



**2022 Lead Covered Agency
NGDA Theme Annual Performance Report
and Self-Assessment**
for
Elevation Theme

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

February 4, 2023



Table of Contents

Table of Contents	i
Introduction.....	1
Executive Summary.....	1
Official Theme Related Information.....	2
NGDA Theme Points of Contact.....	2
NGDA Theme Datasets.....	3
Meeting General Responsibilities – USC 43 Sec 2805(b)(2)	4
Managing Theme-Related Content on GeoPlatform.....	4
Elevation Theme Progress Towards Meeting Requirements	5
Background	5
A. Geospatial Data Standards.....	5
B. Nationwide Population of the Data Theme.....	8
C. Establish Goals That Support the NSDI Strategic Plan.....	10
D. Addressing User Needs	12
FGDC Portfolio-Level Progress Towards Meeting GDA NGDA Data Theme Requirements.....	14
Background	14
A. Geospatial Data Standards.....	14
B. Nationwide Population of NGDA Datasets.....	14
C. Establish Goals That Support the NSDI Strategic Plan.....	15
D. Addressing User Needs	15
Appendix A: Survey Picklist.....	16
Endnotes.....	17

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](#).¹

The GDA Section 2805(b)(3)(E)(I) requires annual 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 Lead Covered Agency NGDA Theme Annual Performance Report (LCA NGDA Theme Report) covers the Fiscal Year 2022 (FY2022), October 1, 2021 through September 30, 2022. The report provides an update on progress made at the NGDA Portfolio and FGDC agency level in support of meeting GDA requirements. This is the third annual report which is based on a template and survey to facilitate consistency across the FGDC NGDA Themes. 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. The FGDC summary is required to include a rating for each responsibility of "meets expectations," "made progress toward expectations," or "fails to meet expectations." These ratings are included in this report and are used to generate part of the annual FGDC Summary Report. The summary report along with NGAC comments are included in the biennial FGDC Report to Congress. This and other required reports and information are available online via the [FGDC GDA pages](#).²

The FY2022 LCA NGDA Theme annual report continues to use 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.”

Executive Summary

This third annual FGDC NGDA Theme report provides insights into cross-cutting FGDC portfolio-level activities and theme-specific agency-level activities that will document progress in meeting GDA requirements.

At the theme level, this report provides updates to summaries and information for ongoing processes, procedures, and actions within agencies that manage NGDA datasets, that were provided in previous annual reports.

At the portfolio level, this report highlights continued efforts across the FGDC agencies and the NGDA themes to evaluate the requirements of the GDA in the context of the goals and objectives of the [NSDI Strategic Plan](#).³ Based on an emerging cross-agency understanding of these requirements, the FGDC NGDA Theme community is undertaking efforts to establish governance processes that build on accomplishments, provide value and ensure efficiency. The NGDA Theme Leads established a working group to develop a single NGDA Theme Strategic Plan template that can be tailored to each theme with goals and objectives that are cross walked with all GDA requirements and the NSDI Strategic Plan. The aim of the adopted plan template is to provide flexibility, allowing agencies who manage NGDA data, to identify actions and accomplishments that align with the established goals, objectives, and anticipated

outcomes, yet are sensitive to technological, economic, and organizational constraints and opportunities of the agencies managing NGDA data. The FGDC team also plans to incorporate a simple approach for annual reporting on implementation plans and status of the identified actions.

The efforts documented in this report reflect that all FGDC NGDA Themes are making progress towards meeting GDA requirements.

Official Theme Related Information

As per the OMB Circular A-16 Supplemental Guidance (A-16 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](#)⁴ 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 A-16 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](#).⁵ This information is kept up-to-date in the [NGDA Portfolio Community](#). From the NGDA Portfolio Community page, the NGDA Theme Leads and NGDA Theme Executive Champions lists are found under the NGDA Portfolio drop down menu.

