



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

# **The U.S. Department of the Interior Needs To Continue To Strengthen Governance Practices To Improve Its Management of Geospatial Data**

**This is a revised version of the report prepared for public release.**



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

**SEP 26 2022**

Memorandum

To: Deborah "June" Hartley  
Acting Chief Information Officer

From: Kathleen Sedney   
Assistant Inspector General for Audits, Inspections, and Evaluations

Subject: Final Audit Report – *The U.S. Department of the Interior Needs To Continue To Strengthen Governance Practices To Improve Its Management of Geospatial Data*  
Report No. 2022–CGD–026

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

We will refer Recommendations 1 through 9 to the Office of Policy, Management and Budget for implementation tracking and to report to us on their status. In addition, we will notify Congress about 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 202–208–5745.

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# Results in Brief

The U.S. Department of the Interior (DOI) uses geospatial data—data linked to specific geographic locations—to support its varied missions. For example, the DOI’s bureaus use geospatial data to make decisions and direct resources when responding to wildland fires and hurricanes, to track the habitat of endangered species, and to promote the health and welfare of tribal communities.

The DOI is a major producer of geospatial data, leading more than half of the geospatial data “themes”—specified topics of national significance—for the Federal Government and has obligated approximately \$100 million a year since 2020 to purchase geospatial data and services from third-party contractors. The DOI also operates the GeoPlatform ([Geoplatform.gov](https://geoplatform.gov))—a searchable clearinghouse of geospatial data available from Federal and non-Federal sources. We assessed whether the DOI’s management of its geospatial data programs complied with the Geospatial Data Act of 2018.

The Geospatial Data Act of 2018 was enacted on October 5, 2018, and requires that, not less than once every 2 years, the Inspector General submit to Congress a report of the DOI’s compliance with the Act (see Appendix 1).<sup>1</sup>

Our 2020 evaluation<sup>2</sup> found the DOI had made progress in meeting 11 of the 13 Geospatial Data Act requirements. We also found, however, that the DOI lacked Departmentwide controls to ensure that third-party geospatial data met quality standards and that it did not ensure that bureaus regularly searched the GeoPlatform before purchasing geospatial data from a third party. In response to our recommendations, the DOI issued policies requiring bureaus and offices to complete certain steps during the geospatial data acquisition process.

In this review, we found that the DOI has made progress in meeting 10 of the 13 Geospatial Data Act requirements we reviewed. For example, the DOI made progress in promoting the integration of geospatial data from all sources; allocating resources for geospatial data collection, production, and stewardship; and protecting personal privacy and maintaining confidentiality. However, we also found that the DOI is not ensuring the bureaus’ compliance with the policies issued to address our prior recommendations. Consequently, some bureaus are still not searching all sources for geospatial data before expending funds and are not completing quality checks of all third-party geospatial data. We also found that the DOI’s metadata harvesting—meaning the collection of information about datasets—could be improved.

We make nine recommendations to the DOI to promote compliance with the requirements of the Geospatial Data Act. In response to our draft report, the DOI concurred with all of our recommendations.

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<sup>1</sup> 43 U.S.C. § 2808.

<sup>2</sup> *The U.S. Department of the Interior Needs To Strengthen Governance Practices To Improve Its Management of Geospatial Data* (Report No. 2020-ITA-020), issued October 2, 2020.

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# Introduction

## Objective

We reviewed the status of the U.S. Department of the Interior's (DOI's) compliance with the geospatial data management as defined by the Geospatial Data Act of 2018.

Specifically, the Act mandates that not less than once every 2 years the Inspector General submit to Congress a report of the agency's collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data that reviews agency responsibilities based on 15 specific requirements:

1. Complying with the standard for geospatial data, including information about geospatial data sets, also known as metadata, as established under Section 757. (In keeping with guidance limiting the scope of our obligations, we did not assess this requirement in fiscal year (FY) 2020 or 2022. See Appendix 1 for additional details.)
2. Preparing, maintaining, publishing, and implementing a strategy for advancing geographic information and related geospatial data and activities appropriate to the mission of the DOI, in support of the strategic plan for the National Spatial Data Infrastructure (NSDI) prepared under Section 755(c).
3. 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.
4. Promoting the integration of geospatial data from all sources.
5. 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.
6. Allocating resources to fulfill the responsibilities of effective geospatial data collection, production, and stewardship regarding related activities of the DOI, and as necessary to support the activities of the Federal Geographic Data Committee (FGDC).
7. Using the geospatial data standards, including those for metadata, and other appropriate standards, including documenting geospatial data with the relevant metadata and making metadata available through the GeoPlatform.
8. 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.

9. 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.
10. Protecting personal privacy and maintaining confidentiality according to Federal policy and law.
11. Determining, when applicable, whether declassified data can contribute to and become a part of the NSDI.
12. Searching all sources, including the GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meet DOI needs before expending funds for geospatial data collection.
13. Ensuring, to the maximum extent practicable, that a person receiving Federal funds for geospatial data collection provides high-quality data.
14. Appointing a contact to coordinate with the lead covered agencies for collection, acquisition, maintenance, and dissemination of the National Geospatial Data Asset (NGDA) data themes used by the DOI.
15. Complying with the limitation on the use of Federal funds under Section 759a. (In keeping with guidance limiting the scope of our obligations, we did not assess this requirement in FY 2020 and 2022. See Appendix 1 for additional details.)

## Background

According to a 2009 congressional hearing<sup>3</sup> and a 2015 Government Accountability Office (GAO) report,<sup>4</sup> geospatial data—data linked to specific geographic locations—play a critical role in decision making and ensures the United States can quickly and effectively respond to national priorities, including disaster and national security events; lead the world in global spatial infrastructure; and provide transparency and accountability to its citizens. The Federal Government collects, maintains, and uses geospatial data to support homeland security, respond to natural disasters, and track outbreaks of pandemics such as COVID-19.

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<sup>3</sup> [Testimony](#) of Karen C. Siderelis, U.S. Department of the Interior Geospatial Information Officer and Acting Chair of the Federal Geographic Data Committee before the U.S. House of Representatives, Committee on Natural Resources, Subcommittee on Energy and Mineral Resources, “Oversight Hearing on Federal Geospatial Data Management,” July 23, 2009.

<sup>4</sup> GAO report, *Geospatial Data: Progress Needed on Identifying Expenditures, Building and Utilizing a Data Infrastructure, and Reducing Duplicative Efforts* (Report No. [GAO-15-193](#)), dated February 12, 2015.

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**Geospatial data** are information tied to a location on the Earth, including the geographic location and characteristics of natural or constructed features and boundaries on the Earth, and that is generally represented in vector datasets by points, lines, polygons, or other complex geographic features or phenomena.

A **dataset** is a structured collection of data generally associated with a unique body of work.

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Geospatial data and technology are major investments by the Federal Government. The same GAO report noted that it is estimated that more than 80 percent of the data produced by Federal agencies have a geospatial component.

In addition, 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 develop the NSDI.

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component

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The **NSDI** includes the technology, policies, criteria, standards, and employees necessary to promote geospatial data sharing throughout the Federal Government; State, tribal, and local governments; and the private sector.

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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 data themes, standards, metadata, a clearinghouse, and partnerships. The U.S. Office of Management and Budget (OMB) revised OMB Circular A-16, *Coordination of Geographic Information and Related Spatial Data Activities*, on August 19, 2002, to further describe the components of the NSDI and agency responsibilities for acquiring, maintaining, distributing, using, and preserving geospatial data. The circular describes the following five components of the NSDI:

- **Data themes:** Topics of national significance as listed in OMB Circular A-16, which at the time of issuance had identified 34 data themes and the lead agency or agencies for each theme. Each data theme consists of one or more electronic data records, known as datasets.
- **Standard:** Common and repeatable rules or guidelines for the development, documentation, and exchange of 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.

- **National Spatial Data Clearinghouse (referred to as the GeoPlatform, Geoplatform.gov):** A searchable catalog of geospatial data and related artifacts that are available from Federal and non-Federal sources. By searching the GeoPlatform, Federal agencies can determine if suitable geospatial data are available before expending funds on data. Moreover, Executive Order No. 12906 and OMB Circular A–16 require Federal agencies to identify their existing and planned geospatial investments and to search the GeoPlatform for cost-saving opportunities 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 the development of the NSDI.

In 2010, the OMB provided supplemental guidance that further defined and clarified Circular A–16 and focused on managing geospatial data as a capital asset. The guidance established the concept of NGDAs, which are the most significant data themes and datasets. The guidance sought to create a Governmentwide NGDA portfolio by encouraging agencies to adopt and implement a portfolio management approach for their geospatial data investments. According to the FGDC, as of June 21, 2022, there are 18 data themes and approximately 173 NGDA datasets that make up the Circular A–16 NGDA portfolio.

