



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

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

February 4, 2023



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Introduction

The Geospatial Data Act of 2018 (GDA) was signed into law on October 5, 2018. The GDA was included as a component of the FAA Reauthorization Act (H.R. 302, P.L. 115-254). The GDA is now in [U.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.

Cadastre Theme Contacts	
Theme Lead(s):	Dominica VanKoten, U.S. Department of the Interior, Bureau of Land Management
Executive Theme Champion(s):	David Carter, U.S. Department of the Interior

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 Cadastre 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	Cadastre Theme NGDA Datasets	Agency
10	BLM National Public Land Survey System Polygons – National Geospatial Data Asset (NGDA)	U.S. Department the Interior, Bureau of Land Management
11	Department of Defense Land Parcels and Sites	U.S. Department of Defense, Acquisition and Sustainment
13	FS National Forest Dataset (US Forest Service Proclaimed Forests)	U.S. Department of Agriculture, U.S. Forest Service
14	FWS Interest – August 2022	U.S. Department of the Interior, U.S. Fish and Wildlife Service
16	Administrative Boundaries of National Park System Units 6/30/2022 – National Geospatial Data Asset (NGDA) NPS National Parks	U.S. Department of the Interior, National Park Service
17	Outer Continental Shelf Active Renewable Energy Leases	U.S. Department of the Interior, Bureau of Ocean Energy Management
18	Outer Continental Shelf Block Aliquots – Atlantic Region NAD83	U.S. Department of the Interior, Bureau of Ocean Energy Management
19	Outer Continental Shelf Lease Blocks – Alaska Region NAD83	U.S. Department of the Interior, Bureau of Ocean Energy Management
20	Outer Continental Shelf Lease Blocks – Atlantic Region NAD83	U.S. Department of the Interior, Bureau of Ocean Energy Management
21	Outer Continental Shelf Lease Blocks – Gulf of Mexico Region NAD27	U.S. Department of the Interior, Bureau of Ocean Energy Management
22	Outer Continental Shelf Lease Blocks – Pacific Region – West Coast NAD83	U.S. Department of the Interior, Bureau of Ocean Energy Management
23	Outer Continental Shelf Official Protraction Diagrams – Alaska Region NAD 83	U.S. Department of the Interior, Bureau of Ocean Energy Management
24	Outer Continental Shelf Official Protraction Diagrams – Atlantic Region NAD 83	U.S. Department of the Interior, Bureau of Ocean Energy Management
25	Outer Continental Shelf Official Protraction Diagrams and Lease Maps – Gulf of Mexico Region NAD27	U.S. Department of the Interior, Bureau of Ocean Energy Management
26	Outer Continental Shelf Official Protraction Diagrams – Pacific Region – West Coast NAD 83	U.S. Department of the Interior, Bureau of Ocean Energy Management
27	Protected Areas Database of the United States (PAD-US)	U.S. Department of the Interior, U.S. Geological Survey

NGDAID	Cadastre Theme NGDA Datasets	Agency
188	BLM National Surface Management Agency Area Polygons – National Geospatial Data Asset (NGDA)	U.S. Department of the Interior, Bureau of Land Management
195	BAmerican Indian Reservations (AIR) Exterior Extent Boundaries	U.S. Department of the Interior, Bureau of Indian Affairs

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

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.

Cadastre 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

PAD-US has implemented and adheres to all applicable agency policies, directives, or guidelines. Survey Manual 502.2 Fundamental Science Practices: Planning and Conducting Data Collection and Research, (<https://www.usgs.gov/about/organization/science-support/survey-manual/5022-fundamental-science-practices-planning-and>), USGS. Survey Manual 502.7 Fundamental Science Practices: Metadata for USGS Scientific Information Products Including Data, (<https://www.usgs.gov/about/organization/science-support/survey-manual/5027-fundamental-science-practices-metadata-usgs>), USGS.

