

2021 Covered Agency Annual Report and Self-Assessment

for **Department of Commerce**

Geospatial Data Act of 2018 Section USC 43 Sec 2808(a) Requirements

February 4, 2022



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Introduction

The Geospatial Data Act of 2018 (GDA) was signed into law on October 5, 2018. The GDA was included as a component of the FAA Reauthorization Act (H.R. 302, P.L. 115-254). The GDA is now in <u>U.S. Code,</u> <u>Title 43 – Public Lands, Chapter 46: GEOSPATIAL DATA.</u>

USC 43 Sec 2808(b) of the Geospatial Data Act (GDA) requires each covered agency¹ to submit to the Federal Geographic Data Committee (FGDC) "an annual report regarding the achievements of the covered agency in preparing and implementing the strategy described in subsection (a)(1) and complying with the other requirements under subsection (a)." [https://fgdc.gov/gda/online]

This document serves as the Department of Commerce's annual report to the FGDC covering the period from October 1, 2020 through Fiscal Year 2021 (September 30, 2021). The report was developed through a self-assessment template developed by the FGDC agencies. Annual reports span one fiscal year. The report includes a rating for each covered agency responsibility of "meets expectations," "made progress toward expectations," or "fails to meet expectations," as required by the GDA. A summary and evaluation of all the covered agency reports will be generated by FGDC and provided to the National Geospatial Advisory Committee (NGAC) for review and comment. The summary reports, along with the NGAC comments, will also become part of the biennial FGDC GDA report to Congress and will be published online via the FGDC GDA pages [https://fgdc.gov/gda].

This report is based on a standardized questionnaire and self-assessment score for each covered agency responsibility. The Department of Commerce has maintained documentation supporting the responses provided for this assessment. This information may be reviewed as part of the biennial Inspector General (IG) audits of covered agencies.

A recommended self-assessment key has been provided for each responsibility. In some cases, optional text is provided for additional insights or to justify a self-assessment selection. Any optional responses provided are not a factor in the self-assessment.

Where data or datasets are referenced, ² information relates to all geospatial datasets owned or managed by the Department of Commerce that are, or should be, available to the public.

To support a more comprehensive picture of agency compliance and related activities, each agency had the option to submit up to a 2-page document, using the survey, as part of the agency's submission. If provided, the document may include highlights and examples that can supplement the FGDC report to Congress, support the feedback process with the NGAC, or provide context to Office of the Inspector General (OIG) findings. The Department of Commerce submitted a 2-page document that has been included in this report as Appendix B.

¹ GDA definition of *agency*: <u>https://www.fgdc.gov/gda/online#the-term-"covered-agency" — means — an-executive-department-as-def</u>

² GDA definition of *geospatial data*: <u>https://www.fgdc.gov/gda/online#the-</u> term-%E2%80%98%E2%80%98geospatial-data%E2%80%99%E2%80%99%E2%80%94means-information-that-istied-to-a

Self-Assessment for Department of Commerce

USC 43 Sec 2808(a)(1) Covered Agency Geospatial Strategies

GDA Requirement	Prepare, maintain, publish, and implement a strategy for advancing geographic information and related geospatial data and activities appropriate to the mission of the covered agency, in support of the strategic plan for the National Spatial Data Infrastructure	
Agency Self-Assessment	Meets Expectations	
KEY to Self-Assessment	 Meets expectations = Yes to Question 1.1 and 1.2 Made progress toward expectations = 	

Table 1. GDA USC 43 Sec 2808(a)(1) Covered Agency Geospatial Strategies Requirement and Self-Assessment Criteria.

Clarifying Text: FGDC developed and released a new national strategic plan for the development of the National Spatial Data Infrastructure (NSDI) [the GDA, USC 43 Sec 2804(c)], which was approved by the FGDC Steering Committee in November 2020. Covered Agency Geospatial Strategies [the GDA, USC 43 Sec 2808(a)(1)], which will support the goals in the NSDI strategic plan, were due to be completed and submitted for agency approval by February 26, 2021, per FGDC guidance. For more information, please visit <u>http://fgdc.gov/nsdi-plan</u>.

1.1 Is your agency's strategy complete, approved, and being implemented?

• Yes

1.2 Is your agency's strategy published?

• Yes

If yes, please provide the URL or briefly describe how public access is being provided.

https://www.commerce.gov/sites/default/files/2021-07/US-Dept-of-Commerce-Geospatial-Strategy-FY21-24.pdf 1.3 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(1), "Prepare and implement a strategy for advancing geospatial data activities appropriate to the agency's mission." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

The Department of Commerce Geospatial Strategy was published in July 2021. The Geospatial Strategic Action Plan was published in October 2021 and can be accessed here:

https://www.commerce.gov/sites/default/files/2021-10/US-Dept-of-Commerce-Geospatial-Strategic-Action-Plan.pdf. The Action Plan outlines the priority actions for FY22, as well as providing a roadmap for implementation of the Commerce Geospatial Strategy for FY21-FY24. The Strategy describes the actions the Commerce geospatial community will take in collaboration with partners and the FGDC. Subject matter experts coordinated across Commerce to provide input to the new plan, including the Commerce Data Governance Board. The Commerce Geospatial Strategic Plan is also tightly integrated with the draft Commerce Open Data Plan. Accomplishments in FY21 include : - Completed GDA Reporting Products for Commerce's NGDA portfolio - Closed five of the six OIG GDA Audit Action Plan Recommendations and milestones - Completed GDA Reporting Products for Commerce's NGDA portfolio - Published NGDA inventory to data.gov and FGDC GeoPlatform - Established Commerce Geospatial Working Group (CGWG) reporting to the Commerce Data Governance Board (CDGB) - Developed and published the Commerce Geospatial Strategy (2021–2024) and companion document for implementation, the Commerce Geospatial Strategic Action Plan - Facilitated communication and document sharing amongst Commerce geospatial working groups - Established Commerce Geospatial Standards Users Group (CGSUG) focused on the geospatial standards - Coordinated with the Commerce Chief Data Officer and Commerce Data Governance Board (CDGB) on the implementation of applicable geospatial policies

USC 43 Sec 2808(a)(2) Support Data Sharing

GDA Requirement	Collect, maintain, disseminate, and preserve geospatial data such that the resulting data, information, or products can be readily shared with other federal agencies and non-federal users.	
Agency Self-Assessment	Meets Expectations	
KEY to Self-Assessment	 Meets expectations = Data is currently shared selections for all agency appropriate parties for Question 2.1 and Yes to Questions 2.2 and 2.3 Made progress toward expectations = Data is currently shared selections for some appropriate parties for Question 2.1, or Question 2.2 and 2.3 have a mix of answers Fails to meet expectations = No to Questions 2.1, 2.2, and 2.3 	

Table 2. GDA USC 43 Sec 2808(a)(2) Support Data Sharing Requirement and Self-Assessment Criteria.

Clarifying text:

- ✓ This section does not include efforts related to partners, which are covered under Question 7, USC 43 Sec 2808(a)(7).
- \checkmark Review the <u>GDA definition of geospatial data</u> to consider the questions in this section.
- Remember, your agency's answers should include information about all geospatial datasets owned or managed by your agency that are, or should be, available to the public in accordance with agency statutory authorities and missions; not just National Geospatial Data Asset (NGDA) Datasets.
- ✓ Sharing data on the Internet using open standards, protocols and formats makes it part of the NSDI.
- ✓ Additional detail on the definition of geospatial data may be provided by OMB Circular A-16 when finalized.
- ✓ Geospatial data that will not or cannot be distributed to the public does not need to be considered for GDA-related responses as per the GDA.

