



OFFICE OF  
**INSPECTOR GENERAL**  
U.S. DEPARTMENT OF THE INTERIOR



**Audit**

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U.S. DEPARTMENT OF THE INTERIOR

SEP 17 2026

Memorandum

To: Eric Sidle  
Chief Information Officer

From: Nicki Miller *Nicki Miller*  
Assistant Inspector General for Audits, Inspections, and Evaluations

Subject: Final Audit Report – *The U.S. Department of the Interior Continues to Make Progress in Its Management of Geospatial Data; However, Improvements Are Still Needed*  
Report No. 2025-CTD-036

This memorandum transmits our audit report on the U.S. Department of the Interior's progress in implementing the objectives of the Geospatial Data Act of 2018.

We will track open recommendations for resolution and implementation. We will notify Congress of our findings, and we will report semiannually, as required by law, on actions you have taken to implement the recommendations and on recommendations that have not been implemented. We will also post a public version of this report on our website.

If you have any questions about this report, please contact me at [aie\\_reports@doioig.gov](mailto:aie_reports@doioig.gov).

**Audit**

# The U.S. Department of the Interior Continues to Make Progress in Its Management of Geospatial Data; However, Improvements Are Still Needed

**Objective**

To review the status of the U.S. Department of the Interior's (DOI's) compliance with geospatial data management in accordance with the Geospatial Data Act of 2018 requirements for a biennial audit.

**Recommendations**

We make three recommendations that, if implemented, will help DOI improve its compliance with the Geospatial Data Act. All three recommendations are resolved.

**Risk Areas**

Data Availability & Quality



Cybersecurity



Land Management



Tribal Nations & Insular Communities



Environmental Impact



Land Management

**Findings**

We found that DOI is making continued improvement toward complying with the 13 agency responsibilities outlined in the Geospatial Data Act. However, we found that deficiencies affecting 2 of the 13 responsibilities in the following areas still exist:

- Allocating resources necessary to fulfill DOI's responsibilities and to support Federal Geographic Data Committee activities.
- Using geospatial data standards, including those for metadata, and other related standards, as well as documenting geospatial data with the relevant metadata and making metadata available through GeoPlatform, the online geospatial data portal.

**Impact**

DOI's incomplete tracking of geospatial data expenditures undermines its ability to determine whether resources are being allocated efficiently. Missing metadata fields for National Geospatial Data Assets hinders data discoverability and accessibility.

As a result, critical geospatial information may be unavailable or difficult to locate during emergencies, potentially impacting mission outcomes and compliance with the Geospatial Data Act. Persistent deficiencies also limit oversight and the effectiveness of data management practices across DOI bureaus.

**Other Matters**

In the course of our audit, we identified potential areas of concern related to Data.gov, the U.S. Government's official, centralized online portal for publicly available Federal data, and referred those issues to the General Services Administration Office of Inspector General.

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# Introduction

## Objective

The objective of our audit was to review the status of the U.S. Department of the Interior's (DOI's) compliance with geospatial data management in accordance with the Geospatial Data Act of 2018 (GDA) requirements for a biennial audit.<sup>1</sup> Specifically, § 2808(c) of the Act mandates that, not less than once every two years, the Office of Inspector General submit to Congress an audit of its agency's "collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data."

To execute this requirement, we reviewed whether DOI fulfilled its 13 responsibilities as a covered agency.<sup>2</sup>

See Appendix 1 for our audit scope and methodology, Appendix 2 for a list of abbreviations, and Appendix 3 for a glossary of terms used in this report.

## Background

### Federal Government's Role and Use of Geospatial Data

The GDA became law on October 5, 2018. It codifies the Federal Geographic Data Committee (FGDC) committees, processes, and tools used to develop, drive, and manage the National Spatial Data Infrastructure (NSDI) and recognizes entities beyond the Federal Government responsible for its development. The GDA reflects the growing recognition of the important role that technology contributes to understanding and managing geospatial data. Geospatial data are information tied to a location on Earth and include the geographic location and characteristics of natural or constructed features and boundaries on the Earth. These data are generally represented in vector datasets by points, lines, polygons, or other complex geographic features or phenomena. Further, a geospatial dataset is a structured collection of data generally associated with a unique body of work.

Multiple Federal agencies provide services at the same geographic locations and may independently collect similar geospatial data about those locations, raising the question of how well the Federal Government coordinates its investments in geospatial data. Accordingly, in 1994, the President issued Executive Order No. 12906 to address concerns regarding wasteful duplication and incompatibility of geospatial data and to develop the NSDI.<sup>3</sup>

The NSDI includes the technology, policies, criteria, standards, and employees necessary to promote geospatial data sharing throughout the Federal, State, Tribal, and local governments and the private sector. The NSDI provides a structure to facilitate the efficient collection, sharing, and dissemination of geospatial data among all levels of government, the private sector, and the public. The NSDI consists of National Geospatial Data Asset (NGDA) themes, standards, metadata, a clearinghouse (referred to as GeoPlatform or GeoPlatform.gov), and partnerships. On August 19, 2002, the Office of Management and Budget (OMB) revised OMB Circular No. A-16, *Coordination of Geographic Information and Related Spatial Data Activities*, to further describe the components of the NSDI and agency responsibilities for acquiring, maintaining, distributing, and preserving geospatial data.

<sup>1</sup> 43 U.S.C. §§ 2801-2811.

<sup>2</sup> 43 U.S.C. § 2808(c)(2) requires review of compliance with the items listed in § 2808(a)(1-13). 43 U.S.C. §§ 2808(c)(1) and (3) require review of compliance with standards developed under § 2806 and limitations on the use of Federal funds under § 2809. However, as discussed in Appendix 1, the Council of the Inspectors General on Integrity and Efficiency issued guidance that limited the scope of Geospatial Act audits because the Federal Geographic Data Committee has not issued final GDA standards. This results in an inability to assess compliance with 43 U.S.C. §§ 2806 and 2809.

<sup>3</sup> Executive Order No. 12906, *Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure*, issued April 11, 1994.

In 2010, OMB provided supplemental guidance that further defined and clarified Circular A-16; focused on managing geospatial data as a capital asset; and established the concept of NGDAs, which are significant geospatial datasets designated by the FGDC Steering Committee. The guidance states that while there are many Federal geospatial datasets that are useful to Federal agencies, their business partners, stakeholders, and the public to varying degrees, only a select subset of these will rise to the significance required for NGDA dataset designation. The process of designating geospatial datasets as NGDAs starts with a recommendation by the relevant NGDA theme lead and progresses when the FGDC Coordination Group concurs. Finally, the FGDC Steering Committee designates geospatial datasets as NGDAs if they meet at least one of the following criteria: the dataset (1) is used by multiple agencies or agency partners such as State, Tribal, and local governments; (2) supports presidential priorities as expressed by OMB; (3) supports the mission of multiple Federal agencies; or (4) is statutorily mandated.