Elevation Theme Contacts	
Theme Lead(s):	Ashley Chappell, U.S. Department of Commerce, National Oceanic and Atmospheric Administration Brian C. Hadley, U.S. Department of the Interior, U.S. Geological Survey
Executive Theme Champion(s):	Rear Admiral Benjamin K. Evans, U.S. Department of Commerce, National Oceanic and Atmospheric Administration Dr. Michael Tischler, U.S. Department of the Interior, U.S. Geological Survey

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

NGDA Theme Datasets

The NGDA datasets and the agencies listed in Table 2 are provided as the official list of NGDA that currently populate the Elevation 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 is maintained on the GeoPlatform in the [NGDA Portfolio Community](#) under the NGDA Portfolio drop down menu. Each NGDA dataset also has a unique value assigned, called an NGDAID, that allows the dataset to be tracked throughout its lifecycle.

NGDAID	Elevation Theme NGDA Datasets	Agency
37	U.S. Coastal Lidar Elevation Data - Including the Great Lakes and Territories, 1996 - Present	U.S. Department of Commerce, National Oceanic and Atmospheric Administration
39	Global Multi-Resolution Terrain Elevation Data – National Geospatial Data Asset (NGDA)	U.S. Department of the Interior, U.S. Geological Survey
40	Lidar Point Cloud – USGS National Map 3DEP Downloadable Data Collection	U.S. Department of the Interior, U.S. Geological Survey
41	MultiBeam Bathymetry Database (MBBDB)	U.S. Department of Commerce, National Oceanic and Atmospheric Administration
42	1/3 rd arc-second Digital Elevation Models (DEMs) – USGS National Map 3DEP Downloadable Data Collection	U.S. Department of the Interior, U.S. Geological Survey
43	National Flood Hazard Layer (NFHL)	U.S. Department of Homeland Security, Federal Emergency Management Agency
44	Marine Trackline Geophysics Database	U.S. Department of Commerce, National Oceanic and Atmospheric Administration
45	NOS Hydrographic Surveys Collection	U.S. Department of Commerce, National Oceanic and Atmospheric Administration
46	Shuttle Radar Topography Mission 1 Arc-Second Digital Terrain Elevation Data – Global – National Geospatial Data Asset (NGDA)	U.S. Department of the Interior, U.S. Geological Survey
184	1 Meter Digital Elevation Models (DEMs) – USGS National Map 3DEP Downloadable Data Collection	U.S. Department of the Interior, U.S. Geological Survey
185	5 Meter Alaska Digital Elevation Models (DEMs) – USGS National Map 3DEP Downloadable Data Collection	U.S. Department of the Interior, U.S. Geological Survey
199	Continuously Updated Digital Elevation Model (CUDEM) – 1/9 Arc-Second Resolution Bathymetric-Topographic Tiles	U.S. Department of Commerce, National Oceanic and Atmospheric Administration
200	Continuously Updated Digital Elevation Model (CUDEM) – 1/3 Arc-Second Resolution Bathymetric-Topographic Tiles	U.S. Department of Commerce, National Oceanic and Atmospheric Administration

Table 2. NGDA Theme Datasets.

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

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

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

- Agency has published a geospatial strategy as required by the GDA
- 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: Theme leads coordinate with other existing geospatial data working groups and initiatives

Managing Theme-Related Content on GeoPlatform

During FY2022, the GeoPlatform transitioned from WordPress to Esri ArcGIS Hub sites to house and manage Theme related content. Theme Community Hub sites are a work in progress, allowing Themes to publicly display information from a variety of sources.

Elevation Theme Progress Towards Meeting Requirements

Background

This section provides Theme-related updates to information provided in previous annual reports and designates the Lead Covered Agency self-assessment for each of the four GDA NGDA Data Theme Requirements.

A. Geospatial Data Standards

The following table describes the GDA requirements for Section 2805(b)(3)(A) pertaining to geospatial data standards, and the Lead Covered Agency’s self-assessment for meeting those requirements.

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

FGDC Agency Efforts to Support NGDA Data Standards

This section provides summary updates on NGDA Theme agency-level activities and efforts to support standards for the NGDA portfolio datasets.