As the chair of the FGDC, the DOI plays a leading role in the Federal collection, maintenance, and management of geospatial data. The DOI's U.S. Geological Survey (USGS) houses the FGDC Office of the Secretariat, which provides administrative, strategic planning, funding, and technical support to the FGDC. This 32-member interagency committee composed of representatives from the Executive Office of the President and Cabinet-level and independent Federal agencies is responsible for coordinating geospatial data activities. In place for more than two decades, the FGDC strives to reduce duplication and increase the interoperability of federally sourced geospatial data. The FGDC has also established common standards across the Federal Government so agencies can share and use all data collected and has determined authoritative sources for a set of geospatial data themes, ensuring that agencies do not produce the same data. From 2020 through 2022, the DOI has obligated approximately \$100 million a year to purchase geospatial data from third-party contractors.

Geospatial data supports critical missions across the DOI, including:

1. Managing and protecting lands and natural resources.
2. Overseeing wildland fire and post-fire Burned Area Emergency Response.
3. Monitoring hurricane recovery and land changes.
4. Conducting computational modeling of topography-influenced volcano hazards, such as lahars (volcanic mudflows) that can travel downstream and affect nearby populated areas.

5. Completing emergency management planning for dam-break scenarios.
6. Providing habitat information in support of the Endangered Species Act.
7. Locating and recording historic properties, such as archeological sites and historic structures.
8. Generating maps for studies and special projects, such as reservoir operations pilots, feasibility studies, and planning studies.

Of the 18 total data themes, the DOI is responsible for 9 data themes, representing 50 percent of the Federal Government's NGDA portfolio (see Appendix 2). In addition, the DOI has datasets in three data themes for which it is not the designated lead agency.

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

In October 2020, we issued an evaluation<sup>5</sup> on the DOI's progress implementing the objectives of the Geospatial Data Act of 2018. We found the DOI had made progress in meeting 11 of the 13 Geospatial Data Act requirements we evaluated. We also found that the DOI did not implement Departmentwide controls to ensure that geospatial data purchased from third parties met quality standards and did not ensure that bureaus regularly searched the GeoPlatform before expending Federal funds to purchase geospatial data from a third party. We recommended that the DOI's chief data officer ensure that:

- Bureau contracts with third-party providers of geospatial data meet FGDC-endorsed data and metadata quality standards; and
- All bureaus and offices search the GeoPlatform to determine if existing Federal, State, local, or private data meets the DOI's needs before expending funds for data collection.

In response to our recommendations, the DOI issued an acquisition planning policy<sup>6</sup> in December 2020, and a geospatial data policy<sup>7</sup> in July 2021. As a result, these recommendations were closed.

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<sup>5</sup> *The U.S. Department of the Interior Needs To Strengthen Governance Practices To Improve Its Management of Geospatial Data* (Report No. 2020-ITA-020), issued October 2, 2020.

<sup>6</sup> DOI-AAAP-0169, *Special Acquisition Planning Considerations*, issued December 2, 2020.

<sup>7</sup> DOI-PGM-POL-2021-0005, *Use of Geospatial Data*, issued July 2, 2021.

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# Results of Audit

We found that the DOI has made progress in meeting 10 of the 13 Geospatial Data Act requirements we reviewed.<sup>8</sup> For example, the DOI made declassified data from the NSDI available pursuant to Executive Order No. 12951. In addition, the DOI is working on:

- Promoting the integration of geospatial data from all sources;
- Allocating resources for geospatial data collection, production, and stewardship;
- Ensuring that bureau geospatial data and activities are included on agency record schedules approved by the National Archives and Records Administration;
- Using geospatial data to enhance operations, support decision making, and enhance reporting to Congress; and
- Protecting personally identifiable information stored on the GeoPlatform from unauthorized access in accordance with Federal policy and law.

In our prior evaluation, we acknowledged that the DOI assigned an executive to manage Departmentwide collection, acquisition, maintenance, and dissemination of its geospatial data; in this evaluation, we confirmed that this executive is still in place and is currently implementing a strategy for advancing geospatial data and related activities to support bureau missions. We also found evidence that the DOI was coordinating with Federal and non-Federal entities to effectively manage geospatial data and readily shared geospatial data through the GeoPlatform with other Federal agencies and non-Federal users. We found that the DOI has continued these practices.

However, we found the following concerns related to three of the requirements:

- The Office of the Chief Information Officer's (OCIO's) senior agency official for geospatial information is not ensuring that bureaus are implementing policies for acquisition and management of geospatial data (Requirements 12 and 13).
- Some bureaus do not have policies, procedures, or controls in place to ensure they comply with the Act's requirement to search all sources for geospatial data, including the GeoPlatform (Requirement 12).
- One bureau did not require staff to check the quality of all geospatial data provided by a third party (Requirements 13).

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<sup>8</sup> In our prior evaluation report, we found that the DOI had made progress in meeting 11 of the 13 Geospatial Data Act requirements we reviewed, and we made recommendations pertaining to Requirements 12 and 13. This review identified an additional concern with Requirement 7, as described in our "Inaccurate and Incomplete Metadata Harvesting" section of this report. We also make new recommendations pertaining to Requirements 12 and 13.

- The DOI’s metadata harvesting from Data.gov left some datasets in the GeoPlatform with no metadata or inaccurate metadata (Requirement 7).

Appendix 3 provides a summary of the DOI’s progress toward meeting the requirements.

## The DOI Is Not Monitoring Bureaus’ Compliance With Policies

The DOI OCIO’s senior agency official for geospatial information is responsible for overseeing, coordinating, and facilitating the DOI’s implementation of geospatial-related requirements, policies, activities, and investments. Since our prior report, the DOI issued an acquisition planning policy<sup>9</sup> and a geospatial data policy.<sup>10</sup>

Specifically, the acquisition planning policy requires the bureaus to search all existing Federal, State, local, and private data, including the GeoPlatform, and affirm in writing to the contracting officer that the search was completed before expending funds for new data collection, which addresses Requirement 12.<sup>11</sup> The geospatial data policy requires, in part, that the contractor to complete the same search at no cost to the Government before beginning a new data collection service.

In addition, the acquisition planning policy requires the bureaus to ensure that any acquired data adhere to the applicable geospatial data standards, including metadata standards, as established in Requirement 13.<sup>12</sup> It provides standard language to be added to the assistance agreement requiring the contractor to provide high-quality data. Separately, the geospatial data policy provides, in part, that standard language must be added to the notice of funding opportunity and assistance agreements, which states that “all geospatial data collected for or produced through the use of the [DOI] financial assistance funds are required to meet all relevant standards for data and metadata established by the [FGDC] and authorized by the Geospatial Data Act.”

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The DOI issued its **acquisition planning policy** (DOI-AAAP-0169) in December 2020, and its **geospatial data policy** (DOI-PGM-POL-2021-0005) in July 2021. These policies address **Requirements 12 and 13** of the Geospatial Data Act.

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<sup>9</sup> DOI-AAAP-0169, *Special Acquisition Planning Considerations*, issued December 2, 2020.

<sup>10</sup> DOI-PGM-POL-2021-0005, *Use of Geospatial Data*, issued July 2, 2021.

<sup>11</sup> Section 759(a)(11).

<sup>12</sup> Section 759 (a)(12).

Although the OCIO's senior agency official for geospatial information is responsible for ensuring the implementation of geospatial-related policies, we learned that the DOI OCIO does not follow up with or monitor the bureaus to ensure they are following the acquisition planning policy and the geospatial data policy. Specifically, based on the DOI's responses provided in June 2022, we found that:

- The Bureau of Indian Affairs (BIA) expressed the opinion that the acquisition planning policy was inapplicable because it believed the policy only applied to the use of unmanned aircraft systems (UAS). The BIA stated that it will begin incorporating both DOI policies into its policies, procedures, and controls but did not provide a timeframe for completion.
- The Bureau of Land Management (BLM) represented that it plans to incorporate the DOI policies into its policies, procedures, and controls, but it did not provide a timeline for completion.
- The Bureau of Ocean Energy Management (BOEM) stated that it was in the process of incorporating the DOI policies into its policies, procedures, and controls. Since June 2022, BOEM has worked with the Bureau of Safety and Environmental Enforcement (BSEE)<sup>13</sup> to issue policies on August 1, 2022, which implement the DOI policies.
- The Bureau of Reclamation (BOR) stated that it had not yet incorporated the DOI policies into its policies, procedures, and controls and did not provide a timeline for completion. However, the BOR stated that it plans to communicate the requirements in the policies to BOR employees.
- BSEE did not have policies in place at the start of our audit. As stated previously, BSEE has worked with BOEM to issue policies on August 1, 2022, which implement the DOI policies.
- The National Park Service (NPS) stated it has incorporated both DOI policies into its policies, procedures, and controls.
- The U.S. Fish and Wildlife Service (FWS) told us that it plans to incorporate the DOI policies into its policies, procedures, and controls.
- The USGS has incorporated the applicable portions of the DOI policies into its acquisition procedures.

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<sup>13</sup> BOEM and BSEE coordinated their responses on these specific Act requirements because BSEE provides administrative support to BOEM including acquisition, financial, and IT services.

