

Calendar No. 180115TH CONGRESS
1ST SESSION**S. 760****[Report No. 115–134]**

To expand the Government’s use and administration of data to facilitate transparency, effective governance, and innovation, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 29, 2017

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

JULY 24, 2017

Reported by Mr. JOHNSON, with amendments

[Omit the part struck through and insert the part printed in italics]

A BILL

To expand the Government’s use and administration of data to facilitate transparency, effective governance, and innovation, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Open, Public, Elec-
3 tronic, and Necessary Government Data Act” or the
4 “OPEN Government Data Act”.

5 **SEC. 2. FINDINGS.**

6 (a) FINDINGS.—Congress finds the following:

7 (1) Federal Government data is a valuable na-
8 tional resource. Managing Federal Government data
9 to make it open, available, discoverable, and usable
10 to the general public, businesses, journalists, aca-
11 demics, and advocates promotes efficiency and effec-
12 tiveness in Government, creates economic opportuni-
13 ties, promotes scientific discovery, and most impor-
14 tantly, strengthens our democracy.

15 (2) Maximizing the usefulness of Federal Gov-
16 ernment data that is appropriate for release rests
17 upon making it readily available, discoverable, and
18 usable—in a word: open. Information presumptively
19 should be available to the general public unless the
20 Federal Government reasonably foresees that disclo-
21 sure could harm a specific, articulable interest pro-
22 tected by law or the Federal Government is other-
23 wise expressly prohibited from releasing such data
24 due to statutory requirements.

1 (3) The Federal Government has the responsi-
2 bility to be transparent and accountable to its citi-
3 zens.

4 (4) Data controlled, collected, or created by the
5 Federal Government should be originated, trans-
6 mitted, and published in a modern, open, and elec-
7 tronic format, to be as readily accessible as possible,
8 consistent with data standards under this Act or
9 otherwise permitted by law.

10 (5) The effort to inventory *Federal* Government
11 data will have additional benefits, including identi-
12 fying opportunities within agencies to reduce waste,
13 increase efficiencies, and save taxpayer dollars. As
14 such, this effort should involve many types of data,
15 including data generated by applications, devices,
16 networks, and equipment, which can be harnessed to
17 improve operations, lower energy consumption, re-
18 duce costs, and strengthen security.

19 (6) Communication, commerce, and data tran-
20 scend national borders. Global access to *Federal*
21 Government information is often essential to pro-
22 moting innovation, scientific discovery, entrepreneur-
23 ship, education, and the general welfare.

1 **SEC. 3. DEFINITION.**

2 In this Act, the term “agency” has the meaning given
3 the term in section 3561 of title 44, United States Code,
4 as added by section 4.

5 **SEC. 4. OPEN GOVERNMENT DATA.**

6 (a) IN GENERAL.—Chapter 35 of title 44, United
7 States Code, is amended by adding at the end the fol-
8 lowing:

9 **“Subchapter III—Open Government Data**

10 **“§ 3561. Definitions**

11 “As used in this subchapter—

12 “(1) the term ‘agency’—

13 “(A) has the meaning given the term in
14 section 3502; and

15 “(B) includes the Federal Election Com-
16 mission;

17 “(2) the term ‘data’ means recorded informa-
18 tion, regardless of form or the media on which the
19 data is recorded;

20 “(3) the term ‘data asset’ means a collection of
21 data elements or data sets that may be grouped to-
22 gether;

23 “(4) the term ‘Director’ means the Director of
24 the Office of Management and Budget;

1 “(5) the term ‘Enterprise Data Inventory’
2 means ~~the~~ *a* data inventory developed and main-
3 tained pursuant to section 3563;

4 “(6) the terms ‘information resources manage-
5 ment’, ‘information system’, and ‘information tech-
6 nology’ have the meanings given those terms in sec-
7 tion 3502;

8 “(7) the term ‘machine-readable’ means a for-
9 mat in which information or data can be easily proc-
10 essed by a computer without human intervention
11 while ensuring no semantic meaning is lost;