Brief Summary

The following is a brief update and description of FY2022 actions, progress, and accomplishments regarding activities that address Section 2805(b)(3)(A). (Limit 5,000 characters, or approximately 1.5 pages)

Clarifying Text: Summary includes agency, sub-agency, or bureau-level progress and accomplishments associated with any new key activities, and those highlighted last year, including citations and resource links as necessary. Key activities cover any of the data within the Theme and include:

- ✓ development, maintenance, modification, or establishment of standards
- ✓ work that supports standards

As with last year's report, this also includes involvement in and accomplishments of groups in support of NGDA data standards, 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

FGDC Subcommittees and other governance groups that promote standards that are associated with the Elevation Theme include the FGDC 3D Nation Elevation Subcommittee, the 3D Elevation Program (3DEP) Working Group, the Interagency Working Group on Ocean and Coastal Mapping (IWG-OCM), the 3D Elevation Program Executive Forum, the Subcommittee on Ocean Science and Technology Policy, the Alaska Mapping Executive Committee (AMEC), the National Ocean Mapping, Exploration and Characterization Council (NOMECC), and the USGS Elevation Specifications Review Board. Both DOI-USGS and DOC-NOAA are members of the Open Geospatial Consortium (OGC) and the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) to promote the development and use of international geospatial standards. DOC-NOAA participates in the International Standards Organization (ISO) and ISO/Technical Committee 211 Geographic information/Geomatics (ISO/TC 211). DOI-USGS participated in OGC meetings related to appropriate data and services formats.

NGDA Baseline Standards Inventories were completed in FY 2020 for the datasets in the Elevation Theme. The inventory confirmed that Elevation Theme datasets are all documented using the Federal Geographic Data Committee (FGDC) content standard for geospatial metadata. Information from the baseline surveys, as well as other information, will be used to identify further actions that can be taken towards fully meeting GDA expectations.

In FY2022, DOI-USGS and DOC-NOAA continued investigations into sponsoring the adoption of LAZ as an official standard. LAZ is an open source, directly accessible, ready-to-use format that also provides significant compression and allows processing directly in the cloud. In September 2022, NOAA's Office of Coast Survey released its Data Licensing Policy for its use of bathymetric data. This policy on data licensing provides assurance to data providers for how their data may be used, and to users in how they may use the data. It both expands access to the bathymetric data to a wider user base and enables NOAA to maximize use of data from other agencies and external providers. The machine-readable data license, based on Creative Commons, eases and standardizes data ingest into the National Bathymetric Source. Data contributed from external sources may have restrictions. If the external data is not already licensed, the provider may assign a data license onto their data prior to contributing to Coast Survey, to define any terms of use.

Also, in FY2022, the IWG-OCM, in support of the NOMECC Strategy and goal objectives for consistent approaches to data acquisition, continued to iterate on its draft Standard Ocean Mapping Protocol (SOMP). The SOMP includes standards and best practices for bathymetry (elevation), as well as related remote sensing of acoustic backscatter, water column data, side scan and sub-bottom profiling, and magnetometer data. The standards associated with these datasets are primarily derived from internationally accepted standards, including International Hydrographic Organization hydrographic survey specifications and deliverables available at https://nauticalcharts.noaa.gov/publications/docs/standards-and-requirements/specs/HSSD_2021.pdf.

Cutting across all components of the SOMP is data stewardship and steps for effective data management. The draft SOMP is in review and anticipated to go final in mid 2023 as a living document for continuous improvement. DOC staff actively participated in international and national organizations to ensure that the relevant NGDA datasets remain compliant with internationally accepted standards.

FEMA manages the National Flood Hazard Layer (NFHL) NDGA under the Elevation Theme. FEMA has a process to establish, modify, and retire Standards and Guidance for the Risk MAP Program, many of which pertain to the data displayed in the NFHL and the associated metadata. Standards, Guidelines, Technical References, and archived materials can be found here: (<https://www.fema.gov/flood-maps/guidance-reports/guidelines-standards>). This is published every year and made available on this website.

Additionally, in FY2022, Elevation Theme Co-Leads attended NGDA Community Meetings and received communications from the NGDA coordinator to stay current on GDA requirements related to specifications, metadata, and the GeoPlatform.

B. Nationwide Population of the Data Theme

The following table describes the GDA requirements for Section 2805(b)(3)(B) pertaining to a plan for nationwide population of the data theme, and the Lead Covered Agency’s self-assessment for meeting those requirements.

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

FGDC Agency Efforts to Support Plans for Nationwide Population of NGDA Datasets

This section provides summary updates on NGDA Theme agency-level activities and efforts to support plans for nationwide population of NGDA Datasets.