While all bureaus (except the BOR<sup>14</sup>) include standard language in all awards to ensure data provided by third-party contracts are high-quality, the language used by the bureaus does not always comport with the text required by the geospatial data policy. Using consistent contract language related to quality standards that is identified in DOI’s acquisition planning and geospatial data policies would help the DOI and its bureaus protect more the \$100 million in Federal funds spent each year on this data and mitigate the risk that the DOI at will expend Federal funds on data that is not high quality.

### **Recommendation**

We recommend that the Office of the Chief Information Officer:

1. Create a system to monitor the bureaus’ compliance with the DOI’s acquisition planning policy (DOI-AAAP-0169) and geospatial data policy (DOI-PGM-POL-2021-0005) in their own geospatial data acquisition policies and procedures.

## **Bureaus Lacked Policy for Geospatial Data Searches**

Requirement 12 states that “each covered agency shall search all sources, including the GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meets the needs of the covered agency before expending funds for geospatial data collection.”<sup>15</sup> In addition, the DOI’s acquisition planning policy, which applies to all planned geospatial data acquisition actions, provides that, if a requirement involves the use of geospatial data, the agency must first affirm in writing to the contracting officer that this search has been completed. We found that NPS is the only bureau that implemented this policy to require it to submit in writing to the contract officer that NPS staff searched all readily available data, including the GeoPlatform, prior to the submitting the request for funding.

We found that, for a variety of reasons, certain bureaus are still not following the Act’s requirement to search all sources, including the GeoPlatform, to determine if existing data meet their needs before spending funds on geospatial data collection. We also found that, as of June 2022, the BIA, BOEM, the BOR, and BSEE, did not have policies in place to require their offices to search all sources, including the GeoPlatform, for existing geospatial data. Specifically, we found:

- The BIA does not require searches because it currently does not expend funds on geospatial data collection. Accordingly, the BIA does not have a policy, procedures, or controls in place to address this topic. The BIA reported that it is developing a policy so that when it begins to spend funds on geospatial data collection, a search will be conducted before the purchase.

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<sup>14</sup> The BOR does not require this standard language in all awards. We address this issue in the section titled “The BOR Does Not Require Third-Party Quality Data Checks.”

<sup>15</sup> Section 759(a)(11).

- BOEM stated that it does not have written policy in place that requires it to search through all data available, including the GeoPlatform, before the purchase of new data. BOEM is in the process of developing and training employees on its new, cloud-based, enterprise geographic information system, which will require staff to search all data holdings, including the GeoPlatform. In coordination, BOEM and BSEE implemented the DOI policies and now require searches of the GeoPlatform as of August 1, 2022.
- The BOR stated it regularly searches GeoPlatform and other resources to determine if existing data sources would meet program or project requirements. However, it does not have policies in place to ensure that this occurs consistently. The BOR told us it is creating a step in its preliminary purchase request process that would require the geographic information system data manager to conduct a search for all purchase requests.
- According to BSEE, it has a standard practice of searching all geospatial data, including the GeoPlatform, as part of contract market research, but it has no formal written policy on data acquisitions. BSEE does not purchase geospatial data directly and has coordinated with BOEM on needed policy changes. BSEE and BOEM implemented the DOI policies and now require searches of the GeoPlatform as of August 1, 2022, and BSEE is coordinating with other groups to ensure all other available sources are also searched.

Without policies, procedures, and controls to ensure that these searches are completed and documented, the bureaus could be paying for geospatial data that are readily available.

<b>Recommendations</b>
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<p>We recommend that the Office of the Chief Information Officer:</p>
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| <ol style="list-style-type: none"> <li>2. Direct the bureaus to incorporate an internal control in their geospatial data acquisition policies and procedures requiring offices to search all sources, including the GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meet the needs of the covered agency before expending funds for geospatial data collection.</li> <li>3. Direct the bureaus to document the search as required by the acquisition planning policy (DOI-AAAP-0169).</li> </ol> |
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## The BOR Does Not Require Third-Party Data Quality Checks

Requirement 13 states that “each covered agency shall, to the maximum extent practicable, ensure that a person receiving Federal funds for geospatial data collection provides high-quality data.”<sup>16</sup> We found that the BOR does not require staff to check the quality of all geospatial data provided by a third party receiving Federal funds. The BOR instead leaves testing requirements to the discretion of the project lead or the contracting officer’s representative. Specifically, the BOR stated that it does not have a bureauwide requirement to include data-quality standards in its awards, which would ensure a data quality test is performed. Rather, the BOR only recommends the inclusion of a data quality standard in the contracts if the Geographic Information System Program Coordinator is engaged during the acquisition process. As a result, the BOR is unable to ensure that all data provided by third parties are of high-quality and adhere to the applicable geospatial data standards, including metadata standards.

All other bureaus described controls in place to ensure high-quality data is being purchased. For example:

- The BIA does not currently collect data using a third party. Should it do so in the future, it plans to evaluate the company’s history and track record of acquiring aerial imagery and then, using the geospatial standards and metrics established by Trust Asset Accounting Management System (TAAMS) mapping and Quality Assurance/Quality Control, test or evaluate the data for quality and completeness.
- The BLM ensures the quality of the data received is high by including the standardized language in its blanket purchase agreements. The BLM’s subject matter experts also perform unique quality control tests of geospatial data provided by third parties based on the type of information acquired and before distributing it for public use.
- BOEM has standard wording used in agreements that informs the contractor of BOEM’s policies and requires that “prior to submission, all data shall undergo appropriate quality assurance and post-processing to facilitate its use by knowledgeable scientists.”
- BSEE includes requirements as well as inspection, acceptance, and quality clauses in contracts to ensure that a quality product is delivered.
- The NPS’ programs are implementing requirements for data quality assurance and including specific language in all scopes of work to ensure the data being delivered for the project area are accurate.
- The FWS’ *Service Data Management Policy and Handbook* outlines requirements that staff must meet to ensure the data provided is high-quality. The FWS policy also requires the development of a data management plan, which include quality control and assurance procedures, before approval to acquire new data.

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<sup>16</sup> Section 759(a)(12).

- As part of its contracts, the USGS requires review and approval of the quality of data provided by testing for accuracy and completeness through automated and manual testing tools. Within set areas, the data is expected to meet requirements and is compared to existing models and derivatives to check for errors.

### Recommendation

We recommend that the Office of the Chief Information Officer:

4. Direct the Bureau of Reclamation to incorporate an internal control in its geospatial data acquisition policies and procedures that requires its office to conduct quality testing on all geospatial data provided by third parties.

## Inaccurate and Incomplete Metadata Harvesting

The Geospatial Data Act requires covered agencies<sup>17</sup> to collect, maintain, disseminate, and preserve geospatial data such that the resulting data, information, or products can be readily shared. According to Requirement 7, covered agencies should document geospatial data with the relevant metadata and make metadata available through the GeoPlatform.<sup>18</sup> In addition, the DOI must ensure to the maximum extent practicable that those receiving Federal funds for geospatial data collection provide high-quality data. It also requires the National Geospatial Advisory Committee to provide advice and recommendations relating to the management of Federal and national geospatial programs. Further, it requires the lead covered agencies to provide leadership and facilitate the development and implementation of a plan for nationwide population of the NGDA data theme, which includes identifying the needs relating to metadata for geospatial data within the NGDA data theme, and the GeoPlatform. The DOI's OCIO is the managing partner of the GeoPlatform on behalf of the FGDC.

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**Data.gov** is a website with a searchable data catalog that provides access to Federal datasets and helps the public find, access, and download non-sensitive Government data and tools in a variety of formats. The website was launched in 2009 and is managed and hosted by the U.S. General Services Administration.

**Data harvesting** is a process that copies datasets and their metadata between two or more data catalogs. According to the DOI's *Geospatial Platform Privacy Impact Assessment*, Data.gov harvests metadata records from Federal agencies once a week, and the GeoPlatform harvests geospatial metadata records from Data.gov on a weekly basis.

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<sup>17</sup> A "covered agency" for these purposes is "an Executive department, as defined in section 101 of title 5 United States Code, that collects, produces, acquires, maintains, distributes, uses, or preserves geospatial data on paper or in electronic form to fulfill the mission of the Executive department, either directly or through a relationship with another organization, including a State, local government, Indian tribe, institution of higher education, business partner or contractor of the Federal Government, and the public."

<sup>18</sup> Section 759(A)(6).

The **GeoPlatform** is an online portal managed by the DOI and located at the [Geoplatform.gov](https://www.geoplatform.gov) website. It is used to share geographic data, maps, and online services for use by Federal agencies and their State, local, tribal, and regional partners to meet their mission needs and the broader needs of the Nation.

**Metadata** includes information about datasets—such as content, source, accuracy, method of collection, and point of contact—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.

We determined that DOI metadata harvesting from Data.gov was inconsistent among bureaus, leaving some datasets in the GeoPlatform with either no metadata or inaccurate metadata. We found that these metadata inconsistencies existed because the bureaus were not ensuring data were properly harvested and that they were accurate on the two platforms (Data.gov and the GeoPlatform). See Figure 1 for a summary of the missing metadata by bureau. For more details on the specific datasets that contain metadata see Appendix 4.

