

U.S. Department of Labor

Office of Inspector General—Office of Audit

**REPORT TO THE CHIEF DATA
OFFICER**



**DOL MADE PROGRESS IN
IMPLEMENTING GEOSPATIAL DATA
ACT REQUIREMENTS, BUT MORE
NEEDS TO BE DONE**

**DATE ISSUED: SEPTEMBER 30, 2022
REPORT NUMBER: 23-22-003-01-001**



BRIEFLY...

DOL MADE PROGRESS IN IMPLEMENTING GEOSPATIAL DATA ACT REQUIREMENTS, BUT MORE NEEDS TO BE DONE

September 30, 2022

WHY OIG CONDUCTED THE AUDIT

The Geospatial Data Act of 2018 (GDA) was signed into law on October 5, 2018, to foster efficient management of geospatial data, technologies, and infrastructure through enhanced coordination among federal, state, local, and tribal governments, along with the private sector and academia. According to the GDA, the Inspectors General must complete an audit every two years regarding their agencies' progress toward implementing GDA requirements, such as devising a strategy and enforcing standards for agency geospatial data.

WHAT OIG DID

To address this mandatory audit requirement, we focused on the Department of Labor's (DOL) progress toward compliance with the GDA. Specifically, we performed an audit to answer the following question:

To what extent has DOL fulfilled the requirements of the GDA to date?

We assessed the status of DOL's implementation efforts as of August 2022 by conducting interviews with DOL management officials and analyzing evidence provided.

READ THE FULL REPORT

<http://www.oig.dol.gov/public/reports/oa/2022/23-22-003-01-001.pdf>

WHAT OIG FOUND

DOL took steps to address the 13 specific requirements of the GDA, but more remains to be done to meet the requirements. Of the 13 requirements, we determined DOL met 3 requirements, and made some progress on implementing the remaining 10 requirements.

At the departmental level, DOL began implementing GDA requirements for the geospatial data it tracked and monitored. However, individual DOL agencies had expanded their systems and data without considering GDA requirements.

DOL's progress to date has been hindered by multiple factors, one being inconsistent data collection by DOL's Chief Data Officer (CDO). For example, geospatial data regarding MSHA mines, OSHA injury reports, and drones was not identified through the data collection process. Each agency then submitted its own geospatial data independently within Data.gov, which caused inconsistent data submissions. Finally, the Federal Geographic Data Committee (FGDC) and the Office of Management and Budget (OMB) have not yet issued regulations to provide guidance on how GDA requirements are to be implemented.

While DOL's Geospatial Data Strategy was issued in June 2022, updates are needed for DOL's emerging types of data inventory. Without creating policy and procedures to cover all of DOL's geospatial data, DOL may not achieve GDA compliance.

WHAT OIG RECOMMENDED

We recommend the CDO ensures DOL includes all types of agency geospatial data in its geospatial data management processes, and update policy and procedures to cover all geospatial data covered in the GDA's 13 requirements.

We also recommend that the CDO plan for obtaining sufficient funding to properly implement and oversee data quality standards throughout DOL and for its contracts. The CDO generally agreed with our recommendations.

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INSPECTOR GENERAL'S REPORT

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This report presents the results of our review of the Department of Labor's (DOL) progress in implementing the requirements of the Geospatial Data Act of 2018 (GDA). The federal government collects, maintains, and uses geospatial data¹—i.e., information linked to specific geographic locations—to help in decision making and to support many functions. This includes national security, law enforcement, health care, environmental protection, and natural resources conservation. The GDA was signed into law on October 5, 2018, to foster efficient management of geospatial data, technologies, and infrastructure through enhanced coordination among federal, state, local, and tribal governments, along with the private sector and academia.

The GDA established the Federal Geographic Data Committee (FGDC) as the lead federal entity for developing, implementing, and reviewing the policies, practices, and standards relating to geospatial data. Federal agencies have 5 years from the date FGDC establishes each standard to complete implementation of GDA requirements. Additionally, the GDA mandates that once every two years, the Inspector General must perform an audit of agency compliance with the requirements, including limitations on the use of funds should GDA requirements not be met. Our audit focused on the progress that DOL made in implementing GDA requirements. As such, we performed an audit to answer the following question:

¹ Geospatial data is information that is tied to a location on the Earth, including by identifying the geographic location and characteristics of natural or constructed features and boundaries on the Earth. Examples of geospatial information include maps, satellite imagery, and census and housing data as well as information identified by a region or jurisdiction.