2.1 Does your agency ensure that all eligible geospatial data is managed so it can be readily shared and is it provided in open formats, as appropriate? (This will include agency open government and transparency guidelines.) (Select all that apply - see Appendix A for complete list of optional responses)

• Data is currently openly shared to the public.

2.2 Does your agency disseminate eligible geospatial data in a way that can be readily shared in open formats (for example, using machine readable formats or searchable metadata)? (Select all that apply - see Appendix A for complete list of optional responses)

• Yes, eligible geospatial data and metadata are shared in open formats.

2.3 Are maintenance processes in place to ensure other federal agencies and non-federal users have access to the most recent data in addition to data and metadata updates and corrections? (Select all that apply - *see Appendix A for complete list of optional responses*)

• Yes, agency policies exist to ensure all programs implement data maintenance processes.

2.4 Optional Question: Would the agency like to provide up to 5 key examples of ongoing or planned activities that ensure eligible geospatial data and associated metadata can be easily shared, understood, and re-used by others, now and in the future?

• Yes

Planned or Ongoing Activities	Description
Commerce Geospatial Data	Listed Below are the theme pages for the Commerce NGDA
Catalogs on the GeoPlatform	datasets:
	https://www.geoplatform.gov/ngda/climate/
	https://www.geoplatform.gov/ngda/elevation/
	https://www.geoplatform.gov/ngda/geodeticcontrol/
	https://www.geoplatform.gov/ngda/waterocean/
	https://www.geoplatform.gov/ngda/govunits/
	https://www.geoplatform.gov/ngda/address/
National Oceanic and Atmospheric	The NOAA Data Catalog can be accessed here:
Administration (NOAA) Data	https://data.noaa.gov (and searched here:
Discovery Portal	https://data.noaa.gov/datasetsearch). This is an inventory of all
	NOAA data collections and includes 91,948 datasets with fully
	compliant metadata. The user interface allows web-based
	searching by keywords and other attributes; machine-to-
	machine searching is available using the OGC CSW protocol
	(Open Geospatial Consortium Catalog Service for the Web).
Data.gov Catalogs	Both Census and NOAA have published agency data catalogs via
	the data.gov website. These can be found at the following
	URLs:
	https://catalog.data.gov/organization/census-gov
	https://catalog.data.gov/organization/noaa-gov
NOAA provides a variety of our	NOAA's National Weather Service (NWS) GIS Portal:
geospatial mission related data to	https://www.weather.gov/gis/for importing data into a GIS,
the public using standard protocols	map viewers, or web pages.
and formats such as ArcGIS rest	NOAA provides nautical charts, hydrographic surveys, and
services.	maritime boundaries:
	https://gis.charttools.noaa.gov/arcgis/rest/services;
	NOAA's bathymetry, ocean observations and monitoring, and
	marine habitats data:
	https://gis.ngdc.noaa.gov/arcgis/rest/services;
	NOAA's climate observations and monitoring data:
	https://gis.ncdc.noaa.gov/arcgis/rest/services
Census Bureau Geography	Many of the Geography Program data sets are available in
Program:	formats that are able to be imported directly into a GIS or
https://www.census.gov/programs-	custom map viewers or web pages. Data formats include
surveys/geography.html	downloadable shapefiles and KML formats, web services, and
	basemaps in shapefile format. Census geography can be
	combined with statistical data collected from Census surveys.
	Census 2020 data can be found at
	https://www.census.gov/programs-surveys/decennial-
	census/decade/2020/2020-census-main.html

Table 2.a. Optional Information Regarding Ongoing or Planned Geospatial Data Sharing Activities.

2.5 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(2), "collect, maintain, disseminate, and preserve geospatial data such that the resulting data, information, or products can be readily shared with other Federal agencies and non-Federal users." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

Commerce is compliant with GDA Sec. 759(a)(2) and agency statutes for data accessibility, including hosting all of its geospatial data on agency websites. All geospatial data that Commerce produces from its programs and partnerships is openly available online with the exception of data protected from disclosure. For example, Commerce does not release Personally Identifiable Information (PII) as defined by the Privacy Act of 1974, as amended, 5 U.S.C. § 552. In addition, some NOAA Fisheries data are protected from disclosure under the Magnuson-Stevens Fishery Conservation and Management Act, as amended, 16 USC § 1881a and some Census Bureau data including addresses and structure points are protected by 13 U.S.C. § 9. Commerce provides long-term stewardship and preservation of our data per NARA guidelines.

USC 43 Sec 2808(a)(3) Promote Data Integration

GDA Requirement	Promote the integration of geospatial data from all sources	
Agency Self-Assessment	Meets Expectations	
KEY to Self-Assessment	 Meets expectations = Yes to Question 3.1 Made progress toward expectations = Partial to Question 3.1 Fails to meet expectations = No to Question 3.1 	

Table 3. GDA USC 43 Sec 2808(a)(3) Promote Data Integration Requirement and Self-Assessment Criteria.

3.1 Has your agency taken action to promote integration of data from multiple sources?

• Yes. The agency has taken appropriate action to promote data integration.

3.1.a If yes or partial to Question 3.1, in what ways does your agen cy promote data integration from multiple sources? (Select all that apply - *see Appendix A for complete list of optional responses*)

- Hosts a data sharing infrastructure where partners and/or data users can share and discover data.
- Develops a data integration toolkit or APIs to promote integration of agency data in external applications.
- Develops data integration processes to promote integration of non-agency data into applications.
- Provides data in openly standardized readable formats or as downloadable file packages.
- Develops data sharing agreements or Memoranda Of Agreement (MOA) with public and private partners for ingest or sharing of data.

3.2 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(3), "promote the integration of geospatial data from all sources." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

Commerce promotes the integration of geospatial data from all sources. The Census Bureau continued to integrate high-quality address, feature, and boundary data provided by more than 40,000 tribal, federal, state, and local government partners through our partnership programs, such as the Boundary and Annexation Survey, into the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System. NOAA has established partnership programs and federal agency agreements with a wide range of government, private, and academic partners across the NOAA mission areas. In addition to these productive partnerships, NOAA promotes the use of data discovery and access platforms such as the NOAA GeoPlatform, US GeoPlatform, Digital Coast, and a number of other systems in order to enhance the availability of data and promote data integration. NOAA also leads the Integrated Working Group on Ocean and Coastal Mapping (IWG-OCM) and the 3D

Elevation Program (3DEP) which are demonstrating one way to work together on coordinated mapping requirements and acquisition plans of Federal and state agencies around the country through the U.S. Mapping Coordination site

(https://www.seasketch.org/#projecthomepage/5272840f6ec5f42d210016e4/layers). This site, open to all, is a geospatial platform to share outlines of mapping priorities and annual planned projects of collaborating partners.

USC 43 Sec 2808(a)(4) Ensure Records Retention Schedule for Geospatial Data

GDA Requirement	Ensure that data information products and other records created in geospatial data and activities are included on agency record schedules that have been approved by the National Archives and Records Administration	
Agency Self-Assessment	Meets Expectations	
KEY to Self-Assessment	 Meets expectations = Yes to Questions 4.1 and 4.2 Made progress toward expectations = 	

Table 4. GDA USC 43 Sec 2808(a)(4) Ensure Records Retention Schedule for Geospatial Data Requirement and Self-Assessment Criteria.

4.1 To ensure approved National Archives and Records Administration (NARA) schedules are in place, does the appraisal process for your agency to determine which data is archived include geospatial data?

• Yes. The agency program's archiving appraisal process is inclusive of data information products and other records created in geospatial data and activities.

