



**2021 Lead Covered Agency
NGDA Theme Annual Performance Report
and Self-Assessment**
for
**Governmental Units, and Administrative
and Statistical Boundaries Theme**

**Geospatial Data Act of 2018
Section USC 43 Sec 2805(b)(3) Requirements**

February 4, 2022



Table of Contents

Table of Contents	i
Introduction.....	1
Executive Summary.....	2
Official Theme Related Information	3
NGDA Theme Points of Contact	3
NGDA Theme Portfolio Datasets	3
Meeting General Responsibilities – USC 43 Sec 2805(b)(2).....	6
Managing Theme-Related Content on GeoPlatform.....	6
A. Geospatial Data Standards.....	7
Meeting Requirements for Geospatial Data Standards.....	7
FY2020 Report Follow up.....	8
Highlighting FGDC Agency Efforts to Support NGDA Data Standards	9
B. Nationwide Population of the Data Theme.....	14
Meeting Requirements for Nationwide Population of NGDA Datasets.....	14
FY2020 Report Follow up.....	15
Highlighting Key Examples of FGDC Agency Efforts to Support Plans for Nationwide Population of NGDA Datasets	15
C. Establish Goals That Support the NSDI Strategic Plan.....	27
Establishing Common Goals and Priorities Supporting the NSDI and Its Strategic Plan	27
Highlighting FGDC Agency Strategies that Support the NSDI and Geospatial Data	28
D. Addressing User Needs	31
Highlighting FGDC and FGDC Agency Efforts to Meet User Needs	31
FY2020 Report Follow up.....	32
Highlighting FGDC and FGDC Agency Efforts to Meet User Needs	32
Appendix A: Survey Picklists	34
Endnotes.....	36

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.S. Code, Title 43 – Public Lands, Chapter 46: GEOSPATIAL DATA](#).

The GDA Section 2805(b)(3)(E)(I) requires performance reports to be submitted to the Federal Geographic Data Committee (FGDC) that document “the activities relating to and implementation of the National Geospatial Data Asset [NGDA] data theme, including progress in achieving the requirements under subparagraphs (A), (B), (C), and (D)” of Section 2805(b)(3).

This 2021 Lead Covered Agency NGDA Theme Annual Performance Report (LCA NGDA Theme Report) covers the period of October 1, 2020 through Fiscal Year (FY) 2021, September 30, 2021 and uses agency self-assessments for this report to the FGDC. Reports will be developed annually and will span one fiscal year period. Lead covered agencies will ensure that one consolidated report per NGDA theme is submitted to FGDC. This report will include a rating for each responsibility of "meets expectations," "made progress toward expectations," or "fails to meet expectations," as required by the GDA. A report template and survey were developed to facilitate consistent self-assessments and consolidated reports. As per the GDA, a summary and evaluation of the progress to achieve the requirements will be generated by FGDC and will be provided to the National Geospatial Advisory Committee (NGAC) for comment. Summary reports with NGAC comments and other required reports and information will be available online via the [FGDC GDA pages](#).¹

The revised Circular A-16 is currently in development for release by the Office of Management and Budget (OMB) and is intended to provide guidance and direction for the FGDC on management of the GDA requirements. Following the release of the updated OMB Circular A-16, the FGDC anticipates conducting a review of its governance structure, including its working groups and subcommittees, to ensure that they support the needs of FGDC agencies and have the proper resources and structure to meet the requirements for facilitating agencies’ work to meet requirements of the GDA.

This 2021 NGDA Theme LCA annual performance report template uses the GDA definition for NGDA data theme as the foundation for reporting compliance *for the data within the theme*. From the GDA definitions, NGDA data theme “means the NGDA core geospatial datasets (including electronic records and coordinates) relating to a topic or subject designated under Section 2805.” FGDC anticipates that future enhancements to the reporting process will include a mechanism to gather information at the dataset level which can then be reported at the theme and agency level to provide a greater level of granularity for annual reporting and better management of the NGDA Portfolio.

The focus of this report will be to document both the ongoing processes, procedures, and actions within agencies that manage the NGDA datasets, and the FGDC activities underway for identifying common definitions and approaches for meeting the requirements for plans and actions identified in the GDA.

Executive Summary

This report is the result of continued efforts across the FGDC and the NGDA theme community to evaluate the requirements of the GDA in the context of the goals and objectives of the [National Spatial Data Infrastructure \(NSDI\) Strategic Plan 2021-2024](#).² The report is meant to highlight an emerging understanding of these requirements, communicate the steps that FGDC is undertaking to ensure governance processes are in place that build on the accomplishments to date, and lay out an approach for collaboratively moving forward. Communication of the necessary actions and next steps across the FGDC is the cornerstone of this report.

This annual performance report documents progress made in meeting GDA requirements since the initial, baseline, report was submitted in 2020. This second annual report for the Governmental Units, and Administrative and Statistical Boundaries Theme provides insights into both ongoing, cross-cutting FGDC portfolio management, and agency and theme-specific activities that align with GDA requirements.

FGDC agencies, in coordination with the FGDC Office of the Secretariat (OS), provided leadership and input for GDA requirements analysis as part of ongoing theme strategic planning and implementation activities. Progress made by all NGDA themes for this reporting cycle centers on two key GDA requirements – geospatial data standards and establishing a plan for nationwide population of the NGDA data themes (or core datasets). The collaborative efforts included development of two briefing papers outlining the issues, benefits, challenges, and recommended actions for advancing each requirement. The anticipated outcomes, with FGDC Steering Committee approval, will include formation of two task teams to further evaluate the respective GDA requirements, establish a collaborative approach with government and nongovernment leaders, partners, and stakeholders, and develop recommendations for FGDC on required governance, technical guidance, and actions.

Theme-related information gathered during the 2020 LCA reporting process will also be used to support GDA requirements for geospatial data standards and nationwide population of the data theme. The reported information included participation in FGDC Subcommittees and Working Groups, National and International voluntary consensus standards bodies, International geospatial Working Groups supporting standards, other activities undertaken by agencies to support standards, and theme partners and partnership programs. FGDC will analyze the information collected and the existing GeoPlatform [Theme Community](#)³ content to determine how best to redesign the theme pages to host the relevant information.

Prior to the enactment of the GDA, the FGDC conducted Lifecycle Maturity Assessments (LMA) based on the A-16 Supplemental Guidance [Stages of the Geospatial Lifecycle](#).⁴ As described in the FY2020 LCA NGDA Theme Reports, these assessments were conducted in 2015 and 2017 and resultant [Theme LMA Summary Reports](#)⁵ and Dashboards were made available online through GeoPlatform.gov. While the LMA process was put on hold following the enactment of the GDA, it is seen as a key component moving forward. Following the release of the updated OMB Circular A-16, the FGDC will analyze that guidance and evaluate the LMA process for adoption and use to capture the lifecycle information from agencies and dataset managers. The LMA process could be used to dynamically augment these GDA annual reports and will also be analyzed as part of developing and implementing the plan for nationwide population of the NGDA data themes (core datasets).

This report has been developed using an NGDA Theme Lead consensus-driven report template that provides consistent reporting across all NGDA Themes.

Official Theme Related Information

As per the OMB Circular A-16 Supplemental Guidance, official theme related information includes designated points of contact for NGDA Portfolio management, including Theme Leads and Executive Champions, and the official list of NGDA datasets. As further described in the sections below, this information is maintained on the GeoPlatform [NGDA Portfolio Community](#)⁶ site.

NGDA Theme Points of Contact

Reference: [USC 43 Sec 2805\(b\)\(3\)\(E\)\(i\)](#)

Section 2805(b)(3)(E)(i) requires lead covered agencies to “designate a point of contact within the lead covered agency who shall be responsible for developing, maintaining, coordination relating to, and disseminating data using the GeoPlatform” as part of administering the NGDA theme.

In accordance with the current OMB Circular A-16 Supplemental Guidance, NGDA theme personnel play an ongoing, vital role in the operation and maintenance of a theme. They are individuals who provide interdepartmental leadership and coordination at the NGDA theme level and work with NGDA dataset managers to facilitate, among other things, portfolio development including activities associated with standards and guidance.

Traditionally, these roles have been coordinated through lead covered agencies with the FGDC Office of the Secretariat and the NGDA theme lead assuming a majority of NGDA theme responsibilities.

Transitioning to meet specific GDA responsibilities provides opportunities for lead covered agencies to designate specific points of contact to coordinate an expanding portfolio of datasets across the NGDA theme and for greater dissemination of data through the GeoPlatform.

Theme and agency points of contact provided in Table 1 below are maintained to meet requirements from the [A-16 Supplemental Guidance Roles and Responsibilities](#).⁷ This information is kept up-to-date in the NGDA Portfolio Community on [NGDA Theme Leads](#)⁸ and [NGDA Executive Theme Champions](#)⁹ pages.

Governmental Units, and Administrative and Statistical Boundaries Theme Contacts	
Theme Lead(s):	Dierdre Bevington-Attardi, U.S. Department of Commerce, U.S. Census Bureau
Executive Theme Champion(s):	Deirdre D. Bishop, U.S. Department of Commerce, U.S. Census Bureau

Table 1. Theme and Lead Covered Agency Points of Contact Involved in Theme Management.

NGDA Theme Portfolio Datasets

The NGDA datasets and the agencies listed in Table 2 are provided as the official list of NGDA that currently populate the Governmental Units, and Administrative and Statistical Boundaries Theme. If the theme includes NGDA datasets managed by non-covered agencies, they are shown in bold. Support for GDA requirements by these non-covered agencies is very important to the success of the themes. The

official list of [NGDA Portfolio Datasets](#)¹⁰ is maintained on the GeoPlatform and is provided here [filtered by the Governmental Units, and Administrative and Statistical Boundaries Theme](#). Each NGDA dataset also has a unique value assigned, called an NGDAID, that allows the dataset to be tracked throughout its lifecycle.