DOI has a unique role, both as a leader and contributor, in the Federal collection, maintenance, and management of geospatial data. DOI was designated as a leader in Federal geospatial data management when, in 1990, OMB Circular No. A-16 established DOI as chair of the FGDC, the interagency committee created to promote the coordinated development, use, sharing, and dissemination of related geospatial data. The FGDC has 32 members, who are representatives from the Executive Office of the President and Cabinet-level and independent Federal agencies. The FGDC's responsibilities include:

- Leading the development and management of, and operational decision making for, the NSDI strategic plan and Federal geospatial data policy.
- Establishing cross-government policies and guidelines on how FGDC agencies collaboratively implement Federal geospatial policies.
- Engaging with coordinating bodies responsible for implementing Federal data laws and policies.
- Engaging in ongoing strategic planning to ensure continued investment of resources in high-value programs, activities, and technologies for the advancement of the NSDI.

The five components of the NSDI are:

- NGDA themes: Topics of national significance as listed in OMB Circular No. A-16. Each data theme has a designated lead agency or agencies and consists of one or more NGDAs.
- Standards: Common and repeatable rules or guidelines for the development, documentation, and exchange of NGDAs and other geospatial datasets.
- Metadata: Information about datasets, such as content, source, accuracy, method of collection, and point of contact. Metadata are used to facilitate the search of and access to datasets within a data library or clearinghouse and enable potential users to determine the data's applicability for their use.
- GeoPlatform: The searchable catalog of Federal and non-Federal geospatial data providing access to NGDAs and other geospatial datasets. It is an authoritative source for NGDAs. Executive Order No. 12906 and OMB Circular No. A-16 require Federal agencies to identify their existing and planned geospatial investments and to search the GeoPlatform to see if the data exists before expending funds on new geospatial data.
- Partnerships: All stakeholders (e.g., Federal, Tribal, State, and local governments, as well as academic institutions) should be involved in developing the NSDI.

In addition, both OMB Circular No. A-16 and the GDA designate the Secretary of the Interior as the chairperson of the FGDC, who in 2023 delegated the role to DOI's Principal Deputy Assistant Secretary for Water and Science. The GDA also requires that the FGDC operate GeoPlatform; the FGDC chair designated DOI as the managing partner for GeoPlatform. Additionally, the U.S. Geological Survey (USGS) houses the

FGDC Office of the Secretariat, which provides administrative, strategic planning, funding, and technical support to the FGDC.

DOI is also a contributor of Federal geospatial data, as the GDA designates it as a “covered agency,” which is an executive department that collects, produces, acquires, maintains, distributes, uses, or preserves geospatial data on paper or in electronic form to fulfill its mission, either directly or through a relationship with another organization. DOI is responsible for 42 NGDAs and 9 NGDA themes (see Appendix 4). Geospatial data supports critical missions across DOI, including:

- Managing and protecting lands and natural resources.
- Overseeing wildland fire and post-fire Burned Area Emergency Response.
- Monitoring hurricane recovery and land changes.
- Conducting computational modeling of topography-influenced volcano hazards, such as lahars (volcanic mudflows) that can travel downstream and affect nearby populated areas.
- Completing emergency management planning for dam-break scenarios.
- Providing habitat information in support of the Endangered Species Act.
- Locating and recording historic properties, such as archeological sites and historic structures.
- Generating maps for studies and special projects, such as reservoir operations pilot projects, feasibility studies, and planning studies.

## **Prior Review of Compliance With the Geospatial Data Act**

In September 2024, we issued our third report on DOI’s progress implementing the GDA’s objectives.<sup>4</sup> We found that DOI had made progress toward meeting 9 of the 13 GDA requirements we evaluated. However, we found the process of populating DOI’s NGDA left some datasets with no metadata or inaccurate metadata. We also found that bureaus were not ensuring datasets were properly harvested and accurate on Data.gov and GeoPlatform. Lastly, DOI’s bureaus did not accurately track or report their spending on geospatial data due to longstanding challenges in collecting, categorizing, and reporting related expenditure information.

All recommendations made in prior audit periods have been formally closed with corrective actions considered fully implemented. While new findings identified during the current audit period may reflect control deficiencies similar in nature to previously reported issues, each have been assessed independently, and new recommendations have been issued to address the current conditions identified.

<sup>4</sup> *The U.S. Department of the Interior Is Making Progress in Its Management of Geospatial Data but Improvements Are Needed* (Report No. 2024-ER-003), issued September 17, 2024. Available at <https://www.doi.gov/reports/audit/us-department-interior-making-progress-its-management-geospatial-data-improvements>.

# Results of Audit

We found that DOI continued to make progress toward complying with the 13 agency responsibilities outlined in the GDA. However, we found continued deficiencies affecting 2 of the 13 responsibilities. Specifically:

- Allocating resources necessary to fulfill DOI's responsibilities and to support FGDC activities.
- Using geospatial data standards, including those for metadata, and other related standards, as well as documenting geospatial data with the relevant metadata and making metadata available through GeoPlatform, the online geospatial data portal.<sup>5</sup>

DOI's progress to date has been hindered by several factors, including:

- A lack of knowledge by DOI bureaus regarding how much they spent on geospatial data.
- DOI's NGDAs omission of important data fields.

Additionally, we noted an area of concern related to data variability in the Application Programming Interface (API) used to extract geospatial data. We discuss this issue in the "Other Matters of Interest" section of this report.

## DOI Bureaus Lacked Awareness of Their Geospatial Data Expenditures

The GDA requires DOI to allocate resources to fulfill the responsibilities of effective geospatial data collection, production, and stewardship related to DOI activities and as necessary to support FGDC activities.<sup>6</sup>

Without expenditure data on the collection, production, and stewardship of geospatial data, DOI cannot be assured that resources are allocated in a way that most effectively meets the responsibilities established by the GDA. We found that five of the six bureaus we reviewed—Bureau of Ocean Energy Management, Bureau of Safety and Environmental Enforcement, U.S. Fish and Wildlife Service, National Park Service, and the USGS—were unable to report how much they have spent on geospatial data. Specifically, all five bureaus were unable to provide us with an estimate of their total expenditures related to geospatial data collection, production, and stewardship.

