

MEMORANDUM

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Subject: Summary of Substitute Legislation for S. 1253, the Geospatial Data Act of 2017

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This memorandum provides a summary and a brief analysis of individual sections of draft legislation intended as a substitute for the Geospatial Data Act of 2017 (S. 1253). The substitute legislation was provided to CRS on October 31, 2017.

Summary

The legislation intended as a substitute for the Geospatial Data Act of 2017 (S. 1253) is identical in most respects to S. 1253, which was introduced on May 25, 2017.¹ Both S. 1253 and the substitute legislation would codify aspects of the Office of Management and Budget (OMB) Circular A-16,² authorizing many of its existing components, and modifying or expanding upon other aspects. For example, both bills would continue the Federal Geographic Data Committee (FGDC) and support the current goal of creating a National Spatial Data Infrastructure (NSDI). Both bills also would add a requirement for annual performance reporting from each of the covered agencies to the FGDC, and would require a summary and evaluation by the FGDC of each agency in fulfilling the responsibilities listed in the legislation for the covered agencies.³ The annual summaries and evaluations would be made available to the National Geospatial Advisory Committee (NGAC), and the FGDC would be directed to respond to comments from NGAC. Further, the FGDC would be required to make available to Congress, not less than every two years, a report summarizing and evaluating agency performance, comments from NGAC, responses to those comments, and responses to comments from the covered agencies themselves.

The substitute legislation differs from the original bill primarily by omitting the last two sections of S. 1253, sections 11 and 12. Section 11 of S. 1253 would address use of the private sector to provide

¹ The House version of S. 1253 is H.R. 3522, introduced on July 27, 2017.

² OMB Circular A-16 has provided guidance for the coordination of geographic information and related spatial data activities, and was last revised on August 19, 2002. Available at <https://www.fgdc.gov/policyandplanning/a-16/circular-A-16.pdf>. The circular “provides direction for federal agencies that produce, maintain or use spatial data either directly or indirectly in the fulfillment of their mission.”

³ The term covered agency is defined in the legislation as an agency, as defined in 5 U.S.C §551, that collects, produces, acquires, maintains, distributes, uses, or preserves geospatial data on paper or in electronic form to fulfill the mission of the agency, either directly or through a relationship with another organization, including a state, local government, Indian tribe, institution of higher education, business partner or contractor of the federal government, and the public.

geospatial data and services.⁴ Section 12 of S. 1253 describes the relationship of the legislation to state laws regarding performance of services of a surveying, mapping, or geospatial nature.⁵

The following is a brief summary of each section of the substitute legislation, together with comments where appropriate identifying significant changes compared to the original bill, S. 1253.

Section 1. Short Title

The legislation calls itself the Geospatial Data Act of 2017.

Section 2. Definitions

Section 2 defines 13 terms used in the substitute legislation. Many of these terms are included and explained or defined in OMB Circular A-16, but some are not, such as the “National Geospatial Advisory Committee (NGAC),” “Geoplatform,” and “covered agency.” OMB Circular A-16 includes definitions for more terms in its Appendix D and other locations; however, the substitute legislation expands upon some terms, such as the definition for “geospatial data.” The original bill, S. 1253, would greatly expand the definition of “geospatial data” compared to the definition provided in OMB Circular A-16. The definition for “geospatial data” provided in the substitute legislation is a comparatively small expansion upon the definition provided in OMB Circular A-16.⁶

Also, the substitute legislation describes which types of data and activities are not included under the definition of “geospatial data.” For example, geospatial activities of an Indian tribe are not included under the definition of geospatial data if they are not, in whole or in part, carried out using federal funds. Also, classified national security-related geospatial data activities of the Department of Defense and of the Department of Energy are not included. Intelligence geospatial data activities, as determined by the Director of National Intelligence, would be excluded as well.

Some of the other terms defined in OMB Circular A-16 are changed or expanded; for example, “data theme” is defined and explained as “NGDA data theme”⁷ in the legislation.

Section 3. Federal Geographic Data Committee

The substitute legislation would codify the continuation of an existing federal interagency committee, the Federal Geographic Data Committee (FGDC), established under OMB Circular A-16. The FGDC is the primary entity for developing, implementing, and reviewing the policies, practices, and standards relating to geospatial data according to the guidelines and requirements under OMB Circular A-16, including implementation of the NSDI (described in Section 5 of the legislation). The legislation would codify

⁴ Section 11 of S. 1253 would prohibit the federal government from commencing or continuing any surveying or mapping activity that competes with a commercial product or service if that product or service is provided on a more economical basis from private sources. Section 11 of S. 1253 states that for the purposes of selecting a firm for a contract under 40 U.S.C. chapter 11, the term “surveying and mapping” shall have the meaning given for the term “geospatial data” in section 2 of S. 1253. Further, S. 1253 would revise 48 C.F.R. 36.000 et seq. to specify that the term “architectural and engineering services” includes surveying and mapping services and the acquisition of geospatial data.