NGDAID	Governmental Units, and Administrative and Statistical Boundaries Theme NGDA Datasets	Agency
57	TIGER/Line Shapefile, Current, Nation, U.S., 116th Congressional Districts	U.S. Department of Commerce, U.S. Census Bureau
58	TIGER/Line Shapefile, Current, Nation, U.S., 2020 5-Digit ZIP Code Tabulation Areas (ZCTA5)	U.S. Department of Commerce, U.S. Census Bureau
59	TIGER/Line Shapefile, 2010, Series Information File for the 2010 Census Block State-based Shapefile with Housing and Population Data	U.S. Department of Commerce, U.S. Census Bureau
60	Collection Information for the 2010 Public Use Microdata Areas (PUMA) State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
61	TIGER/Line Shapefile, Current, Nation, U.S., 2010 Urban Areas	U.S. Department of Commerce, U.S. Census Bureau
62	Collection Information for the Urban Growth Areas State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
63	Collection Information for the Voting Districts State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
64	TIGER/Line Shapefile, Current, Nation, U.S., American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas	U.S. Department of Commerce, U.S. Census Bureau
65	TIGER/Line Shapefile, Current, Nation, U.S., American Indian Tribal Subdivisions	U.S. Department of Commerce, U.S. Census Bureau
66	TIGER/Line Shapefile, Current, State, Alaska, Alaska Native Regional Corporations (ANRC)	U.S. Department of Commerce, U.S. Census Bureau
69	Collection Information for the 2020 Census Blocks State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
70	Collection Information for the Block Groups State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
72	Collection Information for the Census Tracts State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
73	TIGER/Line Shapefile, Current, Nation, U.S., Combined New England City and Town Areas (CNECTA)	U.S. Department of Commerce, U.S. Census Bureau
74	TIGER/Line Shapefile, Current, Nation, U.S., Combined Statistical Areas (CSA)	U.S. Department of Commerce, U.S. Census Bureau
75	Collection Information for the Consolidated Cities State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
76	TIGER/Line Shapefile, Current, Nation, U.S., Counties and Equivalent Entities	U.S. Department of Commerce, U.S. Census Bureau
77	Collection Information for the County Subdivisions State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
78	Collection Information for the Elementary School Districts State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau

NGDAID	Governmental Units, and Administrative and Statistical Boundaries Theme NGDA Datasets	Agency
80	TIGER/Line Shapefile, Current, State, United States Virgin Islands, Estates	U.S. Department of Commerce, U.S. Census Bureau
81	HUD Entitlement Grantee Jurisdiction - National Geospatial Data Asset (NGDA)	U.S. Department of Housing and Urban Development
82	International Boundary United States Mexico Minute 315	U.S. Department of State, International Boundary and Water Commission
83	TIGER/Line Shapefile, Current, Nation, U.S., Metropolitan Divisions	U.S. Department of Commerce, U.S. Census Bureau
84	TIGER/Line Shapefile, Current, Nation, U.S., Core Based Statistical Areas (CBSA)	U.S. Department of Commerce, U.S. Census Bureau
86	TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Area (NECTA) Divisions	U.S. Department of Commerce, U.S. Census Bureau
87	TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Areas (NECTA)	U.S. Department of Commerce, U.S. Census Bureau
88	Collection Information for the Places State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
89	Collection Information for the Secondary School Districts State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
90	TIGER/Line Shapefile, Current, Nation, U.S., States and Equivalent Entities	U.S. Department of Commerce, U.S. Census Bureau
91	Collection Information for the State Legislative Districts Lower Chamber State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
92	Collection Information for the State Legislative Districts Upper Chamber State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
93	TIGER/Line Shapefile, Current, State, Puerto Rico, Subbarrios (Subminor Civil Divisions)	U.S. Department of Commerce, U.S. Census Bureau
94	TIGER/Line Shapefile, Current, Nation, U.S., Tribal Block Groups	U.S. Department of Commerce, U.S. Census Bureau
95	TIGER/Line Shapefile, Current, Nation, U.S., Tribal Census Tracts	U.S. Department of Commerce, U.S. Census Bureau
96	Collection Information for the Unified School Districts State-Based TIGER/Line Shapefiles, Current	U.S. Department of Commerce, U.S. Census Bureau
97	United States Canada Boundary	U.S. Department of State, International Boundary Commission
186	BLM National Administrative Unit Boundary Polygons and Office Points - National Geospatial Data Asset (NGDA)	U.S. Department of the Interior, Bureau of Land Management

Table 2. Theme NGDA Datasets.

Meeting General Responsibilities – USC 43 Sec 2805(b)(2)

Reference: [USC 43 Sec 2805\(b\)\(2\)](#)

Q1. How is the Lead Covered Agency(ies) participating in ensuring the coordinated management of the Theme? (Select all that apply - see Appendix A for complete list of optional responses)

- Lead Agency, or Co-Lead Agencies, have published a geospatial strategy as required by the GDA
- Theme Lead(s) attend NGDA Theme Community Meetings
- Theme Lead(s) participate in GDA Working Group meetings
- Theme Lead(s) review the outcomes from GDA Working Group meetings and provide feedback on approaches for GDA compliance
- Theme Lead(s) coordinate GDA compliance activities with Theme personnel
- Theme Lead(s) communicate new and ongoing Portfolio Management activities and priorities with Dataset Managers in the Theme
- Steering Committee members coordinate with the Theme
- **Other:** Theme Lead(s) participated in 2021 Lead Covered Agency Theme Annual Report Team Meetings to provide feedback to the LCA report template.

Managing Theme-Related Content on GeoPlatform

The baseline 2020 LCA NGDA Theme Report gathered theme specific information in a series of tables to reflect compliance with the GDA requirements. This content was captured to describe agency efforts that can be used moving forward to support development of the plans required by the GDA. As continued progress towards meeting requirements of the GDA, the NGDA theme community will evaluate redesign of theme community sites to allow agencies to provide current information to the public and stakeholders related to theme management.

A. Geospatial Data Standards

GDA Requirement	<p>USC 43 Sec 2805(b)(3)(A) – Provide leadership and facilitate the development and implementation of geospatial data standards for the National Geospatial Data Asset data theme, with a particular emphasis on a data content standard for the National Geospatial Data Asset data theme, including by—</p> <ul style="list-style-type: none"> i. assessing existing standards; ii. identifying anticipated or needed data standards; and iii. developing a plan to originate and implement needed standards with relevant community and international practices — <ul style="list-style-type: none"> I. in accordance with Office of Management and Budget Circular A– 119, or any successor thereto; and II. consistent with or as a part of the plan described in subparagraph (B);
Lead Covered Agency Self-Assessment	Made Progress Toward Expectations
Key to Self-Assessment	<p>FGDC agencies continue work to evaluate options for establishing a common understanding and approach to meeting GDA requirements. The FGDC Steering Committee has the <i>Briefing Paper – Reestablishing the FGDC Standards Process 8-4-21</i> under consideration. The paper outlines a path forward for reestablishing a resourced and sustainable standards process that will be compliant with the GDA and responsibilities for managing standards. This work provides a foundation for designating “Made progress toward expectations” for all themes the FY2021 reporting year. Response options included:</p> <ul style="list-style-type: none"> • Fails to Meet Expectations • Made Progress Toward Expectations • Meets Expectations

Reference: [USC 43 Sec 2805\(b\)\(3\)\(A\)](#)

Meeting Requirements for Geospatial Data Standards

This section of the GDA calls on the FGDC agencies to provide leadership and facilitate the development and implementation of geospatial data standards and outlines activities that include development of a plan to originate and implement needed standards with relevant community and international practices in accordance with OMB Circular A-119 and consistent with, or as part of the plan that will be established to meet subparagraph (B) requirements.

On August 11, 2021, the FGDC Steering Committee was presented for their consideration and approval the *Briefing Paper – Reestablishing the FGDC Standards Process 8-4-21* which outlined the need for reestablishing an FGDC standards process and included a Draft Position Statement (provided below). The paper states that an updated standards process will guide the FGDC agencies in their assessment, development, vetting, and approval of draft standards through the FGDC governance and endorsement steps (for both FGDC developed internal and FGDC endorsed external standards), and follow-on

maintenance and update steps. The standards process should also address FGDC representation and participation in other standards bodies and the administrative support required to manage and maintain the FGDC's standards inventory, web pages, and process documentation.

The briefing paper provided a set of short-term actions that include approval of the position statement and for FGDC to establish a task team to evaluate and recommend a path forward for reestablishing a resourced and sustainable standards process.

The FGDC Draft Position Statement:

The Geospatial Data Act of 2018 (GDA) establishes the Federal Geographic Data Committee (FGDC) as the lead entity in the executive branch of government for the development, implementation, and review of policies, practices, and standards relating to geospatial data. The GDA describes responsibilities related to geospatial standards for the FGDC and the agencies covered by the law (covered agencies). These responsibilities are reinforced by Office of Management and Budget Circular A-16. The covered agencies are responsible for geospatial related standards development, coordination, approval, implementation, and use. The FGDC is determining how to reestablish and resource a sustainable standards process, implement supporting governance requirements, update and improve legacy processes, and begin establishing standards as required under the GDA. Agencies should continue, to the extent possible in lieu of an active standards process, to develop, review, update, and implement existing and pending standards, and become members of the appropriate FGDC standards body when it becomes active.

A document providing the longer-term tasks and outcomes expected of the team is now under development as requested by the Steering Committee and includes:

- Evaluate FGDC and agency geospatial standards requirements in associated laws and policies
- Review legacy FGDC standards policies and procedures and recommend establishing, updating, or retiring them
- Evaluate and recommend a process for FGDC to establish standards as per the GDA and for evaluation of the NGDA baseline standards inventory, which includes currently endorsed FGDC standards, that will result in the list of standards in use across FGDC
- Evaluate opportunities to leverage work or recommendations from other existing standards bodies
- Evaluate governance requirements for managing standards and recommend necessary changes to the FGDC governance structure.
- Develop recommendations for resourcing a sustainable FGDC standards governance process

[FY2020 Report Follow up](#)

The FY2020 reports provided information on the FGDC subcommittees and working groups, national and international voluntary consensus standards bodies, the international geospatial organizations supporting standards and other activities that support standards for the data within the theme. This information will be evaluated for inclusion in the redesign of the FGDC theme community sites.