4.2 Are geospatial data assets included on agency record schedules?

• Yes. Agency record schedules are inclusive of data information products and other records created in geospatial data and activities.

4.3 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(4), "ensure that data information products and other records created in geospatial data and activities are included on agency record schedules that have been approved by the National Archives and Records Administration." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

The most recent Census Bureau geospatial data products and records have been entered onto an agency records schedule (DAA-0029-2019-0004) which was approved by the NARA in December 2019. NOAA has numerous records schedules covering geospatial content related to remote sensing, nautical charts, forecasting maps, aerial photography and geodetic survey. All records schedules associated with geospatial records can be found in chapters 1300, 1400, 1500, and 1600 of the NOAA Records Control Manual (https://www.corporateservices.noaa.gov/audit/records_management/schedules/index.html). The applicable record schedules specify whether records and data are transferred to the NOAA National Centers for Environmental Information (NCEI) data archive, Federal Records Center (FRC), or if they are destroyed or accessioned in NARA for permanent preservation.

USC 43 Sec 2808(a)(5) Allocate Resources for Geospatial Data Management Responsibilities

GDA Requirement	Allocate resources to fulfill the responsibilities of effective geospatial data collection, production, and stewardship with regard to related activities of the covered agency, and as necessary to support the activities of the Committee	
Agency Self-Assessment	Meets Expectations	
KEY to Self-Assessment	 Meets expectations = Yes to Question 5.1 Made progress toward expectations = Partial to Question 5.1 Fails to meet expectations = No to Question 5.1 	

Table 5. GDA USC 43 Sec 2808(a)(5) Allocate Resources for Geospatial Data Management Responsibilities Requirement and Self-Assessment Criteria.

5.1 Are geospatial program resources (including full- or part-time federal employees or contractors) allocated to fulfill the responsibilities of effective geospatial data collection, production, and stewardship with regard to related activities of the covered agency, and as necessary to support the activities of the Committee? (Select the most appropriate answer and provide context for your agency's response in Question 5.2.)

Clarifying text: Analyses of the requirements for the GDA are ongoing and it is anticipated that agencies will answer based on currently understood or anticipated requirements. Additional details can be provided in the 5.2 Brief Summary and in your agency's 2-page PDF in Appendix B (if provided).

• Yes

5.2 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(5), "allocate resources to fulfill the responsibilities of effective geospatial data collection, production, and stewardship with regard to related activities of the covered agency, and as necessary to support the activities of the Committee." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

For the current reporting period, Commerce was able to allocate sufficient resources to fulfill these responsibilities. Staff across the department devoted substantial time to data collection, production, and stewardship along with GDA action planning and reporting, including extensive LCA template review, in addition to the usual mission-related geospatial data management. As GDA implementation continues to ramp up in the future, there is concern that level funding would create a conflict between mission requirements and GDA reporting / administrative responsibilities.

A key Census Bureau challenge moving forward is receiving an appropriation for the Geographic Support Program at the level requested in the President's Budget. Funding levels below the request impact the ability of this program to deliver the current and accurate geospatial products and activities, human resources, and services required. For NOAA, limited resources across geospatial programs could lead to compromises in our ability to meet both mission and GDA requirements.

As of the time of this reporting, there are several full-time positions in NOAA and Census that are structured for agency oversight of the GDA reporting activities including: Senior Agency Official for Geospatial Information (SAOGI), NOAA Geospatial Information Officer, and Census Geospatial Information Officer.

USC 43 Sec 2808(a)(6) Use Data Standards

GDA Requirement	Use the geospatial data standards, including the standards for metadata for geospatial data, and other appropriate standards, including documenting geospatial data with the relevant metadata and making metadata available through the GeoPlatform	
Agency Self-Assessment	Made Progress Toward Expectations	
KEY to Self-Assessment	 Meets expectations = Yes to Questions 6.1, 6.2 and 6.3 Made progress toward expectations = Any other combination of Yes, No, and Partial to Questions 6.1, 6.2, and 6.3 Fails to meet expectations = No to Questions 6.1, 6.2, and 6.3 	

Table 6. GDA USC 43 Sec 2808(a)(6) Use Data Standards Requirement and Self-Assessment Criteria.

Clarifying Text:

- ✓ Reestablishment of an active, resourced, and sustainable standards process with supporting governance is currently under consideration by the FGDC (Committee).
- ✓ The FGDC has not yet established any standards under the GDA, USC 43 Sec 2806.
- ✓ Answers should include information about all geospatial datasets owned or managed by your agency that are, or should be, available to the public in accordance with agency statutory authorities and missions; not just National Geospatial Data Asset (NGDA) Datasets.

6.1. Are defined data standards used in collecting, processing, and/or disseminating the data being addressed? (Select all that apply - see Appendix A for complete list of optional responses)

• Yes. Eligible geospatial datasets use FGDC endorsed data standards under OMB A-16, 2002, or more current versions of those endorsed standards.

6.2 Does your agency maintain its metadata in an FGDC-endorsed, or ISO-compliant geospatial metadata standard format? (Select all that apply - *see Appendix A for complete list of optional responses*)

Clarifying text: Question does not include legacy datasets that are static and no longer modified or otherwise managed. Also, see the list of endorsed FGDC-endorsed standards <u>https://www.fgdc.gov/standards/</u>.

• Partial. Some eligible datasets have well maintained FGDC-endorsed or current ISO-compliant geospatial metadata.

6.3 Is your agency geospatial metadata available through GeoPlatform.gov?

Clarifying Text: For the scope of the requirement, Section 758(b)(1)(A)(iv) provides for "includ[ing] download access to all open geospatial data directly or indirectly collected by covered agencies" and Section USC 43 Sec 2808(a)(6) requires that "metadata [be] available through the GeoPlatform."

• Partial. Some metadata for some public datasets are available via GeoPlatform.gov.

6.4 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(6), "use the geospatial data standards, including the standards for metadata for geospatial data, and other appropriate standards, including documenting geospatial data with the relevant metadata and making metadata available through the GeoPlatform." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

Not all Commerce geospatial data is registered in the GeoPlatform, but only because the GeoPlatform site has not been successfully harvesting all agency geospatial data holdings. Until the NGDAs can be successfully and consistently harvested to the GeoPlatform, we will continue to prioritize the successful harvesting of NGDAs only.

The Department of Commerce uses geospatial metadata standards for the 34 Census Bureau NGDAs and 23 NOAA NGDAs that are harvested yearly to Data.gov and the GeoPlatform. The Census Bureau and NOAA both maintain licenses for various ISO standards. NOAA also applies voluntary consensus standards from the International Hydrographic Office, World Meteorological Organization, and the International Association of Geodesy. In April 2021, the Commerce Geospatial Standards Users' Group (CGSUG) was established as a community of standards users and subject matter experts to exchange information among members regarding geospatial standards topics such as metadata, data content, and data dissemination. The CGSUG actively reviews best practices and issues within Commerce agencies for NGDA Themes/datasets, metadata architecture, and geospatial data cataloguing. Members have explored a potential expansion of the NOAA's Collection Metadata Editing Tool (CoMET) that is currently modelled on ISO 19115-2 and ISO 19139-2 pairing to accommodate additional metadata standards such as ISO 19115-1 and ISO 19115-3. Kappa Architecture was presented by NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) in October as the most recent testbed for diverse metadata standards interoperability on a NOAA-supported cloud. CGSUG also invited Department of Interior (U.S. Geological Survey) and members of the FGDC Secretariat, as well as commercial partners (Esri) to present on GDA requirements, the 2020 NGDA Baseline Standards Inventory, workflows, and tools (mdEditor, mdTranslator, mdJSON Schema Viewer) to produce ISO-compliant metadata.