**Figure 1: Missing Metadata by Bureau as of May 2022**

Bureau	Total Datasets		Datasets With Unharvested Data		Contains Duplicate Metadata
	Number	Percentage (%)	Number	Percentage (%)	
BIA	1	2	–	–	–
BLM	3	5	–	–	–
BOEM	23	38	3	13	–
BSEE	3	5	1	33	1
FWS	3	5	–	–	–
NPS	2	3	2	100	–
USGS	25	42	5	20	–
<b>TOTAL</b>	<b>60</b>	<b>100%</b>	<b>11</b>	<b>18%</b>	<b>1</b>

In May 2022, we identified 12 DOI NGDA data themes in the GeoPlatform with a total of 60 datasets across 7 bureaus—BLM, FWS, BOEM, NPS, BIA, BSEE, and USGS. We found that 11 of the DOI datasets (18 percent) did not have the appropriate metadata harvested from Data.gov to the GeoPlatform. Figure 2 contains an example of a USGS dataset with missing metadata.

**Figure 2: Example of USGS Dataset With Missing Metadata**

Theme Community ▲	NGDA - Links to Data.gov Metadata ▲	NGDA - GeoPlatform.gov Dataset Resource Pages ▲	Dept-Agency Abbreviation ▲
Theme Community	NGDA - Links to Data.gov Metadata	NGDA - GeoPlatfor...	Dept-Age...
Imagery	Landsat 7 Enhanced Thematic Mapper Plus Collection 1 Level-1 -	Data Resources	DOI-USGS
Imagery	Landsat 1-5 Multispectral Scanner Collection 1 Level-1 -	Data Resources	DOI-USGS
Imagery	Landsat 4-5 Thematic Mapper Collection 1 Level-1 -	Data Resources	DOI-USGS

The NSDI data theme is "Imagery."

The name of this dataset is "Landsat 4-5 Thematic Mapper Collection 1 Level-1."

Data Resources is where the metadata is located. When the Data Resources link is selected for this dataset, the following message is shown, indicating that no metadata has been harvested:

A more complete metadata record may be available in Data.gov but has not been completely harvested into GeoPlatform. The NGDA Portfolio team will update the link once it is available on GeoPlatform.

If you have any questions or concerns, please contact the [NGDATeam@FGDC.gov](mailto:NGDATeam@FGDC.gov).

From the 11 DOI datasets that were missing metadata, we were able to confirm the data existed on Data.gov for 6 datasets but were unable to confirm the specific data existed for another 5 datasets, as the manual search result was too numerous. Also, the metadata for one dataset were a duplicate of another dataset. Based on interviews with the DOI’s geospatial information officer, it is our understanding that the DOI OCIO does not check the metadata for accuracy but relies instead on the individual bureaus to verify the accuracy. The OCIO’s metadata policy<sup>19</sup> requires the senior agency official for geospatial information to “oversee the development of robust governance and monitoring procedures for the Department’s geospatial metadata management.” Metadata management involves establishing policies and processes that ensure information can be integrated, accessed, shared, linked, analyzed, and maintained across the organization.

Bureaus use geospatial data for decision making and for directing resources to accomplish their missions. If the data used are incomplete, inaccurate, or imprecise, decisions made based on poor-quality or absent data may result in the misdirection of resources, which may in turn adversely affect mission outcomes. The problem is amplified if no metadata are uploaded to the GeoPlatform, as the data cannot be widely shared with Federal and non-Federal users.

<sup>19</sup> OCIO Directive 2013–002, *U.S. Department of the Interior Geospatial Metadata Policy*, issued September 24, 2013.

## **Recommendations**

We recommend that the Office of the Chief Information Officer:

5. Coordinate with the bureaus to determine why their datasets in the GeoPlatform had missing or inaccurate metadata and establish appropriate controls to help ensure future accuracy.
6. Direct the Bureau of Ocean Energy Management to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.
7. Direct the Bureau of Safety and Environmental Enforcement to ensure that metadata is harvested from Data.gov into the appropriate datasets on the GeoPlatform.
8. Direct the National Park Service to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.
9. Direct the U.S. Geological Survey to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

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# Conclusion and Recommendations

## Conclusion

The DOI is a major user, producer, provider, and buyer of geospatial data, and its bureaus rely on geospatial data to accomplish their varied missions. The DOI operates the GeoPlatform, a widely used Federal clearinghouse for geospatial metadata from Federal and non-Federal sources. The DOI has obligated approximately \$100 million a year since 2020 to purchase geospatial data and services from third parties.

Although we found that the DOI has satisfied 10 of the 13 geospatial data requirements we reviewed, we identified weaknesses with respect to the 3 remaining requirements. To address these weaknesses, the DOI must ensure that bureaus follow policies, that bureaus search all sources for geospatial data before expending funds, that bureaus complete required quality checks of all third-party geospatial data, and that metadata harvesting is accurate and complete.

## Recommendations Summary

We provided a draft of this report to the DOI for review. The DOI concurred with all nine recommendations. We consider recommendations 1 through 9 resolved but not implemented. Below we summarize the DOI's response to our recommendations, as well as our comments on those responses. See Appendix 5 for the full text of the DOI's response; Appendix 6 lists the status of each recommendation.

We recommend that the Office of the Chief Information Officer:

1. Create a system to monitor the bureaus' compliance with the DOI's acquisition planning policy (DOI-AAAP-0169) and geospatial data policy (DOI-PGM-POL-2021-0005) in their own geospatial data acquisition policies and procedures.

**DOI Response:** The DOI concurred with the recommendation and stated that the Office of the Chief Data Officer "in partnership with the Office of Acquisition and Property Management and the Office of Grants Management will jointly issue a memorandum to the bureaus and offices, which will include guidance to establish bureau and office controls for searching for existing geospatial data as well as compliance with DOI-AAAP-0169 and DOI-PGM-POL-2021-0005." The DOI also identified the officials responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI's response, we consider Recommendation 1 resolved but not implemented.

2. Direct the bureaus to incorporate an internal control in their geospatial data acquisition policies and procedures requiring offices to search all sources, including the GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meet the needs of the covered agency before expending funds for geospatial data collection.

**DOI Response:** The DOI concurred with the recommendation and stated that the Office of the Chief Data Officer “in partnership with the Office of Acquisition and Property Management and the Office of Grants Management will issue a memorandum, which will include guidance to establish bureau and office controls for searching for existing geospatial data as well as compliance with DOI-AAAP-0169 and DOI-PGM-POL-2021-0005.” The DOI also identified the officials responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI’s response, we consider Recommendation 2 resolved but not implemented.

3. Direct the bureaus to document the search as required by the acquisition planning policy (DOI-AAAP-0169).

**DOI Response:** The DOI concurred with the recommendation and stated that the Office of the Chief Data Officer “in partnership with the Office of Acquisition and Property Management and the Office of Grants Management will issue a memorandum, which will include guidance to establish bureau and office controls for searching for existing geospatial data as well as compliance with DOI-AAAP-0169 and DOI-PGM-POL-2021-0005.” The DOI also identified the officials responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI’s response, we consider Recommendation 3 resolved but not implemented.

4. Direct the Bureau of Reclamation to incorporate an internal control in its geospatial data acquisition policies and procedures that requires its office to conduct quality testing on all geospatial data provided by third parties.

**DOI Response:** The DOI concurred with the recommendation and stated the OCIO “will issue a memorandum directing all DOI bureaus and offices to establish controls for testing the quality of all geospatial data provided by third parties.” The DOI also identified the official responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI’s response, we consider Recommendation 4 resolved but not implemented.

5. Coordinate with the bureaus to determine why their datasets in the GeoPlatform had missing or inaccurate metadata and establish appropriate controls to help ensure future accuracy.

**DOI Response:** The DOI concurred with the recommendation and stated that the OCIO “will work with individual bureaus on their metadata and establish a control to verify that metadata are registered properly in the GeoPlatform.” The DOI also identified the official responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI’s response, we consider Recommendation 5 resolved but not implemented.

6. Direct the Bureau of Ocean Energy Management to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

**DOI Response:** The DOI concurred with the recommendation and stated that the OCIO “will issue a memorandum directing all DOI bureaus and offices to develop internal controls for geospatial metadata harvest[ing] to [D]ata.gov and [G]eoplatform.gov.” The DOI also identified the official responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI’s response, we consider Recommendation 6 resolved but not implemented. The recommendation will be considered implemented when the DOI provides supporting documentation demonstrating that BOEM has harvested the metadata from Data.gov into the appropriate dataset on the GeoPlatform for the missing datasets identified during our audit.

7. Direct the Bureau of Safety and Environmental Enforcement to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

**DOI Response:** The DOI concurred with the recommendation and stated that the OCIO “will issue a memorandum directing all DOI bureaus and offices to develop internal controls for geospatial metadata harvest[ing] to [D]ata.gov and [G]eoplatform.gov.” The DOI also identified the official responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI’s response, we consider Recommendation 7 resolved but not implemented. The recommendation will be considered implemented when the DOI provides supporting documentation demonstrating that BSEE has harvested the metadata from Data.gov into the appropriate dataset on the GeoPlatform.gov for the missing datasets identified during our audit.