Brief Summary

The following is a brief update and description of FY2022 actions, progress, and accomplishments regarding activities that address Section 2805(b)(3)(B). (Limit 5,000 characters, or approximately 1.5 pages)

Clarifying Text: Summary includes agency, sub-agency, or bureau-level progress and accomplishments associated with any new key activities, and those highlighted last year, including citations and resource links as necessary. Key activities that support nationwide population of NGDA datasets within the Theme include:

- ✓ existing or planned partnership programs with a wide range of stakeholders supporting NGDA datasets within the Theme
- ✓ processes, or plans for processes, in place to meet the needs of users. Note that Section D of this report also covers efforts to collect and analyze user needs and incorporation of those needs into agency strategies.
- ✓ existing or planned program and data management plans in place that address human and financial resource needs
- ✓ processes, or plans for processes, in place to identify needs related to standards
- ✓ any other processes in place that support nationwide population of datasets (e.g., data quality control processes that cover data collected by external stakeholders)

The Elevation Theme continued to make progress toward GDA requirements in FY2022, particularly related to partnerships, nationwide population of data, defining user needs, and data standards. The goal of the 3D Nation Elevation Subcommittee is to continually improve the national elevation mapping foundation by coordinating the topographic, coastal, and bathymetric mapping activities across the Federal government and in coordination with state, local, tribal, private, and academic partners. This goal is achieved through coordinating bodies like the IWG-OCM, NOME Council, AMEC, 3DEP Working Group, and 3DEP Executive Forum. Jointly, the Elevation Theme coordinated with numerous Federal agencies and national organizations through monthly 3DEP Working Group meetings, bi-monthly IWG-OCM meetings, and quarterly 3DEP Executive Forum meetings. In addition, the 3DEP Working Group held a joint coordination meeting with the 3D Hydrography Program (3DHP) Working Group (affiliated with the Inland-Waters NGDA theme) in July 2022 to discuss progress of the 3D National Topography Model (3DNTM) that integrates elevation and hydrography, and future 3DEP Next Generation program scenarios to ensure the needs of other federal agencies would be met.

In FY2022, DOI-USGS, in partnership with federal, state, local, and tribal partners, contracted for acquisition of over 199,000 square miles of lidar data that increased nationwide coverage of 3DEP from 84% to 89.5%. Additionally, over 400,000 square miles of Lidar Point Cloud data was added to The National Map. The DOI-USGS Global Multi-Resolution Terrain Elevation Data, Shuttle Radar Topography Mission 1 Arc-Second Digital Terrain Elevation Data, and 5 Meter Alaska Digital Elevation Models maintained full coverage for their defined extents. On the bathymetric side in FY21, and calculated in FY22, NOAA and a broad range of partners acquired and archived bathymetric data at the National Centers for Environmental Information to reduce the percentage of unmapped U.S. waters from 53% to 52%.

National, state, and regional needs for elevation-related geospatial data and the Elevation Theme NGDAs have been evaluated through the 3D Nation Elevation Requirements and Benefits Study, completed in September 2022. The study documents topographic and bathymetric 3D elevation data requirements and benefits across a multitude of geographies and users. DOI-USGS is using the results of the 3D Nation study to help define data requirements for 3DEP Next Generation. In addition, DOI-USGS works with the National States Geographic Information Council (NSGIC) on the 3DEP for the Nation project which engages the NSGIC network of state geospatial information representatives to explore options and share information about 3DEP data planning, acquisition, management, distribution, and applications. DOC-NOAA works with NSGIC and other bodies on requirements for ocean and coastal elevation data.

C. Establish Goals That Support the NSDI Strategic Plan

The following table describes the GDA requirements for Section 2805(b)(3)(C) pertaining to establishing goals that support the NSDI Strategic Plan, and the Lead Covered Agency’s self-assessment for meeting those requirements.

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

References: [NSDI Strategic Plan 2021-2024](#)

FGDC Agency Efforts to Support Establishing Goals That Support the NSDI Strategic Plan

This section provides summary updates on NGDA Theme agency-level activities and efforts to support establishing goals that support the NSDI Strategic Plan.

Brief Summary

The following is a brief update and description of FY2022 actions, progress, and accomplishments regarding activities that address Section 2805(b)(3)(C). (Limit 5,000 characters, or approximately 1.5 pages)

Clarifying Text: Summary includes agency, sub-agency, or bureau-level progress and accomplishments associated with any new key activities, and those highlighted last year, including citations and resource links as necessary, that support that support the NSDI Strategic Plan and the NGDA datasets within the theme.

