

**Cadastre Theme
Strategic Plan
2025 - 2027**

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

September 30, 2024



Introduction	1
Background	1
I. Goal: 2805(b)(3)(E) – Administer the Theme.....	3
I.A. Objective: 2805(b)(3)(E)(i) – Point of Contact	3
I.B. Objective: 2805(b)(3)(E)(ii)(I) – Annual Reporting.....	4
I.C. Objective: 2805(b)(3)(E)(ii)(II) – Annual Report Comments	4
II. Goal: 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	6
II.A. Objective: 2805(b)(3)(B)(i) – Partnerships.....	6
II.B. Objective: 2805(b)(3)(B)(ii) and 2805(b)(3)(D) – User Needs.....	8
II.C. Objective: 2805(b)(3)(B)(iii) – Human and Financial Resources.....	10
II.D. Objective: 2805(b)(3)(E)(iii) – Publish Maps or Comparable Graphics Online	11
II.E. Objective: 2805(b)(3)(E)(iv) – Provide Access to NGDA Through the GeoPlatform	12
II.F. Objective: 2805(b)(3)(E)(v) – Coordinate with the GeoPlatform	12
Objective: 2805(b)(3)(E)(vi) – Publish Proven Geospatial Practices	13
III. Goal: 2805(b)(3)(A), (b)(3)(B)(iv) – Assess Metadata and Data Standards	14
III.A. Objective: 2805(b)(3)(B)(iv) – Metadata Standards	14
III.B. Objective: 2805(b)(3)(A)(i); (ii); (iii) – Data Standards.....	15
Appendix A: NGDA Data Themes (GDA Sec 2805) and NSDI Strategic Plan Crosswalk	17

Introduction

This Cadastre Theme Strategic Plan (henceforth Plan), developed in Fiscal Year (FY) 2024, spans three years, FY 2025 - FY 2027. It outlines a strategy to achieve progress toward meeting [Section 2805 of the Geospatial Data Act of 2018](#)¹ (GDA). Its origin is from Sec. 2805 (b)(3)(B) to “provide leadership and facilitate the development and implementation of a plan for nationwide population of the National Geospatial Data Asset data theme.” It is organized by goals, addressing major subsections of Sec. 2805, objectives supporting the goals, and anticipated actions to be taken over its lifecycle to achieve progress.² In addition to meeting GDA requirements, these goals and objectives align with the [National Spatial Data Infrastructure \(NSDI\) Strategic Plan](#)³ as required by Section 2805(b)(3)(C). A crosswalk of the GDA and the NSDI Strategic Plan can be found in Appendix A of this document. For each FY covered by this Plan, the lead covered agency theme (see Background below) will generate an annual performance report, as required by the GDA, to inform on progress in achieving the goals.

Background

The Federal Geographic Data Committee (FGDC), henceforth Committee, is composed of both covered and non-covered agencies as defined by the GDA. For each National Geospatial Data Asset (NGDA) data theme (henceforth theme), the Committee designates one or more covered agencies as lead covered agencies (LCA) for the theme. As called for in the [OMB Circular A-16 Supplemental Guidance](#),⁴ the lead covered agencies designate theme leads to oversee the management of the theme. The lead covered agencies have taken a coordinated approach to addressing GDA section 2805.

Starting in late FY 2022 and continuing into FY 2023, lead covered agencies collaborated on a common approach to improving annual performance reporting.⁵ The result is a Theme Strategic Plan template for use by all themes based on a common set of goals and objectives to meet the GDA requirements. This approach ensures the application of a common set of metrics and allows the FGDC Office of the Secretariat (FGDC OS) to provide a consistent summary of individual and collective progress made by all

¹ <https://www.fgdc.gov/gda/43-usc-ch-46-geospatial-data-geospatial-data-act.pdf#page=8>

² Sec 2802(c)(A)(i) an evaluation of the progress of each lead covered agency in achieving the requirements under subparagraphs (A), (B), (C), and (D) of section 2805(b)(3) of this title; and (ii) a determination of whether, for each of subparagraphs (A), (B), (C), and (D) of section 2805(b)(3) of this title, each lead covered agency meets expectations, has made progress toward expectations, or fails to meet expectations.

³ <https://www.fgdc.gov/nsdi-plan>

⁴ https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/memoranda/2011/m11-03.pdf.

It should be noted that the revised Circular A-16 is currently in development for release by the Office of Management and Budget for use by the FGDC Community. Associated Technical Guidance may be developed by FGDC once the revised Circular is released.