To what extent has DOL fulfilled the requirements of the Geospatial Data Act of 2018 to date?

Our audit examined DOL’s progress in implementing geospatial data creation, maintenance, and usage as detailed in the GDA. We assessed the status of DOL’s implementation efforts as of August 2022 by conducting interviews with DOL management officials and analyzing evidence provided.

RESULTS

DOL made progress in addressing the 13 specific requirements in Section 759 (a) of the GDA; however, more remains to be done. Of the 13 requirements, we determined DOL initiated action on and met 3 requirements. And while DOL made varying degrees of progress, it did not meet the remaining 10 requirements. Additionally, we found DOL agencies are expanding their systems and data without considering the requirements of the GDA or working with the CDO on ensuring geospatial data quality.

DOL’s progress to date has been hindered by several factors. This includes: inconsistent data collection processes; lack of identified funding for licensing of data quality standards; lack of agency coordination and reporting; and lack of guidance and regulations from the FGDC and Office of Management and Budget (OMB).

In our first GDA audit report published on September 30, 2020,² we issued two recommendations. DOL provided evidence it had performed corrective actions to close both recommendations. DOL addressed the first recommendation by establishing the role of CDO to manage DOL’s geospatial data assets. In addressing the second recommendation, DOL drafted and published its Geospatial Data Strategy and DOL Enterprise Data Strategy.

Without continuing to make progress in implementing the requirements of the GDA and effective controls over identifying geospatial data within agency systems, DOL cannot offer reasonable assurance that it will be able to achieve timely compliance with GDA requirements.

² DOL Needs to Do More to Implement the Geospatial Data Act of 2018, Report No. 23-20-004-01-001 (September 30, 2020), available at: <https://www.oig.dol.gov/public/reports/oa/2020/23-20-004-01-001.pdf>

PROGRESS IN IMPLEMENTING GDA REQUIREMENTS

DOL's efforts to implement GDA included:

- initiating the development of a strategy for advancing DOL's geographic information and related geospatial data activities;
- identifying geographic information usage and sources;
- working with other federal agencies and groups regarding geospatial data; and
- appointing the CDO as the official responsible for coordinating DOL's geospatial data collection, acquisition, maintenance, and dissemination.

These actions satisfied 3 of the 13 requirements of the GDA. Though DOL made progress in implementing the remaining 10 requirements, we determined that the requirements were not met.

The following is our detailed analysis of DOL's progress in addressing each of the 13 requirements in section 759 (a) of the GDA. (For a summary-level view of our final assessment regarding DOL's progress on these 13 requirements, refer to Exhibit 1.)

Requirement 1, Strategy. DOL was required to prepare, maintain, publish, and implement a strategy for promoting the use of geographic information and related geospatial data and activities appropriate to its mission. DOL created the Geospatial Data Strategy, which partially implemented requirement 1. We made this determination based on our testing that identified the existence of geospatial data in MSHA and OSHA information systems and also in DOL drone inspection data. DOL had not identified certain data as geospatial data and therefore did not include it in their Geospatial Data Strategy. The CDO had developed policies for the potential handling of address data, but excluded planning for other types of geospatial data. Data from sources included latitude and longitude of MSHA mines, OSHA severe injury reports, and drone inspection aerial photos. Additionally, as each agency tracked their own geospatial data in Data.gov according to their own independent determinations, this caused inaccurate collection. The lack of a standardized approach or policy created inconsistencies, and therefore, entries of data type and data consideration were not centralized and approved by the CDO.

Although the strategy was cleared by DOL on March 29, 2021, DOL did not publish its data policies on the Office of Data Governance website until June 15, 2022, more than a year after it was supposed to be implemented.

OIG Assessment: This requirement was not met.

Requirement 2, Geospatial Data. DOL was required to collect, maintain, disseminate, and preserve geospatial data so it could be readily shared with other federal agencies and non-federal users. The CDO stated that DOL has not identified significant amount of geospatial data but is focused on improving the address standardization for current and prospective data analysis efforts. We found that DOL was unaware of the existence of geospatial data in OSHA and MSHA inspection records and within DOL drone programs. As a result, DOL did not fully collect, maintain, disseminate, and preserve the entire set of geospatial data that can be readily shared with other federal agencies and non-federal users.