Based on bureau representative responses to questions in our internal control questionnaire, we determined that DOI's bureaus do not know how much is spent on geospatial data because they do not collect, track, or report on resources expended for geospatial data functions. Bureaus reported that the capture, management, and use of geospatial data are often done by multiple people as part of regular mission duties or other duties as assigned in various program offices.

The bureaus were unable to provide the information necessary for us to review DOI's compliance with the requirement to allocate resources to fulfill geospatial data responsibilities. Consequently, we were unable to compare DOI's allocation of resources to geospatial data responsibilities over time. Therefore, incomplete and unreliable information on the cost of investments made in geospatial data may lead to misallocation of resources, which may in turn adversely affect mission outcomes.

This issue is related to a prior year finding. In our 2024 report, we recommended that DOI develop and implement a methodology for its bureaus to consistently identify all geospatial-related costs and to track and report these costs annually to the Office of the Chief Information Officer. Although this recommendation was

<sup>5</sup> <https://www.geoplatform.gov/>.

<sup>6</sup> 43 U.S.C. § 2808(a)(5).

implemented, our current audit determined that the bureaus failed to consistently adhere to the established methodology. As a result, we are issuing further recommendations to remedy these ongoing deficiencies. This lack of compliance may hinder DOI’s ability to accurately track and report geospatial-related costs, potentially affecting resource allocation decisions. Therefore, it is essential that clear guidance and oversight mechanisms be implemented to ensure bureaus follow the prescribed methodology in future reporting cycles.

**Recommendations**

We recommend that DOI:

1. Establish procedures for the bureaus to identify all DOI geospatial-related costs to ensure consistency and establish related accountability mechanisms to ensure compliance.
2. Establish procedures and accountability mechanisms to ensure the bureaus track all geospatial-related costs and report these costs to the Office of the Chief Information Officer annually.

## DOI’s National Geospatial Data Assets Did Not Include Important Metadata Fields

The GDA mandates that DOI adhere to geospatial data standards, including those related to metadata, and other applicable standards. It further requires DOI to clearly document geospatial data with the appropriate metadata and ensure this metadata is accessible via GeoPlatform.

As of April 2026, the FGDC has yet to publish or formally endorse any geospatial data standards; however, it has established best practices for creating geospatial metadata and outlined metadata content recommendations in its publication, *FGDC Technical Guidance: Data.gov and The GeoPlatform Metadata Recommendations, Including Guidelines for National Geospatial Data Assets (NGDA)*. This guidance supports implementation of the GDA and assists metadata publishers with developing comprehensive metadata to enhance resource discovery within Data.gov and GeoPlatform, as well as maximizing data utility. Notably, the technical guidance includes a checklist to facilitate the integration of datasets into these platforms, summarizing recommended NGDA metadata content for fields such as dataset titles, key dates (citation and metadata), points of contact, URLs, and keywords (see Figure 1).

**Figure 1: Descriptions of Metadata Data Fields From FGDC’s Technical Guidance**

| Field        | Description                                                                                                                                                                                                                                                                                         |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title        | A good title is descriptive and distinctive. It provides users a good sense of the resource content and context and enables them to distinguish among similar resources.                                                                                                                            |
| Dates        | Dates enable machines to improve search results and users to determine the relevancy and “fitness for use” of the resource. There are numerous options within the metadata record to record different date values.                                                                                  |
| Keywords     | Keywords identify resources of highest interest to users. Users and machines are best able to discern, differentiate, and distinguish the resources when presented with a rich set of accurate keywords. Additionally, NGDA keywords facilitate the identification of the data as an NGDA resource. |
| Contact Info | Point of contact information directs users to a single point of inquiry regarding the dataset.                                                                                                                                                                                                      |
| Links        | Direct links (or URLs) to datasets provide users access to available resources and associated information.                                                                                                                                                                                          |

Source: FGDC Technical Guidance.

DOI's NGDA data fields annotated on GeoPlatform were frequently inconsistent with the FGDC guidance. Specifically, we found that approximately 35 percent of NGDAs lacked critical data elements that improve discoverability and accessibility for users (see Appendix 5 for more information on our analysis of DOI metadata fields). For instance, several NGDAs lacked keywords essential to NGDA identification, such as "National Geospatial Data Asset" and the NGDA ID.

This inconsistency occurred because the FGDC has not published or endorsed new geospatial data standards since the GDA was enacted in 2018. Furthermore, the most recent revision of the technical guidance from December 2022 clarified that FGDC technical guidance serves as a compilation of best practices rather than enforceable policy for agencies or audit functions. The FGDC reported having a previously active review and approval process for geospatial data standards but paused policy endorsements in 2018 to assess legislative requirements and facilitate collaboration with Federal and non-Federal stakeholders. While many preexisting FGDC-approved standards still offer value and enhance interoperability, no new standards have been established post-enactment.

Federal geospatial data and services must remain readily accessible to all stakeholders. Comprehensive documentation of geospatial data resources is recognized as a best practice in data management and stewardship, aligning with the widely used principles of FAIR—Findable, Accessible, Interoperable, and Reusable. Per FGDC, adherence to these principles enables users to progress efficiently from raw data discovery to analysis-ready datasets and actionable information in a reproducible and trustworthy manner. Until DOI ensures all metadata conforms to existing guidance, users may experience challenges in uniquely identifying NGDAs and retrieving pertinent search results across geospatial themes, topics, features, and locations, particularly during emergencies when timely data access is critical to safeguarding lives, preserving the environment, and using resources effectively.

This issue is also related to a prior year finding. In our 2024 report, we recommended that DOI identify relevant best practices and develop requirements for specific data fields for NGDAs in the absence of formal FGDC standards. Although this recommendation was implemented, our current audit determined that persistent challenges continue to affect the effectiveness and reliability of NGDA data management. As a result, we are issuing a new recommendation to address the issues identified during this audit. These actions are necessary to ensure that all critical data elements are consistently incorporated, thereby enhancing discoverability and accessibility for users and supporting compliance with best practices in geospatial data stewardship.

## Recommendation

We recommend that DOI:

3. In the absence of Federal Geographic Data Committee standards, establish procedures and accountability mechanisms to ensure compliance with relevant best practices and develop requirements for specific data fields for National Geospatial Data Assets in alignment with best practices.

## Other Matters of Interest

During our audit, we identified issues of concern with Data.gov, the U.S. Government's official, centralized online portal for Federal geospatial data that is managed by the General Services Administration's (GSA's) Technology Transformation Services. DOI's bureaus are responsible for ensuring NGDAs are available on DOI's data inventory website, which flows automatically to Data.gov on a weekly basis, and then finally to GeoPlatform each day. To support using geospatial data hosted on Data.gov, the Federal Government authorizes using an API, which is a software tool that uses a set of rules or protocols to enable software applications to communicate, exchange data, and share functionality. GSA provides [api.data.gov](https://api.data.gov) as a free API management service for Federal agencies to make it easier for agencies to release and manage their APIs.