12 “(8) the term ‘metadata’ means structural or
13 descriptive information about data such as content,
14 format, source, rights, accuracy, provenance, fre-
15 quency, periodicity, granularity, publisher or respon-
16 sible party, contact information, method of collec-
17 tion, and other descriptions;

18 “(9) the term ‘nonpublic data asset’—

19 “(A) means a data asset that may not be
20 made available to the public for privacy, secu-
21 rity, confidentiality, regulation, or other reasons
22 as determined by law; and

23 “(B) includes data provided by contractors
24 that is protected by contract, license, patent,

1 trademark, copyright, confidentiality, regula-
2 tion, or other restriction;

3 “(10) the term ‘open Government data asset’
4 means a data asset maintained by the Federal Gov-
5 ernment that is—

6 “(A) machine-readable;

7 “(B) available in an open format;

8 “(C) not encumbered by restrictions that
9 would impede use or reuse; and

10 “(D) based on an underlying open stand-
11 ard that is maintained by a standards organiza-
12 tion;

13 “(11) the term ‘open license’ means a legal
14 guarantee applied to a public data asset that the
15 data asset is made available—

16 “(A) at no cost to the public; and

17 “(B) with no restrictions on copying, pub-
18 lishing, distributing, transmitting, citing, or
19 adapting; and

20 “(12) the term ‘public data asset’ means a data
21 asset maintained by the Federal Government that—

22 “(A) may be released to the public;

23 “(B) has been released to the public in an
24 open format and is discoverable through a

1 search of Data.gov or any successor to
2 Data.gov; or

3 “(C) is part of the worldwide public do-
4 main or, if necessary, published with an open li-
5 cense.

6 **“§ 3562. Requirements for Government data**

7 “(a) MACHINE-READABLE DATA REQUIRED.—Open
8 Government data assets made available by an agency shall
9 be published as machine-readable data.

10 “(b) OPEN BY DEFAULT.—When not otherwise pro-
11 hibited by law, and to the extent practicable, public data
12 assets and nonpublic data assets maintained by the Fed-
13 eral Government shall—

14 “(1) be available in an open format; and

15 “(2) be available under open licenses.

16 “(c) OPEN LICENSE OR WORLDWIDE PUBLIC DO-
17 MAIN DEDICATION REQUIRED.—When not otherwise pro-
18 hibited by law, and to the extent practicable, open Govern-
19 ment data assets published by or for an agency shall be
20 made available under an open license or, if not made avail-
21 able under an open license and appropriately released,
22 shall be considered to be published as part of the world-
23 wide public domain.

24 “(d) INNOVATION.—Each agency may engage with
25 nongovernmental organizations, citizens, nonprofit organi-

1 zations, colleges and universities, private and public com-
 2 panies, and other agencies to explore opportunities to le-
 3 verage the public data assets of the agency in a manner
 4 that may provide new opportunities for innovation in the
 5 public and private sectors in accordance with law and reg-
 6 ulation.

7 **“§ 3563. Enterprise data inventory *Data Inventory***

8 “(a) AGENCY DATA INVENTORY REQUIRED.—

9 “(1) IN GENERAL.—In order to develop a clear
 10 and comprehensive understanding of the data assets
 11 in the possession of an agency, the head of each
 12 agency, in consultation with the Director, shall de-
 13 velop and maintain an enterprise data inventory (~~in~~
 14 ~~this section referred to as the ‘Enterprise Data In-~~
 15 ~~ventory’~~) that accounts for any data asset created,
 16 collected, under the control or direction of, or main-
 17 tained by the agency after the effective date of this
 18 section, with the goal of including all data assets, to
 19 the extent practicable.

20 “(2) CONTENTS.—~~The~~ *Each* Enterprise Data
 21 Inventory shall include ~~each of~~ the following:

22 “(A) Data assets used in agency informa-
 23 tion systems (including program administration,
 24 statistics, and financial activity) generated by

1 applications, devices, networks, facilities, and
2 equipment, categorized by source type.