OIG Assessment: This requirement was not met.

Requirement 3, Promotion of Integration. DOL was required to promote the integration of geospatial data from all sources. Since DOL was unable to complete a full inventory of geospatial data, it was not able to effectively integrate geospatial data from all sources. Also, the policy for integration is not included in its Geospatial Data Strategy. DOL published the data policy onto its website in June 2022 after we started the audit. This responsibility is progressing, but is partially implemented.

OIG Assessment: This requirement was not met.

Requirement 4, Inclusion of Geospatial Data in Agency Record Schedules. DOL was required to ensure that data information products and other records created in geospatial data were included on agency record schedules that have been approved by the National Archives and Records Administration (NARA). We requested DOL's record schedules that have been approved by NARA but DOL could not provide the specific test samples requested. Since DOL was unable to complete a full inventory of geospatial data, it also could not ensure all relevant data is included in NARA-approved agency record schedules.

OIG Assessment: This requirement was not met.

Requirement 5, Allocation of Resources. DOL was required to allocate resources to fulfill the responsibilities of geospatial data collection, production, and stewardship, and support of Committee (i.e., FGDC) activities. Planning did not include predictable nor consistent funding lines for geospatial data identification, collection, or production. The CDO has stated this was an ongoing concern for management regarding their responsibilities and for future geospatial

planned activities. DOL has recognized this risk, but it does not have a plan or strategy for future developments and budgeting in this area.

OIG Assessment: This requirement was not met.

Requirement 6, Use of Geospatial Data Standards. DOL was required to use the standards, including those for metadata for geospatial data, for documenting geospatial data with relevant metadata and making metadata available through the GeoPlatform.³ DOL did not obtain a license nor allocate funding for data quality standards. For example, the DOL did not use ISO 19115 data standard or a similar standard for DOL's address location data due to a lack of sufficient funding. However, the CDO was planning to use the Postal Addressing Standards Publication 28 as the standard for address location data which is a public standard. The Postal Addressing Standards Publication 28 is intended for postal addressing data, but is not a quality standard for other types of geospatial data. Additionally, the planned address standardization contracts for geospatial data did not have documented risk plans for data quality such as handling and including data with latitudes, longitudes, and altitudes. The CDO has planned for the address-related data quality standards, but this did not include other types of geospatial data at DOL. DOL has made progress with handling postal data standards, but does not have general standards defined yet.

Since DOL did not have a full inventory of geospatial data, it was not able to ensure its geospatial data complies with applicable geospatial data standards, including metadata standards.

OIG Assessment: This requirement was not met.

Requirement 7, Coordination. DOL was required to coordinate and work with other federal agencies, 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 upon existing non-federal geospatial data to the extent possible. The CDO and DOL have participated in government-wide partnerships to develop plans for geospatial sharing and standardization. The CDO participated in FGDC meetings and provided evidence regarding DOL's participation.

OIG Assessment: DOL met the requirement.

³ The term "metadata for geospatial data" means information about geospatial data, including the content, source, vintage, accuracy, condition, projection, method of collection, and other characteristics or descriptions of the geospatial data. The GeoPlatform is maintained by the FGDC and provides a suite of geospatial data, services, and applications for use by federal agencies and other partners.

Requirement 8, Use of Geospatial Information. DOL was required to use geospatial information to a) make federal geospatial information and services useful to the public; b) enhance operations; c) support decision making; and d) enhance reporting to the public and to Congress. Since DOL did not have a complete inventory of geospatial data, it was not able to take steps to make federal geospatial information and services useful to the public, enhance operations, and support decision making. There are plans being developed to make address data more functional, but these plans for addressing standardization have not been executed yet.

OIG Assessment: This requirement was not met.

Requirement 9, Personal Privacy and Confidentiality. DOL was required to protect personal privacy and maintain confidentiality in accordance with federal policy and law. However, DOL did not have a complete inventory of geospatial data, and this meant certain data might have been inadvertently at risk of being accessible. As an example, we found MSHA mines' geospatial data on DOL's publicly available website. While this data was not sensitive, it is an example of DOL not having awareness of all the geospatial data (or datasets) available within its agency and thus not knowing what may be sensitive geospatial data that needs to be protected. If DOL does not have a complete inventory of geospatial data or a reliable data collection process, we are not in a position to assess risk of privacy and confidentiality. DOL cannot execute effective governance on data without knowing the volume, format, content, and characteristics of that data.