Highlighting FGDC Agency Efforts to Support NGDA Data Standards

The FGDC agencies with responsibilities for managing NGDA themes and datasets have developed the following questions to highlight on-going agency efforts to support standards for the NGDA portfolio datasets.

QA.1. Are there activities ongoing that you would like to highlight regarding development, modification, or establishment of standards for any of the data within the Theme?

Clarifying Text: This question provides agencies and dataset managers an opportunity to highlight significant efforts which are ongoing and may facilitate the work of any standards task team established as described above. Please consider agency work to evaluate or develop standards or work that has been completed and has resulted in standards that are ready to be endorsed, or established, under Section 2806. (Ongoing agency work would include a review or assessment of existing national and international standards, assessment for meeting user needs, and other work that meets the requirements of the GDA.)

- Yes

Please identify all the NGDA datasets for which you would like to provide information on work to support standards.

- TIGER/Line Shapefile, Current, Nation, U.S., 116th Congressional Districts
- TIGER/Line Shapefile, Current, Nation, U.S., 2020 5-Digit ZIP Code Tabulation Areas (ZCTA5)
- Collection Information for the 2010 Public Use Microdata Areas (PUMA) State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., 2010 Urban Areas
- Collection Information for the Urban Growth Areas State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Voting Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian Tribal Subdivisions
- TIGER/Line Shapefile, Current, State, Alaska, Alaska Native Regional Corporations (ANRC)
- Collection Information for the 2020 Census Blocks State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Block Groups State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Census Tracts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Combined New England City and Town Areas (CNECTA)
- TIGER/Line Shapefile, Current, Nation, U.S., Combined Statistical Areas (CSA)
- Collection Information for the Consolidated Cities State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Counties and Equivalent Entities
- Collection Information for the County Subdivisions State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Elementary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, United States Virgin Islands, Estates
- TIGER/Line Shapefile, Current, Nation, U.S., Metropolitan Divisions

- TIGER/Line Shapefile, Current, Nation, U.S., Core Based Statistical Areas (CBSA)
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Area (NECTA) Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Areas (NECTA)
- Collection Information for the Places State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Secondary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., States and Equivalent Entities
- Collection Information for the State Legislative Districts Lower Chamber State-Based TIGER/Line Shapefiles, Current
- Collection Information for the State Legislative Districts Upper Chamber State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, Puerto Rico, Subbarrios (Subminor Civil Divisions)
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Block Groups
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Census Tracts
- Collection Information for the Unified School Districts State-Based TIGER/Line Shapefiles, Current

Next, please provide a brief description of work you would like to highlight that supports standards, including citations and resource links as necessary.

Census Bureau NGDAs: Data content and metadata standards from the International Organization for Standardization (ISO), the American National Standards Institute, the Open Geospatial Consortium, and the Federal Geographic Data Committee (FGDC) are applied to 33 Governmental Units, and Administrative and Statistical Boundaries Theme (or Governmental Units Theme) NGDAs. The Census Bureau's geographic partnership programs create and maintain these NGDAs and perform yearly updates to Data.gov and the GeoPlatform. All Governmental Units Theme NGDAs comply with the Office of Management and Budget (OMB) Circular A-119 guidance on the use of voluntary consensus standards (VCS) for metadata, namely ISO 19115-2 and ISO 19139-2.

The Census Bureau licenses the following fifteen (15) ISO Standards:

- INCITS 31-2009 (R2019) Information Technology – Codes for the Identification of Counties and Equivalent Areas of the United States, Puerto Rico, and the Insular Areas
- INCITS 38-2009 (R2019) Information Technology – Codes for the Identification of the States and Equivalent Areas within the United States, Puerto Rico, and the Insular Areas
- INCITS 446-2008 (R2018) Information Technology – Identifying Attributes for Named Physical and Cultural Geographic Features (Except Roads and Highways) of the United States, Territories, Outlying Areas, and Freely Associated Areas, and the Waters of the Same to the Limit of the Twelve-Mile Statutory Zone
- INCITS 454-2009 (R2019) Information Technology – Codes for the Identification of Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas of the United States and Puerto Rico
- INCITS 455-2009 (R2019) Information Technology – Codes for the Identification of Congressional Districts and Equivalent Areas of the United States, Puerto Rico, and the Insular Areas
- INCITS/ISO 19110:2016 (2018) Geographic information – Methodology for feature cataloguing
- INCITS/ISO 19111:2007[R2012] Geographic information – Spatial referencing by coordinates
- INCITS/ISO 19115-1:2014 (R2019) Geographic information – Metadata — Part1: Fundamentals

- INCITS/ISO 19115-2:2019 (2019) Geographic information – Metadata — Part 2: Extensions for acquisition and processing
- INCITS/ISO TS 19139:2007 [2015] Geographic information – Metadata XML schema implementation
- INCITS/ISO/TS 19139-2:2012 (2017) Geographic information – Metadata XML schema implementation - Part 2: Extensions for imagery and gridded data
- INCITS/ISO 19157:2013 (R2019) Geographic information – Data Quality
- INCITS/ISO 19115-2003 Geographic information – Metadata
- INCITS 453-2009[R2014] Information Technology – North American Profile of ISO 19115:2003 – Geographic Information – Metadata (NAP-Metadata)
- INCITS/ISO/TS 19115-3:2016 (2017) Geographic Information – Metadata — Part 3: XML Schema Implementation for Fundamental Concepts

The Census Bureau participates in the Commerce Geospatial Standards Users Group (CGSUG) established in April 2021 to exchange information with Commerce agencies on geospatial topics such as metadata data content and data dissemination. In FY21, the Census Bureau Geospatial Standards Working Group (CBGSWG) formalized plans for membership, objectives, responsibilities, and goals for the implementation of geospatial standards for Geospatial products and services for a kick-off meeting on December 15, 2021. Membership is comprised of members from the Geography Division and the Decennial Information Technology Division. The focus is to assure that relevant geospatial standards are implemented for Census Bureau geospatial products and services, and conformance with these standards is adequately documented.

The Census Bureau also complies with the directive to “report to National Institute of Standards and Technology (NIST) no later than December 31 of each year, about the nature and extent of agency participation in the development and use of voluntary consensus standards from the previous fiscal year.” The report for FY21 focuses on standards licensing, participation in the CGSUG, and the establishment of the CBGSWG.

Other NGDAs: The BLM NGDA (BLM National Administrative Unit Boundary Polygons and Office Points) complies with “agency policies, directives, or guidelines related to geospatial data standards” and the metadata file available on GeoPlatform.gov maintains the minimum content for NGDA metadata recommended by FGDC. The data.json metadata file for the Department of Housing and Urban Development (HUD) NGDA (HUD Entitlement Grantee Jurisdiction) is accessible on Data.gov website but cannot be found on GeoPlatform.gov. The NGDAs from the International Boundary Commission (United States Canada Boundary NGDA) and the International Boundary and Water Commission (International Boundary United States Mexico Minute 315 NGDA) report compliance with ISO and/or FGDC data standards, but the metadata is not accessible on Data.gov or the GeoPlatform.

QA.2. Please check all the activities that have been taken to establish, develop, or modify standards for data within the theme (select all that apply and use the “other” textbox to briefly describe additional activities):

- Reviewed ISO metadata collection tools
- Reviewed conformance assessment procedures with assistance from existing standards bodies
- Maintain active licenses for all standards (where applicable)
- Agency established processes for standards management
- Agency examined comparable international standards for suitability with NGDA data set
- Agency examined comparable FGDC endorsed standards for suitability with NGDA data set
- Agency examined comparable open-source standards for applicability to NGDA data set
- Agency developed comparable agency-specific standards to apply to NGDA data set
- Theme established an appropriate subject-matter expert committee to develop a new standard to meet agency-specific/FGDC/international needs for the NGDA data set

QA.3. Brief Summary (Limit 5,000 characters, or approximately 1.5 pages): Please provide a brief description of FY2021 actions and accomplishments in addressing Section 2805(b)(3)(A).

Clarifying Text: Please ensure that the Brief Summary comments you submit this year highlight efforts that agencies are engaged in at the dataset or agency level that relate to GDA requirements, including involvement in and accomplishments of groups in support of NGDA data, such as:

- ✓ FGDC subcommittees and working groups
- ✓ Agency working groups and partner efforts
- ✓ National and international voluntary consensus standards bodies
- ✓ International geospatial organizations supporting standards
- ✓ Other activities that support standards

The Census Bureau participates in the following FGDC Subcommittees and working groups to advance a sustainable standard process that will be compliant with the GDA and in several activities that support standards:

- GDA Covered Agency Working Group: Commerce Executive Champions and members of the Commerce Geospatial Working Group (CGWG) and the Commerce Geospatial Standards User’s Group (CGSUG) attend monthly meetings of the working group. Participants discussed the status of the FGDC’s endorsement of standards, the reestablishment of the FGDC Standards Process, covered agency geospatial strategies, and alignment with the National Spatial Data Infrastructure (NSDI) Strategic Plan.
- NGDA Theme Lead Working Group: Census Bureau’s Theme Lead for the Governmental Units Theme and additional members of the National Boundaries Group, Federal Lands Working Group, and the Tribal Boundaries Subgroup, attend all NGDA Theme Lead Meetings for updates on changes to the NGDA theme portfolio approved by the FGDC Steering Committee, management of NGDA datasets, metadata requirements for Data.gov and the GeoPlatform, metadata audits, GDA compliance, and conformance to standards.
- Census Bureau Geospatial Standards Working Group (CBGSWG): The CBGSWG formalized plans for membership, objectives, responsibilities, and goals relating to the implementation of geospatial standards for Geospatial products and services to prepare for a kick-off in December 15, 2021.
- Commerce Geospatial Standards Users Group (CGSUG): Census Bureau staff, including the NGDA Theme Lead for Governmental Units, participated in establishing the CGSUG in April 2021. Members meet monthly to review standards implementation, recent geospatial legislation and policies, tools and classification systems for metadata collection, schema, data content, symbology, codes, internet

protocols, and data dissemination for multiple use cases.