8. Direct the National Park Service to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

**DOI Response:** The DOI concurred with the recommendation and stated that the OCIO “will issue a memorandum directing all DOI bureaus and offices to develop internal controls for geospatial metadata harvest[ing] to [D]ata.gov and [G]eoplatform.gov.” The DOI also identified the official responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI’s response, we consider Recommendation 8 resolved but not implemented. The recommendation will be considered implemented when the DOI provides supporting documentation demonstrating that the NPS has harvested the

metadata from Data.gov into the appropriate dataset on the GeoPlatform for the missing datasets identified during our audit.

9. Direct the U.S. Geological Survey to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

**DOI Response:** The DOI concurred with the recommendation and stated that the OCIO “will issue a memorandum directing all DOI bureaus and offices to develop internal controls for geospatial metadata harvest[ing] to [D]ata.gov and [G]eoplatform.gov.” The DOI also identified the official responsible for implementation and a target date of May 26, 2023.

**OIG Comment:** Based on the DOI’s response, we consider Recommendation 9 resolved but not implemented. The recommendation will be considered implemented when the DOI provides supporting documentation demonstrating that the USGS has harvested the metadata from Data.gov into the appropriate dataset on the GeoPlatform for the missing datasets identified during our audit.

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# Appendix 1: Scope and Methodology

## Scope

We audited the status of the U.S. Department of the Interior’s (DOI’s) compliance with the management of geospatial data as defined by the Geospatial Data Act of 2018, specifically, focusing on the DOI’s actions between March 2020 through March 2022 to meet the Act’s requirements. This Act requires the Office of Inspector General (OIG) to report on the agency’s collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data according to 15 requirements (see “Background”).

## Scope Limitation

In October 2021, the Council of the Inspectors General on Integrity and Efficiency (CIGIE) issued a letter to the U.S. Congress narrowing the scope of the fiscal year (FY) 2022 report to exclude 2 of the 15 requirements (Requirements 1 and 15). CIGIE excluded covered agency compliance with data standards and limitation on using public funds for geospatial data management activities because the standards the reports should use to evaluate compliance are unclear and because Federal law establishes a 5-year implementation period before limiting the use of public funds for noncompliant activities. CIGIE’s unified approach also provides latitude for the OIG to define audit procedures. For the current year’s report, we performed an audit of the DOI’s compliance with the Geospatial Data Act of 2018 under the generally accepted government auditing standards.

## Methodology

We conducted the 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 the DOI’s geospatial data management, we interviewed the DOI’s chief data officer and reviewed documentation related to the DOI’s oversight of geospatial data. To review the DOI’s oversight, we reviewed eight DOI bureaus, which all have responsibilities for geospatial data:

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Ocean Energy Management
- Bureau of Reclamation
- Bureau of Safety and Environmental Enforcement

- National Park Service
- U.S. Fish and Wildlife Service
- U.S. Geological Survey

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

- 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.

We relied on the chief data officer and the bureaus to provide written responses and evidence of their performance with the objectives we review. To accomplish our objectives, we:

- Reviewed relevant criteria, such as the Geospatial Data Act of 2018, Office of Management and Budget Circular A-16, and Executive Order No. 12951;
- Reviewed Federal Geographic Data Committee guidance published at [Fgdc.gov](http://Fgdc.gov);
- Reviewed DOI and bureau policies and memoranda related to the management and oversight of geospatial data;
- Searched geospatial data on the GeoPlatform ([Geoplatform.gov](http://Geoplatform.gov)) and [Data.gov](http://Data.gov);
- Reviewed the position description and nomination documentation for the chief data officer as the DOI's senior agency official for geospatial information;
- Reviewed evidence of meetings to coordinate geospatial data collaboration activities, such as meeting minutes and agendas;

- Examined privacy impact assessments;
- Reviewed screenshots and documentation citing examples of the DOI's use of geospatial data; and
- Reviewed agency and bureau budget data and resource allocations related to geospatial data collection, production, and stewardship.

During our audit, we obtained information from Geoplatform.gov and Data.gov. We conducted limited data reliability testing related to metadata harvesting. Specifically, we gained an understanding of the two websites, tested the existence of metadata for datasets listed in the GeoPlatform, and compared the information in Geoplatform.gov to Data.gov. We determined that the data we used as a basis for our findings and conclusion was sufficiently reliable for the purposes of this audit.

## Appendix 2: Description of the U.S. Department of the Interior’s National Geospatial Data Asset Themes

NGDA <sup>20</sup> Theme	NGDA Theme Description	Theme Leads <sup>21</sup>
Biodiversity and Ecosystems	Pertains to or describes the dynamic processes, interactions, distributions, and relationships between and among organisms and their environments	Department of the Interior (DOI) – U.S. Geological Survey (USGS)
Cadastre	Past, current, and future rights and interests in real property, including the spatial information necessary to describe geographic extents	DOI – 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)	DOI – National Park Service
Elevation	The measured vertical position of the earth’s surface, other landscape, or underwater depth of ocean floors or lake floor	DOI – USGS
Geology	Geographically referenced data pertaining to the origin, history, composition, structure, features, and processes of the solid earth, both onshore and offshore	DOI – Bureau of Ocean Energy Management and USGS
Governmental Units, and Administrative and Statistical Boundaries	Boundaries that delineate geographic areas for uses such as governance and the general provision of services (e.g., States, American Indian reservations, counties, cities, towns, etc.), administration and/or for a specific purpose (e.g., Congressional Districts, school districts, fire districts, Alaska Native Regional Corporations, etc.), and/or provision of statistical data (census tracts, census blocks, metropolitan and micropolitan statistical areas, etc.)	U.S. Department of Commerce – United States Census Bureau
Imagery	Georeferenced images of the earth's surface, which have been collected via aerial photography or satellite data	DOI – USGS

<sup>20</sup> NGDA = National Geospatial Data Asset.

<sup>21</sup> 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 Geospatial Data Act annual report process.

<b>NGDA<sup>20</sup> Theme</b>	<b>NGDA Theme Description</b>	<b>Theme Leads<sup>21</sup></b>
Land Use – Land Cover	Natural and manmade surface features that cover the land (land cover) and to the primary ways in which land cover is used by humans (land use)	DOI – USGS
Real Property	The spatial representation (location) of real property entities, typically consisting of one or more of the following: unimproved land, a building, a structure, site improvements and the underlying land	U.S. General Services Administration
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)	DOI – 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)	DOI – U.S. Fish and Wildlife Service and USGS
Water – Oceans and Coasts	Features and characteristics of salt water bodies (i.e., tides, tidal waves, coastal information, reefs) and features and characteristics that represent the intersection of the land with the water surface (i.e., shorelines), the lines from which the territorial sea and other maritime zones are measured (i.e., baseline maritime) and lands covered by water at any stage of the tide (i.e., Outer Continental Shelf), as distinguished from tidelands, which are attached to the mainland or an island and cover and uncover with the tide	U.S. Department of Commerce – National Oceanic and Atmospheric Administration

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# Appendix 3: The U.S. Department of the Interior’s Status in Meeting the Requirements of the Geospatial Data Act of 2018

Requirement	OIG Assessment of Compliance Status
<p><b>Requirement 1:</b> Complying with the standard for geospatial data, including information about geospatial data sets, also known as metadata, as established under Section 757</p>	<p>We did not audit this objective because the Council of the Inspectors General for Integrity and Efficiency (CIGIE) excluded it from the scope for fiscal year (FY) 2022 (see Appendix 1: Scope and Methodology, “Scope Limitation”).</p>
<p><b>Requirement 2:</b> Preparing, maintaining, publishing, and implementing a strategy for advancing geographic information and related geospatial data and activities appropriate to the mission of the U.S. Department of the Interior (DOI), in support of the strategic plan for the National Spatial Data Infrastructure (NSDI) prepared under Section 755(c)</p>	<p>Met – We determined that the DOI has prepared, maintained, published, and implemented a strategy for advancing geographic information and related geospatial data and activities appropriate to the mission of the DOI, in support of the strategic plan for the NSDI prepared under section 755(c) that complies with the Geospatial Act of 2018.</p> <p>We verified that bureaus have either published or are in the process of publishing a strategy for advancing geographic information and related geospatial data and activities appropriate to the mission of the bureau.</p>
<p><b>Requirement 3:</b> 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>	<p>Met – The policies and procedures used to share and publish geospatial information vary across the bureaus and data types. Office of the Chief Information Officer (OCIO) Directive 2013-002 contained requirements for bureaus to share geospatial information in accordance with Office of Management and Budget (OMB) Circular A-16 and for the senior agency official for geospatial information to issue guidance and procedures to be followed for carrying out these requirements.</p> <p>Although the senior agency official for geospatial information has not issued policies and procedures to instruct the bureaus on how to implement the policy, the DOI’s bureaus share information with the public and other Federal agencies by publishing information on the GeoPlatform or their own agency websites and geographic information systems (GIS) services.</p>