NSDI strategic goals focus on four critical components to accelerate the development of the NSDI – policy and governance, data, shared services, and partnerships. Toward these goals, Elevation Theme products are searchable collections through the Data.gov Open Government Initiative and products are provided in formats that are fully compliant with Executive Order 12906, OMB Circular A-16, OMB Circular A130, and OMB Circular A-119. DOI-USGS and DOC-NOAA help to maintain and use the U.S. Interagency Elevation Inventory (USIEI) that is made publicly available or discoverable on the GeoPlatform, to annually inventory and search for existing data before acquiring new data. DOI-USGS and DOC-NOAA lead the 3D Nation subcommittee and promote programs built on a foundation of collaborative governance and partnerships to meet national needs and priorities in support of NSDI Strategic Goals.

The Department of Commerce (DOC) has developed a Commerce Geospatial Strategy for fiscal years 2021-2024 available at (<https://www.commerce.gov/sites/default/files/2021-07/US-Dept-of-Commerce-Geospatial-Strategy-FY21-24.pdf>). The strategy includes goals and supporting objectives that directly support the Department of Commerce Data Strategy (2021–2024), the Geospatial Data Act of 2018 (GDA) and the National Spatial Data Infrastructure Strategic Plan (2021–2024). This Strategy was developed by the Commerce Geospatial Working Group under the Commerce Data Governance Board (CDGB) with input from all DOC bureaus, per the requirement of a lead covered agency (LCA) under the GDA. The Strategy charts a course forward for making geospatial data, technologies, and services more widely available, well managed, and more useful to DOC, its partners, and the public. DOC will enhance

the management and promote the use of its geospatial programs, leverage shared services (both within and outside the Department), and continue to lead the national and international geospatial community by engaging with other sectors and users of its geospatial data and services.

D. Addressing User Needs

The following table describes the GDA requirements for Section 2805(b)(3)(D) pertaining to addressing user needs, and the Lead Covered Agency's self-assessment for meeting those requirements.

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

FGDC Agency Efforts to Support Addressing User Needs

This section provides summary updates on NGDA Theme agency-level activities and efforts to support addressing user needs.

Brief Summary

The following is a brief update and description of FY2022 actions, progress, and accomplishments regarding activities that address Section 2805(b)(3)(D). (Limit 5,000 characters, or approximately 1.5 pages)

Clarifying Text: Summary includes agency, sub-agency, or bureau-level progress and accomplishments associated with any new key activities, and those highlighted last year, including citations and resource links as necessary. Key activities that support incorporating user needs into strategies related to the NGDA datasets within the Theme include, processes that as necessary:

- ✓ collect and analyze the needs of users
- ✓ incorporate those needs of users into strategies relating to the NGDA datasets

Past and current efforts to collect and analyze information from users of Elevation Theme geospatial data include the National Enhanced Elevation Assessment (NEEA, 2012), Research Study to Understand Use of USGS-NGP Geospatial Data and Products by Private Mapping Companies (2019), USGS 3DEP Technology Assessment (2020), and the 3D Nation Requirements and Benefits Study (2022).

DOI-USGS engages with state, local, tribal, academic, and private entities to gather user requirements and information directly and through the USGS-NGP User Engagement Office which coordinates with users and stakeholders at the local scale and work to ensure NGP products and services provide the greatest value and impact for the Nation. The 3DEP Working Group is responsible for developing, promoting, and executing a national strategy for acquisition, management, and distribution of elevation data consistent with the goals of 3DEP. The 3DEP Working Group held a joint coordination meeting with the 3D Hydrography Program (3DHP) Working Group in July 2022 to discuss progress of the 3D National Topography Model (3DNTM) that integrates elevation and hydrography, and future 3DEP Next Generation program scenarios to ensure the needs of other federal agencies would be met. The USGS Elevation Specifications Review Board technical committee engages state representatives to ensure state user requirements are defined and considered in proposed changes to the Lidar Base Specification. Additionally, DOI-USGS holds regular meetings with participants in the 3DEP for the Nation project

managed in cooperation with NSGIC. These meetings focus on gathering state perspectives and requirements for elevation data and to assist state stakeholders in finding solutions to elevation coverage gaps in their states.