- **International Voluntary Consensus Standards Bodies:** Commerce staff leads and participates in international voluntary consensus standards bodies and standards development through the International Committee for Information Technology Standards Technical Committee L1 - Geographic Information Systems (INCITS-L1), the U.S. Technical Advisory Group to ISO Technical Committee 211 Geographic information/Geomatics (TC 211), and the Open Geospatial Consortium (OGC).
- **United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM):** The Census Bureau's Geospatial Information Officer (GIO) and Executive Champion for the Governmental Units Theme also serves as the Head of the U.S. Delegation of the UN-GGIM as assigned by the Office of Management and Budget (OMB). The role of the UN-GGIM is to develop global geospatial information frameworks and disseminate best practices for international, regional, and national bodies on geospatial information related to management models and technical standards.
- **United Nations Expert Group on the Integration of Statistical and Geospatial Information (UN EG-ISGI):** U.S. representatives from the Census Bureau participate in the UN-ISGI, which includes the development of norms, principles, guides, and standards to increase the interoperability and integration of statistical and geospatial information.
- **Delineation of Metropolitan and Micropolitan Statistical Areas using Office of Management and Budget (OMB) Standards:** The Census Bureau's NGDAs adhere to OMB's current standards for delineating metropolitan, micropolitan, and related statistical areas. 2020 Standards were published in a Federal Register Notice [86 FR 37770] on July 16, 2021: 2020 Standards for Delineating Core Based Statistical Areas.
- **American National Standards Institute (ANSI) Geographic Area Codes:** The Census Bureau NGDAs support the maintenance of the ANSI geographic area codes for states, counties, metropolitan, micropolitan, and other geographic areas.
- **Board on Geographic Names (BGN):** Census Bureau staff participates in the BGN to maintain uniform geographic name usage and names standardization in all Governmental Units Theme NGDAs and geospatial data products. The BGN is the central authority to resolve name problems, name inquiries, name changes, and new name proposals.
- **Census Bureau and the U.S. Geological Survey (USGS) recently modified their MOU to Exchange Standardized Geographic Names and Codes:** In FY21, the Census Bureau and USGS finalized the "Annex—Exchange of Geographic Names and Codes Addition to Memorandum of Understanding between the U.S. Geological Survey and the U.S. Census Bureau for Coordination and Cooperation Pertaining to the Exchange and Use of Topologically Integrated Geographic Encoding and Reference (TIGER) Data in The National Map" (January 11, 2021). This Annex sets forth terms and conditions to collaborate on names for the U.S. Geographic Names Information System (GNIS).

B. Nationwide Population of the Data Theme

GDA Requirement	<p>USC 43 Sec 2805(b)(3)(B) – provide leadership and facilitate the development and implementation of a plan for nationwide population of the National Geospatial Data Asset data theme, which shall—</p> <p>(i) include developing partnership programs with States, Indian tribes, institutions of higher education, private sector entities, other Federal agencies, and local governments;</p> <p>(ii) meet the needs of users of geospatial data;</p> <p>(iii) address human and financial resource needs;</p> <p>(iv) identify needs relating to standards, metadata for geospatial data within the National Geospatial Data Asset data theme, and the GeoPlatform; and</p> <p>(v) expedite the development of necessary National Geospatial Data Asset data themes;</p>
Lead Covered Agency Self-Assessment	Made Progress Toward Expectations
Key to Self-Assessment	<p>FGDC agencies continue work to evaluate options for establishing a common understanding and approach to meeting GDA requirements. A briefing paper, described in this section, is being developed for FGDC Steering Committee consideration. It outlines a path forward for engaging partners and stakeholders regarding nationwide population of data and establishing common practices that can be used to advance the NSDI, the goals and objectives of the NSDI Strategic Plan, and meet requirements of the GDA and other legislation. This work provides a foundation for designating “Made progress toward expectations” for all themes the FY2021 reporting year. Response options included:</p> <ul style="list-style-type: none"> • Fails to Meet Expectations • Made Progress Toward Expectations • Meets Expectations

Reference: [USC 43 Sec 2805\(b\)\(3\)\(B\)](#)

Meeting Requirements for Nationwide Population of NGDA Datasets

This section of the GDA calls on the FGDC agencies to, “provide leadership and facilitate the development and implementation of a plan for nationwide population of the National Geospatial Data Asset data theme.” Using the GDA definition of NGDA data theme, the required plans would focus on nationwide population of the core datasets within the theme and include the work to expedite development of necessary core datasets.

FGDC agencies manage NGDA core datasets and other geospatial data to meet mission requirements and to address priority needs of the agency and the nation. There are multiple examples of ongoing agency efforts to establish partnerships, conduct requirements and user needs analysis, identify options

for appropriate human and financial resourcing, and identify needs relating to standards for NGDA datasets in support of nationwide population of priority geospatial datasets.

To support development of a common approach for meeting GDA and other legislative requirements and address the goals and objectives of the [NSDI Strategic Plan 2021-2024](#), a briefing paper has been developed for consideration by the FGDC Steering Committee. The briefing paper proposes that FGDC engage the NGAC to provide advice and recommendations for federal and non-federal partners and stakeholders regarding nationwide population of data and establishing common practices that can be used to advance the NSDI.

The briefing paper documents the need for establishing common approaches and a common understanding of what constitutes “nationwide population of datasets;” a methodology for identifying datasets that should be considered for nationwide population and a means to prioritize those efforts; and a process for identifying data that requires integration with government and nongovernment data or those that only require national coverage of federal data.

As FGDC agencies continue to develop common approaches for meeting requirements for geospatial data management, they will be incorporated into the reporting process. This FY2021 report highlights ongoing efforts that support these requirements. The information gathered here will be available for further evaluation of processes and activities across FGDC agencies that can be used as best practices and established in guidance and governance documents.

[FY2020 Report Follow up](#)

The information on theme partners and partnership programs supporting data within the theme reported as part of the FY2020 Reports will be evaluated for inclusion in the redesign of the FGDC theme community sites.

[Highlighting Key Examples of FGDC Agency Efforts to Support Plans for Nationwide Population of NGDA Datasets](#)

The following suite of questions was established to highlight ongoing agency efforts to support nationwide population of the NGDA portfolio datasets. FGDC anticipates using this information moving forward as work continues to identify and establish best practices to develop common approaches.

QB.1. Are there activities ongoing that you would like to highlight that support nationwide population of NGDA datasets within the Theme, or efforts that support any of the elements included in this requirement?

- Yes

QB.1a. Are there existing or planned partnership programs with a wide range of stakeholders supporting NGDA datasets within the Theme that you would like to highlight?

- Yes

Please identify all the NGDA datasets for which you would like to provide information related to partnership activities.

- TIGER/Line Shapefile, Current, Nation, U.S., 116th Congressional Districts
- TIGER/Line Shapefile, Current, Nation, U.S., 2020 5-Digit ZIP Code Tabulation Areas (ZCTA5)
- Collection Information for the 2010 Public Use Microdata Areas (PUMA) State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., 2010 Urban Areas
- Collection Information for the Urban Growth Areas State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Voting Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian Tribal Subdivisions
- TIGER/Line Shapefile, Current, State, Alaska, Alaska Native Regional Corporations (ANRC)
- Collection Information for the 2020 Census Blocks State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Block Groups State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Census Tracts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Combined New England City and Town Areas (CNECTA)
- TIGER/Line Shapefile, Current, Nation, U.S., Combined Statistical Areas (CSA)
- Collection Information for the Consolidated Cities State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Counties and Equivalent Entities
- Collection Information for the County Subdivisions State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Elementary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, United States Virgin Islands, Estates
- TIGER/Line Shapefile, Current, Nation, U.S., Metropolitan Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., Core Based Statistical Areas (CBSA)
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Area (NECTA) Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Areas (NECTA)
- Collection Information for the Places State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Secondary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., States and Equivalent Entities
- Collection Information for the State Legislative Districts Lower Chamber State-Based TIGER/Line Shapefiles, Current
- Collection Information for the State Legislative Districts Upper Chamber State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, Puerto Rico, Subbarrios (Subminor Civil Divisions)
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Block Groups
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Census Tracts
- Collection Information for the Unified School Districts State-Based TIGER/Line Shapefiles, Current

Next, please provide a brief description of partnership with citations and resource links as necessary.

The Governmental Units, and Administrative and Statistical Boundaries Theme LCA (Census Bureau) provides authoritative data developed from partnership programs listed here:

- Boundary and Annexation Survey (<https://www.census.gov/programs-surveys/bas.html>)
- Participant Statistical Areas Program (<https://www.census.gov/programs-surveys/decennial-census/about/psap.html>)
- School District Review Program (<https://www.census.gov/programs-surveys/sdrp.html>),
- Boundary Quality Project (<https://www.census.gov/programs-surveys/bas/information/bqarp.html>)
- Census Redistricting Data Program (<https://www.census.gov/programs-surveys/decennial-census/about/rdo/program-management.html>).

Program participants from the Census Bureau collaborate with tribal governments, state governments, local governments, other federal agencies, and institutions of higher education.