USC 43 Sec 2808(a)(7) Support Coordination and Partnerships

GDA Requirement	Coordinate and work in partnership with other Federal agencies, agencies of State, tribal, and local governments, institutions of higher education, and the private sector to efficiently and cost-effectively collect, integrate, maintain, disseminate, and preserve geospatial data, building upon existing non-federal geospatial data to the extent possible	
Agency Self-Assessment	Meets expectations	
KEY to Self-Assessment	 Meets expectations = Yes to Questions 7.1 and Yes or Not applicable to Question 7.2 Made progress toward expectations = Any combination of Yes, Not applicable, Partial, or No to Questions 7.1 and 7.2 Fails to meet expectations = No to Questions 7.1 and 7.2 	

Table 7. GDA USC 43 Sec 2808(a)(7) Support Coordination and Partnerships Requirement and Self-Assessment Criteria.

7.1 Are there processes in place to ensure that, when appropriate, partners and stakeholders have visibility into agency geospatial data management activities (e.g., collection, integration, maintenance, dissemination, and preservation)? (Select all that apply - see Appendix A for complete list of optional responses)

• Yes. There are processes in place for all agency mission areas.

7.1.a If yes or partial to Question 7.1, which external partners and stakeholders are involved in data management activities? (Select all that apply - *see Appendix A for complete list of optional responses*)

Clarifying text: The selection list provided was taken from the GDA, USC 43 Sec 2803(b)(C).

- Other federal agencies
- States
- Local governments
- Regional governments
- Tribal governments
- Private sector entities
- Geospatial information user industries
- Professional associations
- Scholarly associations
- Nonprofit organizations
- Academia
- Licensed geospatial data acquisition professionals
- **Other**: International Boundary Commission and International Boundary and Water Commission boundaries are integrated.

7.1.b If yes or partial to Question 7.1, what processes are in place to ensure partners and stakeholders are involved? (Select all that apply - *see Appendix A for complete list of optional responses*)

Clarifying text: When answering this question think about activities such as using surveys, listening sessions, Request for Information, booths at stakeholder conferences.

- Partnership outreach activities
- Expert consultations
- Advisory committee(s)
- Working group(s) and sub-committee(s)
- Steering committees
- Councils
- Engage with trade groups
- Feedback opportunities (e.g., contact email/phone, call center)
- Federal Register Notices
- Memoranda of Understanding
- **Other:** Geographic Support Program Listening Tour

7.2 Does your agency build upon existing non-federal geospatial data? (Select all that apply - *see Appendix A for complete list of optional responses*)

• Yes. Agency builds upon existing non-federal geospatial data to the extent possible.

7.2. a If yes or partial to Question **7.2**, what ways do you build upon existing non-federal geospatial data? (Select all that apply - *see Appendix A for complete list of optional responses*)

- Procurement/acquisition/grant
- Research partnership
- Cooperative data collection or crowd sourcing
- Mission assignments or Interagency Agreements
- MOAs/data sharing agreements

7.3 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(7), "coordinate and work in partnership with other Federal agencies, agencies of State, tribal, and local governments, institutions of higher education, and the private sector to efficiently and cost -effectively collect, integrate, maintain, disseminate, and preserve geospatial data, building upon existing non-Federal geospatial data to the extent possible." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

A comprehensive list of the Census Bureau's geographic partnership programs can be found here: https://www.census.gov/programs-surveys/geography/about/partnerships.html. Starting in September of 2021 Census Bureau engaged partners in a series of small focus groups to identify shared challenges, future plans, and opportunities for collaboration and product improvement for the next decade. Additionally, Census Bureau is developing a Partner Portal on census.gov, where tribal, state, and local governments can receive customized and controlled access to Census Bureau geographic and statistical information unique to their government; as well as enable them to update contact information, receive and respond to program invitations, download data and products, securely upload and update authoritative geographic data (addresses, features, boundaries, and geographic reference data), view historical participation information, and correspond with Census Bureau officials regarding their community – all without requiring licensed commercial software.

A list of NOAA's Partnership Programs can be found here: https://www.noaa.gov/officeeducation/elp/partnerships. NOAA has established partnerships with a wide range of government, private, and academic partners across the NOAA mission areas. Many of NOAA's geospatial datasets integrate geospatial data from various government and non-government sources. The NOAA Digital Coast Partnership (https://coast.noaa.gov/digitalcoast/about/partnership.html) is a prime example of the benefits of connecting the federal government with local leaders. This group of eight nongovernmental membership organizations has expertise in a wide range of policy and technical issues. The Digital Coast also provides an effective platform for these groups to work together to address coastal issues. Partnerships are covered by Memorandums of Agreement, Memorandums of Understanding, and other similar agreements.

USC 43 Sec 2808(a)(8) Promote Application of Geospatial Data Assets

GDA Requirement	Use geospatial information to— (A) make Federal geospatial information and services more useful to the public; (B) enhance operations; (C) support decision making; and (D) enhance reporting to the public and to Congress;	
Agency Self-Assessment	Meets Expectations	
KEY to Self-Assessment	 Meets expectations = Yes to 8.1, 8.2 and 8.3 Made progress toward expectations = Any combination of Yes, Partial and No to Questions 8.1, 8.2 and 8.3 Fails to meet expectations = No to 8.1, 8.2 and 8.3 	

Table 8. GDA USC 43 Sec 2808(a)(8) Promote Application of Geospatial Data Assets Requirement and Self-Assessment Criteria.

USC 43 Sec 2808(a)(8)(A) make Federal geospatial information and services more useful to the public;

8.1 Does your agency leverage geospatial information to make federal geospatial information and services more useful to the public?

Clarifying Text: A number of examples of leveraging geospatial information for public use include, but are not limited to:

- ✓ Making the data accessible
- ✓ Providing data in ingestible services
- ✓ Providing maps or visualizations of geospatial data like a map of an agency's jurisdictional regions so the public can identify their region on a website
- ✓ Provided data in an online application like the COVID-19 case tracker
- ✓ Outreach/communications for user feedback
- ✓ Making data open, standardized, or machine readable
- Yes

USC 43 Sec 2808(a)(8)(B) enhance operations; USC 43 Sec 2808(a)(8)(C) support decision making

8.2 Does your agency leverage geospatial information to improve operations and decision-making?

• Yes. Agency broadly leverages geospatial information in operations improvements or decisionmaking.

USC 43 Sec 2808(a)(8)(D) enhance reporting to the public and to Congress

8.3 Does your agency leverage geospatial information to enhance reporting to the public or to Congress? (Select all that apply - *see Appendix A for complete list of optional responses*)

• Yes. Agency broadly leverages geospatial information to enhance public and Congressional reporting.

8.3.a If yes or partial, for which of these audiences does your agency leverage geospatial information to enhance reporting? (Select all that apply - *see Appendix A for complete list of optional responses*)

- Public reports (e.g., fact sheets, data briefs, annual reports, other published agency reports).
- Congressional reports.
- Internal agency and leadership plans, reports and communications.

8.4 Optional Question: Would the agency like to provide up to 5 key examples and links that demonstrate how geospatial data assets are used, internally and externally, to make federal geospatial information and services more useful to the public; enhance operations; support decision making; and/or enhance reporting to the public and to Congress?