During our audit fieldwork, we found that, between December 2025 and March 2026, GSA's catalog.data.gov API endpoint failed when obtaining geospatial dataset metadata. During our data analysis, we received persistent 504 Gateway Timeout Server Errors, which indicate backend server connectivity or performance failures. During discussions with GSA employees, they stated that their log analysis confirmed the presence of these errors.

In addition to the API failures, we identified another issue affecting geospatial data. Specifically, we downloaded geospatial data through the Data.gov API endpoint and identified inconsistencies across multiple data downloads, which raised questions regarding data accuracy and variability.

After the conclusion of our fieldwork in April 2026, we were informed that Data.gov implemented an update to its API. We did not assess the effectiveness of these updates.

We referred these issues to the GSA Office of Inspector General.

## Prior Year Improvements

This audit demonstrates material progress by DOI in addressing the previously identified issue of NGDA availability on GeoPlatform.<sup>7</sup> As of this year's audit, DOI has resolved the concern, ensuring that 42 out of 42 NGDAs are now accessible through GeoPlatform. This marks a substantial improvement from earlier findings where more than half of DOI's NGDAs were unavailable on the platform. DOI's efforts have eliminated this as an audit finding for fiscal year 2026, thereby furthering its obligation to expanding public access to geospatial resources and supporting the coordinated use and dissemination of geospatial data Nationwide.

DOI's resolution of this issue not only aligns with the requirements of the GDA but also supports its role in managing and sharing critical geospatial datasets with Federal and non-Federal stakeholders. With nearly all NGDAs consistently available, stakeholders can rely on GeoPlatform for accurate and timely geospatial information enhancing decision making and resource allocation across DOI's diverse missions.

<sup>7</sup> *The U.S. Department of the Interior Is Making Progress in Its Management of Geospatial Data but Improvements Are Needed* (Report No. 2024-ER-003), issued September 17, 2024. Finding Titled: "DOI's National Geospatial Data Assets Were Not Consistently Available on GeoPlatform." Available at <https://www.doioig.gov/reports/audit/us-department-interior-making-progress-its-management-geospatial-data-improvements>.

# Conclusion and Recommendations

## Conclusion

We found that DOI continued to make progress toward complying with the 13 agency responsibilities outlined in the GDA (see Appendix 6). However, we found continued deficiencies impacting 2 of the 13 responsibilities. As a result, DOI's incomplete tracking of geospatial data expenditures and missing metadata fields for NGDAs undermines its ability to allocate resources efficiently and hinders data discoverability and accessibility. Critical geospatial information may be unavailable or difficult to locate during emergencies, potentially impacting mission outcomes and compliance with the GDA. Persistent deficiencies also limit oversight and the effectiveness of data management practices across DOI bureaus.

The deficiencies we found occurred because DOI did not collect, track, or report geospatial data expenditures, making it difficult to assess resource allocation, leading to unreliable data and possible misallocation. Also, its NGDAs lacked consistent inclusion of important metadata fields due to the absence of formally published or endorsed geospatial data standards by the FGDC since 2018. While FGDC issued best practices and technical guidance, these were not enforceable, resulting in inconsistent metadata documentation and reduced data discoverability and accessibility. Both challenges are ongoing and highlight the need for DOI to adopt proper methodologies for tracking geospatial data costs and to ensure comprehensive metadata for NGDAs using available best practices in the absence of formal standards.

While our review involved a sample of 42 NGDAs, our findings highlight issues that may be applicable across all DOI geospatial data.

We make three recommendations that, if implemented, will help DOI comply with the GDA.

## Recommendations Summary

We provided a draft of this report to DOI's Office of the Chief Information Officer for review. DOI concurred with all three recommendations. We consider all recommendations resolved. Below we summarize DOI's response to our recommendations, as well as our comments on its response. See Appendix 7 for the full text of DOI's response.

We recommend that DOI:

1. Establish procedures for the bureaus to identify all DOI geospatial-related costs to ensure consistency and establish related accountability mechanisms to ensure compliance.

**DOI Response:** DOI concurred with the recommendation and stated that the Office of the Chief Information Officer "will establish procedures for all bureaus to consistently identify geospatial-related costs through the current IT investment reporting process and implement accountability mechanisms to ensure compliance." The Office of the Chief Information Officer provided May 1, 2027, as a target implementation date.

**Status:** Resolved. We will track implementation under Recommendation No. 2025-CTD-036-01.<sup>8</sup>

**OIG Comment:** The recommendation will be implemented when DOI provides documentation demonstrating it has established procedures for all bureaus to consistently identify geospatial-related costs through the current IT investment reporting process and implement accountability mechanisms to ensure compliance.

<sup>8</sup> The numbering convention we use to track recommendations is the report number followed by sequential recommendation digits.

2. Establish procedures and accountability mechanisms to ensure the bureaus track all geospatial-related costs and report these costs to the Office of the Chief Information Officer annually.

**DOI Response:** DOI concurred with the recommendation and stated that the Office of the Chief Information Officer “will work with the DOI [Geospatial Advisory Council] to establish procedures and accountability mechanisms to ensure all bureaus track geospatial-related costs and report them annually to” the Office of the Chief Information Officer. The Office of the Chief Information Officer provided June 1, 2027, as a target implementation date.

**Status:** Resolved. We will track implementation under Recommendation No. 2025-CTD-036-02.

**OIG Comment:** The recommendation will be implemented when DOI provides documentation demonstrating it has established procedures and accountability mechanisms to ensure bureaus track all geospatial-related costs and report them annually to the Office of the Chief Information Officer.

3. In the absence of Federal Geographic Data Committee standards, establish procedures and accountability mechanisms to ensure compliance with relevant best practices and develop requirements for specific data fields for National Geospatial Data Assets in alignment with best practices.

**DOI Response:** DOI concurred with the recommendation and stated that the Office of the Chief Information Officer “will establish and enhance current procedures and accountability mechanisms to ensure compliance with relevant best practices for data catalog metadata (DCAT-US 1.1, 3.0) and develop requirements for specific metadata data fields for National Geospatial Data Assets in data.gov and geoplatform.gov.” The Office of the Chief Information Officer provided July 14, 2027, as a target implementation date.

**Status:** Resolved. We will track implementation under Recommendation No. 2025-CTD-036-03.

**OIG Comment:** The recommendation will be implemented when DOI provides documentation demonstrating it has established procedures and accountability mechanisms to ensure compliance with relevant best practices and developed requirements for specific data fields for NGDA in alignment with best practices.

