           Chief Artificial Intelligence Officers to serve on  
20           the Council.”; and

21           (6) by adding at the end the following:

22           “(e) DATA GOVERNANCE REPORTS.—The Council  
23           shall submit to the Director, the Committee on Homeland  
24           Security and Governmental Affairs of the Senate, and the

1 Committee on Oversight and Accountability of the House  
2 of Representatives—

3 “(1) a biennial report on the work of the Coun-  
4 cil, including any updates to the recommendations  
5 provided in the report required under paragraph (2)  
6 of this subsection;

7 “(2) not later than 1 year after the date of en-  
8 actment of this subsection, a report with rec-  
9 ommendations and best practices for agencies on de-  
10 veloping datasets, data governance policies, and in-  
11 frastructure to enable adoption and use of emerging  
12 technologies and artificial intelligence, including for  
13 use in training, testing, and operation of artificial  
14 intelligence within agencies that includes—

15 “(A) an assessment of key data governance  
16 and sharing challenges preventing adoption of  
17 emerging technologies and artificial intelligence  
18 across agencies;

19 “(B) an assessment of ways to strengthen  
20 and clarify roles and responsibilities related to  
21 data governance between senior agency leaders,  
22 including the Chief Information Officer, the  
23 Chief Information Security Officer, the Chief  
24 Financial Officer, the Chief Privacy Officer, the

1 Chief Artificial Intelligence Officer, and the  
2 Chief Acquisition Officer;

3 “(C) recommendations for data governance  
4 best practices, including—

5 “(i) best practices to ensure data used  
6 for testing, training, and operation of arti-  
7 ficial intelligence is reliable, relevant to the  
8 task, representative of the impacted indi-  
9 viduals of the artificial intelligence system,  
10 transparent, high quality, and protects the  
11 privacy and personally identifiable informa-  
12 tion of individuals; and

13 “(ii) defining key data standards, in-  
14 cluding data quality;

15 “(D) a prioritization of agency artificial in-  
16 telligence use cases that address a critical need  
17 across the Federal Government, for which new  
18 or shared datasets are needed to support adop-  
19 tion;

20 “(E) identification of existing data avail-  
21 able to 1 or more agencies that would benefit  
22 other such agencies if the data were shared or  
23 made available;

1           “(F) recommendations for ways to address  
2 increases in risks, including through training of  
3 relevant agency employees, associated with—

4           “(i) the potential for misuse of, mis-  
5 management of, and unauthorized access  
6 to data and personally identifiable informa-  
7 tion of individuals when an agency  
8 leverages data for use in artificial intel-  
9 ligence, including identification of software  
10 or hardware solutions, technical processes,  
11 techniques, or other technological means of  
12 mitigating privacy risks arising from data  
13 processing; or

14           “(ii) increasing access to the data of  
15 the agency for the purposes of supporting  
16 a cross-Government mission;

17           “(G) recommendations for data ownership  
18 and retention policies and procedures, including  
19 policies and procedures to ensure that agency  
20 contracts to procure artificial intelligence in-  
21 clude any necessary clauses to ensure that the  
22 Federal Government—

23           “(i) retains sufficient rights to data,  
24 and any modifications to that data;

1           “(ii) avoids vendor lock-in and retains  
2           the ability to facilitate or conduct the con-  
3           tinued design, development, testing, and  
4           operation of artificial intelligence by the  
5           Federal Government; and

6           “(iii) can conduct pre-procurement re-  
7           views of artificial intelligence to assess po-  
8           tential error issues;

9           “(H) criteria agencies should consider  
10          when using data to train artificial intelligence  
11          used by agencies, including recommendations  
12          for—

13               “(i) ways to increase transparency of  
14               training data for the public and for agency  
15               employees using the relevant artificial in-  
16               telligence system software;

17               “(ii) processes and procedures to ana-  
18               lyze and test training data for potential  
19               risks;

20               “(iii) criteria for determining how to  
21               preserve the interests of the Federal Gov-  
22               ernment; and

23               “(iv) performance evaluation metrics  
24               to ensure that an artificial intelligence sys-  
25               tem performs as intended;



1           “(I) recommendations for ways to expand  
2 public access to Federal data assets in a ma-  
3 chine-readable format while also taking into ac-  
4 count security considerations, including the risk  
5 that, while information in an individual data  
6 asset may not pose a security risk in isolation,  
7 such information could pose a security risk  
8 when combined with other data assets;