In addition, Census Bureau participates in the National States Geographic Information Council, National League of Cities, National Association of Counties, and American Association of Geographers. The U.S. Geological Survey (USGS) and Census Bureau's partnership through a Memorandum of Understanding (MOU) facilitates the exchange and use of Census Bureau's roads and boundary data within the Topologically Integrated Geographic Encoding and Reference (TIGER) System for use by USGS in The National Map. This partnership supports the Census Bureau's geospatial data development and the USGS National Geospatial Program (NGP) with scheduled updates to the U.S. topographic map series (US Topo) and the Census Bureau's NGDAs. The Census Bureau's Geography Division staff meets monthly with NGP staff to discuss geospatial data and program updates. There were three USGS/Census Bureau technical exchanges on October 21, 2020: Hydrography; July 21, 2021: Geospatial Research - the Census Bureau's Data Science programs, Change Detection/Imagery and Building Footprints, USGS' Dynamic Mapping and Center of Excellence for Geospatial Information Science Research projects; and October 26, 2021: Dynamic Mapping Updates (an update to the Cartography Technical Exchange on September 23, 2020).

The Census Bureau has also worked with the Connecticut Office of Policy and Management in 2021 who has requested that the Census Bureau adopt the State's nine Councils of Government (COGs)/Planning Regions as the statistical equivalents of counties. In FY21, the Census Bureau published a Federal Register Notice regarding this proposed change and conducted outreach to the FGDC's GDA Covered Agency Working Group and to the Homeland Infrastructure Foundation Level Data Subcommittee in October 2021.

To assist with NGDA updates that occur during these partnership programs, the Census Bureau is currently initiating the early development of a Partner Portal on [census.gov](https://www.census.gov), where tribal, state, and local governments can receive customized and controlled access to the Census Bureau geographic and statistical information unique to their government. The portal will enable the Census Bureau's stakeholders 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. In the upcoming decade, the portal will allow for the secure transfer of data to and from governments on an as needed basis, and as defined by the Geographic Support Program.

Beginning in late-2021, the Census Bureau conducted a series of listening tours with key Census Bureau external stakeholders including tribal, federal, state, local partners, and external data users to assess how the contents and requirements of the MAF/TIGER System, or access to the data itself, need to change to better serve these communities. Several data opportunities resulting from the Listening Tour such as increasing the frequency of product delivery, identifying more appropriate methods of product delivery and training, and consideration of alternate geographies for summary products are being considered for inclusion in the "Vision for the Geographic Support Program, Fiscal Years 2021-2031" document that is used to guide future planning.

QB.1b. Are processes, or plans for processes, in place to meet the needs of users? Note that Section 2805(b)(3)(D) of this report covers efforts to collect and analyze user needs and incorporation of those needs into agency strategies. However, you may include the information on those efforts in your response for this question.

Clarifying Text: If no formal process exists, but information on summits, training events, or other activities that supported the collection or understanding of user needs may be included.

- Yes

Please identify all the NGDA datasets for which you would like to provide information on efforts to meet user needs.

- TIGER/Line Shapefile, Current, Nation, U.S., 116th Congressional Districts
- TIGER/Line Shapefile, Current, Nation, U.S., 2020 5-Digit ZIP Code Tabulation Areas (ZCTA5)
- Collection Information for the 2010 Public Use Microdata Areas (PUMA) State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., 2010 Urban Areas
- Collection Information for the Urban Growth Areas State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Voting Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian Tribal Subdivisions
- TIGER/Line Shapefile, Current, State, Alaska, Alaska Native Regional Corporations (ANRC)
- Collection Information for the 2020 Census Blocks State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Block Groups State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Census Tracts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Combined New England City and Town Areas (CNECTA)
- TIGER/Line Shapefile, Current, Nation, U.S., Combined Statistical Areas (CSA)
- Collection Information for the Consolidated Cities State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Counties and Equivalent Entities
- Collection Information for the County Subdivisions State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Elementary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, United States Virgin Islands, Estates
- TIGER/Line Shapefile, Current, Nation, U.S., Metropolitan Divisions

- TIGER/Line Shapefile, Current, Nation, U.S., Core Based Statistical Areas (CBSA)
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Area (NECTA) Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Areas (NECTA)
- Collection Information for the Places State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Secondary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., States and Equivalent Entities
- Collection Information for the State Legislative Districts Lower Chamber State-Based TIGER/Line Shapefiles, Current
- Collection Information for the State Legislative Districts Upper Chamber State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, Puerto Rico, Subbarrios (Subminor Civil Divisions)
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Block Groups
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Census Tracts
- Collection Information for the Unified School Districts State-Based TIGER/Line Shapefiles, Current

Next, please provide a brief description of efforts to meet user needs, including citations and resource links as necessary.

The Census Bureau collects and maintains boundary data within the MAF/TIGER System from partnership programs with tribal, state, and local government partners each year. In addition to these foundational uses for boundary data, numerous censuses and surveys rely on current and accurate boundary data to select samples, conduct operations, and disseminate data. Regular internal users of boundary data provided by the Geographic Support Program include the Decennial Census, the Redistricting Data Program, the American Community Survey, the Economic Census, the Population Estimates Program, and the Demographic Surveys. External users of this boundary data include numerous federal agency programs, tribal, state, and local governments, non-governmental and non-profit organizations, academia, and numerous commercial sectors.

The Census Bureau identified a series of innovations and strategies to be completed over the next decade. These innovations are described in the "Vision for the Geographic Support Program, Fiscal Years 2021-2031." Some new geospatial strategies outlined in the vision include:

- **New Non-Response Follow-up Opportunities:** BAS will now feature a non-response follow-up component, where the Census Bureau will contact all legal governments instead of the subset of governments in non-Decennial years who have not responded, to see if they have boundary updates to submit to the Census Bureau.
- **New Recommendations for Census Designated Places:** BAS will solicit recommendations yearly for updates and new proposals for Census Designated Places, a statistical geographic entity. Historically, changes to Census Designated Places could only be made via the Participant Statistical Areas Program immediately prior to a decennial census.
- **Intercensal Updates for Statistical Area Geographies:** Proposals for intercensal update of certain statistical area geographies, including census tracts, will be considered from external data users, as well as federal and state program sponsors. Historically, boundaries for most statistical geographic areas used to tabulate and disseminate census data are only updated every ten years during a decennial

census, which enables comparability and longitudinal analysis of these geographies across censuses, but also limits the usefulness of the data as it ages within the decade.

- **Expansion of the National Boundary Group Charter:** A Census Bureau staff member will continue to serve as co-chair of the National Boundary Group, a working group of the FGDC's Governmental Units Theme. The scope of the National Boundary Group charter will be expanded to include formal coordination with those agencies that manage international, military, and federal land boundaries as part of their ongoing mission.
- **Geographic Grids:** The Census Bureau will research the use of a geographic grid concept for tabulating and disseminating statistical data. The use of geographic grids for managing and publishing data is prevalent around the globe and would supplement the continued use of existing small area geographies, such as census tracts.
- **Customized Geographies:** The Census Bureau will explore the possibility of offering data users the flexibility to customize geographies – to apply their own geographic areas to the underlying statistical data.
- **United States and Territories:** The Census Bureau will add topology and attribution for the remaining nine Minor Outlying Island territories to the coverage of the MAF/TIGER System, which currently includes the 50 United States, the District of Columbia, Puerto Rico, and the Island Area territories of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands. The Minor Outlying Island territories are Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Island in the Pacific Ocean, and Navassa Island in the Caribbean Sea. Once the Minor Outlying Island territories are added, the GS Program will use the term "United States and Territories" to describe the full coverage of the MAF/TIGER System.

Beginning in late-2021, the Census Bureau conducted a series of listening tours with key Census Bureau external stakeholders including tribal, federal, state, and local partners, and external data users to assess how the contents and requirements of the MAF/TIGER System, or access to the data itself, need to change to better serve these communities. Several data opportunities resulting from the Listening Tour such as increasing the frequency of product delivery, identifying more appropriate methods of product delivery and training, and consideration of alternate geographies for summary products are being considered for inclusion in the "Vision for the Geographic Support Program, Fiscal Years 2021-2031" that is used to guide future planning.

QB.1c. Are there existing or planned program and data management plans in place that address human and financial resource needs?

- Yes

Please identify all the NGDA datasets for which you would like to provide information on efforts to address human and financial resource needs.

- TIGER/Line Shapefile, Current, Nation, U.S., 116th Congressional Districts
- TIGER/Line Shapefile, Current, Nation, U.S., 2020 5-Digit ZIP Code Tabulation Areas (ZCTA5)
- Collection Information for the 2010 Public Use Microdata Areas (PUMA) State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., 2010 Urban Areas
- Collection Information for the Urban Growth Areas State-Based TIGER/Line Shapefiles, Current

- Collection Information for the Voting Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian Tribal Subdivisions
- TIGER/Line Shapefile, Current, State, Alaska, Alaska Native Regional Corporations (ANRC)
- Collection Information for the 2020 Census Blocks State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Block Groups State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Census Tracts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Combined New England City and Town Areas (CNECTA)
- TIGER/Line Shapefile, Current, Nation, U.S., Combined Statistical Areas (CSA)
- Collection Information for the Consolidated Cities State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Counties and Equivalent Entities
- Collection Information for the County Subdivisions State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Elementary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, United States Virgin Islands, Estates
- TIGER/Line Shapefile, Current, Nation, U.S., Metropolitan Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., Core Based Statistical Areas (CBSA)
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Area (NECTA) Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Areas (NECTA)
- Collection Information for the Places State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Secondary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., States and Equivalent Entities
- Collection Information for the State Legislative Districts Lower Chamber State-Based TIGER/Line Shapefiles, Current
- Collection Information for the State Legislative Districts Upper Chamber State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, Puerto Rico, Subbarrios (Subminor Civil Divisions)
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Block Groups
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Census Tracts
- Collection Information for the Unified School Districts State-Based TIGER/Line Shapefiles, Current

Next, please provide a brief description of efforts to meet financial and human resource needs, including citations and resource links as necessary (Limit 5,000 characters, approximately 800 words).