# Appendix 1: Scope and Methodology

## Scope

We audited the status of DOI's compliance with the management of geospatial data as defined by the GDA, specifically focusing on DOI's actions between January 2024 and January 2026 to meet the GDA's requirements. Our audit focused on DOI's progress toward compliance with the 13 responsibilities listed in 43 U.S.C. § 2808(a) of the GDA because of the limitations identified below.

## Scope Limitation

Finalized GDA standards set by FGDC have not been issued. This may lead to the inability to assess compliance with 43 U.S.C. §§ 2806 and 2809.

## Methodology

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To audit DOI's geospatial data management, we:

- Interviewed DOI's Acting Chief Data Officer and reviewed documentation related to DOI's oversight of geospatial data.
- Reviewed relevant criteria, such as the GDA, OMB Circular A-16, and Executive Order No. 12951.
- Reviewed FGDC guidance published at [fgdc.gov](https://fgdc.gov).
- Reviewed DOI and bureau policies and memoranda related to the management and oversight of geospatial data.
- Searched geospatial data on GeoPlatform and Data.gov.
- Inspected evidence of geospatial data collaboration activities, such as memorandums of understanding.
- Examined privacy impact assessments.
- Reviewed documentation citing examples of DOI's use of geospatial data.
- Inspected agency and bureau budget data and resource allocations related to geospatial data collection, production, and stewardship.
- Determined how geospatial data are included on National Archives and Records Administration-approved record schedules.

We assessed whether internal control was significant to the audit objectives. We determined that DOI's control activities, information, communications, and monitoring and the following principles were significant to the audit objectives:

- The oversight body and management should demonstrate a commitment to integrity and ethical values.

- The oversight body should oversee the entity's internal control system.
- Management should establish an organizational structure, assign responsibility, and delegate authority to achieve the entity's objectives.
- Management should demonstrate a commitment to recruit, develop, and retain competent individuals.
- Management should evaluate performance and hold individuals accountable for their internal control responsibilities.
- Management should define objectives clearly to enable the identification of risks and define risk tolerances.
- Management should identify, analyze, and respond to risks related to achieving the defined objectives.
- Management should consider the potential for fraud when identifying, analyzing, and responding to risks.
- Management should identify, analyze, and respond to significant changes that could impact the internal control system.
- Management should design control activities to achieve objectives and respond to risks.
- Management should design the entity's information system and related control activities to achieve objectives and respond to risks.
- Management should implement control activities through policies.
- Management should use quality information to achieve the entity's objectives.
- Management should internally communicate the necessary quality information to achieve the entity's objectives.
- Management should externally communicate the necessary quality information to achieve the entity's objectives.
- Management should establish and operate monitoring activities to monitor the internal control system and evaluate the results.
- Management should remediate identified internal control deficiencies on a timely basis.

To determine DOI's compliance, we reviewed six DOI bureaus, which all have responsibilities for geospatial data:

- Bureau of Land Management
- Bureau of Ocean Energy Management
- Bureau of Safety and Environmental Enforcement
- U.S. Fish and Wildlife Service
- National Park Service
- USGS

During our audit, we obtained information from Geoplatform.gov, Data.gov, and DOI's data inventory website. We conducted limited data reliability testing related to dataset availability and reliability. Specifically, we gained an understanding of the three websites, tested the existence of the datasets listed on GeoPlatform, and compared the information on Geoplatform.gov to Data.gov and DOI's data inventory website. We determined that the data available on Data.gov were unreliable as noted in the "Other Matters of Interest" section of this report. We determined that the data available on Geoplatform.gov and DOI's data inventory website were sufficiently reliable for the purposes of this audit. Due to the unreliable data on Data.gov, we exclusively used Geoplatform.gov and DOI's data inventory website data as a basis for our findings and conclusions.

Based on the results of our initial assessments, we assigned a level of risk and selected a judgmental sample for testing. We used auditor judgment and considered risk levels relative to other audit work performed to determine the degree of testing performed in each area. Our sample selections were not generated using statistical sampling; therefore, we did not project the results of our tests to the total population of transactions.

## **Prior Reports**

We identified three prior audit reports we issued between 2020 and 2024 that related to DOI's GDA program. These reports contained 17 recommendations that covered 4 out of 13 agency responsibilities. All 17 of these recommendations have been closed and implemented.

## Appendix 2: Abbreviations

| Abbreviation | Definition                                        |
|--------------|---------------------------------------------------|
| DOI          | U.S. Department of the Interior                   |
| FGDC         | Federal Geographic Data Committee                 |
| NGDA         | National Geospatial Data Asset                    |
| GDA          | Geospatial Data Act                               |
| NSDI         | National Spatial Data Infrastructure              |
| OMB          | Office of Management and Budget                   |
| GSA          | General Services Administration                   |
| USGS         | U.S. Geological Survey                            |
| API          | Application Programming Interface                 |
| FAIR         | Findable, Accessible, Interoperable, and Reusable |

# Appendix 3: Glossary of Terms

We developed this glossary of terms and definitions using information from the GDA, OMB Circular No. A-16, and the FGDC.

**NGDA themes:** Topics of national significance as listed in OMB Circular No. A-16. Each data theme has a designated lead agency or agencies and consists of one or more NGDAs. (Source: OMB Circular No. A-16.)

**Standards:** Common and repeatable rules or guidelines for the development, documentation, and exchange of NGDAs and other geospatial datasets. (Source: OMB Circular No. A-16.)

**Metadata:** Information about datasets, such as content, source, accuracy, method of collection, and point of contact. Metadata are used to facilitate the search of and access to datasets within a data library or clearinghouse and enable potential users to determine the data's applicability for their use. (Source: OMB Circular No. A-16.)

**GeoPlatform:** The searchable catalog of Federal and non-Federal geospatial data providing access to NGDAs and other geospatial datasets. It is an authoritative source for NGDAs. Executive Order No. 12906 and OMB Circular No. A-16 require Federal agencies to identify their existing and planned geospatial investments and to search GeoPlatform to see if the data exists before expending funds on new geospatial data. (Source: Executive Order No. 12906, OMB Circular No. A-16, Geospatial Data Act of 2018, and the GeoPlatform Home Page.)

**Partnerships:** All stakeholders (e.g., Federal, Tribal, State, and local governments, as well as academic institutions) should be involved in developing the NSDI. (Source: OMB Circular No. A-16.)

