AMENDMENT NO._____ Calendar No.____

Purpose: In the nature of a substitute.

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

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.

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. PETERS

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 "Modernizing Data

5 Practices to Improve Government Act".

6 SEC. 2. AMENDMENTS.

7 Section 3520A of title 44, United States Code, is

8 amended—

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

1	(2) by redesignating subsections (a) through (c)
2	as subsections (b) through (d), respectively;
3	(3) by inserting before subsection (b), as so re-
4	designated, the following:
5	"(a) DEFINITIONS.—In this section:
6	"(1) Artificial intelligence.—The term
7	'artificial intelligence'—
8	"(A) has the meaning given that term in
9	section 5002 of the National Artificial Intel-
10	ligence Initiative Act of 2020 (15 U.S.C. 9401);
11	and
12	"(B) includes the artificial systems and
13	techniques described in paragraphs (1) through
14	(5) of section 238(g) of the John S. McCain
15	National Defense Authorization Act for Fiscal
16	Year 2019 (Public Law 115–232; 10 U.S.C.
17	4061 note prec.).
18	"(2) DATA GOVERNANCE.—The term 'data gov-
19	ernance'—
20	"(A) means the approach of an agency to
21	managing data during the lifecycle of the data;
22	and
23	"(B) includes—

1	"(i) agency responsibilities and re-
2	quirements to ensure data is secure, pri-
3	vate, accurate, available, and usable; and
4	"(ii) authorities, roles, responsibilities,
5	organizational structures, policies, proce-
6	dures, standards, and resources for the
7	definition, stewardship, production, secu-
8	rity provenance, dissemination, and use of
9	data.".
10	(4) in subsection (c), as so redesignated—
11	(A) by redesignating paragraph (5) as
12	paragraph (6);
13	(B) in paragraph (4), by striking the
14	"and" at the end; and
15	(C) by inserting after paragraph (4) the
16	following:
17	"(5) identify opportunities and procedures to
18	improve data governance to—
19	"(A) ensure that publicly available data of
20	agencies are transparent, accessible, and of suf-
21	ficient quality for the intended use of the data;
22	and
23	"(B) support agency heads and their ef-
24	forts to reliably and securely leverage emerging
25	technologies and artificial intelligence, including

1	to ensure mission outcomes and improve oper-
2	ational efficiency across agencies; and";
3	(5) in subsection $(d)(4)$, as so redesignated, by
4	striking "and Evaluation Officers" through "mem-
5	ber of the Council" and inserting ", a representative
6	from all Chief Artificial Intelligence Officers, and a
7	representative for all Chief Privacy Officers, and
8	such representatives shall serve as non-voting ex
9	officio members of the Council'; and
10	(6) by adding at the end the following:
11	"(e) Council Staff.—The Council may enter into
12	an interagency agreement with the Administrator of Gen-
13	eral Services for shared services for the purpose of staffing
14	the Council.
15	"(f) DATA GOVERNANCE REPORTS.—The Council
16	shall submit to the Director, the Committee on Homeland
17	Security and Governmental Affairs of the Senate, and the
18	Committee on Oversight and Accountability of the House
19	of Representatives—
20	"(1) a biennial report on the work of the Coun-
21	cil, including any updates to the recommendations
22	provided in the report required under paragraph (2)
23	of this subsection and an explanation of the work to
24	ensure progress on each of the objectives in sub-
25	section (c);

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1 ((2)) not later than 1 year after the date of en-2 actment of this subsection, a report with rec-3 ommendations and best practices for agencies (tak-4 ing into account that the recommendations may not 5 apply to all agencies or to all agencies equally, based 6 on the unique missions and capabilities of each 7 agency) for developing datasets, data governance 8 policies, and infrastructure, including to enable 9 adoption and use of emerging technologies and arti-10 ficial intelligence, such as for use in training, test-11 ing, and operation of artificial intelligence within 12 agencies, which shall include— 13 "(A) an assessment of key data governance 14 and sharing challenges, including those that 15 prevent adoption of emerging technologies and 16 artificial intelligence across agencies; 17 "(B) an assessment, as applicable, of ways 18 to strengthen and clarify the roles and respon-19 sibilities relating to data governance of agency 20 officials, in addition to the Chief Data Officer; 21 "(C) recommendations for data governance best practices, including— 22 23 "(i) best practices to ensure data used 24 is reliable, fit for purpose, transparent,

25 high quality, protects privacy and person-

1	ally identifiable information, and protects
2	confidentiality of individuals and other sen-
3	sitive information, including data used for
4	testing, training, and operation of artificial
5	intelligence; and
6	"(ii) defining key data standards, in-
7	cluding data quality;
8	"(D) a prioritization of existing and future
9	agency artificial intelligence use cases that ad-
10	dress a critical need across the Federal Govern-
11	ment, for which new or shared datasets are
12	needed to support adoption;
13	"(E) identification of existing data avail-
14	able to 1 or more agencies that would benefit
15	other such agencies if the data were shared or
16	made available;
17	"(F) recommendations for ways Chief
18	Data Officers should work with relevant agency
19	officials to assist in addressing increases in
20	risks associated with—
21	"(i) the potential for misuse of, mis-
22	management of, and unauthorized access
23	to data and personally identifiable informa-
24	tion of individuals when an agency
25	leverages data for use in artificial intel-