OIG Assessment: This requirement was not met.

Requirement 10, Declassified Data. DOL was required to participate in determining whether declassified data can contribute to and become a part of the National Spatial Data Infrastructure. DOL generally does not have a large amount of classified or declassified geospatial data. Additionally, the CDO stated he is waiting to fully update DOL policies for their limited data once the final government-wide policy is published.

OIG Assessment: DOL met the requirement.

Requirement 11, Review of Existing Geospatial Data. DOL was required to search all sources, including the GeoPlatform, to determine whether existing federal, state, local, or private geospatial data meets the needs of the covered agency before expending funds for geospatial data collection. The CDO confirmed that DOL did not acquire geospatial data. However, as DOL did not have a full inventory or reliable process for geospatial data collection, it also did

not search all geospatial data sources and thus, did not perform procedures on detecting and removing duplicative geospatial data collections.

OIG Assessment: This requirement was not met.

Requirement 12, Collection of High Quality Data. DOL was required to ensure, to the extent possible, that persons who receive federal funds to collect geospatial data obtain high-quality data. According to the CDO, DOL did not contract for specific geospatial data. However, as DOL did not have a full inventory of its geospatial data, it may not have had awareness of data quality of all data or existing contracts needing access to high-quality geospatial data.

OIG Assessment: This requirement was not met.

Requirement 13, Appointment of Contact. DOL was required to appoint a contact for coordination with other lead covered agencies in the collection, acquisition, maintenance, and dissemination of the National Geospatial Data Asset data themes⁴ used by the covered agency. In the 2018 report, we made a recommendation for this requirement. The CDO was appointed with this authority. This recommendation was closed.

Assessment: DOL met the requirement.

DOL PROGRESS IN IMPLEMENTING GDA REQUIREMENTS IMPAIRED BY MULTIPLE FACTORS

DOL's progress to date has been impaired by multiple factors. DOL's CDO had only a partial inventory of geospatial data due to an inconsistent process for identifying and collecting data assets. For example, MSHA and OSHA systems, along with their drone-related data, contained geospatial data that was not identified within DOL's collection process. Furthermore, DOL had no plans for long-term funding or allocations for geospatial projects or to purchase data quality standards. Finally, the FGDC and OMB have not yet issued required guidance and regulations pertinent to the GDA.

⁴ The National Geospatial Data Asset core geospatial datasets (including electronic records and coordinates) relate to a topic or subject designated under section 756. Under this section, the National Geospatial Data Asset data themes are the primary topics and subjects for which the coordinated development, maintenance, and dissemination of geospatial data will benefit the federal government and the interests of the people of the United States.

We found geospatial data in DOL agency systems that had not been previously identified by CDO. The CDO originally stated DOL did not have geospatial data beyond address data at the entrance meeting on June 2, 2022. However, our testing identified geospatial data in MSHA and OSHA systems. Specifically, we identified geospatial data from drone aerial photography in MSHA mine inspections and OSHA inspections. MSHA and OSHA used drones for specific data within report evidence including aerial photography with embedded latitude, longitude, and altitude data. In addition, we identified MSHA's system contained datasets that held latitude and longitude data and we found OSHA systems with longitude and latitude data in its severe injury reporting data. This geospatial data was maintained by OSHA and originated from employers reporting all severe work-related injuries. From 2015 onward, OSHA had collected and made this data available to the public through their website.

We identified that DOL had not planned for funding for geospatial data. DOL's planning did not include predictable nor consistent funding lines for geospatial data identification, collection, or production. In fact, the current funding was a part of another funding source, the Technology Modernization Fund. Implementing geospatial data standards, including funding to support this initiative, should be identified as an ongoing concern for management regarding their responsibilities and for future geospatial planned activities. We found that CDO did not have a license or funding available for obtaining or using ISO data quality or similar standards. For example, the CDO obtained address data quality standards, but this is a partial quality oversight standard and is not inclusive of all geospatial data. The CDO is using Publication 28, Postal Addressing Standards, as the standard for address location.

Also, DOL continued to be hindered by lead agencies not publishing timely standards and guidance. FGDC and OMB, lead agencies for implementing the GDA, continue to be delayed in providing data standards and guidance needed by covered agencies. This led to DOL not being able to define geospatial controls consistent with government-wide standards.