⁵ Section 12 of S. 1253 states that nothing in the legislation would preempt any state laws relating to the performance of surveying, mapping, or geospatial services required to be performed or approved by a person licensed, registered, or certified to provide such services under state law.

⁶ The definition for “geospatial data” in OMB Circular A-16 constitutes 48 words; the definition in S. 1253 constitutes 719 words. In the substitute legislation, the definition constitutes 208 words.

⁷ NGDA is the acronym for National Geospatial Data Asset. The term “NGDA data theme” means core geospatial datasets (including electronic records and coordinates) relating to a topic or subject designated under Section 6 of the legislation.

duties and responsibilities of the FGDC that are largely described in OMB Circular A-16. Those duties include being the lead entity for development and management of the NSDI, among other duties and responsibilities.

The legislation directs that the Director of OMB and the Secretary of the Interior shall serve as Chairperson and Vice Chairperson of the committee, respectively. This would reverse the roles for chairperson and vice chairperson under the current FGDC leadership. The legislation also would authorize the President to appoint members from among officers and employees of the covered agencies.

In addition to codifying duties and responsibilities (13 total) mostly described in OMB Circular A-16, the legislation would require the FGDC to make available online, and update at least annually, a summary of the status for each National Geospatial Data Asset (NGDA) data theme, based on annual reports submitted by each covered agency. The summary would include a determination of the agency's progress toward its responsibilities for its NGDA data theme(s) under Section 6 of the legislation. The FGDC also would be required to make a determination of the progress achieved for other agency responsibilities described in Section 9. In each of these cases, the legislation directs the FGDC to determine if each covered agency (1) met expectations, (2) made progress toward expectations, or (3) failed to meet expectations.

The legislation requires the FGDC to make available the annual summaries and evaluations of covered agency performance, described above, to the National Geospatial Advisory Committee (NGAC, described in Section 4 of the legislation, see below), and to respond to comments upon request from NGAC about the annual summaries and evaluations. Also, the FGDC would be required, not less than once every two years, to submit to Congress a report that includes the summaries and evaluations of covered agency performance, comments from NGAC, and FGDC responses to those comments. Further, FGDC would be required to make available the annual summaries and evaluations to the covered agencies, seek comments from them, and not less than every two years submit to Congress a report that includes the comments and responses.

The summaries, evaluations, responses, and reports are not currently required under OMB Circular A-16.

Section 4. National Geospatial Advisory Committee

The substitute legislation would codify an established advisory committee (the National Geospatial Advisory Committee, or NGAC). The substitute legislation would also include language specifying that the NGAC would be administered in the Department of the Interior (that language is not in S. 1253). The current NGAC was established under the authority of the Secretary of the Interior in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended.⁸ Similar to its current charge, NGAC would continue to be charged with providing advice and recommendations to the chairperson of the FGDC relating to the management of federal and national geospatial programs, the development of the NSDI, and other activities relating to the implementation of the legislation. NGAC would also review and comment on geospatial policy and management issues, and ensure that the views of representatives of non-federal interested parties involved in national geospatial activities are conveyed to the FGDC.

NGAC would meet not less than once per year, and no more than four times per year, and could hold meetings or hearings and receive testimony, and secure information from federal agencies to carry out its duties under the legislation.⁹

⁸ Federal Advisory Committee Act, 5 U.S.C. Appendix 2. The current charter for NGAC can be found at <https://www.fgdc.gov/ngac/ngac-charter>.

⁹ The legislation would also direct NGAC to include in its comments to the FGDC regarding the covered agencies any failure by a federal agency to furnish information to NGAC upon request.

In the legislation, NGAC would be composed of 30 members appointed by the chair of FGDC. The members would be selected to achieve a balanced representation of different viewpoints on national geospatial activities and the development of the NSDI, and would take into consideration the geographic balance of its members. Members would be selected from groups including states, local governments, regional governments, tribal governments, the private sector, geospatial information user industries, professional associations, scholarly associations, nonprofits, academia, and the federal government. The allowable composition of NGAC under the legislation would be consistent with the current membership.