BOEM Datasets: BOEM continues to participate in the Federal Lands Working Group and NGDA Theme meetings. BOEM included a task for documenting the Offshore Marine given and Standards in the upcoming Boundary Delineation System Phase 8 Contract with NV5. The contract begins in January 2023 and ends on September 30, 2023. Upon completing the standard, the Geospatial Services Division (GSD) will submit the standards to the DOI Cadastral Subcommittee and FGDC for endorsement.

FWS Interest is the parcel-level dataset for DOI-FWS and adheres to existing data standards set forth by the agency. The Chief Cartographer maintains an extensive list of data domains, data dictionaries, and metadata – all are updated as needed and consistent with agency policy and handbooks. The Chief Cartographer is an active member of the FGDC Cadastre Theme subcommittee and the Federal Lands Working Group. The Chief Cartographer chairs the DOI-FWS “Cadastral Data Working Group” which is comprised of a team of GIS professionals, Cartographers, and technical support staff and they group meets monthly to identify, discuss, and resolve national cadastral data issues and share successes for constant, internal improvement.

BLM SMA: Internal data standards are developed in collaboration with the BLM National Operations Center. A BLM wide assessment of SMA data was completed and efforts are underway to use the data collected to develop a formal data standard. Coordination is ongoing to increase the data currency, content, and accuracy. BLM is drafting a handbook covering the data requirements for the BLM PLSSDS and SMA datasets to increase data currency and build collaboration with the data owners.

USFS: The USFS Proclaimed National Forest Boundaries dataset describes the exterior extent of federally designated National Forests. Those boundaries do not change without official action. When boundaries do change, we have established well-documented processes and quality control measures to implement those changes. For production and publication, we adhere to FGDC recommended cadastral data content standard, FGDC-STD-014.1-2008, and have customized it for the Proclaimed Forest dataset. We will implement new standards if they change. We adhere to the FGDC Content Standard for Digital Geospatial Metadata (CSDGM), but also make our data available with a compliant version of the ISO

19115 metadata standard in the Data.gov and GeoPlatform environments. Our production and publication environments rely heavily on a suite of ESRI ArcGIS software programs to work with its geospatial data and associated metadata to meet ISO metadata standards. Metadata specialists have been developing a new workflow to switch our metadata from the FGDC CSDGM standard's format to the ISO 19xxx suite of standards' format. These efforts have shown that none of the ESRI products can display or export full metadata information in the preferred ISO 19115-3 format. There are options in the software to export and/or view metadata in the ISO 19xxx format but when these options are chosen, users find that only a subset of the full CSDGM metadata are given and contain typos when exported to XML.

BLM PLSSDS: Data and standards are coordinated through the FGDC Cadastral Subcommittee. The BLM hosted two cadastral subcommittee meetings and coordinated with other working groups including FGDC National Boundaries Group, and Tribal Boundaries Working Group. Existing data standards include the following: Metadata Standards <https://www.fgdc.gov/metadata/geospatial-metadata-standards> Cadastral Data Content Standard, FGDC-STD-003, Geographic Information Framework Data Content Standard Part 1, Cadastral, FGDC-STD-014.1-2008, Geographic Information Framework Data Content Standard, Part 5: Governmental unit and other geographic area boundaries, FGDC-STD-014.5-2008, and https://gloreports.blm.gov/reference/nationalCad_standard_content/CADSTAND_v.1.4.pdf

NPS Administrative Boundaries dataset items: updating data standards to more closely align with other NPS national datasets, created ISO metadata to meet national standards, updating National Park Service Land Acquisition Procedures Document, Chapter 5 (Cartographic Procedures). Please email PPFL_LandsNet@nps.gov for more information regarding NPS boundary and ownership standards. NPS participates in the Federal Lands Working Group and NGDA Theme Community meetings.

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)

PAD-US: Federal Lands Workgroup (FLWG), (<https://ngda-gov-units-geoplatform.hub.arcgis.com/pages/federal-lands-workgroup>), State Lands Workgroup (SLWG), PAD-US Data-Stewards, (<https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/pad-us-data-stewards>) FGDC and USGS developed a series level metadata record to expedite and simplify future data harvests to Data.gov and GeoPlatform.gov.