We found DOL reporting of data characteristics to Data.gov was not managed or overseen by the CDO due to lack of standardization. Each DOL agency submitted their own information regarding geospatial data in Data.gov, and independent agency determinations caused inconsistent data submissions. Entries of data type and data consideration were not centralized by the CDO or his personnel. Additionally, we found the planned address standardization contracts for geospatial data do not require reviewing the geospatial data's quality.

If DOL doesn't have a reliable process for determining the inventory of geospatial data assets, risk assessment related to privacy and confidentiality may not be

accurately completed. DOL cannot execute effective governance of data unless DOL knows the existence, volume, format, content, and characteristics of that data. The purpose of this audit was to evaluate DOL's compliance with the GDA, but other data assets may apply here as well. Generally, the 13 responsibilities cannot be considered met without documented and consistent processes. Many of the GDA's responsibilities and criteria referred to the maintenance and implementation on the geospatial data and were rated "Not Implemented" due to the domino effect of geospatial data asset identification.

Although DOL has its Geospatial Data Strategy, the strategy primarily covers address geospatial data and does not cover all geospatial data. DOL needs to have policy and procedures that include all of its geospatial data.

The GDA provides agencies 5 years after establishment of each data standard to implement the requirements specific to the data standard. DOL can better prepare for implementation of the data standards and readiness to use geospatial resources by further developing strategies for the creation, use, and contracting of geospatial data. Without the strategies and plans implemented, DOL may inadvertently spend funds on redundant data or provide and use data that do not conform with data standards.

DOL ADDRESSED PRIOR GDA REPORT'S RECOMMENDATIONS

In our prior GDA report dated September 30, 2020, we had the following two recommendations:

Recommendation 1:

We recommended the Deputy Secretary of Labor provide an official assignment for the responsibility and the authority to develop and implement DOL policy for geospatial laws and regulations.

Corrective Action – The Department provided an internal memorandum dated November 17, 2020, detailing official re-assignment from the Deputy Secretary of Labor to the CDO for the responsibility and the authority to develop and implement DOL policy for geospatial laws and regulations.

OIG's Conclusion – Based on our review of the evidence provided, we closed this recommendation.

Closed Effective Date: March 31, 2021.

Recommendation 2:

We recommended the CDO create and implement strategies and internal planning that ensure compliance with the GDA and update geospatial planning strategies once data standards and guidance are issued.

Corrective Actions – On March 8, 2021, the Department provided draft strategies and internal planning documents that were scheduled to be approved in April 2021. The CDO provided evidence that the strategy published on June 15, 2022.

OIG's Conclusion – Based on our review of the evidence provided, we closed this recommendation. However, we noted this strategy should continue to be refined as new government-wide policies are published and data process and standards are finalized.

Closed Effective Date: September 7, 2022.

OIG'S RECOMMENDATIONS

We recommend the Chief Data Officer:

1. Implement processes that ensure DOL includes all types of agency geospatial data in its geospatial data management processes
2. Update policy and procedures to cover other types of geospatial data in completing their 13 responsibilities.
3. Develop a plan to sufficiently fund the implementation and oversight of data quality standards throughout DOL and for its contracts.

SUMMARY OF CHIEF DATA OFFICER'S RESPONSE

The CDO generally agreed with our characterization of DOL's progress in meeting the requirements of the law and with our recommendations. However, the CDO provided some additional context for reviewing the findings and determining what appropriate next steps the Department should take to further implement the GDA. The CDO noted GDA requirements apply to all federal agencies regardless of the extent to which the agency collects, manages, or uses geospatial data or assets, and DOL's current scope and use of geospatial data is

minor. The CDO also noted that implementing corrections at this time would involve extensive efforts due to DOL's numerous, inconsistent legacy systems, and it will be important for the Department to develop approaches to meet the requirements of the GDA in a manner that is consistent with the current and prospective uses of geospatial data and assets. Finally, he noted that the Department has a number of activities underway to address our recommendations and will update its Geospatial Data Strategy, location data standards, and data governance plan that will cover emerging types of geospatial data. We included the CDO's response to our draft report in its entirety in Appendix B.

We appreciate the cooperation and courtesies extended to us by DOL personnel during this audit. OIG personnel who made major contributions to this report are listed in Appendix C.