Every year, the Census Bureau develops and uses program and data management plans, detailed schedules, and other program-specific documents that describe the human and financial resource needed to ensure the success of geographic partnership programs, such as the Boundary and Annexation Survey (BAS), that are critical to the success of the Governmental Units Theme NGDAs.

As we embark on developing the innovations that support the Governmental Units Theme NGDAs, as described in the "Vision for the Geographic Support Program, Fiscal Years 2021-2031," the Census

Bureau will also expand and revise program management artifacts to consider how these program innovations impact human and financial resource requirements. The Census Bureau will also continue to revise and mature the systemic planning process to fully optimize human and financial resource needs. The Census Bureau will continue to consult on best practices for data management, data storage, and preservation to facilitate sharing and discovery of data.

QB.1d. Are processes, or plans for processes, in place to identify needs related to standards?

- Yes

Please identify all the NGDA datasets for which you would like to provide information on needs related to standards.

- TIGER/Line Shapefile, Current, Nation, U.S., 116th Congressional Districts
- TIGER/Line Shapefile, Current, Nation, U.S., 2020 5-Digit ZIP Code Tabulation Areas (ZCTA5)
- Collection Information for the 2010 Public Use Microdata Areas (PUMA) State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., 2010 Urban Areas
- Collection Information for the Urban Growth Areas State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Voting Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian Tribal Subdivisions
- TIGER/Line Shapefile, Current, State, Alaska, Alaska Native Regional Corporations (ANRC)
- Collection Information for the 2020 Census Blocks State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Block Groups State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Census Tracts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Combined New England City and Town Areas (CNECTA)
- TIGER/Line Shapefile, Current, Nation, U.S., Combined Statistical Areas (CSA)
- Collection Information for the Consolidated Cities State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Counties and Equivalent Entities
- Collection Information for the County Subdivisions State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Elementary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, United States Virgin Islands, Estates
- TIGER/Line Shapefile, Current, Nation, U.S., Metropolitan Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., Core Based Statistical Areas (CBSA)
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Area (NECTA) Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Areas (NECTA)
- Collection Information for the Places State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Secondary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., States and Equivalent Entities

- Collection Information for the State Legislative Districts Lower Chamber State-Based TIGER/Line Shapefiles, Current
- Collection Information for the State Legislative Districts Upper Chamber State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, Puerto Rico, Subbarrios (Subminor Civil Divisions)
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Block Groups
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Census Tracts
- Collection Information for the Unified School Districts State-Based TIGER/Line Shapefiles, Current

Next, please provide a brief description of efforts to identify needs related to standards, including citations and resource links as necessary.

The following needs related to standard have been identified during monthly meetings of the Commerce Geospatial Standards Users' Group (CGSUG) formalized by charter in April 2021:

- Conformance Assessments for Standards: At the September 2021 CGSUG meeting, National Institute of Standards and Technology (NIST) provided guidance and recommendations to Commerce agencies on conformance assessment activities and documentation of control systems that can be applied to metadata, data content, and developing geospatial technologies (i.e., Web services, Geodatabases). The Census Bureau has identified the need to conduct more detailed conformance assessments to document quality control systems currently in place for the Census Bureau's NGDAs, as well as the need for further exploration of new metadata standards and pairings for all geospatial data.
- New metadata collection methodologies and tools: In July 2021, NOAA presented the Collection Metadata Editing Tool (CoMET) during the CGSUG meeting and invited members to participate in the August NOAA Environmental Data Management (EDM) Workshop. Participating members from the Census Bureau have discussed a potential expansion of the NOAA's 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. Additionally, the Census Bureau is also reviewing the Department of Interior's (U.S. Geological Survey) metadata workflows, and tools (mdEditor, mdTranslator, mdJSON Schema Viewer) to develop new procedures and metadata tools for ISO standards conformance.
- Increase staff expertise in metadata creation and quality control workflows: A persistent theme across the federal government's geospatial community is the need to bolster staff expertise and training in metadata creation and control systems development for all geospatial data, including NGDAs. During CGSUG meetings with Commerce agencies, and invited guests from the Department of Interior, and Esri, participants have reported that the limited number of staff available for metadata creation, metadata tool development, and enhanced quality control systems for standards conformance assessments has hampered the developmental improvements necessary to assure interoperability of all geospatial data on the GeoPlatform and other geospatial data portals.
- Apply geospatial metadata standards to all geospatial data: In addition to the Census Bureau's NGDAs, all new and existing products and services are required to follow metadata standards and document standards conformance (i.e., Cartographic boundary files, partnership files, TIGERweb, and additional Web Map Services). As a member of the Open Geospatial Consortium (OGC), the Census Bureau will investigate the need to migrate to newer, more robust standards for Web Map Services or Web Feature Services, GeoPackages, KMLs, and GeoAPIs.

QB.1e. Are there any other processes in place that support nationwide population of data sets (e.g., data quality control processes that cover data collected by external stakeholders)?

- Yes

Please identify all the NGDA datasets for which you would like to provide additional information related to nationwide population of data.

- TIGER/Line Shapefile, Current, Nation, U.S., 116th Congressional Districts
- TIGER/Line Shapefile, Current, Nation, U.S., 2020 5-Digit ZIP Code Tabulation Areas (ZCTA5)
- Collection Information for the 2010 Public Use Microdata Areas (PUMA) State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., 2010 Urban Areas
- Collection Information for the Urban Growth Areas State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Voting Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas
- TIGER/Line Shapefile, Current, Nation, U.S., American Indian Tribal Subdivisions
- TIGER/Line Shapefile, Current, State, Alaska, Alaska Native Regional Corporations (ANRC)
- Collection Information for the 2020 Census Blocks State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Block Groups State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Census Tracts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Combined New England City and Town Areas (CNECTA)
- TIGER/Line Shapefile, Current, Nation, U.S., Combined Statistical Areas (CSA)
- Collection Information for the Consolidated Cities State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., Counties and Equivalent Entities
- Collection Information for the County Subdivisions State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Elementary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, United States Virgin Islands, Estates
- TIGER/Line Shapefile, Current, Nation, U.S., Metropolitan Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., Core Based Statistical Areas (CBSA)
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Area (NECTA) Divisions
- TIGER/Line Shapefile, Current, Nation, U.S., New England City and Town Areas (NECTA)
- Collection Information for the Places State-Based TIGER/Line Shapefiles, Current
- Collection Information for the Secondary School Districts State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, Nation, U.S., States and Equivalent Entities
- Collection Information for the State Legislative Districts Lower Chamber State-Based TIGER/Line Shapefiles, Current
- Collection Information for the State Legislative Districts Upper Chamber State-Based TIGER/Line Shapefiles, Current
- TIGER/Line Shapefile, Current, State, Puerto Rico, Subbarrios (Subminor Civil Divisions)

- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Block Groups
- TIGER/Line Shapefile, Current, Nation, U.S., Tribal Census Tracts
- Collection Information for the Unified School Districts State-Based TIGER/Line Shapefiles, Current

Next, please provide a brief description of other efforts that support nationwide population of data, including citations and resource links as necessary.

The Census Bureau has software, control systems, and dashboards in place to properly ingest a partner file which ensures that partners are providing their data in a standard format with all the required attribute information needed for the Census Bureau to integrate into TIGER. The Census Bureau records return dates for partner data, creates log files documenting the contents throughout the process, reviews for duplicate submissions, checks for suspense records, determines the types of changes, and creates standardized geospatial databases for processing, quality control, and verification. Quality control scripts are used on the geospatial database to flag issues and concerns. The log file for each partner is reviewed for program specific dates and information. The Census Bureau reviews partner files for both spatial and attribute accuracy and offers feedback to partners that provide whole government files on the submission.

The Census Bureau also runs large-scale geographic area checks that compare different vintages of data. These checks look for holes in geographic coverage, new or deleted relationships, and large changes in a geographic area. These checks can also identify errors made by other programs or operations. Statistics on partner invitation, partner participation, and partner submissions for our programs on governmental units and administrative and statistical boundaries are presented below:

- For the 2021 School District Review Program, the Census Bureau invited 50 states and the District of Columbia to respond.
 - o 27 states responded.
 - o 21 states reported no changes.
 - o 3 states did not respond.
- For the 2020 Participant Statistical Area Program, the Census Bureau invited 1,010 partners to participate, and 859 partners responded.
 - o A total of 615 counties were invited to participate in the program, and 495 counties responded.
 - o Census Bureau invited 614 tribal partners to participate, and 160 tribal partners responded. These partners represented 675 tribal areas, for which 188 tribal areas responses were received.
- For the 2021 Boundary and Annexation Survey:
 - o 39,120 total governments were contacted.
 - o 36,066 governments responded (92.04% response rate).
 - o 1,704 submissions with boundary updates.
 - o 4,632 governments boundaries were updated from those submissions.

QB.2. Brief Summary (Limit 5,000 characters, approximately 800 words): Please provide a brief description of FY2021 actions and accomplishments in addressing Section 2805(b)(3)(B).

Clarifying Text: Summary comments provide an opportunity to further highlight and expand on significant efforts agencies are engaged in at the dataset or agency level that relate to GDA requirements.