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Requirement	OIG Assessment of Compliance Status
<p><b>Requirement 4:</b> Promoting the integration of geospatial data from all sources</p>	<p>Met – We determined the DOI promotes integrating geospatial data from all sources. In addition to the DOI, each of the eight bureaus provided many examples as evidence of promoting integrated geospatial data from all sources. Multiple resources are essential for several projects and programs to function since different types of data are required.</p>
<p><b>Requirement 5:</b> 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 (NARA)</p>	<p>Met – NARA establishes standards for the retention of permanent records and assists Federal agencies in applying the standards to records in their custody. Record schedules detail which Federal records have temporary value and may be destroyed and which Federal records have permanent value and must be transferred to NARA (36 C.F.R. § 1220.12). NARA must approve record schedules before they are implemented.</p> <p>We asked each bureau records officer to determine whether the bureaus currently have NARA-approved record schedules in place for geospatial data. Seven of the eight bureaus reported having a schedule in place that covers geospatial data. BSEE does not transfer data because its enterprise data systems do not provide metadata and tracking specific to records management, such as record schedules and dispositions as specified by NARA. The BLM has not transferred any data because of technical difficulties. We confirmed that the BIA, BOR, NPS, and FWS have transferred data to NARA. The BOEM and the USGS have a NARA-approved records schedule but have not transferred any data to NARA.</p>
<p><b>Requirement 6:</b> Allocating resources to fulfill the responsibilities of effective geospatial data collection, production, and stewardship regarding related activities of the DOI, and as necessary to support the activities of the Federal Geographic Data Committee (FGDC)</p>	<p>Met – The DOI has a chief data officer/geospatial information officer who supervises three full-time employees supporting geospatial enterprise contracts, enterprise geospatial systems management and geospatial data management/stewardship, and enterprise data management and governance, which includes geospatial data.</p> <p>We determined that the following lead agencies have budget documentation that included resource allocations to fulfill the requirements as theme leads: Biodiversity and Ecosystems (USGS), Cadastre (BLM), Cultural Resources (NPS), Elevation (USGS), Geology (BOEM and USGS), Imagery (USGS), Land Use – Land Cover (USGS), Utilities (BSEE), and Water Inland Data (FWS and USGS).</p>

**Requirement****OIG Assessment of Compliance Status**

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**Requirement 7:** Using the geospatial data standards, including those for metadata, and other appropriate standards, including documenting geospatial data with the relevant metadata and making metadata available through the GeoPlatform

Not Met – Per review of the GeoPlatform in May 2022, 7 DOI bureaus are named for 12 National Spatial data themes covering 60 datasets. We reviewed all 60 DOI datasets and found that 11 datasets from the following 4 bureaus were missing metadata: BOEM, BSEE, the NPS, and the USGS.

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Met – We determined that DOI works with a range of private and public entities.

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. For example:

**Requirement 8:** 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

- Tribes, tribal agencies, and corporations used BIA geospatial data to support land development.
  - States and counties that contained tribal trust lands used BIA data for boundary delineation.
  - BLM geospatial information supports the work of oil and gas operators that submit applications for permits to drill to the BLM by informing their plans for development while mitigating for potential resource concerns (e.g., existing oil and gas wells, grazing permits, rights-of-way, and wildlife habitats).
  - The offshore wind industry uses BOEM data to aid in identifying areas that should be avoided for development or cable or pipeline routes to avoid blocking that resource for future use.
  - The BOR provides geospatial data of reservoir locations and current capabilities to the “Addressing Drought in the West,” a public-facing informational portal to support public information and decision making.
  - BSEE geospatial data is used by academia and institutes of higher education for research of Outer Continental Shelf operations. Only BSEE executed a memorandum of understanding with another partner (the Office of Natural Resources Revenue). Although it addressed information systems related to the Outer Continental Shelf, it did not mention geospatial data.
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Requirement	OIG Assessment of Compliance Status
<b>Requirement 9:</b> 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	Met – Based on the many examples and evidence provided by the DOI, we determined the current state of the DOI’s use of geospatial information to (1) make Federal geospatial information and services more useful to the public, (2) enhance operations, (3) support decision making, and (4) enhance reporting to the public and to Congress is in accordance with the Geospatial Act of 2018.
<b>Requirement 10:</b> Protecting personal privacy and maintaining confidentiality according to Federal policy and law	Met – We reviewed privacy impact assessments (PIAs) to determine the current state of the DOI’s compliance with the standard for geospatial data, including whether the DOI protects personal privacy and maintains confidentiality according to Federal policy and whether laws comply with the Geospatial Data Act of 2018. We found that the DOI has two systems that contain records of personally identifiable information (PII) related to geospatial data: ArcGIS and the GeoPlatform. The PII for these systems is mostly related to the creation and management of user accounts, including data such as email addresses (personal or work), the full names of the users, and user workplaces. We also confirmed that mitigating controls to protect privacy were documented for each system.
<b>Requirement 11:</b> Determining, when applicable, whether declassified data can contribute to and become a part of the NSDI	Met – OMB Circular A-16 requires Federal agencies to determine, when applicable, data declassified pursuant to Executive Order 12951 that can contribute to and become a part of the NSDI. On February 22, 1995, Executive Order No. 12951 directed the declassification of intelligence imagery acquired by the first generation of United States photo-reconnaissance satellites from 1959 to 1980, including the systems code-named CORONA, ARGON, and LANYARD. Under this order, the declassified imagery was transferred to the USGS to ensure the public had access to these data. We reviewed Data.gov (part of the NSDI) and noted that the USGS released 836,454 images in 1996 and 46,697 images in 2002, totaling 883,151 images from the CORONA, ARGON, and LANYARD systems as part of the NSDI. The images are available for public use.
<b>Requirement 12:</b> Searching all sources, including the GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meet DOI needs before expending funds for geospatial data collection	Not Met – We found that the DOI risks expending Federal funds on data that are already available. While it has defined procedures to ensure that all bureaus collecting geospatial data are searching all sources including the GeoPlatform before expending funds on data collection, the DOI does not monitor those procedures to confirm bureaus implement them.

Requirement	OIG Assessment of Compliance Status
<p><b>Requirement 13:</b> Assuring, to the maximum extent practicable, that a person receiving Federal funds for geospatial data collection provides high-quality data</p>	<p>Not Met – We found that the DOI risks expending Federal funds on data that is less than high quality. While it has defined procedures to ensure that all bureaus collecting geospatial data are reviewing the quality of data provided by third parties receiving Federal funds, the DOI does not monitor those procedures to confirm bureaus implement them.</p>
<p><b>Requirement 14:</b> Appointing a contact to coordinate with the lead covered agencies for collection, acquisition, maintenance, and dissemination of the National Geospatial Data Asset data themes used by the DOI</p>	<p>Met – We reviewed the OCIO’s 2016 memorandum designating the chief data officer as the DOI’s senior agency official for geospatial information (SAOGI). Pursuant to the OCIO’s designation, the SAOGI oversees, coordinates, and facilitates the DOI’s implementation of geospatial-related requirements, policies, activities, and investments. The SAOGI also serves as the DOI’s representative on the FGDC, pursuant to OMB Circular A-16.</p> <p>We also reviewed the OCIO’s 2020 position description of the geospatial information officer (GIO). The GIO serves as principal advisor to the chief data officer, chief information officer, and other top Department and bureau officials on cross-cutting program matters related to all aspects of geospatial policy, data, programs, and technology. The GIO is responsible for facilitating and leading the establishment of unified standards for geospatial activities and the evaluation of the quality and effectiveness of geospatial activities and initiatives in support of the GeoPlatform.</p>
<p><b>Requirement 15:</b> Complying with the limitation on the use of Federal funds under Section 759a</p>	<p>We did not evaluate this objective because CIGIE excluded it from the scope for FY 2022 (see Appendix 1: Scope and Methodology, “Scope Limitation”).</p>

## Appendix 4: List of U.S. Department of the Interior Datasets' Metadata Existence as of May 2022

No.	NGDA Theme	Dataset	Bureau	Metadata Available in the GeoPlatform?	Metadata Available in Data.gov? <sup>22</sup>
1	Biodiversity and Ecosystems	FWS Critical Habitat for Threatened and Endangered Species Dataset	DOI-FWS	Yes	
2	Biodiversity and Ecosystems	Terrestrial Ecosystems of the Conterminous United States	DOI-USGS	Yes	
3	Biodiversity and Ecosystems	U.S. Geological Survey - Gap Analysis Project Species Habitat Maps CONUS_2001	DOI-USGS	No	Unable to Determine
4	Biodiversity and Ecosystems	U.S. Geological Survey - Gap Analysis Project Species Range Maps CONUS_2001	DOI-USGS	Yes	
5	Biodiversity and Ecosystems	GAP/LANDFIRE National Terrestrial Ecosystems 2011	DOI-USGS	Yes	
6	Cadastre	BLM National Public Land Survey System Polygons - National Geospatial Data Asset (NGDA)	DOI-BLM	Yes	
7	Cadastre	FWS Interest - August 2021	DOI-FWS	Yes	

<sup>22</sup> According the DOI's *Geospatial Platform Privacy Impact Assessment*, the GeoPlatform harvests geospatial metadata records from Data.gov on a weekly basis. If the metadata was available on the GeoPlatform, we did not search Data.gov to verify metadata was available there.