3 “(B) Data assets shared or maintained
4 across agency programs and bureaus.

5 “(C) Data assets that are shared among
6 agencies or created by more than 1 agency.

7 “(D) A clear indication of all data assets
8 that can be made publicly available under sec-
9 tion 552 of title 5 (commonly known as the
10 ‘Freedom of Information Act’).

11 “(E) A description of whether the agency
12 has determined that an individual data asset
13 may be made publicly available and whether the
14 data asset is available to the public.

15 “(F) Nonpublic data assets.

16 “(G) Open Government data assets.

17 “(b) PUBLIC AVAILABILITY.—The Chief Information
18 Officer of each agency shall use the standards ~~provided~~
19 *issued* by the Director ~~issued~~ pursuant to subsection (c)
20 to make public data assets included in the Enterprise
21 Data Inventory *of the agency* publicly available in an open
22 format and under an open license.

23 “(c) STANDARDS FOR ENTERPRISE DATA INVEN-
24 TORY.—The Director shall issue standards for ~~the~~ *an* En-
25 terprise Data Inventory, including—

1 “(1) a requirement that ~~the~~ *an* Enterprise Data
2 Inventory include a compilation of metadata about
3 agency data assets; and

4 “(2) criteria that the head of each agency shall
5 use in determining whether to make a particular
6 data asset publicly available in a manner that takes
7 into account—

8 “(A) the expectation of confidentiality as-
9 sociated with an individual data asset;

10 “(B) security considerations, including the
11 risk that information in an individual data asset
12 in isolation does not pose a security risk but
13 when combined with other available information
14 may pose such a risk;

15 “(C) the cost and benefits to the public of
16 converting the data into a manner that could be
17 understood and used by the public;

18 “(D) the expectation that all data assets
19 that would otherwise be made available under
20 section 552 of title 5 (commonly known as the
21 ‘Freedom of Information Act’) be disclosed; and

22 “(E) any other considerations that the Di-
23 rector determines to be relevant.

1 “(d) NONPUBLIC DATA ASSETS.—Nonpublic data as-
2 sets included in ~~the~~ *an* Enterprise Data Inventory may
3 be maintained in a nonpublic section of the inventory.

4 “(e) AVAILABILITY OF ENTERPRISE DATA INVEN-
5 TORY.—The Chief Information Officer of each agency—

6 “(1) shall make the Enterprise Data Inventory
7 *of the agency* available to the public on Data.gov;

8 “(2) shall ensure that access to the Enterprise
9 Data Inventory *of the agency* and the data contained
10 therein is consistent with applicable law and regula-
11 tion; and

12 “(3) may implement paragraph (1) in a manner
13 that maintains a nonpublic portion of the Enterprise
14 Data Inventory *of the agency*.

15 “(f) REGULAR UPDATES REQUIRED.—The Chief In-
16 formation Officer of each agency shall—

17 “(1) to the extent practicable, complete the En-
18 terprise Data Inventory for the agency not later
19 than 1 year after the date of enactment of this sec-
20 tion; and

21 “(2) add additional data assets to the Enter-
22 prise Data Inventory for the agency not later than
23 90 days after the date on which the data asset is
24 created or identified.

1 “(g) USE OF EXISTING RESOURCES.—When prac-
 2 ticable, the Chief Information Officer of each agency shall
 3 use existing procedures and systems to compile and pub-
 4 lish the Enterprise Data Inventory for the agency.