⁵ NSDI Strategic Plan Goal 1.3. Identify common approaches and tools to meet GDA and related planning and reporting requirements.

Sec 2805 (b)(3)(E)(ii)(I): (ii) submit to the Committee—

(I) a performance report, at least annually, that documents the activities relating to and implementation of the National Geospatial Data Asset data theme, including progress in achieving the requirements under subparagraphs (A), (B), (C), and (D).

themes in meeting GDA requirements. Depending on their complexity, themes may expand beyond the common set of goals, objectives, and actions within the template. In subsequent years, within the lifecycle of the Plan, the Bureau of Land Management (BLM) for the Cadastre Theme will provide an annual report that includes status on identified actions and demonstrates progress made in achieving the Plan goals and objectives aligned to the GDA requirements.

The Cadastre Theme includes the following 10 NGDAs:

NGDAID	NGDA Theme	NGDA Title	Dept-Agency Abbr.
10	Cadastre	BLM National PLSS Public Land Survey System Polygons	DOI-BLM
11	Cadastre	Department of Defense Land Parcels and Sites	DOD-A&S
13	Cadastre	FS National Forest Dataset (US Forest Service Proclaimed Forests)	USDA-USFS
14	Cadastre	U.S. Fish and Wildlife Service National Realty Tracts	DOI-FWS
16	Cadastre	Administrative Boundaries of National Park System Units - National Geospatial Data Asset (NGDA) NPS National Parks Dataset	DOI-NPS
17	Cadastre	Outer Continental Shelf Active Renewable Energy Leases	DOI-BOEM
27	Cadastre	Protected Areas Database of the United States (PAD-US)	DOI-USGS
51	Cadastre	OCS Marine Minerals Lease Area	DOI-BOEM
188	Cadastre	BLM National SMA Surface Management Agency Area Polygons	DOI-BLM
205	Cadastre	BOEM Offshore Marine Cadastre Data Collection	DOI-BOEM

I. Goal: 2805(b)(3)(E) – Administer the Theme

The Committee designates National Geospatial Data Asset data themes (henceforth theme).⁶ The Committee also designates one or more covered agencies as the lead covered agencies for each theme.⁷ Themes may include NGDA datasets that are contributed by other covered agencies and non-covered agencies. The Bureau of Land Management (BLM) is designated the lead for the Cadastre Theme.

The majority of the theme's NGDAs are on land; however, the data also extends over the U.S. Outer Continental Shelf (OCS). The OCS NGDAs are managed by the DOI Bureau of Ocean Energy Management (BOEM).

I.A. Objective: 2805(b)(3)(E)(i) – Point of Contact

The GDA 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.

GDA Reference

(b) Lead covered agencies

(3) Specific responsibilities

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(E) as part of administering the National Geospatial Data Asset data theme—

(i) 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;

I.A.i. Action(s) to Meet Objective: 2805(b)(3)(E)(i) – Point of Contact

The designated BLM shall designate a point of contact who shall be responsible for developing, maintaining, coordination relating to, and disseminating data using the GeoPlatform. The POC will be updated and reported annually.

In addition to annual reporting, the BLM shall inform the Committee of interim changes to the POC as necessary to maintain continuity.

Theme and agency points of contact provided below are maintained to meet the requirements.

Theme Lead: Dominica VanKoten, U.S. Department of the Interior, Bureau of Land Management

Executive Theme Champion: David Carter, U.S. Department of the Interior

⁶ Sec 2805(a) the term "National Geospatial Data Asset data theme" is defined as the National Geospatial Data Asset core geospatial datasets (including electronic records and coordinates) relating to a topic or subject designated under section 2805 of this title.

⁷ Sec 2805(b)(1) For each National Geospatial Data Asset data theme, the Committee shall designate one or more covered agencies as the lead covered agencies for the National Geospatial Data Asset data theme.

I.B. Objective: 2805(b)(3)(E)(ii)(I) – Annual Reporting

The GDA requires lead covered agencies to submit a performance report, at least annually, that documents the activities relating to and implementation of the National Geospatial Data Asset data theme.

GDA Reference

(b) *Lead covered agencies*

(3) *Specific responsibilities*

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(E) *as part of administering the National Geospatial Data Asset data theme—*

(ii) *submit to the Committee—*

(I) *a performance report, at least annually, that documents the activities relating to and implementation of the National Geospatial Data Asset data theme, including progress in achieving the requirements under subparagraphs (A), (B), (C), and (D); and*

I.B.i. Action(s) to Meet Objective: 2805(b)(3)(E)(ii)(I) – Annual Reporting

The BLM shall submit a performance report annually, that documents the activities relating to and implementation of the National Geospatial Data Asset data theme, including progress in achieving the requirements under subparagraphs (A), (B), (C), and (D).