DOC-NOAA and the IWG-OCM work with stakeholders through NSGIC and other bodies to gather user needs for ocean and coastal elevation data, including the Association of State Floodplain Managers, the American Shore and Beach Preservation Association, the Coastal States Organization and at annual events such as Coastal GeoTools (<https://coastalgeotools.org>) and the Joint Airborne Lidar Bathymetry Technical Center of Expertise (JALBTCX) Workshop where topobathymetric lidar needs, standards and projects are shared and discussed. IWG-OCM-hosted coastal summits are also venues to share and explore opportunities to meet user needs. Online GIS-based collaboration sites and tools are also key, such as the U.S. Federal Mapping Coordination site (<http://fedmap.seasketch.org/>). Elevation Theme-relevant stakeholder input is also gathered and shared by the NOAA Hydrographic Services Review Panel, a Federal Advisory Committee.

FGDC Portfolio-Level Progress Towards Meeting GDA NGDA Data Theme Requirements

Background

This section highlights the actions that reflect FGDC Portfolio-level progress towards meeting GDA requirements.

Since the passage of the GDA, FGDC agencies and the Theme Leads have continued to evaluate options to consistently document progress and streamline reporting. Development of a NGDA Theme Strategic Plan template, based on an existing strategic plan developed for the Transportation Theme, is underway. The template will provide a consistent framework for agencies to develop goals, objectives, and actions that directly align with GDA requirements. Theme annual reports will highlight agency actions and accomplishments associated with the strategic plan in support of standards, nationwide population of NGDA datasets, strategic planning that aligns with the NSDI Strategic Plan, and meeting user needs. Additional details for each of the four GDA NGDA Data Theme Requirements are included below.

A. Geospatial Data Standards

To ensure continuity of standards development including maintenance and implementation of existing standards, the FGDC Steering Committee approved the following Position Statement on Standards on December 17, 2021:

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 and OMB Circular A-119 (development and use of voluntary consensus standards). In the near future, FGDC will reestablish and resource a sustainable standards process, including implementing supporting governance requirements, updating and improving legacy processes, and validating standards for use as required under the GDA. Agencies should continue, to the extent possible in lieu of an active standards process, to develop, review, update, and achieve compliance with existing and pending standards, and become members of the appropriate FGDC standards body when active.

The NGDA Theme Strategic Plan template will include information that supports Theme related standards and support for the FGDC standards process to ensure overall continuity in standards across all NGDA Themes.

B. 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.” 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. The strategic plan

template will incorporate 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.

In accordance with the GDA definition of NGDA data theme, the NGDA Theme Strategic Plan template being developed will allow theme plans to focus on nationwide population of the core datasets within the theme and allow agencies to document, provide citations to, and report on efforts that facilitate meeting this requirement.

C. Establish Goals That Support the NSDI 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."

The NGDA Theme Strategic Plan template being developed will allow agencies to identify actions and accomplishments that align with mission requirements and support implementation of the NSDI Strategic Plan and its goals and objectives. For the NGDA portfolio, the NSDI Strategic Plan 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.

D. Addressing User Needs

The NGDA Theme Strategic Plan template will allow FGDC agencies to identify efforts to understand the needs of users and incorporate those needs into strategies relating to the NGDA datasets and themes.

Appendix A: Survey Picklist

This appendix provides the full set of available choices presented for the Meeting General Responsibilities – USC Sec.2805(b)(2) question.

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]

Endnotes

- ¹ U.S. Code, Title 43 – Public Lands, Chapter 46: GEOSPATIAL DATA
<https://www.fgdc.gov/gda/43-usc-ch-46-geospatial-data-geospatial-data-act.pdf>
- ² FGDC GDA Information:
<https://fgdc.gov/gda>
- ³ NSDI Strategic Plan:
<https://www.fgdc.gov/nsdi-plan>
- ⁴ NGDA Portfolio Community Site:
<https://ngda-portfolio-community-geoplatform.hub.arcgis.com/pages/portfolio>
- ⁵ OMB A-16 Supplemental Guidance Roles and Responsibilities:
<https://fgdc.gov/policyandplanning/a-16/key-roles-and-responsibilities-a16-supplemental.pdf>