• Yes

Link	Description
https://www.climate.gov/maps-data	NOAA's Climate.gov - Science & Information for a Climate-Smart Nation provides timely and authoritative scientific data and information about climate science, adaptation, and mitigation to help people understand climate and make decisions on how to manage climate- related risks and opportunities. Climate.gov also provides maps and data to showcase NOAA geospatial data and services and provide easy, consumer-oriented data that can be interpreted by the public without expert knowledge.
https://www.fgdc.gov/resources/key- publications/2021-climate-mapping- report/fgdc-climate-mapping-report-oct- 2021.pdf	NOAA served as a key contributor to the FGDC led report, "Advancing the Nation's Geospatial Capabilities to Promote Federal, State, Local, and Tribal Climate Planning and Resilience" under EO 14008. This report discusses the development of a collaborative Federal geographic mapping service to facilitate public access to climate-related information to assist Federal, State, local, and Tribal governments in their local, national, and international climate planning and resilience activities.
https://storymaps.arcgis.com/stories/3ed6b 70ffa80447aac3fcb1d3378884a	NOAA Visualization Lab (VizLab) colleagues, in collaboration with NASA JPSS, have won top prize for Institutional Writing in 2021 from the National Association of Science Writers for their Story Map: The World According to Weather Satellites
https://mtgis- portal.geo.census.gov/arcgis/apps/webappv iewer/index.html?id=585d0b7776e141b0ab 93050eaf1517e7 [and] https://mtgis- portal.geo.census.gov/arcgis/apps/MapSerie s/index.html?appid=2566121a73de463995e d2b2fd7ff6eb7	 2020 Census Address Count Listing Files Viewer was developed to supplement the Address Count Listing files. The files include housing unit and group quarters counts, by census block. 2020 Census Demographic Data Map Viewer The 2020 Census Demographic Data Map Viewer is a web map application that includes state-, county-, and census tract-level data from the 2020 Census. The map includes data related to population, race, Hispanic origin, housing, and group quarters.
https://www.census.gov/about/what/data- equity.html	Census Bureau Data for Equity page in response to the Presidential Executive Order 13985 "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government"

Table 8.a. Example Benefits of Federal Geospatial Data Assets.

8.5 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(8), "use geospatial information to —

- (A) make federal geospatial information and services more useful to the public;
- (B) enhance operations;
- (C) support decision making; and
- (D) enhance reporting to the public and to Congress;"

If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

The Department of Commerce has responded to the Presidential Executive Order 13985 "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government" and Executive Order 14008 "Tackling the Climate Crisis at Home and Abroad" in several ways, including by contributing to several multi-agency or FGDC-led reports:

- "Advancing the Nation's Geospatial Capabilities To Promote Federal, State, Local, and Tribal Climate Planning and Resilience"

- "Opportunities for Expanding and Improving Climate Information and Services for the Public" (https://downloads.globalchange.gov/reports/eo-14008-211-d-report.pdf)

- "Conserving and Restoring America the Beautiful" (https://www.doi.gov/sites/doi.gov/files/report-conserving-and-restoring-america-the-beautiful-2021.pdf)

USC 43 Sec 2808(a)(9) Protection of Privacy and Confidentiality

GDA Requirement	Protect personal privacy and maintain confidentiality in accordance with Federal policy and law	
Agency Self-Assessment	Meets Expectations	
KEY to Self-Assessment	 Meets expectations = Yes to Questions 9.1 and 9.2 Made progress toward expectations = 	

Table 9. GDA USC 43 Sec 2808(a)(9) Protection of Privacy and Confidentiality Requirement and Self-Assessment Criteria.

9.1 Are the agency's Privacy Threshold Assessment or Privacy Impact Assessment (PTA/PIA) processes inclusive of your agency's geospatial data?

Clarifying Text: The Privacy Threshold Assessment/Analysis would be the mechanism that agencies use to determine if PII is, or is not, collected and whether a Privacy Impact Assessment needs to be done for an information system.

• Yes. The agency's PTA/PIA processes are inclusive of all agency data.

9.2 Are the IT systems and applications that maintain and support your agency's geospatial data covered by a current Authorization to Operate (ATO)?

• Yes. All agency geospatial data is housed in a system covered by a current ATO and is appropriately protected in accordance with applicable laws and regulations.

9.3 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(9), "protect personal privacy and maintain confidentiality in accordance with Federal policy and law." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

Commerce complies with the Federal Information Security Modernization Act of 2014 (FISMA), FIPS 200: Minimum Security Requirements for Federal Information and Information Systems, the Government Act of 2002, and the OMB Circular A-130: Management of Federal Information Resources, which states that federal agencies are required to meet minimum security and privacy standards for information and information systems. Per NIST guidance, Commerce information systems enter a state of ongoing authorization following issuance of an initial authorization.

The Census Bureau just released v 1.1 of the Office of Information Security Risk Management Program Authority to Operate (ATO) Process guide in July 2021. The bureau follows the guidelines for initial and ongoing authorizations. A powerful new disclosure avoidance system (DAS) designed to withstand modern re-identification threats will protect 2020 Census data products (other than the apportionment data; those state-level totals remain unaltered by statistical noise). More information can be found at https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/process/disclosure-avoidance.html.

USC 43 Sec 2808(a)(10) Declassified Data

GDA Requirement	Participate in determining, when applicable, whether declassified data can contribute to and become a part of the National Spatial Data Infrastructure
Agency Self-Assessment	Meets Expectations
KEY to Self-Assessment	 Meets expectations = Yes or Not applicable to Question 10.1 Fails to meet expectations = No to Question 10.1

Table 10. GDA USC 43 Sec 2808(a)(10) Declassified Data Requirement and Self-Assessment Criteria.

10.1 If your agency handles declassified geospatial datasets, does it have a process to review these declassified datasets for inclusion in the NSDI?

Clarifying text: Sharing standards-based data on the Internet using standard protocols and formats makes it part of the NSDI.

• Not applicable: The agency does not handle declassified data.

10.2 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(10), "participate in determining, when applicable, whether declassified data can contribute to and become a part of the National Spatial Data Infrastructure." If the assessment is "fails to meet expectations," include the actions your agency is taking to achieve the "meets expectations" level.

N/A for Census Bureau & NOAA. The Department of Commerce does not have a formal process for determining whether declassified data at the Department can contribute to and become part of the National Spatial Data Infrastructure. Any classified geospatial data the Department uses in its mission activities originates from other Departments and agencies and as such the Department is not the originating entity and therefore doesn't have the authority to declassify the original data. The Department has worked with originating agencies to declassify derivative products for specific use cases; however, in those cases the declassification and product dissemination was the responsibility of the originating agency. The Department maintains situational awareness of classified geospatial data through its involvement with the Civil Applications Committee.

USC 43 Sec 2808(a)(11) Non-Duplication of Data

GDA Requirement	Search all sources, including the GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meets the needs of the covered agency before expending funds for geospatial data collection
Agency Self-Assessment	Meets Expectations
KEY to Self-Assessment	 Meets expectations = No to Question 11.1 or Yes to Questions 11.1 and 11.2 and all agency appropriate responses to Question 11.3 Made progress toward expectations = Yes to Question 11.1 and Partial or No to Question 11.2 and agency appropriate responses to Question 11.3 Fails to meet expectations = Yes to Question 11.1 and No to Question 11.2 and No additional assessments are done selected for Question 11.3

Table 11. GDA USC 43 Sec 2808(a)(11) Non-Duplication of Data Requirement and Self-Assessment Criteria.

11.1 Has your agency expended funds for geospatial data collection for the reporting period?

Clarifying text: "Expended funds" may include grant distribution, agency collection, or procurement of data.

• Yes

11.2 If yes to Question 11.1, and as per <u>OMB Circular A-11 Guidance</u> (Section 25, Page 3), has your agency searched the <u>GeoPlatform</u> prior to making planned geospatial data investments to determine if an existing source for that data is available and meets mission requirements?