# Appendix 4: Description of DOI's NGDA Themes

Below is a list and description of the nine NGDA themes for which DOI and its bureaus are responsible as leaders in the management of geospatial data. Theme leads provide interdepartmental leadership and coordination at the NGDA theme level. Each lead coordinates and oversees the strategic planning and implementation of the NGDA theme and manages the GDA annual report process.

| NGDA Theme                  | NGDA Theme Description                                                                                                                                                                                                                                                                          | DOI Theme Lead(s)                              |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Biodiversity and Ecosystems | Pertains to or describes the dynamic processes, interactions, distributions, and relationships between and among organisms and their environments.                                                                                                                                              | USGS                                           |
| Cadastre                    | Past, current, and future rights and interests in real property, including the spatial information necessary to describe geographic extents.                                                                                                                                                    | Bureau of Land Management                      |
| Cultural Resources          | Features and characteristics of a collection of places of significance in history, architecture, engineering, or society (includes national monuments and icons).                                                                                                                               | National Park Service                          |
| Elevation                   | The measured vertical position of the Earth's surface, other landscape, or underwater depth of ocean floors or lake floors.                                                                                                                                                                     | USGS                                           |
| Geology                     | Geographically referenced data pertaining to the origin, history, composition, structure, features, and processes of the solid Earth, both onshore and offshore.                                                                                                                                | Bureau of Ocean Energy Management and USGS     |
| Imagery                     | Georeferenced images of the Earth's surface, which have been collected via aerial photography or satellite data.                                                                                                                                                                                | USGS                                           |
| Land Use – Land Cover       | Natural and manmade surface features that cover the land (land cover) and the primary ways in which land cover is used by humans (land use).                                                                                                                                                    | USGS                                           |
| Utilities                   | Means, aids, and use of facilities for producing, conveying, distributing, processing, or disposing of public and private commodities, including power, energy, communications, natural gas, and water (includes subthemes for energy, drinking water and water treatment, and communications). | Bureau of Safety and Environmental Enforcement |
| Water – Inland              | Interior hydrologic features and characteristics, including classification, measurements, location, and extent (includes aquifers, watersheds, wetlands, navigation, water quality, water quantity, and groundwater information).                                                               | U.S. Fish and Wildlife Service and USGS        |

# Appendix 5: Analysis of DOI Metadata Fields

Below are the results of 12 tests (related to 5 metadata data fields) we performed of DOI's NGDA metadata content. We judgmentally selected the five metadata data fields from FGDC's technical guidance checklist. (see "DOI's National Geospatial Data Assets Did Not Include Important Metadata Fields" section in this report).

| Metadata Content Field | Metadata Content Tested                          | Department Metadata Passed | Department Metadata Failed | Percent Failed |
|------------------------|--------------------------------------------------|----------------------------|----------------------------|----------------|
| Title                  | Title Listed                                     | 42                         | 0                          | 0.00%          |
| Date                   | Relevant Date                                    | 39                         | 3                          | 7.14%          |
| Keyword                | Keywords Listed                                  | 42                         | 0                          | 0.00%          |
| Keyword                | Keywords Listed "NGDA"                           | 42                         | 0                          | 0.00%          |
| Keyword                | Keywords Listed "National Geospatial Data Asset" | 42                         | 0                          | 0.00%          |
| Keyword                | Keywords Listed the NGDA ID ("NGDA###")          | 39                         | 3                          | 7.14%          |
| Keyword                | Keywords Listed the NGDA Theme                   | 42                         | 0                          | 0.00%          |
| Contact Info           | Contact Info                                     | 37                         | 5                          | 11.90%         |
| Links                  | Dataset Links and Files Available                | 27                         | 15                         | 35.71%         |
| Links                  | Metadata Insights Available                      | 42                         | 0                          | 0.00%          |
| Links                  | Metadata Original Source Available               | 42                         | 0                          | 0.00%          |
| Links                  | Metadata Data.gov Source Available               | 40                         | 2                          | 4.76%          |

# Appendix 6: DOI's Status in Meeting the Requirements of the GDA

Below is a summary of the GDA requirements and our determination of DOI's progress in meeting those requirements. Two of 15 responsibilities were excluded from the scope of our audit due to finalized GDA standards not yet issued by FGDC, leading to an inability to assess compliance with 43 U.S.C. §§ 2806 and 2809. Of the 13 remaining responsibilities, we found that DOI has continued to make progress in complying with the agency responsibilities; however, we found deficiencies impacting two of the responsibilities.

| Requirement                                                                                                                                                                                                                                                                  | DOI's Progress                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>43 U.S.C. § 2808(c)(1)</b><br>Complying with the standards for geospatial data, including information about geospatial datasets, also known as metadata, as established under § 2806.                                                                                     | We did not audit this requirement because we excluded it from the scope for fiscal year 2026.                                                                                                                                                                                                                                                                                                                                          |
| <b>§ 2808(a)(1)</b><br>Preparing, maintaining, publishing, and implementing a strategy for advancing geographic information and related geospatial data and activities appropriate to DOI's mission, in support of the strategic plan for the NSDI prepared under § 2804(c). | We determined that the DOI is in compliance with § 2808(a)(1) of the GDA. The goals outlined in DOI's Geospatial Strategic Plan support those outlined in the strategic plan for the NSDI. As such, we determined that DOI has met this requirement.                                                                                                                                                                                   |
| <b>§ 2808(a)(2)</b><br>Collecting, maintaining, disseminating, and preserving geospatial data, such that the resulting data, information, or products can be readily shared with other Federal agencies and non-Federal users.                                               | <p>We determined that the availability of the NGDA significant datasets on the GeoPlatform is a fair measure of DOI's ability to readily share geospatial data to Federal and non-Federal users.</p> <p>Since the reliability of the NGDA significant datasets on the GeoPlatform has significantly improved (41 of 42 systems now fully available on both GeoPlatform and data.gov), we determined this requirement is satisfied.</p> |
| <b>§ 2808(a)(3)</b><br>Promoting the integration of geospatial data from all sources.                                                                                                                                                                                        | We determined that DOI has taken steps to promote integrating geospatial data from all sources. In addition to DOI, each of its bureaus provided many examples as evidence of promoting integrated geospatial data from all sources and has therefore met this requirement.                                                                                                                                                            |
| <b>§ 2808(a)(4)</b><br>Ensuring that data information products and other records created in geospatial data and activities are included on agency record schedules that have been approved by the National Archives and Records Administration.                              | We determined that DOI and its bureaus generally include geospatial related records on agency record schedules approved by National Archives and Records Administration and has therefore met this requirement.                                                                                                                                                                                                                        |
| <b>§ 2808(a)(5)</b><br>Allocating resources to fulfill the responsibilities of effective geospatial data collection, production, and stewardship regarding related DOI activities, and as necessary to support the FGDC activities.                                          | <p>We were unable to determine whether DOI has properly allocated resources to effectively manage its geospatial data in support of FGDC activities because DOI's bureaus were unable to provide us with geospatial related expenditure information.</p> <p>See "DOI Bureaus Lacked Awareness of Their Geospatial Data Expenditures" section in this report.</p>                                                                       |