I.C. Objective: 2805(b)(3)(E)(ii)(II) – Annual Report Comments

The GDA requires lead covered agencies to submit comments to the Committee about the annual performance summary, as appropriate.

GDA Reference

(b) *Lead covered agencies*

(3) *Specific responsibilities*

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(E) *as part of administering the National Geospatial Data Asset data theme—*

(ii) *submit to the Committee—*

(II) *comments, as appropriate, regarding the summary and evaluation of the performance report provided by the Committee under section 2802(c)(12) of this title;*

I.C.i. Action(s) to Meet Objective: 2805(b)(3)(E)(ii)(II) – Annual Report Comments

The BLM shall continue to submit comments, as appropriate regarding the summary and evaluation of the performance report provided by the FGDC OS under section 2802(c)(12).

The annual report will continue 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.”

The annual 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,

the annual 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, the annual 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 National Spatial Data Infrastructure (NSDI) Strategic Plan.

II. Goal: 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

The Cadastre Theme Lead developed this Plan in coordination with the agencies that manage and contribute to NGDA datasets within the Theme. Over the next three years, the Theme Lead(s) shall facilitate the implementation of this Plan through annual performance reporting. Each of the following goals and objectives within this Plan support the nationwide population of the National Geospatial Data Asset data theme in direct correlation with the GDA.

II.A. Objective: 2805(b)(3)(B)(i) – Partnerships

The GDA requires lead covered agencies to provide leadership and facilitate a plan to develop partnership programs with states, Indian tribes, institutions of higher education, private sector entities, other federal agencies, and local governments.

GDA Reference

(b) Lead covered agencies

(3) Specific responsibilities

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(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—

(i) include developing partnership programs with States, Indian tribes, institutions of higher education, private sector entities, other Federal agencies, and local governments;

II.A.i. Action(s) to Meet Objective: 2805(b)(3)(B)(i) – Partnerships

The theme lead will continue to coordinate with theme dataset managers and users in other Federal Government agencies, State, tribal, and local governments, and the private sector (including nonprofit organizations and institutions of higher education).

The BLM will participate in FGDC subcommittees and working groups, and will coordinate internally to improve the accuracy of national ownership datasets. These activities are necessary to exchange information regarding key issues such as data submission requirements and increasing the efficiency of Surface Management Agency (SMA) and Public Land Survey System Data Set (PLSSDS) compilations.

BLM will continue to work collaboratively with the dataset managers of Cadastre theme NGDA datasets. The BLM has partnerships in place for the PLSS dataset with the US Forest Service (USFS), Department of the Interior Bureau of Indian Affairs (DOI-BIA), State of Arkansas, State of Alaska, State of Nebraska, Montana State Library, State of Utah Automated Geographic Reference Center (AGRC), State of Utah School and Institutional Trust Lands Administration (SITLA), and the State of Oregon's Department of Revenue. The BLM will continue coordination with BOEM on the development and management of the national offshore cadastre dataset to replace regional datasets and a plan to develop a naming convention to link the onshore and offshore marine cadastre datasets. The BLM is coordinating with the USFS to integrate direct sharing of PLSS data between agencies. Similar coordination also occurring with the BIA.

BOEM will continue to contribute to the Protected Areas Database of the US (PAD-US) outer continental shelf withdrawal areas. PAD-US is the official NGDA for aggregated U.S. protected areas data, developed and managed by the USGS in collaboration with the FGDC Federal Lands Working Group (FLWG). PAD-US is the best available U.S. aggregation of federal land and marine interests and management designations, as well as state, local and nonprofit data on protected areas.

In addition, BOEM plans to partner with the National States Geographic Information Council (NSGIC) and support the members to highlight accomplishments of member states to focus on strategic activities where the state has invested significant time and resources particularly where States are rolling up local cadastral data.

The following NGDAs were approved to be retired and replaced by the new BOEM Offshore Marine Cadastre (OMC) Data Collection (National Dataset, no more Region/Datum NGDAs) during the March 2024 FGDC Steering Committee. This is schedule to occur before the end of the FY24.