• Yes. Agency has searched GeoPlatform prior to all geospatial data investments.

11.3 If yes to Question **11.1**, has your agency searched other sources to determine if data necessary to meet requirements already exists (either within or outside the agency) before collecting or acquiring new data? (Select all that apply - *see Appendix A for complete list of optional responses*)

- Market research
- Cross-agency or partner coordination
- Expert consultation
- Database search
- Agency follows a documented process or official policy

11.4 Optional Question: If yes to Question 11.1, would the agency like to provide up to 5 examples of cases where the agency did find existing data that met its needs or partnered on a joint data acquisition?

Title	Description
USDA Farm Service Agency's	The Census Bureau has entered a cost share agreement with USDA to
National Agriculture	help fund NAIP and expand coverage to include Puerto Rico and Hawaii.
Imagery Program (NAIP)	https://www.fsa.usda.gov/programs-and-services/aerial-
	photography/imagery-programs/naip-imagery/
USPS Delivery Sequence File	The DSF is a nationwide address file of all residential and commercial
(DSF)	units that receive mail delivered by USPS. It provides information about
	existing, new and non-viable addresses and Census updates the Master
	Address File biannually with the DSF.
Bathymetry in Alaska	NOAA has an agreement with Quintillion, a fiber-optic cable laying
	company that shared its multibeam sonar data (bathymetry) in Alaska
	with NOAA. NOAA verified the data meets specifications for acquisition
	standards and metadata requirements.
Multibeam data	Multibeam data collected by the State of Maine in state waters for its
	own management purposes, that NOAA has received and is
	incorporating into nautical chart and other products using a data
	acquisition system that meet both Maine and NOAA requirements.
Port Survey Data	Port survey data collected or contracted for cargo loading/unloading is
	shared with NOAA and allows for more frequent chart updates with
	information useful to the commercial mariners and cruise ships
	transiting to/from these ports.

• Yes

Table 11.a. Examples of Successful Data Acquisition Searches and/or Coordination.

11.5 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(11), "Search all sources, including the GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meets the needs of the covered agency before expending funds for geospatial data collection." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

Please see the Department of Commerce Policy on Planned Geospatial Acquisitions [https://www.cio.noaa.gov/pdfs/Commerce_Policy_on_Planned_Geospatial_Acquisitions.pdf], Section 4: Policy which states, "In order to avoid duplication of geospatial data, offices and operating units within the Department shall not expend funds to acquire or produce geospatial data if an existing source for that data is available and meets mission requirements. Departmental Offices and operating units shall coordinate with other organizations, whether within or outside of the Department, if another organization is planning on acquiring or producing data ... [that] will meet its needs." Commerce participates in the Marketplace; however, due to lack of current information in the Marketplace, other resources are utilized as well such as community-owned and maintained systems. As part of the IG audit, Commerce will update the Policy on Planned Geospatial Acquisitions in Q4 FY22.

USC 43 Sec 2808(a)(12) Ensuring High-Quality Data

GDA Requirement	To the maximum extent practicable, ensure that a person receiving Federal funds for geospatial data collection provides high-quality data
Agency Self-Assessment	Meets Expectations
KEY to Self-Assessment	 Meets expectations = No to Question 12.1 or Yes to Question 12.1 and all appropriate selections for Question 12.2 Made progress toward expectations = Yes to Question 12.1 and some agency appropriate selections
	 for Question 12.2 Fails to meet expectations = Yes to Question 12.1 and No official documented Quality Assurance/Quality Control (QA/QC) process is in place for acquisition of geospatial data selected for Question 12.2

Table 12. GDA USC 43 Sec 2808(a)(12) Ensuring High-Quality Data Requirement and Self-Assessment Criteria.

12.1 Has your agency expended funds for geospatial data collection from non-federal sources during the reporting period?

Clarifying text: The requirement for "a person receiving Federal funds" has been interpreted to mean non-federal organizations or corporations who are, for example, contract or grant recipients.

• Yes

12.2 If yes to Question 12.1, what methods does your agency employ to ensure quality in geospatial data collected from non-federal sources? (Check all that apply and use the "other" textbox to briefly describe additional methods used to ensure quality for geospatial data acquired by procurement or grant process - *see Appendix A for complete list of optional responses*)

- Evaluate data for quality prior to any acquisition.
- Geospatial data quality standards are specified in contract documents.
- Staff data experts review and approve geospatial data deliverables.
- The agency acquires data from another federal agency that is responsible for QA/QC.

12.3 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(12), "to the maximum extent practicable, ensure that a person receiving Federal funds for geospatial data collection provides high-quality data." If the assessment is "made progress toward expectations," include the actions your agency is taking to achieve the "meets expectations" level.

Commerce ensures that the data collected by non-federal sources are high-quality. While not applicable to Census, NOAA meets the requirements. For example, datasets that are part of the Elevation and Water - Oceans & Coast Theme adhere to strict international standards for data quality. Whether the data is collected by NOAA or by private entities contracted by or receiving grants from NOAA, the same

standards and policies apply. The Data Sharing Directive for NOAA Grants, Cooperative Agreements and Contracts specifies requirements: "Data should be available in at least one machine-readable format, preferably a widely-used or open-standard format, and should be accompanied by machine-readable documentation (metadata), preferably based on widely-used or international standards." In addition NOAA regularly meets with partners to share research initiatives and progress, and to discuss ways to further our partnerships.

USC 43 Sec 2808(a)(13) Point of Contact

GDA Requirement	Appoint a contact to coordinate with the lead covered agencies for collection, acquisition, maintenance, and dissemination of the National Geospatial Data Asset data themes used by the covered agency
Agency Self-Assessment	Meets Expectations
KEY to Self-Assessment	 Meets expectations = Yes to Question 13.1 Fails to meet expectations = No to Question 13.1

Table 13. GDA USC 43 Sec 2808(a)(13) Point of Contact Requirement and Self-Assessment Criteria.

13.1 Has your agency appointed a POC to coordinate with the lead covered agencies for collection, acquisition, maintenance, and dissemination of the NGDA data themes used by the covered agency?

Clarifying text: According to the GDA Definitions, USC 43 Sec 2801(12), NGDA data theme means "the NGDA core geospatial datasets including electronic records and coordinates relating to a topic or subject designated under Section 756." Also, OMB Circular A-16 may include additional guidance on covered agency responsibilities for theme coordination.

• Yes. An agency POC has been appointed.

13.2 Brief Summary (Limit 2000 characters, or approximately 300 words): Please provide a brief description of agency actions and accomplishments in FY2021 in addressing USC 43 Sec 2808(a)(13), "appoint a contact to coordinate with the lead covered agencies for collection, acquisition, maintenance, and dissemination of the National Geospatial Data Asset data themes used by the covered agency." If the assessment is "fails to meet expectations," include the actions your agency is taking to achieve the "meets expectations" level.

The Commerce Senior Agency Official for Geospatial Information is Tony LaVoi, NOAA Chief Data Officer. Census Bureau leads or co-leads 2 NGDA themes and participates in the activities of 3 others. NOAA leads or co-leads 4 NGDA themes and participates in the activities of 3 others. Census Bureau and NOAA have appointed contacts to all of them. Address Theme: Matthew Zimolzak, Census Co-Lead; Biodiversity and Ecosystems: Nicolle Rutherford, NOAA Member; Cadastre Theme: Laura Waggoner, Census Member; Climate and Weather Theme: Kari Sheets, NOAA Lead; Elevation Theme: Ashley Chappel, NOAA Co-Lead; Geodetic Control Theme: Dan Roman, NOAA Lead; Governmental Units Theme: Dierdre Bevington-Attardi, Census Lead; Imagery Theme: Peter Reid, Census Member, Doug Graham, NOAA Member; Land Use - Land Cover Theme: Nate Herold, NOAA Member; Transportation Theme: David Cackowski, Census Member; Water - Oceans and Coasts Theme: Patrick Keown, NOAA Lead.