<b>No.</b>	<b>NGDA Theme</b>	<b>Dataset</b>	<b>Bureau</b>	<b>Metadata Available in the GeoPlatform?</b>	<b>Metadata Available in Data.gov?<sup>22</sup></b>
8	Cadastre	Administrative Boundaries of National Park System Units 6/30/2021 - National Geospatial Data Asset (NGDA) NPS National Parks Data	DOI-NPS	No	Yes
9	Cadastre	Outer Continental Shelf Active Renewable Energy Leases	DOI-BOEM	No	Yes
10	Cadastre	Outer Continental Shelf Block Aliquots - Atlantic Region NAD83	DOI-BOEM	Yes	
11	Cadastre	Outer Continental Shelf Lease Blocks - Alaska Region NAD83	DOI-BOEM	Yes	
12	Cadastre	Outer Continental Shelf Lease Blocks - Atlantic Region NAD83	DOI-BOEM	Yes	
13	Cadastre	Outer Continental Shelf Lease Blocks - Gulf of Mexico Region NAD27	DOI-BOEM	No	Yes
14	Cadastre	Outer Continental Shelf Lease Blocks - Pacific Region - West Coast NAD83	DOI-BOEM	Yes	
15	Cadastre	Outer Continental Shelf Official Protraction Diagrams -	DOI-BOEM	Yes	

<b>No.</b>	<b>NGDA Theme</b>	<b>Dataset</b>	<b>Bureau</b>	<b>Metadata Available in the GeoPlatform?</b>	<b>Metadata Available in Data.gov?<sup>22</sup></b>
		Alaska Region NAD83			
16	Cadastre	Outer Continental Shelf Official Protraction Diagrams - Atlantic Region NAD83	DOI-BOEM	Yes	
17	Cadastre	Outer Continental Shelf Official Protraction Diagrams and Lease Maps - Gulf of Mexico Region NAD27	DOI-BOEM	Yes	
18	Cadastre	Outer Continental Shelf Official Protraction Diagrams - Pacific Region - West Coast NAD83	DOI-BOEM	Yes	
19	Cadastre	Protected Areas Database of the United States (PAD-US)	DOI-USGS	Yes	
20	Cadastre	BLM National Surface Management Agency Area Polygons - National Geospatial Data Asset (NGDA)	DOI-BLM	Yes	
21	Cadastre	American Indian Reservations (AIR) Exterior Extent Boundaries	DOI-BIA	Yes	
22	Cultural Resources	Geographic Names Information System (GNIS)	DOI-USGS	Yes	

<b>No.</b>	<b>NGDA Theme</b>	<b>Dataset</b>	<b>Bureau</b>	<b>Metadata Available in the GeoPlatform?</b>	<b>Metadata Available in Data.gov?<sup>22</sup></b>
		- USGS National Map Downloadable Data Collection			
23	Cultural Resources	National Register of Historic Places	DOI-NPS	No	Yes
24	Elevation	Global Multi-Resolution Terrain Elevation Data - National Geospatial Data Asset (NGDA)	DOI-USGS	Yes	
25	Elevation	Lidar Point Cloud - USGS National Map 3DEP Downloadable Data Collection	DOI-USGS	Yes	
26	Elevation	1/3rd arc-second Digital Elevation Models (DEMs) - USGS National Map 3DEP Downloadable Data Collection	DOI-USGS	Yes	
27	Elevation	Shuttle Radar Topography Mission 1 Arc-Second Digital Terrain Elevation Data - Global - National Geospatial Data Asset (NGDA)	DOI-USGS	Yes	
28	Elevation	1 meter Digital Elevation Models (DEMs) - USGS National Map 3DEP Downloadable Data Collection	DOI-USGS	Yes	

<b>No.</b>	<b>NGDA Theme</b>	<b>Dataset</b>	<b>Bureau</b>	<b>Metadata Available in the GeoPlatform?</b>	<b>Metadata Available in Data.gov?<sup>22</sup></b>
29	Elevation	5 Meter Alaska Digital Elevation Models (DEMs) - USGS National Map 3DEP Downloadable Data Collection	DOI-USGS	Yes	
30	Geology	Federal Outer Continental Shelf (OCS) Sand and Gravel Borrow Areas (Lease Areas)	DOI-BOEM	No	Unable to Determine
31	Geology	USGS National Geologic Map Database Collection	DOI-USGS	Yes	
32	Geology	Outer Continental Shelf Oil and Natural Gas Wells - Alaska Region NAD83	DOI-BOEM	Yes	
33	Geology	Outer Continental Shelf Oil and Natural Gas Wells - Gulf of Mexico Region NAD27	DOI-BSEE	Yes	
34	Geology	Outer Continental Shelf Oil and Natural Gas Wells - Pacific OCS Region NAD83	DOI-BOEM	Yes	
35	Geology	BOEM Seismic Water Bottom Anomalies - Gulf of Mexico - Gulf of Mexico NAD27	DOI-BOEM	Yes	

<b>No.</b>	<b>NGDA Theme</b>	<b>Dataset</b>	<b>Bureau</b>	<b>Metadata Available in the GeoPlatform?</b>	<b>Metadata Available in Data.gov?<sup>22</sup></b>
36	Governmental Units, and Administrative and Statistical Boundaries	BLM National Administrative Unit Boundary Polygons and Office Points - National Geospatial Data Asset (NGDA)	DOI-BLM	Yes	
37	Imagery	Landsat 7 Enhanced Thematic Mapper Plus Collection 1 Level-1 -	DOI-USGS	Yes	
38	Imagery	Landsat 1-5 Multispectral Scanner Collection 1 Level-1 -	DOI-USGS	Yes	
39	Imagery	Landsat 4-5 Thematic Mapper Collection 1 Level-1 -	DOI-USGS	No	Yes
40	Imagery	High Resolution Orthoimagery Collection - Historical	DOI-USGS	No	Unable to Determine
41	Imagery	Landsat 8 Operational Land Imager and Thermal Infrared Sensor Collection 1 Level-1 -	DOI-USGS	Yes	
42	Land Use - Land Cover	National Land Cover Dataset (NLCD) 2016 Land Cover Products	DOI-USGS	Yes	
43	Land Use - Land Cover	National Land Cover Dataset (NLCD) 2016 Impervious Products	DOI-USGS	Yes	

<b>No.</b>	<b>NGDA Theme</b>	<b>Dataset</b>	<b>Bureau</b>	<b>Metadata Available in the GeoPlatform?</b>	<b>Metadata Available in Data.gov?<sup>22</sup></b>
44	Land Use - Land Cover	NLCD 2011-2016 Tree Canopy Cover Change CONUS (Image Service)	DOI-USGS	No	Unable to Determine
45	Land Use - Land Cover	North American Land Change Monitoring System (NALCMS) Collection	DOI-USGS	No	Unable to Determine
46	Real Property	USGS National Structures Dataset - USGS National Map Downloadable Data Collection	DOI-USGS	Yes	
47	Utilities	Outer Continental Shelf Oil and Natural Gas Pipelines - Gulf of Mexico Region NAD27	DOI-BSEE	No - Duplicate of below	Yes
48	Utilities	Outer Continental Shelf Oil and Natural Gas Platforms - Gulf of Mexico Region NAD27	DOI-BSEE	Yes	
49	Water - Inland	National Hydrography Dataset (NHD) - USGS National Map Downloadable Data Collection	DOI-USGS	Yes	
50	Water - Inland	National Wetlands Inventory - Wetlands	DOI-FWS	Yes	
51	Water - Inland	Watershed Boundary Dataset (WBD) - USGS National Map	DOI-USGS	Yes	

<b>No.</b>	<b>NGDA Theme</b>	<b>Dataset</b>	<b>Bureau</b>	<b>Metadata Available in the GeoPlatform?</b>	<b>Metadata Available in Data.gov?<sup>22</sup></b>
		Downloadable Data Collection			
52	Water - Oceans and Coasts	OCSLA Sec. 8(g) Revenue Zone Boundary - Alaska Region NAD83	DOI-BOEM	Yes	
53	Water - Oceans and Coasts	OCSLA Sec. 8(g) Revenue Zone Boundary - Atlantic Region NAD83	DOI-BOEM	Yes	
54	Water - Oceans and Coasts	OCSLA Sec. 8(g) Revenue Zone Boundary - Gulf of Mexico Region NAD27	DOI-BOEM	Yes	
55	Water - Oceans and Coasts	OCSLA Sec. 8(g) Revenue Zone Boundary - Pacific Region - West Coast NAD83	DOI-BOEM	Yes	
56	Water - Oceans and Coasts	Continental Shelf Boundary - Gulf of Mexico Region NAD27	DOI-BOEM	Yes	
57	Water - Oceans and Coasts	Outer Continental Shelf Submerged Lands Act Boundary - Alaska Region NAD83	DOI-BOEM	Yes	
58	Water - Oceans and Coasts	Outer Continental Shelf Submerged Lands Act Boundary - Atlantic Region NAD83	DOI-BOEM	Yes	
59	Water - Oceans and Coasts	Outer Continental Shelf Submerged	DOI-BOEM	Yes	

<b>No.</b>	<b>NGDA Theme</b>	<b>Dataset</b>	<b>Bureau</b>	<b>Metadata Available in the GeoPlatform?</b>	<b>Metadata Available in Data.gov?<sup>22</sup></b>
		Lands Act Boundary - Gulf of Mexico Region NAD27			
60	Water - Oceans and Coasts	Outer Continental Shelf Submerged Lands Act Boundary - Pacific Region - West Coast NAD83	DOI-BOEM	Yes	

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## **Appendix 5: Response to Draft Report**

The U.S. Department of the Interior's response to our draft report follows on page 41.