169, OCSLA Sec, 8(g) Revenue Zone Boundary – Alaska Region NAD83 , U.S. Department of the Interior, Bureau of Ocean Energy Management

170, OCSLA Sec, 8(g) Revenue Zone Boundary – Atlantic Region NAD83 , U.S. Department of the Interior, Bureau of Ocean Energy Management

171, OCSLA Sec, 8(g) Revenue Zone Boundary – Gulf of Mexico Region NAD27 , U.S. Department of the Interior, Bureau of Ocean Energy Management

172, OCSLA Sec, 8(g) Revenue Zone Boundary – Pacific Region – West Coast NAD83 , U.S. Department of the Interior, Bureau of Ocean Energy Management

173, Continental Shelf Boundary – Gulf of Mexico Region NAD27 , U.S. Department of the Interior, Bureau of Ocean Energy Management

174, Outer Continental Shelf Submerged Land Act Boundary- Alaska Region NAD83 , U.S. Department of the Interior, Bureau of Ocean Energy Management

175, Outer Continental Shelf Submerged Land Act Boundary – Atlantic Region NAD83 , U.S. Department of the Interior, Bureau of Ocean Energy Management

176, Outer Continental Shelf Submerged Land Act Boundary – Gulf of Mexico Region NAD27, U.S. Department of the Interior, Bureau of Ocean Energy Management

177, Outer Continental Shelf Submerged Land Act Boundary – Pacific Region – West Coast NAD83, U.S. Department of the Interior, Bureau of Ocean Energy Management

51, OCS Marine Mineral Lease Area, U.S. Department of the Interior, Bureau of Ocean Energy Management

The new NGAID Cadastre Theme NGDA Dataset

205, Offshore Marine Cadastre (OMC) Data Collection, U.S. Department of the Interior, Bureau of Ocean Energy Management (BOEM)

In addition, the BOEM will continue partnerships and collaboration with the coastal states, federally recognized tribes, territories, the BLM, US Fish and Wildlife Service (FWS), National Oceanic and Atmospheric Administration (NOAA), Department of State (DOS) and Department of Defense (DOD).

The Cadastre Theme will enhance partnerships and information exchange through the following activities:

- Participation in cross-agency activities related to the development of the Theme Strategic Plan Template
- Participation in the NGDA Theme Community Meetings
- Participation in GDA Working Group meetings
- Reviewing the outcomes from GDA Working Group meetings and providing feedback on approaches for GDA compliance
- Coordination of GDA compliance activities within the Theme
- Coordination of changes to the Portfolio inventory for Steering Committee approval
- Updating Dataset Managers and other points of contact

II.B. Objective: 2805(b)(3)(B)(ii) and 2805(b)(3)(D) – User Needs

The GDA requires lead covered agencies provide leadership and facilitate a plan to meet the needs of users of geospatial data including a process to, as necessary, collect and analyze information from users of NGDA within the Theme and incorporate the needs of those users into strategies related to the NGDA data theme.

GDA References

(b) Lead covered agencies

(3) Specific responsibilities

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(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—

(ii) meet the needs of users of geospatial data;

AND

(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;

II.B.i. Action(s) to Meet Objective: 2805(b)(3)(B)(ii) and 2805(b)(3)(D) – User Needs

BLM will continue to work collaboratively with the Cadastre theme dataset managers. BLM strives to attend both Federal and field wide conferences to interact with agencies as well as other users.

Specifically, BLM will continue previous activities, including meeting with both stakeholders and data managers to discuss ways to access, gather, and represent data more efficiently. BLM will continue to coordinate with the BIA, BLM Indian Lands Surveyors (BILS), BOEM, USGS, BLM state and field offices and BLM PLSSDS dataset managers, as well as the agencies listed previously. These interactions, meetings and presentations allow the participants to assess how best to have their data represented.

The BLM will continue development of a mineral estate ownership dataset and a non-rectangular cadastral data framework.

In addition, the Cadastre Theme will use the Theme Hub site on GeoPlatform to incorporate the needs of users. The Theme will use the new GeoPlatform Theme Hub Site template to expand the Theme pages from minimum-required content to Theme-specific content. The Theme will maintain a Hub site manager. The enhanced Hub site provides partners and end users with a robust and data-rich location to access Cadastre Theme geospatial data resources.