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1	ligence, including identification of software
2	or hardware solutions, technical processes,
3	techniques, or other technological means of
4	mitigating privacy risks arising from data
5	processing; and
6	"(ii) increasing access to the data of
7	the agency for the purposes of supporting
8	a cross-Government mission;
9	"(G) recommendations for data ownership
10	and retention policies and procedures, including
11	how Chief Data Officers can support Chief Pro-
12	curement Officers and relevant officials in en-
13	suring that agency contracts to procure emerg-
14	ing technology or artificial intelligence include
15	any necessary clauses to ensure that the Fed-
16	eral Government—
17	"(i) retains sufficient rights to data,
18	and any modifications to that data;
19	"(ii) avoids vendor lock-in and retains
20	the ability to facilitate or conduct the con-
21	tinued design, development, testing, and
22	operation of data by the Federal Govern-
23	ment;

1	"(iii) can conduct pre-procurement re-
2	views of artificial intelligence to assess po-
3	tential error issues; and
4	"(iv) maximizes the use of and access
5	to open data, open source software, and
6	public access research to improve trans-
7	parency, knowledge sharing, and interoper-
8	ability.
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; and
17	"(ii) processes and procedures to ana-
18	lyze and test training data for potential
19	risks;
20	"(I) recommendations for ways to expand
21	public access to Federal data assets in a ma-
22	chine-readable format while also taking into ac-
23	count the criteria listed under section
24	3511(a)(2)(E);

1	"(J) recommendations for defining, gener-
2	ating, using, and ensuring the privacy and secu-
3	rity of synthetic data in the Federal Govern-
4	ment, including—
5	"(i) a formalized definition of syn-
6	thetic data generation for government use,
7	including specifying definitions for data
8	which is fully or partially synthetic;
9	"(ii) best practices relating to syn-
10	thetic data generation and use, including
11	tools or techniques agencies should take
12	to—
13	"(I) mitigate privacy and security
14	risks;
15	"(II) ensure the accuracy and
16	quality of synthetic data and the ap-
17	propriateness for the intended use of
18	the synthetic data by the agency;
19	"(III) adopt the appropriate
20	techniques to validate synthetic data,
21	including data profiling, data consist-
22	ency, data integrity, and data docu-
23	mentation; and
24	"(IV) communicate opportunities,
25	risks, and limitations of synthetic data

1	internally to relevant Federal employ-
2	ees and externally to the public;
3	"(iii) opportunities across the Federal
4	Government and within specific agencies
5	for using synthetic data;
6	"(iv) circumstances when agencies
7	should not use synthetic data; and
8	"(v) opportunities for the Federal
9	Government to partner with public and
10	private sector entities in the development
11	and sharing of data, including synthetic
12	data, including to help in the adoption of
13	emerging technologies and artificial intel-
14	ligence, while also taking into account the
15	criteria under section $3511(a)(2)(E)$; and
16	((K) for subparagraphs (A) through (J),
17	an indication of how agencies can incorporate
18	the respective recommendations and best prac-
19	tices into existing agency processes and statu-
20	tory requirements.
21	"(g) DATA GOVERNANCE GUIDANCE.—The Director,
22	upon receipt of a report required under subsection (f),
23	may issue guidance to agencies with respect to the imple-
24	mentation of the recommendations of the report.

1	"(h) DATA MANAGEMENT REPORT.—Not later than
2	270 days after the date of enactment of this subsection,
3	the Director, in consultation with the Council, shall—
4	"(1) submit to Congress and make available on
5	a public website a report with recommendations to
6	clarify and enhance the roles of the Chief Data Offi-
7	cers across the Federal Government relating to data
8	governance, including for artificial intelligence and
9	including recommendations for suggested collabora-
10	tion opportunities between the Council, other inter-
11	agency councils, and additional Federal Government
12	entities the Council determines relevant; and
13	((2)) make available on a public website, not
14	less frequently than annually—
15	"(A) a list of all Chief Data Officers of
16	agencies, including, with respect to each Chief
17	Data Officer—
18	"(i) any additional roles or titles the
19	Chief Data Officer holds at the agency;
20	and
21	"(ii) the respective roles, responsibil-
22	ities, and statutory authorities of the Chief
23	Data Officer at the agency relating to data
24	and artificial intelligence; and

	12
1	"(B) an identification of skills and re-
2	sources needed by Chief Data Officers and their
3	staffs, including to support artificial intelligence
4	system adoption at agencies.
5	"(i) EVALUATION.—Not later than 2 years after the
6	date of enactment of this subsection, and not less fre-
7	quently than once every 2 years thereafter, the Comp-
8	troller General shall submit to Congress a report on—
9	"(1) whether the duties of the Council improved
10	the use of evidence and data in the Federal Govern-
11	ment; and
12	"(2) any barriers or challenges preventing the
13	Council from accomplishing the objectives under this
14	section or the amendments made by the Modernizing
15	Data Practices to Improve Government Act.
16	"(j) RULE OF CONSTRUCTION.—Nothing in this sec-
17	tion shall be construed to require an agency to implement
18	any recommendation developed pursuant to subsection (f)
19	or (h).
20	"(k) SUNSET.—Beginning on the date that is 7 years
21	after the date of enactment of this subsection, this section
22	shall have no force or effect.".
23	SEC. 3. NO ADDITIONAL FUNDS.
24	No additional funds are authorized to be appro-

25 priated for the purpose of carrying out this Act.