The "Vision for the Geographic Support Program, Fiscal Years 2021-2031" was released in FY21. The vision outlined and supported the geospatial needs and requirements of the federal geographic data community, and geospatial and statistical data users at large. A key objective of the vision is to continuously maintain the completeness, accuracy, and currency of the MAF/TIGER System in support of timely data collection and dissemination of innovative products for addresses, features, boundaries, geospatial reference data, and the Frames Program, for the Census Bureau's staff, customers, partners, and data users. Data acquisition from partnerships, geographic applications and products, and leveraging existing enterprise-wide frames enhances the quality of the Census Bureau's NGDAs as outlined below:

- **Ongoing Partnership Programs:** The collection of geospatial data from tribal, state, and local government partners each year will continue, informed by ongoing analysis of change on the landscape. The Census Bureau works with tribal, state, and local partners across the nation on several geographic programs on a regular basis. To centralize interactions with the partners, the Census Bureau is developing a web-based Partner Portal that government partners can access via a secure login on census.gov. Partners will be able to view and provide contact updates, submit program data, receive data products, communicate with Census Bureau staff, and view historical program participation statuses for their government.
- **Geographic applications, products:** The Geographic Support Program will evaluate new and innovative geospatial technologies to further expand upon existing capabilities. Areas of focus will include further adoption of agile development methodology and capabilities that support improved usability of geographic applications and products (i.e., make them more usable by non-GIS users). These geographic applications will advance the maturity of, accelerate the acquisition of, and expand the sources of NGDAs to ensure that they are findable, accessible, interoperable, and reusable. A primary example of a geographic applications is the Geographic Update Partnership Software (GUPS) which is based on QGIS an open-source geographic information system. There will be continued improvements the GUPS standalone application with future innovations to establish a web interface for partnership participation.
- **Enterprise-wide Frames:** The Frames Program was initiated and staffed in FY21 to create Enterprise-wide frames linkable in nature, agile in structure, accessible for production or research on a need-to-know basis, and that adhere to best practices in terms of technology usage, data management, and methodology. This program fosters an environment to do more work in the office; reduces burden on respondents (individuals and businesses) by re-using data that already exist in one or more frames; reduces duplication, manual efforts, and one-off data cleaning projects. New sources of data acquisition, such as building footprints, will assist in the usability of other kinds of geospatial reference data to perform Census Bureau mission-critical functions such as identifying the location of structures, streets, features, and will increase the accuracy of Governmental Units Theme NGDAs.

C. Establish Goals That Support the NSDI Strategic Plan

GDA Requirement	USC 43 Sec 2805(b)(3)(C) – establish goals that support the strategic plan for the National Spatial Data Infrastructure prepared under section 2804(c);
Lead Covered Agency Self-Assessment	Made Progress Toward Expectations
Key to Self-Assessment	<p>FGDC agencies continue work to evaluate options for establishing a common understanding and approach to meeting GDA requirements and the goals and objectives of the NSDI Strategic Plan. The briefing paper being developed for consideration by the FGDC Steering Committee, and described in Section B, outlines a path forward to establish common practices that can be used to advance the NSDI, and meet requirements of the GDA and other legislation. This work provides a foundation for designating “Made progress toward expectations” for all themes for the FY2021 reporting year. Response options included:</p> <ul style="list-style-type: none"> • Fails to Meet Expectations • Made Progress Toward Expectations • Meets Expectations

References: [USC 43 Sec 2805\(b\)\(3\)\(C\)](#) and [NSDI Strategic Plan 2021-2024](#)

Establishing Common Goals and Priorities Supporting the NSDI and Its Strategic Plan

The FGDC and the geospatial community have partnered for decades in building the National Spatial Data Infrastructure. Much has been accomplished and exploitation of the internet, combined with advances in technology and availability of mobile devices, have increased public awareness that everything happens somewhere. Having Geospatial data and information available at people’s fingertips has become an expectation for most users. The vision of the NSDI Strategic Plan 2021-2024 of a “geo-enabled Nation and world for place-based decision making” provides a platform for partnerships that help ensure required data is the best possible data. FGDC has adopted as its mission to enable a “national network of geospatial resources that seamlessly integrate location-based information to serve the needs of the Nation and wider global interests.”

FGDC agencies are focused on meeting mission requirements for national geospatial data assets they manage while working collaboratively with partners to implement the NSDI strategic plan and meet its goals and objectives. For the NGDA portfolio, these objectives include efforts to: 1) streamline portfolio management practices and establish standards for NGDA themes and associated datasets, 2) develop common approaches to implement data acquisition and lifecycle management strategies, 3) advance the practice of integrating government and nongovernment data into national datasets, as necessary and 4) ensure that geospatial and other meaningful data can be easily integrated and used.

As described previously in this report, the FGDC intends to continue work across agencies and with the NGAC to understand the priorities of government and nongovernment stakeholders and gather their advice and recommendations for further prioritizing collaborative efforts. Establishing the team of federal and non-federal stakeholders and representatives of the NGDA data theme community will allow for establishing common understanding of opportunities and constraints and will allow agencies to

identify “goals that support the strategic plan for the National Spatial Data Infrastructure.” This work would build on the upcoming release of the OMB Circular A-16, the GDA, and other legal and policy requirements in order to establish practical guidance about how agencies can achieve what is being described in the generic, high level, language used in the NSDI Strategic Plan.

Highlighting FGDC Agency Strategies that Support the NSDI and Geospatial Data

QC.1. Do geospatial strategic plan(s) exist for the agencies that manage and support the NGDA datasets within the Theme?

- Yes

If yes, please provide a short description and examples of where these strategies are documented.

U.S. Department of Commerce. "Commerce Geospatial Strategy: Fiscal Years 2021-2024 (CGS)." (<https://www.commerce.gov/sites/default/files/2021-07/US-Dept-of-Commerce-Geospatial-Strategy-FY21-24.pdf>).

QC.2. Have goals or actions been identified that support the goals and objectives of the National Spatial Data Infrastructure (NSDI) Strategic Plan for the NGDA datasets within the Theme?

Clarifying text: Identified actions can be part of the geospatial strategies for the agencies that manage data within the theme, and/or other documents that specifically relate to the data within the theme.

- Yes

If yes, please provide a short description and examples of where these goals or actions are documented.

The U.S. Department of Commerce’s "Commerce Geospatial Strategy: Fiscal Years 2021-2024 (CGS)" aligns with the four goals of the NSDI Strategic Plan (<https://www.commerce.gov/sites/default/files/2021-07/US-Dept-of-Commerce-Geospatial-Strategy-FY21-24.pdf>). The goals and objectives of the Draft Governmental Units Theme Strategic Plan, FY22-FY24 (in progress) align with the NSDI Strategic Plan, Commerce Geospatial Strategy, and the GDA. See preliminary goals, objectives, and actions for the Governmental Units theme documented in QC.3 below.

QC.3. Brief Summary (Limit 5,000 characters, approximately 800 words): Please provide a brief description of FY2021 actions and accomplishments in addressing Section 2805(b)(3)(C).

Clarifying Text: Summary comments provide an opportunity to highlight significant efforts agencies are engaged in at the dataset or agency level that relate to GDA requirements.

The following goals and objectives of the Draft Governmental Units Strategic Plan, FY22-FY24 include documentations of the actions and accomplishments of the Lead Covered Agency for the Governmental Units Theme:

Goal 1—Govern and Manage Geospatial Data:

- Objective 1.1: Align Governmental Units Theme NGDAs with the GDA, NSDI Strategic Plan (2021-2024), and Commerce Geospatial Strategy (2021-2024).

o Achieve compliance with the GDA reporting requirements and align with the current NSDI Strategic Plan and Commerce Geospatial Strategy.

☒ --Governmental Units, and Administrative and Statistical Boundaries Theme Strategic Plan, FY17 through FY21 is available on the GeoPlatform.

☒ --The Draft Governmental Units Theme Strategic Plan, FY22-FY24 is in progress.

- Objective 1.2: Participate in data governance bodies and priorities.

o Participate in the Commerce Geospatial Working Group (CGWG) and establish the priorities of the Commerce geospatial community relating to NGDAs.

☒ --Monthly attendance and minutes for the CGWG and newly established Commerce Geospatial Standards Users Group (CGSUG) were documented.

- Objective 1.3: Promote cross-bureau initiatives to leverage geospatial expertise and innovation

o Follow developments in Standards implementation through participation in the cross-bureau initiatives to enable knowledge-sharing.

☒ --Census Bureau staff delivered presentations to the CGSUG to exchange information on geospatial standards for NGDAs and document metadata workflows and control systems for interoperability.

Goal 2—Expand NGDA Maturity, Acquisition, and Sources to ensure that NGDAs are Findable, Accessible, Interoperable, and Reusable (FAIR principles):

- Objective 2.1: Update, validate, and streamline NGDA portfolio management practices.

o Portfolio management practices for the Governmental Units Theme have been established through to promote discoverability and interoperability on the GeoPlatform.

☒ --All 2021 NGD are available on the GeoPlatform.

- Objective 2.2: Improve technical and administrative procedures for efficient and secure access to and use of multiple data sources. o Engage with data users and federal, academic, and private industry partners to disseminate geospatial data under the FAIR principles.

☒ --FY21 listening tour was conducted to assess user needs for the next decade and to improve NGDAs.

☒ --Geospatial strategies and development of a Partner Portal was discussed with stakeholders.

- Objective 2.3: Develop best practices for licensing of Commerce and industry-acquired datasets.

o Maintain data licensing agreement and standards portal for fifteen ISO geospatial standards with American National Standardization Institute (ANSI).

☒ --Data licensing agreements for fifteen ISO geospatial standards are maintained and standards are available on an internal portal.

Goal 3-- Ensure Open Standards-Based Interoperability to Enable Geospatial Shared Services:

- Objective 3.1: Increase visibility and utility of Commerce geospatial products and services.

o Improve the visibility of NGDAs on agency websites, Data.gov, and the GeoPlatform to meet the Census Bureau's geospatial mission.

☒ --The yearly metadata harvest followed industry-standard formats and catalogues on Data.gov and the GeoPlatform to ensure open access to all current NGDAs.

☒ --Metadata pairings and metadata collection tools were evaluated within the CGSUG and the CBGSWG for possible adoption of ISO 19115-1, ISO 19115-3.