Section 5. National Spatial Data Infrastructure

The substitute legislation supports the concept of the NSDI as “the technology, policies, standards, and human resources necessary to acquire, process, store, distribute, and improve utilization of geospatial data.”¹⁰ In Section 2, the legislation states that the term “National Spatial Data Infrastructure” means “the technology, policies, criteria, standards, and employees necessary to promote geospatial data sharing throughout the Federal Government, State, tribal, and local governments, and the private sector (including nonprofit organizations and institutions of higher education).”

The legislation would provide that the purpose of the NSDI shall be to ensure that geospatial data from multiple sources are available and easily integrated to enhance the understanding of the physical and cultural world. The legislation would establish goals for NSDI that would attempt to ensure privacy and security of personal data; to provide free public access to geospatial data, information, and interpretive products in accordance with OMB Circular A-130;¹¹ to protect proprietary interests related to licensed information and data; to promote interoperability of federal information systems; and to support and advance the establishment of a global spatial data infrastructure.

The legislation would require that FGDC prepare and maintain a strategic plan for the NSDI,¹² and further require that the FGDC advise federal and non-federal users of geospatial data on their responsibilities relating to the implementation of the NSDI.

Section 6. NGDA Data Themes

Under the substitute legislation, the FGDC would designate NGDA data themes, which are primary topics and subjects such as elevation, federal land ownership, vegetation, or marine boundaries, for which the coordinated development, maintenance, and dissemination of geospatial data would benefit the federal government and people of the United States.¹³ The legislation would require that the NGDA data themes “be representations of conceptual topics describing digital spatial information for the nation,” and contain

¹⁰ The concept for the NSDI was first proposed in Executive Order 12906, April 11, 1994, http://www.fgdc.gov/policyandplanning/executive_order.

¹¹ Available at <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A130/a130revised.pdf>. The circular “establishes policy for the management of federal information resources.”

¹² The most current strategic plan for the NSDI is available at <https://www.fgdc.gov/nsdi-plan/nsdi-strategic-plan-2014-2016-FINAL.pdf>. The FGDC is currently in the process of developing an updated 2017 strategic plan; see https://www.fgdc.gov/nsdi-plan/2017/index_html.

¹³ The set of current data themes were endorsed by the FGDC in February 2013, following OMB Circular A-16 Supplemental Guidance, which elucidated a process to modify the Circular A-16 Appendix E themes. The original set of 34 Appendix E themes was reduced to 16 themes: biota, cadastre, climate and weather, cultural resources, elevation, geodetic control, geology, governmental units and administrative and statistical boundaries, imagery, land use-land cover, real property, soils, transportation, utilities, water-inland, water-oceans and coasts. See the 2013 FGDC Annual Report, <https://www.fgdc.gov/library/whitepapers-reports/annual%20reports/2013/web-version>. See also <https://www.fgdc.gov/what-we-do/manage-federal-geospatial-resources/a-16-portfolio-management/themes>.

associated datasets “that are documented, verifiable, and officially designated to meet recognized standards; that may be used in common; and from which other datasets may be derived.”

For each NGDA data theme, the legislation would require that the FGDC designate one or more covered agencies as the lead covered agency for that data theme. The lead covered agencies for each theme would be responsible for coordinating the management of the data theme, providing supporting resources for managing the data, and other services and products related to the NGDA data theme. Each lead covered agency would be charged with specific responsibilities for its NGDA data theme; namely, to provide leadership for developing and implementing geospatial data standards for the theme, and develop and implement a plan for nationwide population of the NGDA data theme. Other specific responsibilities for the lead covered agencies would include establishing goals that support the strategic plan for NSDI, using information from users of geospatial data within each theme regarding the user needs, and incorporating those needs into strategies for the NGDA data theme.

As part of its specific responsibilities, each covered agency for an NGDA data theme would be required to designate a point of contact within the agency who would be responsible for developing, maintaining, coordinating, and disseminating data using the GeoPlatform (described in Section 8 of the legislation). The lead covered agency also would submit a performance report at least annually to the FGDC. The performance report would include progress made in fulfilling the specific responsibilities for each NGDA data theme, as well as comments in response to the subsequent summary and evaluation of the performance report provided by the FGDC. These reports would be summarized and evaluated by the FGDC, as described above. The covered agencies would be given the opportunity to comment on the summaries and evaluations provided by the FGDC.