9           “(J) recommendations for defining, gener-  
10 ating, using, and ensuring the privacy and secu-  
11 rity of synthetic data in the Federal Govern-  
12 ment, including—

13               “(i) a formalized definition of syn-  
14 thetic data generation for government use,  
15 including specifying definitions for data  
16 which is fully or partially synthetic;

17               “(ii) guidance for agencies on best  
18 practices around synthetic data generation  
19 and use, including tools or techniques  
20 agencies should take to—

21                   “(I) mitigate privacy and security  
22 risks;

23                   “(II) ensure agencies practice ap-  
24 propriate processes to ensure the ac-  
25 curacy and quality of synthetic data

1 and the appropriateness for the in-  
2 tended use of the synthetic data by  
3 the agency;

4 “(III) adopt the appropriate  
5 techniques to validate synthetic data,  
6 including data profiling, data consist-  
7 ency, data integrity, and data docu-  
8 mentation; and

9 “(IV) communicate opportunities,  
10 risks, and limitations of synthetic data  
11 internally to agencies and externally  
12 to the public;

13 “(iii) opportunities across the Federal  
14 Government and within specific agencies  
15 for embracing or avoiding the use of syn-  
16 thetic data; and

17 “(iv) opportunities for the Federal  
18 Government to partner with public and  
19 private sector entities in the development  
20 and sharing of data, including synthetic  
21 data, to help in the adoption of emerging  
22 technologies and artificial intelligence; and

23 “(K) for subparagraphs (A) through (J),  
24 an indication of how agencies can incorporate  
25 the respective recommendations and best prac-

1           tices into existing agency processes and statu-  
2           tory requirements.

3           “(f) DATA GOVERNANCE GUIDANCE.—The Director,  
4 upon receipt of a report required under subsection (e),  
5 may issue guidance to agencies with respect to the imple-  
6 mentation of the recommendations of the report.

7           “(g) DATA MANAGEMENT REPORT.—Not later than  
8 270 days after the date of enactment of this subsection,  
9 the Director, in consultation with the Council, shall submit  
10 to Congress an annual report with recommendations to  
11 clarify and enhance the roles of the Chief Data Officers  
12 across the Federal Government relating to data govern-  
13 ance for artificial intelligence, including—

14           “(1) an inventory of all Chief Data Officers of  
15 agencies, including, with respect to each agency—

16           “(A) any additional roles or titles the Chief  
17 Data Officer holds at the agency;

18           “(B) the organizational structure of the  
19 agency, including any official to whom the Chief  
20 Data Officer reports to within the agency; and

21           “(C) the respective roles, responsibilities,  
22 and statutory authorities relating to data and  
23 artificial intelligence of the Chief Data Officer  
24 at the agency;

1           “(2) an identification of skills and resources  
2           needed by Chief Data Officers and their staffs to  
3           support artificial intelligence system adoption at  
4           agencies; and

5           “(3) recommendations for suggested collabora-  
6           tion opportunities between the Council and other  
7           interagency councils to improve data governance best  
8           practices across government, including—

9                   “(A) the Chief Financial Officers Council;

10                   “(B) the Chief Human Capital Officers  
11           Council;

12                   “(C) the Chief Acquisition Officers Coun-  
13           cil;

14                   “(D) the Federal Privacy Council;

15                   “(E) the Chief Information Officers Coun-  
16           cil; and

17                   “(F) other key groups of the Federal Gov-  
18           ernment.

19           “(h) EVALUATION.—Not later than 2 years after the  
20           date of enactment of this subsection, and not less fre-  
21           quently than once every 2 years thereafter, the Comp-  
22           troller General shall submit to Congress a report on—

23                   “(1) whether the duties of the Council improved  
24           the use of evidence and program evaluation in the  
25           Federal Government; and

1           “(2) any barriers or challenges preventing the  
2           Council from accomplishing the objectives under this  
3           section or the amendments made by the Modernizing  
4           Data Practices to Improve Government Act.”.

5           (b) SUNSET.—Beginning on the date that is 7 years  
6           after the date of enactment of this Act, the amendments  
7           made by this Act shall have no force or effect.

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