BOEM cadastral users have a need for data in the U.S Territories and Hawaii. An effort is underway to create OMC data for parts of Guam, the Commonwealth of The Northern Mariana Islands (CNMI), American Samoa and Hawaii. BOEM should finish Phase 1 and 2 of the Pacific Territories and Hawaii Cadastral Project. A similar effort will various locations on the Alaska OCS. BOEM should finish Phase 1 of the Alaska Cadastral Project. All of this new data will be incorporated into the BOEM OMC Data Collection and provided as a public national dataset. The official mapping products will be published in the federal register and the OMC Navigator application will be updated to include these updates.

BLM will begin planning how to engage collect feedback from State, Tribal, Other Federal Agencies/Offices/Bureaus, Local Government, Private sector (including nonprofit organizations), and Institutions of higher education.

BOEM supports the guiding principles offered by the National Academy of Science, Mapping Science Committee identified for NSDI development.

- 1) Data should be widely available. These aligning with statewide cadastral data rollups that are focused on normalizing the local data and distilling the data into a publication version.
- 2) Accessing spatial data should be easy. There are often state standards for local cadastral data to follow, and as data are received the state aggregators may consider how to normalize the various schemas so that it is more readily used for state functions that cross jurisdictional lines and can be integrated related with federal keys.
- 3) The NSDI should be flexible and not dependent on current technology, data, or organizational structures. The organizational structures that steward of this periodically rolled-up cadastral data adopt a public cadastral record for a wide range of public, government, and commercial users.
- 4) The NSDI should be a foundation to foster new applications, services, and industries. Integrating cadastral data normalized into a single, authoritative source used by others at a local, regional, and state level for various governmental functions has many current and future benefits.

BOEM will continue to support the BLM that has used its role to establish standards and has constructed of the cadastral theme framework through their leadership on the Public Land Survey System.

The nation's system of land tenure is recorded at that local level for the public good by the recorders of deeds, and then mapped for discovery and equitable valuation by the Assessors who perform the ad valorem assessment process. The other level of governance over the theme is at the state level where the state has a regulatory role in the oversight of the ad valorem process.

A single authority governing all the components of the cadastral theme across the nation might be ideal. However, this structure simply does not fit the reality of the federated system that is in place. BOEM recognizes and supports State roll-up initiatives which can be a valuable improvement in the integration of cadastral data. Federal agencies like BOEM need a comprehensive view of the cadastral fabric. Integration from States can also aid other agencies like the Federal Emergency Management Agency (FEMA), NOAA, and the US Housing and Urban Development (HUD) when cadastral data is consistently and widely available.

The Official Offshore Cadastre, generated and maintained by BOEM, is a comprehensive spatial data infrastructure whereby rights, restrictions and responsibilities in the marine environment can be assessed, administered, and managed. The offshore cadastre includes the lease block grids and various offshore boundaries, which provide the base for nearly all the BOEM offshore maps and leasing processes. It also gives BOEM the means to define, describe, analyze, and account for every acre/hectare of federal offshore submerged lands. In 2024, the offshore cadastre was transferred from 28 individual datasets across three themes to the Cadastre Theme to improve stakeholder accessibility, usability and to coordinate with the BLM on the NSDI.

II.C. Objective: 2805(b)(3)(B)(iii) – Human and Financial Resources

The GDA requires lead covered agencies to provide leadership and facilitate a plan to address human and financial resource needs for nationwide population of the NGDA data theme.

GDA Reference

(b) *Lead covered agencies*

(3) *Specific responsibilities*

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(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—*

(iii) *address human and financial resource needs;*

II.C.i. Action(s) to Meet Objective: 2805(b)(3)(B)(iii) – Human and Financial Resources

The BLM will continue to assess the state specific needs and strive to maintain data stewards at the field and headquarters level for SMA and PLSSDS datasets to improve data accuracy. The BLM will continue to analyze and prioritize work based on the resources available.

BOEM continues to experience challenges with staffing and resources support the BOEM Geospatial Services Division. The cadastral activities support all programs of BOEM not just Oil and Gas and Marine Mineral related projects within the Office of Strategic Resources (OSR).

II.D. Objective: 2805(b)(3)(E)(iii) – Publish Maps or Comparable Graphics Online

The GDA requires lead covered agencies to publish maps or comparable graphics online showing the extent and status of NGDA data within the Theme.