| Requirement                                                                                                                                                                                                                                                                                                                                                                           | DOI's Progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>§ 2808(a)(6)</b><br/>Using the geospatial data standards, including those for metadata, and other appropriate standards, as well as documenting geospatial data with the relevant metadata and making metadata available through GeoPlatform.</p>                                                                                                                               | <p>We determined that DOI has improved its use of geospatial data standards. During the 2024 GDA audit, we found that DOI's NGDA data fields annotated on GeoPlatform were inconsistent with the FGDC Technical Guidance regarding metadata content. Specifically, we previously found that approximately 61 percent of the NGDAs were missing important data fields that could improve users' ability to find and access them.</p> <p>In this audit no NGDAs are missing the "National Geospatial Data Asset" keyword, and 3 of 42, or 7 percent, were missing a NGDAID. This is a significant improvement from 2024. In addition, in 2024, 40 percent of the NGDAs were missing dataset links and files. This year, the number of missing links and files has been reduced to 35 percent.</p> <p>See "DOI's National Geospatial Data Assets Did Not Include Important Metadata Fields" section in this report.</p>                                                  |
| <p><b>§ 2808(a)(7)</b><br/>Coordinating and working with other Federal agencies; agencies of State, Tribal, and local governments; institutions of higher education; and the private sector to efficiently and cost effectively collect, integrate, maintain, disseminate, and preserve geospatial data, building on existing non-Federal geospatial data to the extent possible.</p> | <p>We determined that DOI works with a range of private and public entities and has therefore met this requirement.</p> <p>The bureaus stated that they worked with Federal agencies; agencies of State, Tribal, and local governments; institutions of higher education; and the private sector by participating in working groups; executing Federal assistance, contracts, and interagency agreements; and attending conferences.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>§ 2808 (a)(8)</b><br/>Using geospatial information to make Federal geospatial information and services more useful to the public, enhance operations, support decision making, and enhance reporting to the public and to Congress.</p>                                                                                                                                         | <p>We determined that DOI is enhancing reporting to the public and to Congress by publishing a covered agency report each year, and by releasing a geospatial strategy plan. Overall, the bureaus are making progress toward making Federal geospatial information and services more useful to the public, enhancing operations, supporting decision making and enhancing reporting to the public and to Congress. As such, we determined this requirement is satisfied.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>§ 2808(a)(9)</b><br/>Protecting personal privacy and maintaining confidentiality according to Federal policy and law.</p>                                                                                                                                                                                                                                                       | <p>We determined that collectively, DOI and its bureaus follow the GDA requirement to protect personal privacy and maintain confidentiality. Three of six bureaus reported their geospatial information systems typically do not have personally identifiable information.</p> <p>Our overall determination was made based on our review of DOI policy and guidance, DOI's reported annual self-assessment, DOI's privacy webpage, identified information system privacy impact assessments, and bureau responses to our questionnaire and supporting documents provided. Through our review of documentation provided or obtained, we also identified some processes DOI and its bureaus use to protect geospatial data (including personally identifiable information) and meet Federal law and policy, including establishment of DOI's framework or privacy program, privacy threshold analyzes, privacy impact assessments, and system security evaluations.</p> |

| Requirement                                                                                                                                                                                                            | DOI's Progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>§ 2808(a)(10)</b><br>Determining, when applicable, whether declassified data can contribute to and become a part of the NSDI.                                                                                       | We identified declassified datasets on GeoPlatform and concluded that DOI has participated in determining when declassified data can contribute to and become a part of the NSDI, thereby satisfying the requirement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>§ 2808(a)(11)</b><br>Searching all sources, including GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meet DOI needs before expending funds for geospatial data collection. | <p>We determined that collectively, DOI and its bureaus have controls or mechanisms in place to ensure searches of existing sources for geospatial are conducted or done before expending funds, thereby satisfying the requirement.</p> <p>We determined DOI and the six GDA bureaus provided complete responses because they gave an explanation for both questions and some evidence.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>§ 2808(a)(12)</b><br>Ensuring, to the maximum extent practicable, that a person receiving Federal funds for geospatial data collection provides high-quality data.                                                  | <p>We determined that DOI has taken steps to assure, to the maximum extent practicable, that a person receiving Federal funds for geospatial data collection provides high-quality data as required by the GDA. In July 2023, the Office of the Chief Information Officer, Office of Policy and Acquisition Management, and Office of Policy and Grants Management issued a joint memorandum <i>GeoPlatform.gov Verification and Geospatial Data Quality Control to Heads of Bureaus and Offices, Bureau Assistant Directors - Administration, and Bureau and Office Associate Chief Information Officers</i>. The memorandum requires bureaus and offices to establish controls to verify a search of existing geospatial data for each acquisition or financial assistance action involving geospatial data that verify compliance with DOI-AAAP-0169, <i>Special Acquisition Planning Considerations</i>, dated December 2, 2020, and the grants process in DOI-PGM-POL 2021-0005, <i>Geospatial Data</i>, as updated on March 10, 2023.</p> <p>According to bureaus officials, they have issued guidance, included standard requirements for contracts and grants, and conducted various evaluations of the data deliverables on a case-by-case basis.</p> |
| <b>§ 2808(a)(13)</b><br>Appointing a contact to coordinate with the lead covered agencies for collection, acquisition, maintenance, and dissemination of the NGDA data themes used by DOI.                             | We reviewed the Office of the Chief Information Officer's 2016 memorandum designating the chief data officer as DOI's Senior Agency Official for Geospatial Information. Pursuant to this designation, this official oversees, coordinates, and facilitates DOI's implementation of geospatial-related requirements, policies, activities, and investments. It also serves as DOI's representative on the FGDC, pursuant to OMB Circular No. A-16. As such, we determined this requirement satisfied.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>§ 2808(c)(3)</b><br>Complying with the limitation on the use of Federal funds under § 2809.                                                                                                                         | We did not audit this requirement because we excluded it from the scope for fiscal year 2026.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## Appendix 7: Response to the Draft Report

DOI's response to our draft report follows on page 21.