Section 7. Geospatial Data Standards

Under the substitute legislation, the FGDC would establish standards for each of the NGDA data themes discussed above, which would include rules, conditions, guidelines, and characteristics; it would also establish content standards for metadata.¹⁴ The standards would be consistent with international standards to the maximum extent practicable, and would be periodically reviewed and updated. Further, the FGDC would develop and promulgate the standards according to OMB Circular A-119¹⁵ or its successor, and would consult with a broad range of data users and providers. To the maximum extent possible, the FGDC would use national and international standards adopted by voluntary consensus bodies, and establish new standards if they do not already exist.

Section 7 of the legislation also contains an exclusion from public disclosure of any information that could reasonably be expected to cause damage to the national interest, security, or defense of the nation, including information relating to geospatial intelligence data activities, as determined in consultation with the Director of National Intelligence.

Section 8. GeoPlatform

Under the substitute legislation, the FGDC would operate an electronic service providing access to geospatial data and metadata to be known as the GeoPlatform. The GeoPlatform would be required to be made available through the internet, be accessible through a common interface, include all geospatial data collected, directly or indirectly, by covered agencies, include a set of programming instructions and

¹⁴ Metadata are information about geospatial data, such as content, source, vintage, spatial scale, accuracy, projection, and others.

¹⁵ Available at https://obamawhitehouse.archives.gov/omb/circulars_a119/. The circular “establishes policies on federal use and development of voluntary consensus standards and on conformity activities.”

standards that would provide an automated means of accessing geospatial data, and could include data from sources other than covered agencies.

In this section, the substitute legislation adds language that is not included in S. 1253, and which would not allow the inclusion of proprietary data acquired under license by the federal government. Also, the substitute legislation would add a subsection in section 8 clarifying that nothing in the bill is intended to prevent covered agencies from “presenting, providing or disseminating” data that is specific to the functions of the covered agency, or is intended for information consumers as part of the agency’s specific functions, apart from the agency’s geospatial activities as detailed in the legislation.

Section 9. Covered Agency Responsibilities

Section 9 of the substitute legislation has three main parts: (1) covered agency responsibilities; (2) reporting; and (3) audits.

Responsibilities

The legislation lists 14 responsibilities for each covered agency. They are paraphrased as follows:

- prepare and implement a strategy for advancing geospatial data activities appropriate to the mission of the agency;
- collect, maintain, and disseminate geospatial data so that it can be shared;
- promote geospatial data integration;
- ensure that geospatial information is included in agency record schedules that have been approved by the National Archives and Records Administration;
- allocate resources to fulfill geospatial data responsibilities;
- use geospatial data standards;
- coordinate with other federal agencies, state, local, and tribal governments, institutions of higher education, and the private sector;
- make federal geospatial information more useful to the public, enhance operations, support decision making, and enhance reporting to the public and to Congress;
- protect personal privacy and maintain confidentiality in accordance with federal policy and law;
- support emergency response activity;
- participate in determining whether declassified data can become part of the NSDI;
- search all sources to determine if existing data meet the needs of the covered agency before expending funds to acquire geospatial data;
- ensure that those receiving federal funds for geospatial data collection provide high-quality data; and
- appoint a contact to coordinate with other lead covered agencies.

Reporting

The legislation would require that each covered agency submit an annual report to the FGDC regarding the 14 responsibilities listed above. The covered agencies also would be required to include geospatial data as a capital asset for purposes of preparing the budget submission of the President under 31 U.S.C. §1105(a). Each covered agency would be required to disclose each contract, cooperative agreement, grant, or other transaction that deals with geospatial data on www.USAspending.gov or its successor.

Under the legislation, OMB would be required to take into consideration the summary and evaluations of the covered agency annual reports provided by the FGDC, in its evaluation of the budget submission from each covered agency. OMB would also include a discussion of the summaries and evaluation of the progress toward establishing the NSDI in each E-government status report submitted under 44 U.S.C. §3606.

Audits

The substitute legislation would require that the Inspector General, or some other senior ethics official of the covered agency, submit to Congress an audit not less than once every two years of the collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data by the covered agency. The audit would require a review of compliance of the covered agency with the requirements established under Section 7 of the legislation, compliance with the 14 responsibilities for each covered agency listed above under Section 9, and compliance of the covered agency with the limitation on the use of federal funds in Section 10 (discussed below).

Section 10. Limitation on Use of Federal Funds

The substitute legislation would prohibit the use of federal funds by a covered agency for the collection, production, acquisition, maintenance, or dissemination of geospatial data that does not comply with applicable standards established under Section 7, as determined by the FGDC. The prohibition would go into effect after five years from the date of enactment.¹⁶

¹⁶ S. 1253 would make this prohibition after four years from date of enactment.