GDA Reference

(b) Lead covered agencies

(3) Specific responsibilities

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(E) as part of administering the National Geospatial Data Asset data theme—

(iii) publish maps or comparable graphics online (in accordance with the mapping conventions specified by the Committee) showing the extent and status of the National Geospatial Data Asset data themes for which the covered agency is a lead covered agency;

II.D.i. Action(s) to Meet Objective: 2805(b)(3)(E)(iii) – Publish Maps or Comparable Graphics Online

The BLM will continue to publish and collaborate with other agencies for publication of maps and online graphics using PLSS and SMA data. USGS uses the PLSS and SMA data acquired multiple times during the year to populate a number of products. The most common general base maps covering the United States, the USGS topographic map series, all depict the PLSS. At the largest scale (1:24,000) these maps show section (and quarter-section) corners (and, implicitly, most meander corners) and section lines; all sections are numbered, and townships and ranges are labeled. At smaller scales (1:100,000 and 1:250,000), USGS topo maps have a simpler representation of the PLSS.

The USGS topo map series are commonly used as source material for other maps. A more straightforward derivative is the Digital Raster Graphic (DRG), a scanned version of the USGS topo map. In both paper and in digital form, private companies have used information (including the PLSS) from USGS maps to construct value-added products. Scanned USGS topographic maps are available for viewing through The National Map Viewer. PLSS forms the base for multiple products and uses through USGS. Some of these include BLM maps both online and in paper form, Google Maps, and most other location-based map products.

The BLM PLSS dataset also supplies much of the data used to populate and compile the SMA data on a quarterly basis and provides the updates to USGS Pad-US. The purpose of the SMA dataset is to fulfill the BLM's responsibility to publish land ownership datasets for use in analysis and reports. This dataset is useful as a tool to determine and illustrate the boundaries of a particular Federal agency's managing area and to quantify these areas in terms of geographic acreage.

BOEM will continue working on improving the Offshore Marine Cadastre Navigator application by completing Phase 2. Phase 2 includes adding Gulf of Mexico NAD27 data and official mapping Official Protraction Diagrams (OPDs), Supplemental Official Block Diagrams (SOPDs), Official Protraction Aliquot Diagrams (OPADs) and PDFs.

II.E. Objective: 2805(b)(3)(E)(iv) – Provide Access to NGDA Through the GeoPlatform

The GDA requires lead covered agencies to encourage Theme data and metadata sources to share their data via the GeoPlatform.

GDA Reference

(b) *Lead covered agencies*

(3) *Specific responsibilities*

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(E) *as part of administering the National Geospatial Data Asset data theme—*

(iv) *encourage individuals and entities that are a source of geospatial data or metadata for geospatial data for the National Geospatial Data Asset data theme to provide access to such data through the GeoPlatform;*

II.E.i. Action(s) to Meet Objective: 2805(b)(3)(E)(iv) – Provide Access to NGDA Through the GeoPlatform

In the summer of 2023, the Cadastre Theme began customizing the new Theme Hub site on the GeoPlatform as part of a strategy to incorporate the needs of users as called for in USC 43 Sec 2805(b)(3)(D). Theme personnel now use the new GeoPlatform Theme Hub Site template to expand the Theme pages from minimum-required content to Theme-specific content. A Hub site manager was identified, featured NGDA datasets and applications were showcased, and contributor data and applications were highlighted. The enhanced Hub site provides partners and end users with a robust and data-rich location to access Cadastre Theme geospatial data resources. Six key Theme NGDA Datasets including their related services and data download resources are highlighted and two contributor applications are featured. The updated Cadastre Theme Hub site was presented to the other 17 themes.

- [NGDA Cadastre Theme \(arcgis.com\)](https://ngda-cadastre-geoplatfrom.hub.arcgis.com/search?collection=dataset)⁸ incorporates datasets that migrated to Cadastre Theme - [OCS Marine Minerals Lease Areas - Catalog \(data.gov\)](https://catalog.data.gov/dataset/ocs-marine-minerals-lease-areas)⁹

II.F. Objective: 2805(b)(3)(E)(v) – Coordinate with the GeoPlatform

The GDA requires lead covered agencies to coordinate with the GeoPlatform as part of administering the NGDA data theme.

GDA Reference

(b) *Lead covered agencies*

(3) *Specific responsibilities*

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(E) *as part of administering the National Geospatial Data Asset data theme—*

(v) *coordinate with the GeoPlatform;*

⁸ <https://ngda-cadastre-geoplatfrom.hub.arcgis.com/search?collection=dataset>

⁹ <https://catalog.data.gov/dataset/ocs-marine-minerals-lease-areas>

II.F.i. Action(s) to Meet Objective: 2805(b)(3)(E)(v) – Coordinate with the GeoPlatform

The Cadastre Theme manages the Theme Hub site on the GeoPlatform as part of a strategy to incorporate the needs of users as called for in USC 43 Sec 2805(b)(3)(D). The Theme will now use the Theme Hub Site template to expand the Theme pages from minimum-required content to Theme-specific content.