BOEM Datasets: BOEM participates in the Federal Lands Working Group and NGDA Theme meetings. The BOEM GSD Offshore Marine Cadastre (OMC) Team is working on creating a National Cadastre dataset to import in BOEM GeoSEAS Enterprise Database. The project includes linking PDF Official Maps (OPDs, OPD Index Maps, OPADs and SOBDS) to the Cadastre dataset. The GeoSEAS team plans to create the Offshore Marine Cadastre Navigator Viewer for public use in the early part of calendar year 2023. The BDS Phase 8 contract with NV5 includes a task to automate the process of creating the OMC National Dataset. The contract begins in January 2023 and ends on September 30, 2023.

FWS Interest is the parcel-level dataset for DOI-FWS and adheres to existing data standards set forth by the agency. A team of approximately 20 cartographers maintain regional-level data that the Chief Cartographer consolidates every four months at the national level and publishes data and services for public use. The Chief Cartographer also maintains an extensive list of data domains with associated data dictionaries that are updated as needed. Metadata for the FWS Interest is not allowing for the automatic harvesting of near quarterly updates through data.gov and geoplatform.gov. The issue was identified in FY 2022 and will be rectified in January 2023.

BLM SMA: The BLM met with stakeholders and data owners to discuss ways to access, gather and represent SMA data. The BLM meets regularly with the data managers of PAD-US and NGDA's to assess data publishing needs. The BLM strives to improve our response to user needs and provides updated SMA data to PAD-US. The SMA was updated four times during FY 2022. Processes are in place to identify issues quickly and resolve them through coordination with data stewards. The BLM increased our engagement with data stewards which resulted in the publication of a more accurate SMA dataset.

USFS: Population of the Proclaimed National Forest Boundaries dataset is based on federally designated boundaries. The nationwide dataset populated by a network of regional data stewards that maintain, refresh, aggregate, and publish the dataset weekly. There is a process to update boundary changes and quality control measures to ensure data integrity. We are considering adapting our workflow to transition to an ESRI-based Parcel Fabric environment. The data maintenance process is based on collaboration with a network of regional specialists and facilitated by monthly coordination calls. Our Enterprise Data Warehouse aggregates, standardizes, and publishes an authoritative dataset on multiple platforms. Externally, USFS is using PAD-US Proclaimed in USTOPO. The data we submit to PAD-US is formatted based USGS requirements. Producing an authoritative representation of Proclaimed National Forest boundaries is our highest priority. We publish the most accurate data following the FGDC recommended cadastral data content standard, FGDC-STD-014.1-2008, and stay current with the evolution of data management and distribution based on standards and digital architecture. We participate in NGDA Theme meetings and coordinate to provide data in the appropriate formats. When collaborating with USGS, we format our data for distribution to PAD-US, but the NGDA is based purely on the designated exterior boundary.

BLM PLSSDS: We have partnerships with: USFS, DOI-BIA, State of Arkansas, State of Alaska, State of Nebraska, MT State Library, State of Utah Automated Geographic Reference Center (AGRC), State of Utah School and Institutional Trust Lands Administration (SITLA), State of Oregon's Department of Revenue. The BLM is coordinating with BOEM on the creation a national offshore cadastre dataset to replace regional datasets and development of a naming convention to link the onshore and offshore cadastre datasets. The BLM is coordinating with the US Forest Service and BIA to integrate direct sharing of PLSS data between agencies.

NPS Administrative Boundaries dataset is based on officially designated units. It is updated every three months. This data is the most accurate data available. Issues with this data are handled quickly through the PPFL_LandsNet contact point. NPS regional cartographers preserve unit level datasets that are updated and submitted as needed. The Chief cartographer and data steward maintain a list of domains that are updated to best fit user needs. Metadata is provided for the boundary dataset and available in a variety of formats to increase access and discoverability on national environments.