Goal 4—Enable and Promote Collaborative Governance and Partnerships to Meet National Needs, Priorities, and Circumstances:

- Objective 4.1: Foster partnerships to support NGDA themes by engaging with external and internal groups and communities.

o Maintain an active presence in the FGDC and the GDA Working Groups to increase awareness and prevent duplication of effort for geospatial data-related activities across the government. ☐ --Participants in the Governmental Units Theme attended the FGDC Steering Committee, GDA Working Group, NGDA Theme Lead Community, and Governmental Units working groups.

☐ --The Tribal Boundaries Workgroup was reinstated by co-leads from the Census Bureau and Bureau of Indian Affairs. ☐ --The Census Bureau staff attended all Federal Lands Workgroup meetings.

- Objective 4.2: Develop a geospatial partnership plan to engage collaboratively with other sectors and users of Commerce’s geospatial data and services. o Use a standardized approach to leverage partnerships, identify new opportunities, and address the needs of user communities to advance the value of Census Bureau’s geospatial data.

☐ --Governmental Units Dataset Managers provided NGDAs to the Homeland Infrastructure Foundation Level Data (HIFLD) Open Data portal and the Protected Areas Database of the United States (PAD-US).

☐ --Data submissions and updates to NGDAs were acquired through FY21 partnership programs with tribal, state, and local governments.

D. Addressing User Needs

GDA Requirement	USC 43 Sec 2805(b)(3)(D) – as necessary, collect and analyze information from users of geospatial data within the National Geospatial Data Asset data theme regarding the needs of the users for geospatial data and incorporate the needs of users in strategies relating to the National Geospatial Data Asset data theme;
Lead Covered Agency Self-Assessment	Made Progress Toward Expectations
Key to Self-Assessment	<p>FGDC agencies continue work to evaluate options for establishing a common understanding and approach to meeting GDA requirements. The briefing paper being developed for consideration by the FGDC Steering Committee, and described in Section B, outlines a path forward to engage partners and stakeholders and work towards establishing common practices that can be used to address the needs of users, advance the NSDI, and meet requirements of the GDA and other legislation. This work provides a foundation for designating “Made progress toward expectations” for all themes the FY2021 reporting year. Response options included:</p> <ul style="list-style-type: none"> • Fails to Meet Expectations • Made Progress Toward Expectations • Meets Expectations

Reference: [USC 43 Sec 2805\(b\)\(3\)\(D\)](#)

Highlighting FGDC and FGDC Agency Efforts to Meet User Needs

This section of the GDA calls on the FGDC agencies to understand the needs of users through collection and analysis of user needs information from the users of NGDA datasets and to incorporate those needs into strategies relating to the NGDA datasets and themes. In addition to agencies efforts to collect and analyze user needs there are many use cases and needs assessments being developed by stakeholders and users of geospatial data, some of which were highlighted and are available in the FY2020 GDA reports.

The desired outcome of efforts to develop the NSDI and advance nationwide population of geospatial data is to meet the needs of geospatial data users and the nation. The result will be for users and stakeholders to be empowered to accomplish tasks that are important to them, to increase the likelihood they will benefit from the decisions that are made, and to provide them access to use geospatial data that improves their day-to-day lives.

As previously highlighted in this report, the efforts to develop a common understanding of the objectives and goals in the NSDI Strategic Plan 2021-2024 will be key to incorporating relevant strategies and approaches to meeting the needs of users for NGDA data.

FY2020 Report Follow up

The FY2020 reports gathered on theme use cases, user needs User Needs Assessments, Workshops, and Summits that support the data within the theme. Additionally, a suite of use cases developed by partners and stakeholders was provided in Appendix A: NGDA Use Cases including those from the Federal Data Strategy, NGAC, HIFLD, the FGDC GDA Communications Working Group, the Joint HIFLD/GeoPlatform Feedback Sessions, and other types of user feedback and use cases. This information will be evaluated for inclusion in the redesign of the FGDC theme community sites.

Highlighting FGDC and FGDC Agency Efforts to Meet User Needs

The FGDC agencies with responsibilities for managing NGDA themes and datasets have developed the following questions to highlight on-going agency efforts to support understanding user needs and incorporating those needs into strategies relating to the NGDA portfolio datasets.

QD.1. Do the agencies, sub-agencies, or bureaus that manage NGDA within the Theme have processes to collect and analyze the needs of users and incorporate those needs of users into strategies relating to the NGDA datasets?

- Yes

QD.2. Did you provide information in response to QB.1b. on any of the NGDA datasets for which user needs information is collected, analyzed, or incorporated into strategies?

- Yes

QD.3. Brief Summary (Limit 5,000 characters, approximately 800 words): Please provide a brief description of FY2021 actions and accomplishments in addressing Section 2805(b)(3)(D).

Clarifying Text: Summary comments provide an opportunity to highlight significant efforts agencies are engaged in at the dataset or agency level that relate to GDA requirements.

On a yearly basis, the Census Bureau maintains and updates geospatial data, infrastructure, other geospatial subject matter, and information technology to support MAF/TIGER System data deliverables through partnership programs and stakeholder agreements (i.e., MOU, Interagency agreements). Governmental Units Theme NGDAs are continuously improved, developed, and updated through these programs to meet the needs of internal staff, external customers, partners, and data users for current, and accurate geospatial data. This data provides the foundation for the numerous economic, demographic, and geospatial data products and services across all sectors of government and private industry. Boundary data for geographic areas used in statistical data tabulation and dissemination, analysis and decision making, and program implementation are available through Census.gov, Data.census.gov, Data.gov, and GeoPlatform.gov.

The Census Bureau has participated in the establishment of standards working groups within the Department of Commerce and the Census Bureau to identify necessary improvements in metadata creation, metadata tool development, and quality control systems for standards conformance. As innovations and strategies expand during the next decade to support the Vision for the Geographic Support Program, Fiscal Years 2021-2031, the Census Bureau will continue to revise, mature, and assess

human and financial resource needs in relation to portfolio data management plans for Governmental Units Theme NGDAs.

See QB.1b. for the Census Bureau's recent engagements with the user community to improve upon the Governmental Units Theme NGDAs through listening tours and ongoing interactions with stakeholders through the Census Bureau's partnership programs.

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.”

Q1. How is the Lead Covered Agency(ies) participating in ensuring the coordinated management of the Theme? (Select all that apply)

- Agency has published a geospatial strategy as required by the GDA
- No participation in ensuring coordinated management of the Theme
- Theme Executive Champion(s) attend NGDA Theme Community Meetings
- Theme Lead(s) attend NGDA Theme Community Meetings
- Theme Lead(s) participate in GDA Working Group meetings
- Theme Leads(s) review the outcomes from GDA Working Group meetings and provide feedback on approaches for GDA compliance
- Theme Lead(s) coordinate GDA compliance activities with Theme personnel
- Theme Lead(s) communicate new and ongoing Portfolio Management activities and priorities with Dataset Managers in the Theme
- Steering Committee members coordinate with the Theme
- Other [Textbox provided]

QA.2. Please check all the activities that have been taken to establish, develop, or modify standards for data within the Theme (select all that apply):

- Agency reviewed ISO metadata collection tools
- Agency reviewed conformance assessment procedures with assistance from existing standards bodies
- Agency maintains active licenses for all standards (where applicable)
- Agency generates Requests for Information (RFI) to develop new standards and tools
- Agency established processes for standards management
- Agency examined comparable international standards for suitability with NGDA dataset
- Agency examined comparable national standards for suitability with NGDA dataset
- Agency examined comparable FGDC endorsed standards for suitability with NGDA dataset
- Agency examined comparable open-source standards for applicability to NGDA dataset
- Agency developed comparable agency-specific standards to apply to NGDA dataset
- Agency analyzed related international, national, FGDC, open-source, or agency-specific standards to identify components to modify or adapt into specific NGDA dataset standard
- Agency analyzed related international, national, FGDC, open-source, or agency-specific standards to identify components to incorporate into a new specific NGDA dataset standard
- Agency established an appropriate subject-matter expert committee to develop a new standard to meet agency-specific, FGDC, national, international, user, or stakeholder needs for the NGDA dataset
- Appropriate committee created a draft agency-specific, FGDC, national, or international standard for the NGDA dataset
- Agency initiated the agency-specific FGDC, national, or international standard creation process for the NGDA dataset

- An agency-specific, FGDC, national, or international standard creation process in progress for the NGDA dataset
- A draft agency-specific, FGDC, national, or international standard for the NGDA dataset is in public review
- A draft agency-specific, FGDC, national, or international standard for the NGDA dataset is waiting for final approval by the appropriate standards governing body
- Other [Textbox provided]

Endnotes

¹ FGDC GDA Information:

<https://fgdc.gov/gda>

² NSDI Strategic Plan:

<https://www.fgdc.gov/nsdi-plan>

³ GeoPlatform Theme Communities:

<https://www.geoplatform.gov/communities>

⁴ Stages of the Geospatial Lifecycle:

<https://www.fgdc.gov/policyandplanning/a-16/stages-of-geospatial-data-lifecycle-a16.pdf>

⁵ Theme LMA Summary Reports:

https://communities.geoplatform.gov/ngda-portfolio/national-geospatial-data-asset-ngda-reports/?wdt_column_filter%5bYear%5d=2015&wdt_column_filter%5bReport%20Type%5d=Theme%20Summary%20Report

⁶ NGDA Portfolio Community Site:

<https://communities.geoplatform.gov/ngda-portfolio/>

⁷ OMB A-16 Supplemental Guidance Roles and Responsibilities:

<https://fgdc.gov/policyandplanning/a-16/key-roles-and-responsibilities-a16-supplemental.pdf>

⁸ NGDA Theme Leads:

<https://communities.geoplatform.gov/ngda-portfolio/ngda-theme-leads/>

⁹ NGDA Executive Theme Champions:

<https://communities.geoplatform.gov/ngda-portfolio/ngda-theme-executive-champions/>

¹⁰ NGDA Portfolio Datasets:

<https://communities.geoplatform.gov/ngda-portfolio/ngda-portfolio/>