Appendix A: Survey Picklists

This appendix provides the full set of choices presented in the self-assessment survey for questions that have multiple response options, including those that are "select all that apply."

2.1 Does your agency ensure that all eligible geospatial data is managed so it can be readily shared and is it provided in open formats, as appropriate? (This will include agency open government and transparency guidelines.) (Select all that apply)

- Data is currently openly shared to the public.
- Data is currently shared on a limited basis with federal partners.
- Data is currently shared on a limited basis with non-federal users.
- No data is currently shared to other federal agencies or non-federal users. (Note: For some agencies, this may be an appropriate response).

2.2 Does your agency disseminate eligible geospatial data in a way that can be readily shared in open formats (for example, using machine readable formats or searchable metadata)?

- Yes, eligible geospatial data and metadata are shared in open formats.
- Eligible geospatial data are shared in open formats, but not all metadata is open format.
- Eligible geospatial metadata are shared in open formats, but not all data are open format.
- Some geospatial data, and its metadata, is shared in open formats.
- No geospatial data is shared, or geospatial data is only shared in proprietary formats.

2.3 Are maintenance processes in place to ensure other federal agencies and non-federal users have access to the most recent data in addition to data and metadata updates and corrections?

- Yes, agency policies exist to ensure all programs implement data maintenance processes.
- Some programs/datasets have maintenance processes in place.
- Maintenance processes are in development or are partially implemented.
- No maintenance processes are currently in place or in development.

3.1.a If yes or partial to Question 3.1, in what ways does your agency promote data integration from multiple sources? (Select all that apply and use the "other" textbox to briefly describe additional methods)

- Hosts a data sharing infrastructure where partners and/or data users can share and discover data.
- Develops a data integration toolkit or APIs to promote integration of agency data in external applications.
- Develops data integration processes to promote integration of non-agency data into applications.
- Provides data in openly standardized readable formats or as downloadable file packages.
- Develops data sharing agreements or Memoranda Of Agreement (MOA) with public and private partners for ingest or sharing of data.
- Other (Textbox provided)

6.1. Are defined data standards used in collecting, processing, and/or disseminating the data being addressed? (Select all that apply)

- Yes. Eligible geospatial datasets use FGDC endorsed data standards under OMB A-16, 2002, or more current versions of those endorsed standards.
- Yes. Eligible geospatial datasets use data standards that comply with OMB Circular A-119.
- Partial. Some eligible geospatial datasets use FGDC-endorsed data standards.
- Partial. Some eligible geospatial datasets use data standards that comply with OMB Circular A-119.
- No. Eligible agency geospatial datasets do not use FGDC-endorsed data standards or standards that comply with OMB Circular A-119.

6.2 Does your agency maintain its metadata in an FGDC-endorsed, or ISO-compliant geospatial metadata standard format? (Select all that apply)

Clarifying text: Question does not include legacy datasets that are static and no longer modified or otherwise managed. Also, see the list of endorsed FGDC-endorsed standards <u>https://www.fgdc.gov/standards/</u>.

- Yes. Eligible non-legacy datasets have well maintained FGDC-endorsed or current ISO-compliant geospatial metadata.
- Partial. Some eligible datasets have well maintained FGDC-endorsed or current ISO-compliant geospatial metadata.
- Partial. Some eligible datasets have FGDC-endorsed or current ISO-compliant geospatial metadata, that needs to be reviewed or refreshed.
- No. Agency datasets do not use FGDC-endorsed or current ISO-compliant geospatial metadata standards.

7.1 Are there processes in place to ensure that, when appropriate, partners and stakeholders have visibility into agency geospatial data management activities (e.g., collection, integration, maintenance, dissemination and preservation)?

- Yes. There are processes in place for all agency mission areas.
- Yes. There are processes in place, but some mission areas do not have requirements for geospatial data management partnerships.
- Partial. There are processes in place for some agency mission areas, but not others.
- No. There are no processes in place. (Skip to question 7.3)

7.1.a If yes or partial to Question 7.1, which external partners and stakeholders are involved in data management activities? (Select all that apply and use the "other" textbox to add additional partners or stakeholders)

Clarifying text: The selection list provided was taken from the GDA, USC 43 Sec 2803(b)(C).

- Other federal agencies
- States
- Local governments
- Regional governments
- Tribal governments
- Private sector entities
- Geospatial information user industries
- Professional associations
- Scholarly associations
- Nonprofit organizations
- Academia
- Licensed geospatial data acquisition professionals
- Other (Textbox provided)

7.1.b If yes or partial to Question 7.1, what processes are in place to ensure partners and stakeholders are involved? (Select all that apply and use the "other" textbox to add additional processes)

Clarifying text: When answering this question think about activities such as using surveys, listening sessions, Request for Information, booths at stakeholder conferences.

- Market research
- Partnership outreach activities
- Expert consultations
- Advisory committee(s)
- Working group(s) and sub-committee(s)
- Steering committees
- Councils
- Engage with trade groups
- Feedback opportunities (e.g., contact email/phone, call center)
- Federal Register Notices
- Memoranda of Understanding
- Use other public comment processes
- Other (Textbox provided)

7.2 Does your agency build upon existing non-federal geospatial data?

- Yes. Agency builds upon existing non-federal geospatial data to the extent possible.
- Not applicable: no existing applicable data exists.
- Partial. Agency builds upon some existing non-federal geospatial data.
- No. Agency does not build upon existing non-federal geospatial data.

7.2.a If yes or partial to Question 7.2, what ways do you build upon existing non-federal geospatial

data? (Select all that apply and use the "other" textbox to add additional ways)

- Procurement/acquisition/grant
- Research partnership
- Cooperative data collection or crowd sourcing
- Mission assignments or Interagency Agreements
- MOAs/data sharing agreements
- Other (Textbox provided)

8.3 Does your agency leverage geospatial information to enhance reporting to the public or to Congress?

- Yes. Agency broadly leverages geospatial information to enhance public and Congressional reporting.
- Not applicable: Agency does not leverage geospatial information in published reports.
- Partial. Agency leverages some geospatial information to enhance either public or Congressional reporting.
- No. Agency does not leverage geospatial information to enhance either public or Congressional reporting.

8.3.a If yes or partial, for which of these audiences does your agency leverage geospatial information to enhance reporting? (Select all that apply)

- Public reports (e.g., fact sheets, data briefs, Annual reports, other published agency reports).
- Congressional reports.
- Internal agency and leadership plans, reports and communications.
- Not applicable: agency does not leverage geospatial information in published reports.

11.3 If yes to Question 11.1, has your agency searched other sources to determine if data necessary to meet requirements already exists (either within or outside the agency) before collecting or acquiring new data? (Select all that apply and use the "other" textbox to briefly describe additional sources)

- Market research
- Cross-agency or partner coordination
- Expert consultation
- Database search
- Agency follows a documented process or official policy
- No additional assessments are done
- Other (Textbox provided)

12.2 If yes to Question 12.1, what methods does your agency employ to ensure quality in geospatial data collected from non-federal sources?