5 **“§ 3564. Federal agency responsibilities**

6 “(a) INFORMATION RESOURCES MANAGEMENT.—
 7 With respect to general information resources manage-
 8 ment, each agency shall—

9 “(1) improve the integrity, quality, and utility
 10 of information to all users within and outside the
 11 agency by—

12 “(A) using open format for any new open
 13 Government data asset created or obtained on
 14 *or after* the date that is 1 year after the date
 15 of enactment of this section; and

16 “(B) to the extent practicable, encouraging
 17 the adoption of open format for all open Gov-
 18 ernment data assets created or obtained before
 19 the date of enactment of this section *described*
 20 *in subparagraph (A)*; and

21 “(2) in consultation with the Director, develop
 22 an open data plan that, at a minimum and to the
 23 extent practicable—

24 “(A) requires the agency to develop proc-
 25 esses and procedures that—

1 “(i) require each new data collection
2 mechanism to use an open format; and

3 “(ii) allow the agency to collaborate
4 with non-Government entities, researchers,
5 businesses, and private citizens for the
6 purpose of understanding how data users
7 value and use open Government data as-
8 sets;

9 “(B) identifies and implements methods
10 for collecting and analyzing digital information
11 on data asset usage by users within and outside
12 of the agency, including designating a point of
13 contact within the agency to assist the public
14 and to respond to quality issues, usability
15 *issues*, recommendations for improvements, and
16 complaints about adherence to open data re-
17 quirements;

18 “(C) develops and implements a process to
19 evaluate and improve the timeliness, complete-
20 ness, accuracy, usefulness, and availability of
21 open Government data assets;

22 “(D) requires the agency to update the
23 plan at an interval determined by the Director;

24 “(E) includes requirements for meeting the
25 goals of the agency open data plan including

1 technology, training for employees, and imple-
2 menting procurement standards, in accordance
3 with existing law, that allow for the acquisition
4 of innovative solutions from the public and pri-
5 vate sectors; and

6 “(F) prohibits the dissemination and acci-
7 dental disclosure of nonpublic data assets.

8 “(b) INFORMATION DISSEMINATION.—With respect
9 to information dissemination, each agency—

10 “(1) shall provide access to open Government
11 data assets online;

12 “(2) shall take the necessary precautions to en-
13 sure that the agency maintains the production and
14 publication of data assets which are directly related
15 to activities that protect the safety of human life or
16 property, as identified by the open data plan of the
17 agency required under subsection (a)(2); and

18 “(3) may engage the public in using open Gov-
19 ernment data assets and encourage collaboration
20 by—

21 “(A) publishing information on open Gov-
22 ernment data assets usage in regular, timely in-
23 tervals, but not less *frequently* than annually;

1 “(B) receiving public input regarding pri-
2 orities for the analysis and disclosure of data
3 assets to be published;

4 “(C) assisting civil society groups and
5 members of the public working to expand the
6 use of open Government data assets; and

7 “(D) hosting challenges, competitions,
8 events, or other initiatives designed to create
9 additional value from open Government data as-
10 sets.

11 **“§ 3565. Additional Chief Information Officer respon-**
12 **sibilities**

13 “The Chief Information Officer of each agency, or
14 other appropriate official designated by the head of an
15 agency, is responsible for—

16 “(1) data asset management, format standard-
17 ization, sharing of data assets, and publication of
18 data assets for the agency;

19 “(2) the compilation and publication of the En-
20 terprise Data Inventory for the agency required
21 under section 3563;

22 “(3) ensuring that agency data conforms with
23 open data best practices;

24 “(4) engaging agency employees, the public,
25 and contractors in using open Government data as-

1 sets and ~~encourage~~ *encouraging* collaborative ap-
2 proaches to improving data use;

3 “(5) supporting the agency Performance Im-
4 provement Officer in generating data to support the
5 function of the Performance Improvement Officer
6 described in section 1124(a)(2) of title 31;

7 “(6) reviewing the information technology infra-
8 structure of the agency and the impact of the infra-
9 structure on making data assets accessible to reduce
10 barriers that inhibit data asset accessibility;

11 “(7) ensuring that, to the extent practicable,
12 the agency is maximizing its own use of data, includ-
13 ing data assets used in agency information systems
14 (including program administration, statistics, and fi-
15 nancial activity) generated by applications, devices,
16 networks, facilities, and equipment, categorized by
17 source type, and such use is not otherwise prohib-
18 ited, to reduce costs, improve operations, and
19 strengthen security and privacy protections; and

20 “(8) identifying points of contact for roles and
21 responsibilities related to open data use and imple-
22 mentation as required by the Director.