# United States Department of the Interior

OFFICE OF THE SECRETARY

Washington, DC 20240

September 2, 2022

Memorandum

To: Mark Lee Greenblatt  
Inspector General

From: Deborah (June) Hartley  
Acting Chief Information Officer  
Office of the Chief Information Officer

DEBORAH HARTLEY

Digitally signed by DEBORAH  
HARTLEY  
Date: 2022 09 02 09:52:30 -06'00'

Megan Olsen  
Director, Office of Acquisition and Property Management  
and Senior Procurement Executive

MEGAN OLSEN

Digitally signed by MEGAN  
OLSEN  
Date: 2022 09 01 16:23:46 -04'00'

Cara Whitehead  
Director, Office of Grants Management and  
Senior Financial Assistance Executive

CARA WHITEHEAD

Digitally signed by CARA  
WHITEHEAD  
Date: 2022 09 01 18:15:13 -04'00'

Subject: Response to Draft Evaluation Report - *The U.S. Department of the Interior Needs To Continue To Strengthen Governance Practices To Improve Its Management of Geospatial Data* (2022-CGD-026)

Thank you for providing the Department of the Interior (Department, DOI) the opportunity to review and comment on the draft Office of Inspector General (OIG) Report, *The U.S. Department of the Interior Needs To Continue To Strengthen Governance Practices To Improve Its Management of Geospatial Data* (2022-CGD-026). We appreciate the OIG's review of the geospatial data and its associated governance processes.

The Department concurs with the OIG's recommendations. Please see the attached for the Department's management response and target dates for the nine recommendations.

If you have questions, please contact Thomas (Tod) Dabolt, Chief Data Officer, at [REDACTED]@ios.doi.gov.

**Attachment:** Management Response to *The U.S. Department of the Interior Needs To Continue To Strengthen Governance Practices To Improve Its Management of Geospatial Data*, OIG Report No. 2022-CGD-026, Recommendations and Responses

cc: Thomas Dabolt, Chief Data Officer, OCIO  
Deputy Chief Information Officers  
Naznin Rahman, Chief, Audit Management Division, Office of Financial Management  
Associate Chief Information Officers  
Associate Chief Data Officers  
Bureau and Office Audit Liaisons  
Douglas Scoville, Chief, Governance Branch, OCIO  
Richard Westmark, Chief, Compliance Management Section, OCIO

**Management Response to *The U.S. Department of the Interior Needs To Continue To Strengthen Governance Practices To Improve Its Management of Geospatial Data*, Report No. 2022–CGD–026**

**Recommendations and Responses**

**Recommendation 1:** We recommend that the DOI create a system to monitor the bureaus’ compliance with the DOI’s acquisition planning policy (DOI-AAAP–0169) and geospatial data policy (DOI-PGM-POL–2021–0005) in their own geospatial data acquisition policies and procedures.

**Response:** Concur. The Office of the Chief Data Officer in partnership with the Office of Acquisition and Property Management and the Office of Grants Management will jointly issue a memorandum to the bureaus and offices, which will include guidance to establish bureau and office controls for searching for existing geospatial data as well as compliance with DOI-AAAP-0169 and DOI-PGM-POL-2021-0005.

**Responsible Officials:** Thomas Dabolt, Chief Data Officer; Megan Olsen, Director, Office of Acquisition and Property Management/Senior Procurement Executive; and Cara Whitehead, Director, Office of Grants Management/Senior Financial Assistance Executive

**Target Date: May 26, 2023**

**Recommendation 2:** We recommend that the DOI direct the bureaus to incorporate an internal control in their geospatial data acquisition policies and procedures requiring offices to search all sources, including the GeoPlatform, to determine if existing Federal, State, local, or private geospatial data meet the needs of the covered agency before expending funds for geospatial data collection.

**Response:** Concur. The Office of the Chief Data Officer in partnership with the Office of Acquisition and Property Management and the Office of Grants Management will issue a memorandum, which will include guidance to establish bureau and office controls for searching for existing geospatial data as well as compliance with DOI-AAAP-0169 and DOI-PGM-POL-2021-0005.

**Responsible Officials:** Thomas Dabolt, Chief Data Officer; Megan Olsen, Director, Office of Acquisition and Property Management/Senior Procurement Executive; and Cara Whitehead, Director, Office of Grants Management/Senior Financial Assistance Executive

**Target Date: May 26, 2023**

**Recommendation 3:** We recommend that the DOI direct the bureaus to document the search as required by the acquisition planning policy (DOI-AAAP–0169).

**Response:** Concur. The Office of the Chief Data Officer in partnership with the Office of Acquisition and Property Management and the Office of Grants Management will issue a memorandum, which will include guidance to establish bureau and office controls for searching for existing geospatial data as well as compliance with DOI-AAAP-0169 and DOI-PGM-POL-2021-0005.

**Responsible Officials:** Thomas Dabolt, Chief Data Officer; Megan Olsen, Director, Office of Acquisition and Property Management/Senior Procurement Executive; and Cara Whitehead, Director, Office of Grants Management/Senior Financial Assistance Executive

**Target Date:** May 26, 2023

**Recommendation 4:** We recommend that the DOI direct the Bureau of Reclamation to incorporate an internal control in its geospatial data acquisition policies and procedures that requires its office to conduct quality testing on all geospatial data provided by third parties.

**Response:** Concur. The OCIO will issue a memorandum directing all DOI bureaus and offices to establish controls for testing the quality of all geospatial data provided by third parties.

**Responsible Official:** Thomas Dabolt, Chief Data Officer

**Target Date:** May 26, 2023

**Recommendation 5:** We recommend that the Office of the Chief Information Officer coordinate with the bureaus to determine why their datasets in the GeoPlatform had missing or inaccurate metadata and establish appropriate controls to help ensure future accuracy.

**Response:** Concur. The OCIO will work with individual bureaus on their metadata and establish a control to verify that metadata are registered properly in the GeoPlatform.

**Responsible Official:** Thomas Dabolt, Chief Data Officer

**Target Date:** May 26, 2023

**Recommendation 6:** We recommend that the Office of the Chief Information Officer direct the Bureau of Ocean Energy Management to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

**Response:** Concur. The OCIO will issue a memorandum directing all DOI bureaus and offices to develop internal controls for geospatial metadata harvest to data.gov and geoplatform.gov.

**Responsible Official:** Thomas Dabolt, Chief Data Officer

**Target Date:** May 26, 2023

**Recommendation 7:** We recommend that the Office of the Chief Information Officer direct the Bureau of Safety and Environmental Enforcement to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

**Response:** Concur. The OCIO will issue a memorandum directing all DOI bureaus and offices to develop internal controls for geospatial metadata harvest to data.gov and geoplatform.gov.

**Responsible Official:** Thomas Dabolt, Chief Data Officer

**Target Date:** May 26, 2023

**Recommendation 8:** We recommend that the Office of the Chief Information Officer direct the

National Park Service to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

**Response:** Concur. The OCIO will issue a memorandum directing all DOI bureaus and offices to develop internal controls for geospatial metadata harvest to data.gov and geoplatform.gov.

**Responsible Official:** Thomas Dabolt, Chief Data Officer

**Target Date:** May 26, 2023

**Recommendation 9:** We recommend that the Office of the Chief Information Officer direct the U.S. Geological Survey to ensure that metadata are harvested from Data.gov into the appropriate datasets on the GeoPlatform.

**Response:** Concur. The OCIO will issue a memorandum directing all DOI bureaus and offices to develop internal controls for geospatial metadata harvest to data.gov and geoplatform.gov.

**Responsible Official:** Thomas Dabolt, Chief Data Officer

**Target Date:** May 26, 2023

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## Appendix 6: Status of Recommendations

Recommendation	Status	Action Required
1-9	Resolved but not implemented	We will refer these recommendations to the Office of Policy, Management and Budget to track implementation.

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# 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.



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

## Who Can Report?

Anyone with knowledge of potential fraud, waste, abuse, misconduct, or mismanagement involving the 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 the OIG, and the information they share can lead to reviews and investigations that result in accountability and positive change for the 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. Section 7(b) of the Inspector General Act of 1978 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.