Objective: 2805(b)(3)(E)(vi) – Publish Proven Geospatial Practices

The GDA requires lead covered agencies to identify and publish proven practices for the use and application of geospatial data of the LCA as part of administering the NGDA data theme.

GDA Reference

(b) *Lead covered agencies*

(3) *Specific responsibilities*

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(E) *as part of administering the National Geospatial Data Asset data theme—*

(vi) *identify and publish proven practices for the use and application of geospatial data of the lead covered agency.*

II.F.ii. Action(s) to Meet Objective: 2805(b)(3)(E)(vi) – Publish Proven Geospatial Practices

The FGDC is 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). The FGDC Executive Committee has established a Standards Task Team to evaluate the requirements, options, processes, resources, and decision structure required to establish an operational and sustainable FGDC standards process. This will include evaluating the FGDC's roles and responsibilities in geospatial standards with those of other standards making bodies, non-Federal participation, and considerations for standards supporting the National Spatial Data Infrastructure (NSDI). The Executive Committee Standards Task Team is currently developing recommendations to update the FGDC's standards management process and will recommend a path forward for the FGDC. Refer to the FGDC Standards webpage (<https://www.fgdc.gov/standards>) for additional information.

BOEM will document a maintenance plan for Boundary Delineation System (BDS) Tools, database, regional data, and public national data. BOEM should continue to work the GSD and upload data to its enterprise system known as GeoSEAS. As the datasets are loaded to GeoSEAS BOEM should clean up the BOEM.gov mapping webpages and remove outdated spatial formats to avoid confusion with data users.

III. Goal: 2805(b)(3)(A), (b)(3)(B)(iv) – Assess Metadata and Data Standards

To maximize the utility of the theme, the GDA requires lead covered agencies to identify needs related to the following three items: data standards for geospatial data within the NGDA data theme, metadata standards for geospatial data within the NGDA data theme, and access to NGDA data and metadata through the GeoPlatform.

III.A. Objective: 2805(b)(3)(B)(iv) – Metadata Standards

The GDA requires lead covered agencies to identify needs related to standards, metadata for geospatial data within the NGDA data theme, and the GeoPlatform to ensure that the NGDA are Findable, Accessible, Interoperable, and Reusable (FAIR).

GDA Reference

(b) *Lead covered agencies*

(3) *Specific responsibilities*

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(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—*

(iv) *identify needs relating to standards, metadata for geospatial data within the National Geospatial Data Asset data theme, and the GeoPlatform;*

III.A.i. Action(s) to Meet Objective: 2805(b)(3)(B)(iv) – Metadata Standards

After the Office of Management and Budget issued Memorandum M-13-13 Open Data Policy (Office of Management and Budget, 2013) in May 2013, the Department of the Interior (DOI) and other Federal agencies began developing an Enterprise Data Inventory. This process provided DOI the impetus to work towards an enterprise approach to implement and manage metadata. The Metadata Implementation Guide (MIG) was developed collaboratively and by consensus with subject matter experts from all DOI bureaus and offices.

The FGDC is 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). The FGDC Executive Committee has established a Standards Task Team to evaluate the requirements, options, processes, resources, and decision structure required to establish an operational and sustainable FGDC standards process. This will include evaluating the FGDC's roles and responsibilities in geospatial standards with those of other standards making bodies, non-Federal participation, and considerations for standards supporting the National Spatial Data Infrastructure (NSDI). The Executive Committee Standards Task Team is currently developing recommendations to update the FGDC's standards management process and will recommend a path forward for the FGDC. Refer to the FGDC Standards webpage (<https://www.fgdc.gov/standards>) for additional information.

- BOEM drafted the Offshore Marine Cadastre (OMC) data Standards and work needs to continue by identifying and documenting Metadata standards for the OMC public data and leases. The OMC Data Collection process for harvesting into EDI needs to be documented for future changes. This will ensure repeatability when maintaining the collection.

III.B. Objective: 2805(b)(3)(A)(i); (ii); (iii) – Data Standards

The GDA requires lead covered agencies to develop a plan to originate and implement needed standards consistent with relevant community and international practices in accordance with Office of Management and Budget Circular A–119, or any successor thereto.