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.

PAD US: Completed aggregation, processing, and publication of PAD-US version 3.0. (<https://www.sciencebase.gov/catalog/item/61794fc2d34ea58c3c6f9f69>) This includes a complete update of Federal estate (where available) and several state, local, and NGO data sets. Documents that describe the current state of PAD-US data and source data as well guidelines for appropriate use are available on the FLWG web site. (<https://ngda-gov-units-geoplatform.hub.arcgis.com/pages/federal-lands-workgroup>) Currently processing next version of PAD-US, streamlining the data submission process and developing a 5 year plan to further increase the utility of PAD-US.

FWS: DOI-FWS provides “FWS Interest” per the NGDA Cadastre theme requirement. It is the parcel-level dataset for DOI-FWS, adheres to existing data standards set forth by the agency, and is included in the 5-Year Geospatial Services Strategic Plan – Fiscal Years 2018-2023. Goals or actions supporting the NSDI Strategic Plan are documented in the FWS Mapping Manual chapter and the Mapping and Cadastral Geographic Information System (GIS) Handbook. The FWS Interest is also consistent with FAIR (findable, accessible, interoperable, and reusable) practices. In FY2022, the FWS Interest was included in the agency’s open data site (<https://gis-fws.opendata.arcgis.com/datasets/fws::fws-national-realty-tracts/explore?location=8.628016%2C0.000000%2C2.17>) allowing for greater discovery and easier download into various formats that are consistent with open standards-based interoperability.

BLM SMA: The BLM continued to identify and resolve data anomalies such as overlapping administrative boundaries, missing data, or incorrect data. The compiled data from all federal surface

management agencies was updated four times during the year, analyzed to identify anomalies, then adjusted the proper representation on the SMA. The BLM will publish a handbook for guidance about how to maintain SMA data integrity, including timing of updates and procedures to assess and rectify data issues. In addition, the BLM is preparing guidance on how to represent less than ownership interests in the SMA, such as easements and leaseholds.

USFS: As we understand it, implementing fully compliant ISO metadata standards are part of the NSDI's strategic plan. An ongoing endeavor associated with the production of the Proclaimed Forest dataset is to ensure that metadata distribution links work in all platforms. Our production and publication environments rely heavily on a suite of ESRI ArcGIS software programs (i.e., ArcCatalog, ArcMap, ArcGIS Pro, AGOL, Hub, etc.), and over the past year, metadata specialists have been developing a new workflow to switch our metadata from the FGDC CSDGM standards' format to the ISO 19xxx suite of standards' format. These efforts have shown that none of the ESRI products available to us today can display or export fully compliant metadata information in the ISO 19xxx format. To overcome these limitations, we are striving for collaboration with ESRI to ensure the ISO metadata standard can be incorporated and function properly in the relevant software.

BLM PLSSDS: BLM's Public Land Survey System Dataset (PLSSDS) data and standards are coordinated through the FGDC Cadastral Subcommittee. In FY 2022 the BLM hosted two cadastral subcommittee meetings and participated in coordination with other working groups including NGCD Lead Covered Agency (LCA), FGDC National Boundaries Group, and Tribal Boundaries Working Group. Existing data standards include the following: Metadata Standards <https://www.fgdc.gov/metadata/geospatial-metadata-standards> Cadastral Data Content Standard, FGDC-STD-003, Geographic Information Framework Data Content Standard Part 1, Cadastral, FGDC-STD-014.1-2008, Geographic Information Framework Data Content Standard, Part 5: Governmental unit and other geographic area boundaries, FGDC-STD-014.5-2008, and https://gloreCORDS.blm.gov/reference/nationalCad_standard_content/CADSTAND_v.1.4.pdf.