23 **“§ 3566. Technology portal**

24 “(a) DATA.GOV REQUIRED.—The Administrator of
25 General Services shall maintain a single public interface

1 online as a point of entry dedicated to sharing open Gov-
2 ernment data assets with the public.

3 “(b) COORDINATION WITH AGENCIES.—The Director
4 shall determine, after consultation with the head of each
5 agency and the Administrator of General Services, the
6 method to access any open Government data assets pub-
7 lished through the interface described in subsection (a).”.

8 (b) SPECIAL PROVISIONS.—

9 (1) EFFECTIVE DATE.—Notwithstanding sec-
10 tion 8, section 3562 of title 44, United States Code,
11 as added by subsection (a), shall take effect on the
12 date that is 1 year after the date of enactment of
13 this Act and shall apply with respect to any contract
14 entered into by an agency on or after such effective
15 date.

16 (2) USE OF OPEN DATA ASSETS.—Not later
17 than 1 year after the date of enactment of this Act,
18 the head of each agency shall ensure that any activi-
19 ties by the agency or any new contract entered into
20 by the agency meet the requirements of section 3562
21 of title 44, United States Code, as added by sub-
22 section (a).

23 (3) DEADLINE FOR TECHNOLOGY PORTAL.—
24 Not later than 180 days after the effective date of
25 this Act, the Administrator of General Services shall

1 meet the requirements of section 3566 of title 44,
 2 United States Code, as added by subsection (a).

3 (c) TECHNICAL AND CONFORMING AMENDMENT.—

4 The table of sections for chapter 35 of title 44, United
 5 States Code, is amended by adding at the end the fol-
 6 lowing:

“SUBCHAPTER III—OPEN GOVERNMENT DATA

“3561. Definitions.

“3562. Requirements for Government data.

“3563. Enterprise ~~data inventory~~ *Data Inventory*.

“3564. Federal agency responsibilities.

“3565. Additional Chief Information Officer responsibilities.

“3566. Technology portal.”.

7 **SEC. 5. EVALUATION OF AGENCY ANALYTICAL CAPABILI-**
 8 **TIES.**

9 (a) AGENCY REVIEW OF EVALUATION AND ANALYSIS
 10 CAPABILITIES; REPORT.—Not later than 3 years after the
 11 date of enactment of this Act, the Chief Operating Officer
 12 of each agency shall submit to the Committee on Home-
 13 land Security and Governmental Affairs of the Senate, the
 14 Committee on Oversight and Government Reform of the
 15 House of Representatives, and the Director of the Office
 16 of Management and Budget a report on the review de-
 17 scribed in subsection (b).

18 (b) REQUIREMENTS OF AGENCY REVIEW.—The re-
 19 port required under subsection (a) shall assess the cov-
 20 erage, quality, methods, effectiveness, and independence of
 21 the evaluation, research, and analysis efforts of an agency,
 22 including each of the following:

1 (1) A list of the activities and operations of the
2 agency that are being evaluated and analyzed and
3 the activities and operations that have been evalu-
4 ated and analyzed during the previous 5 years.

5 (2) The extent to which the evaluations, re-
6 search, and analysis efforts and related activities of
7 the agency support the needs of various divisions
8 within the agency.

9 (3) The extent to which the evaluation research
10 and analysis efforts and related activities of the
11 agency address an appropriate balance between
12 needs related to organizational learning, ongoing
13 program management, performance management,
14 strategic management, interagency and private sec-
15 tor coordination, internal and external oversight, and
16 accountability.