GDA Reference

(b) Lead covered agencies

(3) Specific responsibilities

To assist in fulfilling the responsibilities under paragraph (2) with respect to a National Geospatial Data Asset data theme, the lead covered agencies shall—

(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—

(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—

NGDA Baseline Standards Inventory

In 2021, the lead covered agencies participated in an FGDC-conducted NGDA standards inventory. This inventory was the initial action to identify the standards currently in use, or that needed to be removed or replaced, in the Committee’s list of previously endorsed standards. The inventory will be used to inform the changes required in the FGDC-approved standards list once the Committee implements a process to “establish and maintain geospatial data standards” in accordance with the GDA. The standards inventory results and background information are available on the GeoPlatform NGDA Portfolio [Standards](#)¹⁰ page.

III.B.i. Action(s) to Meet Objective: 2805(b)(3)(A)(i); (ii); (iii) – Data Standards

The data standards in use for the theme are at [Standards | NGDA Cadastre Theme \(arcgis.com\)](#).¹¹

In addition, the BLM will publish a manual and a handbook covering the data requirements for both PLSS and SMA. The purpose is to provide guidance regarding how updates are performed, how often they are performed, and the procedures for rectifying any data issues that arise. The result is a more clearly defined process which will increase data currency and build collaboration with the data owners.

- BLM’s Public Land Survey System Dataset (PLSSDS) data and standards are coordinated through the FGDC Cadastral Subcommittee. BLM will continue to host cadastral subcommittee meetings and participate in coordination with other working groups including FGDC National Boundaries

¹⁰ <https://ngda-portfolio-community-geoplatfrom.hub.arcgis.com/pages/standards>

¹¹ <https://ngda-cadastre-geoplatfrom.hub.arcgis.com/pages/standards>

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://glorerecords.blm.gov/reference/nationalCad_standard_content/CADSTAND_v.1.4.pdf.

- BOEM drafted the Offshore Marine Cadastre (OMC) Standards and work needs to continue with identifying how the lease data created from the cadastre is tied to the standard. To accomplish this goal BOEM will establish a working group to discuss this topic. Once the standard is complete, it should be submitted to FGDC for consideration as a recognized official standard.
 - Enhance ISO 19115 application for BOEM.
 - Evaluate local and existing data standards tabular and spatial for offshore leasing (including taxonomy, ontology, machine readable, accessible, data exchange and use). Identify and evaluate business requirements to develop an offshore energy and minerals leasing data standard.

Appendix A: NGDA Data Themes (GDA Sec 2805) and NSDI Strategic Plan Crosswalk

The following is a crosswalk of National Geospatial Data Asset Data Themes (GDA Sec 2805) referenced within this Plan as the GDA relates to the NSDI Strategic Plan.

Goal	GDA Section	NSDI	GDA
I.	2805(b)(3)(E)	1.3, 2.1, 4.1	Goal: Administration of the Theme
I.A.	2805(b)(3)(E)(i)		Objective: Point of Contact
I.B.	2805(b)(3)(E)(ii)(I)	2.1, 4.1	Objective: Annual Reporting
I.C.	2805(b)(3)(E)(ii)(II)	2.1, 4.1	Objective: Annual Report Comments
II.	2805(b)(3)(B)	2.1-2.4, 3.1-3.4	Goal: Provide leadership and facilitate the development and implementation of a plan for nationwide population of the National Geospatial Data Asset data theme
II.A.	2805(b)(3)(B)(i)	4.1-4.5	Objective: Partnerships
II.B.	2805(b)(3)(B)(ii), 2805(b)(3)(D)	2.4 3.1, 3.3, 4.1, 4.2	Objective: User Needs
II.C.	2805(b)(3)(B)(iii)	4.4	Objective: Human and Financial Resources
II.D.	2805(b)(3)(E)(iii)	2.4, 3.1-3.4	Objective: – Publish Maps or Comparable Graphics Online
II.E.	2805(b)(3)(E)(iv)	2.4, 3.1-3.4	Objective: Provide Access to NGDA Through the GeoPlatform
II.F.	2805(b)(3)(E)(v)	3.1	Objective: Coordinate with the GeoPlatform
II.G.	2805(b)(3)(E)(vi)	2.4	Objective: Publish Proven Geospatial Practices
III.	2805(b)(3)(A), (b)(3)(B)(iv)	3.4, 4.5	Goal: Data and Metadata Standards
III.A.	2805(b)(3)(B)(iv)	3.4, 4.5	Objective: Metadata Standards
III.B.	2805(b)(3)(A)(i)-(iii)	3.4, 4.5	Objective: Plan for Standards