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

PAD US: Federal Lands Workgroup (FLWG), (<https://ngda-gov-units-geoplatform.hub.arcgis.com/pages/federal-lands-workgroup>), State Lands Workgroup (SLWG), PAD-US Data-Stewards, (<https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/pad-us-data-stewards>) Developed several online applications and services to meet users needs. (<https://www.usgs.gov/programs/gap-analysis-project/science/pad-us-online-applications>) Updated and expanded the functionality of PAD-US documentation. (<https://www.usgs.gov/programs/gap-analysis-project/science/protected-areas>)

BOEM: Applies to all BOEM Cadastre NGDA datasets. The Offshore Marine Cadastre Navigator that is currently under development will be used to modernize the mapping pages on the BOEM.gov website. This will give users a modern way to view data and download official mapping products.

FWS: DOI-FWS provides “FWS Interest” per the NGDA Cadastre theme requirement. It is the parcel-level dataset for DOI-FWS and is used extensively in various online and static mapping applications. The data is hosted on the agency’s open data site (<https://gis-fws.opendata.arcgis.com/datasets/fws:fws-national-realty-tracts/explore?location=8.559706%2C0.000000%2C2.17>). Users can make inquiries via

the main DOI-FWS contact page (<https://fws.gov/contact-us>) and it will be routed to the Chief Cartographer upon receipt. Currently, there is no active collection method to obtain information pertaining to user needs from users outside the agency.

BLM SMA: BLM uses a process to collect and analyze the needs of users, as well as address data issues. BLM HQ attends state cadastral and realty meetings and provides input to questions regarding SMA, including update requirements, data content, and needed corrections. In addition, BLM utilizes state and field office specialists on data projects as subject matter experts. This gives them the opportunity to communicate their needs and data challenges, as well as participate in finding workable solutions. BLM HQ also coordinated in FY 2022 with BOEM, USGS, NPS, NOC and USFS. These efforts resulted in increased accuracy of SMA data and allowed the NOC, BLM headquarters, BLM state offices, and other agencies to increase collaboration for future SMA updates.

USFS: The Proclaimed National Forest Boundaries dataset is a depiction of the boundaries encompassing the National Forest System (NFS) lands within the original proclaimed National Forests, along with subsequent Executive Orders, Proclamations, Public Laws, Public Land Orders, Secretary of Agriculture Orders, and Secretary of Interior Orders creating modifications thereto, along with lands added to the NFS which have taken on the status of 'reserved from the public domain' under the General Exchange Act. The purpose of the dataset is to provide display, identification, and analysis capabilities for determining current boundary information for Forest Service managers, GIS Specialists, and others. Reliable access to this authoritative information is among the greatest user needs. While we make the data available internally and externally through the USFS Geodata Clearinghouse, Data.gov, and the GeoPlatform, we are working towards a solution that ensures metadata distribution links function properly in all platforms using the proposed ISO metadata standards. To date, we are working with ESRI on the ArcGIS Hub DCAT configuration to allow additional ISO metadata distribution in the Project Open Data metadata (JSON format) provided to USDA to be ingested into Data.gov and GeoPlatform. We updated the FS National Forests Dataset (US Forest Service Proclaimed Forests), and GeoPlatform was then able to harvest the record so that it now shows up in GeoPlatform at the following URL: (<https://www.geoplatform.gov/metadata/bd04f8d8-96cc-5eac-96af-566bea975ba3>) As part of this process we have also submitted an Esri enhancement request (Esri Case #02713777 - ArcGIS Hub DCAT Enhancement Request) for them to update their DCAT config tool to allow us to add custom distributions for ISO XML metadata. Fully compliant implementation of the ISO metadata standard has not been achieved yet, and the work is ongoing.

BLM PLSSDS: PLSSDS In FY2022 the BLM continued internal efforts to increase data availability and integrity. The BLM published updates to the PLSSDS quarterly and is holding regularly scheduled meetings with BLM State Offices, the NOC, and other agencies to better meet goals and identify potential problems and implement corrective actions. We have re-implemented the PLSSDS Change Community to collect and analyze the needs of users to make sure we are meeting their needs.

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>