# United States Department of the Interior

OFFICE OF THE SECRETARY  
Washington, DC 20240

September 8, 2026

## Memorandum

To: Nicki M. Miller  
Assistant Inspector General for Audits, Inspections, and Evaluations  
U.S. Department of the Interior, Office of Inspector General

From: Eric Sidle  
Chief Information Officer  
Office of the Chief Information Officer

Sidle, Eric E - DOI  
OCIO

Digitally signed by Sidle, Eric E -  
DOI OCIO  
Date: 2026.09.08 12:01:33 -04'00'

Subject: Office of the Chief Information Officer Response to DRAFT *The U.S. Department of the Interior Continues to Make Progress in Its Management of Geospatial Data; However, Improvements Are Still Needed* (2025-CTD-036)

Thank you for the opportunity to review and comment on the draft report titled, *The U.S. Department of the Interior Continues to Make Progress in Its Management of Geospatial Data; However, Improvements Are Still Needed* (2025-CTD-036). The U.S. Department of the Interior (Department, Interior), Office of the Chief Information Officer (OCIO) appreciates the Office of Inspector General's (OIG's) work in planning this engagement, conducting the audit, and issuing the report to assess the Department's progress in implementing the objectives of the Geospatial Data Act of 2018. The information contained in the report will assist the OCIO in strengthening our geospatial data governance practices and addressing areas where improvements are still needed. This memorandum, including any attachments, responds to the draft report and will be emailed to [aie\\_reports@doioig.gov](mailto:aie_reports@doioig.gov) as requested.

If you have any questions, please contact James Rolfes, Deputy Chief Information Officer, Mission Systems, Technology, and Data at [james\\_rolfes@ios.doi.gov](mailto:james_rolfes@ios.doi.gov) or David Carter, Acting Chief Data Officer at [david\\_p\\_carter@ios.doi.gov](mailto:david_p_carter@ios.doi.gov).

### **Attachment 1:** Recommendations and Management Response

Cc: Sherrill Exum, Chief, Audit Oversight Branch, Office of Financial Management  
James Rolfes, Deputy Chief Information Officer, Mission Systems, Technology, and Data  
Rick Kryger, Deputy Chief Information Officer, Customer Service, Infrastructure, and Resource Management  
David Carter, Acting Chief Data Officer  
Nathalie Stevens, Director, Resource Management Directorate  
Amanda Rushbrook, Chief, IT Policy and Audit Coordination Division

## Attachment 1

### **Recommendations and Management Responses to *The U.S. Department of the Interior Continues to Make Progress in Its Management of Geospatial Data; However, Improvements Are Still Needed* (2025-CTD-036)**

**Recommendation 1:** We recommend that DOI establish procedures for the bureaus to identify all U.S. Department of the Interior geospatial-related costs to ensure consistency and establish related accountability mechanisms to ensure compliance.

**Management Response:** Concur. The OCIO concurs with this recommendation. The OCIO will establish procedures for all bureaus to consistently identify geospatial-related costs through the current IT investment reporting process and implement accountability mechanisms to ensure compliance. This will include working with the DOI Geospatial Advisory Council (GAC) to develop standardized guidance, provide training, and institute regular reviews to verify accurate cost identification and reporting across all bureaus.

**Responsible Official:** David Carter, Acting Chief Data Officer

**Task Managers:** Andrew Duff, Acting Geospatial Information Officer

**Target Date:** May 1, 2027

**Recommendation 2:** We recommend that the DOI establish procedures and accountability mechanisms to ensure the bureaus track all geospatial-related costs and report these costs to the Office of the Chief Information Officer annually.

**Management Response:** Concur. The OCIO concurs with this recommendation. The OCIO will work with the DOI GAC to establish procedures and accountability mechanisms to ensure all bureaus track geospatial-related costs and report them annually to the OCIO. This will include implementing tracking tools, establishing reporting protocols, and conducting periodic reviews to ensure compliance and data accuracy. The OCIO will issue a memorandum that directs the Department bureaus and offices to report geospatial spending through the IT investment reporting process.

**Responsible Official:** David Carter, Acting Chief Data Officer

**Task Managers:** Andrew Duff, Acting Geospatial Information Officer

**Target Date:** June 1, 2027

**Recommendation 3:** We recommend that the DOI, in the absence of Federal Geographic Data Committee standards, establish procedures and accountability mechanisms to ensure compliance with relevant best practices and develop requirements for specific data fields for National Geospatial Data Assets in alignment with best practices.

**Management Response:** Concur. The OCIO concurs with this recommendation. The OCIO will establish and enhance current procedures and accountability mechanisms to ensure compliance with relevant best practices for data catalog metadata (DCAT-US 1.1, 3.0) and develop requirements for specific metadata data fields for National Geospatial Data Assets in data.gov and geoplatform.gov. This will include reviewing current practices, aligning procedures with the most recent data.gov and geoplatform.gov standards and guidance, and updating documentation

shared with the bureaus and offices to reflect best practices for metadata and data field requirements.

**Responsible Official:** David Carter, Acting Chief Data Officer

**Task Manager:** Andrew Duff, Acting Geospatial Information Officer

**Target Date:** July 14, 2027



OFFICE OF  
**INSPECTOR GENERAL**  
U.S. DEPARTMENT OF THE INTERIOR

## **REPORT FRAUD, WASTE, ABUSE, AND MISMANAGEMENT**

The Office of Inspector General (OIG) provides independent oversight and promotes integrity and accountability in the programs and operations of the U.S. Department of the Interior (DOI). One way we achieve this mission is by working with the people who contact us through our hotline.

### **WHO CAN REPORT?**

Anyone with knowledge of potential fraud, waste, abuse, misconduct, or mismanagement involving DOI should contact the OIG hotline. This includes knowledge of potential misuse involving DOI grants and contracts.

### **HOW DOES IT HELP?**

Every day, DOI employees and non-employees alike contact OIG, and the information they share can lead to reviews and investigations that result in accountability and positive change for DOI, its employees, and the public.

### **WHO IS PROTECTED?**

Anyone may request confidentiality. The Privacy Act, the Inspector General Act, and other applicable laws protect complainants. Specifically, 5 U.S.C. § 407(b) states that the Inspector General shall not disclose the identity of a DOI employee who reports an allegation or provides information without the employee's consent, unless the Inspector General determines that disclosure is unavoidable during the course of the investigation. By law, Federal employees may not take or threaten to take a personnel action because of whistleblowing or the exercise of a lawful appeal, complaint, or grievance right. Non-DOI employees who report allegations may also specifically request confidentiality.

If you wish to file a complaint about potential fraud,  
waste, abuse, or mismanagement in DOI,  
please visit OIG's online hotline at **[www.doioig.gov/hotline](http://www.doioig.gov/hotline)**  
or call OIG's toll-free hotline number: **1-800-424-5081**