17 (4) The extent to which the agency uses meth-
18 ods and combinations of methods that are appro-
19 priate to agency divisions and the corresponding re-
20 search questions being addressed, including an ap-
21 propriate combination of formative and summative
22 evaluation research and analysis approaches.

23 (5) The extent to which evaluation and research
24 capacity is present within the agency to include per-
25 sonnel, agency process for planning and imple-

1 menting evaluation activities, disseminating best
2 practices and findings, and incorporating employee
3 views and feedback.

4 (6) The extent to which the agency has the ca-
5 pacity to assist front-line staff and program offices
6 to develop the capacity to use evaluation research
7 and analysis approaches and data in the day-to-day
8 operations.

9 (c) GAO REVIEW OF AGENCY REPORTS.—Not later
10 than 4 years after the date of enactment of this Act, the
11 Comptroller General of the United States shall submit to
12 Congress a report that summarizes agency findings and
13 highlights trends from the reports submitted pursuant to
14 subsection (a) and, if appropriate, recommends actions to
15 further improve agency capacity to use evaluation tech-
16 niques and data to support evaluation efforts.

17 **SEC. 6. ONLINE REPOSITORY AND ADDITIONAL REPORTS.**

18 (a) REPOSITORY.—The Director of the Office of
19 Management and Budget shall collaborate with the Office
20 of Government Information Services and the Adminis-
21 trator of General Services to develop and maintain an on-
22 line repository of tools, best practices, and schema stand-
23 ards to facilitate the adoption of open data practices,
24 which shall—

1 (1) include definitions, regulation and policy,
2 checklists, and case studies related to open data, this
3 Act, and the amendments made by this Act; and

4 (2) facilitate collaboration and the adoption of
5 best practices across the Federal Government relat-
6 ing to the adoption of open data practices.

7 (b) GAO REPORT.—Not later than 3 years after the
8 date of enactment of this Act, the Comptroller General
9 of the United States shall submit to the Committee on
10 Homeland Security and Governmental Affairs of the Sen-
11 ate and the Committee on Oversight and Government Re-
12 form of the House of Representatives a report that identi-
13 fies—

14 (1) the value of information made available to
15 the public as a result of this Act and the amend-
16 ments made by this Act;

17 (2) whether it is valuable to expand the publicly
18 available information to any other data assets; and

19 (3) the completeness of the Enterprise Data In-
20 ventory at each agency required under section 3563
21 of title 44, United States Code, as added by section
22 4.

23 (c) BIENNIAL OMB REPORT.—Not later than 1 year
24 after the effective date of this Act, and every 2 years
25 thereafter, the Director of the Office of Management and

1 Budget shall electronically publish a report on agency per-
2 formance and compliance with this Act and the amend-
3 ments made by this Act.

4 (d) AGENCY CIO REPORT.—Not later than 1 year
5 after the effective date of this Act and every year there-
6 after, the Chief Information Officer of each agency shall
7 submit to the Committee on Homeland Security and Gov-
8 ernmental Affairs of the Senate and the Committee on
9 Homeland Security of the House of Representatives a re-
10 port on compliance with the requirements of this Act and
11 the amendments made by this Act, including information
12 on the requirements that the agency could not meet and
13 what the agency needs to comply with those requirements.

14 **SEC. 7. RULE OF CONSTRUCTION.**

15 Nothing in this Act, or the amendments made by this
16 Act, shall be construed to require the disclosure of infor-
17 mation or records that are exempt from public disclosure
18 under section 552 of title 5, United States Code (com-
19 monly known as the “Freedom of Information Act”).

20 **SEC. 8. EFFECTIVE DATE.**

21 This Act, and the amendments made by this Act,
22 shall take effect on the date that is 180 days after the
23 date of enactment of this Act.

Calendar No. 180

115TH CONGRESS
1ST Session

S. 760

[Report No. 115-134]

A BILL

To expand the Government's use and administration of data to facilitate transparency, effective governance, and innovation, and for other purposes.

JULY 24, 2017

Reported with amendments