(Check all that apply and use the "other" textbox to briefly describe additional methods used to ensure quality for geospatial data acquired by procurement or grant process)

- Evaluate data for quality prior to any acquisition.
- Geospatial data quality standards are specified in contract documents.
- Independent verification and validation (IV&V).
- Staff data experts review and approve geospatial data deliverables.
- Data standards are enforced through automated processes such as database controls or script tools.
- The agency acquires data from another federal agency that is responsible for QA/QC.
- No official documented QA/QC process is in place for acquisition of geospatial data.
- Other (Textbox provided)

Appendix B: Optional 2-Page Document

Commerce GDA Covered Agency Report Executive Summary – January 5, 2022

The Department of Commerce (Commerce) performs a critical service for the Nation in overseeing and managing its geospatial data as required by the Geospatial Data Act of 2018 (GDA). Commerce serves as the lead or co-lead for six of the 18 National Geospatial Data Asset (NGDA) Themes and 57 total datasets within these Themes. This accounts for Commerce overseeing roughly one third of the entire NGDA federal portfolio. In 2021, Commerce made significant progress meeting the GDA requirements including the development and publication of the <u>Commerce Geospatial Strategy (2021-2024)</u>, and the companion implementation document, the <u>Commerce Geospatial Strategic Action Plan</u>. The Department of Commerce Geospatial Working Group (CGWG), under the Commerce Data Governance Board (CDGB), published the Commerce Geospatial Strategy, which defines a path to successfully maximize the positive impact of Commerce geospatial data and services. The four goals in the Commerce Geospatial Strategy align directly with requirements in the Geospatial Data Act:

- Govern and Manage Geospatial Data
- Advance the maturity and expand the sources of Commerce National Geospatial Data Assets
- Enable and promote collaborative partnerships to meet Commerce geospatial needs, priorities, and missions
- Foster a diverse Commerce geospatial workforce to meet current and emerging needs

During FY21, Commerce made considerable progress in addressing findings from the initial Commerce Inspector Audit of GDA performance, closing four of the six findings as part of the GDA Audit Action Plan. The remaining two findings are scheduled for closure in FY22.

The CGWG also established the Commerce Geospatial Standards Users' Group (CGSUG) and continued the work of the Commerce Imagery Users' Group (CIUG) to delve further into geospatial topics within Commerce. Each of these geospatial user groups are chartered by the CGWG, include members from across the Commerce bureaus, and hold regularly scheduled meetings open to all Commerce staff.

The CGSUG includes representatives from the Census Bureau, NOAA, the Economic Development Administration (EDA), and the National Institute of Standards and Technology (NIST). This group focuses on standards implementation required by geospatial legislation and policies, such as the GDA, the Evidence Act, and the Federal Data Strategy. The CGSUG includes subject matter experts from government and private sectors with featured presentations on voluntary consensus standards from international organizations such as International Organization for Standardization (ISO) and the Open Geospatial Consortium as documented in the 2020 Baseline Inventory of Standards. In addition to voluntary consensus standards, members reviewed geospatial policy documents, tools, and classification systems developed by individual agencies for metadata collection, schema, data content, symbology, codes, internet protocols, and data dissemination for multiple use cases. In November at the Interagency GDA Covered Agency Working Group meeting, CGSUG Executive Champions presented the recent accomplishments within Commerce pertaining to standards for other covered agencies from across the government to learn more about Commerce standards compliance activities. Commerce staff participates and the leads address standards development through the International Committee for Information Technology Standards Technical Committee L1 - Geographic Information Systems (INCITS-L1) and the U.S. Technical Advisory Group to ISO Technical Committee 211 Geographic information/Geomatics (TC 211). Commerce agencies also adhere to requirements and best practices from standard bodies such as the International Hydrographic Office, the World Meteorological Organization, and the International Association of Geodesy. The Census Bureau maintains an Enterprise standards portal (Standards Connect) to access ISO standards and to assist with the documentation of control systems and conformity assessments applied to metadata, data content, and the development of geospatial technologies. During CGSUG meetings focusing on metadata standards, agencies compared notes on the migration strategy from the Content Standard for Digital Geospatial Metadata (CSDGM) to ISO standards, such as ISO 19115-2 and ISO 19139-2, using automated tools to produce ISO-compliant metadata.

Commerce also played a lead role in supporting the Administration's new priorities, including but not limited to Executive Order 14008 "*Tackling the Climate Crisis at Home and Abroad*" and Executive Order 13985 "*Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*." The following are only a few relevant examples.

Section 211(d) of Executive Order 14008 called for the development of two companion reports. The first report, "Opportunities for Expanding and Improving Climate Information and Services for the Public," was co-developed by the Office of Science and Technology Policy (OSTP), NOAA, and Federal Emergency Management Agency (FEMA). This report discusses opportunities for expanding and improving climate information and services for the public and includes a description of the ecosystem of data providers, data users, and decision makers. The second of the two reports was developed by the Federal Geographic Data Committee (FGDC), with NOAA serving as a key contributor. The report, "Advancing the Nation's Geospatial Capabilities to Promote Federal, State, Local, and Tribal Climate Planning and Resilience," discusses the potential development of a collaborative Federal geographic mapping service that can facilitate public access to climate-related information to assist all governments in their local, national, and international climate planning and resilience activities. NOAA played a key role in both reports, which will help guide the U.S. Government to make rapid progress on expanding and improving climate services to better address societal challenges.

To support Executive Order 13985 "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government," the Census Bureau and NOAA challenged external innovators to create new data-driven tools that will provide decision makers with information to fit their needs and accelerate equitable resilience-building across the nation to tackle the climate crisis. This work was done through the 2021 The Opportunity Project (TOP). NOAA also hosted Climate and Equity Roundtables across the country, which focused on a specific climate hazard that underserved communities are facing and need more support from NOAA and the federal government to adapt and respond. NOAA also introduced a new content area on NOAA.gov dedicated to environmental justice that features the agency's important equity-related work from internal workforce initiatives to external services. Several geospatial mapping tools are highlighted throughout the webpage, including a sea level rise viewer, a climate explorer, and an environmental sensor map. To further help community leaders advance equity, the Census Bureau created the Data for Equity webpage with valuable Census data tools, such as the Opportunity Atlas and the Response Outreach Area Mapper. In response to the directive in Section 211(a) of Executive Order 14008 to conserve at least 30% of U.S. lands and waters by 2030, the Departments of the Interior (DOI), Agriculture (USDA), and Commerce, and the White House Council on Environmental Quality (CEQ) released a preliminary report to the National Climate Task Force recommending a ten-year, locally led campaign. The report, "Conserving and Restoring America the Beautiful," includes input from State, Local, Tribal, and Territorial officials, agricultural and forest landowners, fishermen, and other key stakeholders. The report outlines eight key principles to guide conservation efforts, such as honoring tribal sovereignty and priorities, using science as a guide, pursuing conservation and restoration approaches that create jobs and support healthy communities, and pursuing a collaborative and inclusive approach to conservation. The Secretaries of DOI, USDA, and Commerce and the CEQ Chair are co-chairs of the America the Beautiful Interagency Working Group (IWG) to guide and track implementation of the initiative's goals and recommendations. In December 2021, the IWG co-chairs released the first annual progress report highlighting Administration actions taken over the past year to advance the initiative. In addition, NOAA is one of three co-chairs of the America the Beautiful Measurement Subcommittee, which is developing the American Conservation and Stewardship Atlas. This Atlas will aggregate information from diverse data sources to provide a baseline assessment of how much land, ocean, and other waters in the U.S. are currently conserved or restored. In January 2022, the agencies published a 60-day Federal Register Notice and will host three listening sessions to solicit comments to inform how the Atlas can best serve as a useful tool for the public and how it should reflect a continuum of conservation actions in the America the Beautiful initiative.