Carolyn R. Hantz
Assistant Inspector General for Audit

EXHIBIT 1: STATUS OF THE 13 GDA REQUIREMENTS

Requirement	Description	Met Requirement
1. Strategy	Prepare, maintain, publish, and implement a strategy for promoting the use of geographic information and related geospatial data and activities appropriate to the agency’s mission.	No
2. Geospatial Data	Collect, maintain, disseminate, and preserve geospatial data so that they can be readily shared with other Federal agencies and non-Federal users.	No
3. Promotion of Integration	Promote the integration of geospatial data from all sources.	No
4. Inclusion of Geospatial Data in Agency Record Schedules	Ensure that data information products and other records created in geospatial data are included on agency record schedules that have been approved by the National Archives and Records Administration.	No
5. Allocation of Resources	Allocate resources to fulfill responsibilities of collection, production, and stewardship, and support of Committee activities.	No
6. Use of Geospatial Data Standards	Use the standards, including those for metadata for geospatial data, for documenting geospatial data with relevant metadata and making metadata available through the GeoPlatform.	No

Requirement	Description	Met Requirement
7. Coordination	Coordinate and work with other Federal agencies, State, tribal, and local Governments, institutions of higher education, and private sector to efficiently and cost-effectively collect, integrate, maintain, disseminate, and preserve geospatial data, building upon existing non-Federal geospatial data to the extent possible.	Yes
8. Use of Geospatial Information	Use geospatial information to (A) make Federal geospatial information and services useful to the public, (B) enhance operations, (C) support decision making, and (D) enhance reporting to the public and to Congress.	No
9. Personal Privacy and Confidentiality	Protect personal privacy and maintain confidentiality in accordance with Federal policy and law.	No
10. Declassified Data	Participate in determining whether declassified data can contribute to and become a part of the National Spatial Data Infrastructure.	Yes
11. Review of Existing Geospatial Data	Search all sources, including the GeoPlatform, to determine whether existing Federal, State, local, and private geospatial data meet the needs of the covered agency before expending funds for geospatial data collection.	No
12. Collection of High Quality Data	To the extent possible, ensure that persons that receive Federal funds to collect geospatial data obtain high-quality data.	No

Requirement	Description	Met Requirement
13. Appointment of Contact	Appoint a contact to coordinate with lead covered agencies for collection, acquisition, maintenance, and dissemination of the National Geospatial Data Asset data themes.	Yes

APPENDIX A: SCOPE, METHODOLOGY, & CRITERIA

SCOPE

To accomplish our objectives, we audited DOL's progress in implementing the 13 covered agency responsibilities listed in Section 759 (a) of the GDA. Our work was conducted remotely with Office of the Assistant Secretary for Policy headquarters personnel located in Washington, D.C.

GDA Oversight and Audit Requirements

The GDA includes several congressional oversight components related to geospatial data. These oversight components included requirements for annual performance reporting by federal agencies and the FGDC. Additionally, the GDA mandates that, not less than once every 2 years, the Inspector General of each covered agency submit to Congress an audit of the agency's collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data.

According to the mandate, this audit must include a review of the following:

- Compliance of the covered agency with standards for geospatial data, including metadata for geospatial data established under section 757 of the Act;
- Compliance of the covered agency with the agency responsibilities and requirements under section 759 (a) of the Act; and
- Compliance of the covered agency with the limitation on the use of federal funds under section 759A of the Act.

To meet these mandatory audit requirements, the Covered Agency Inspectors General determined that audits focused on the Covered Agencies' progress toward compliance with the GDA, including the agencies' compliance with requirements under subsection (a), would likely provide the best value to the Covered Agencies, Congress, and the public.

This is a somewhat narrower approach than what the law requires because it is currently difficult to determine which standards the audits should use in evaluating compliance. Also, because the law establishes a 5-year implementation period before limiting the use of federal funds for non-compliant

activities, this requirement would not be evaluated in the GDA Audit for fiscal year 2022.

METHODOLOGY

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

To accomplish our objective, we reviewed federal laws and regulations, including the GDA, interviewed DOL officials, including the CDO, and analyzed documentation provided by the CDO.

INTERNAL CONTROLS

In planning and performing our audit, we considered DOL's internal controls significant to our audit objective by obtaining an understanding of those controls and assessing control risks relevant to our objective. We considered the internal control principle of assignment of responsibility and delegation of authority during our planning, substantive phases, and evaluated relevant controls. The objective of our audit was not to provide assurance of the internal controls; therefore, we did not express an opinion on DOL's internal controls. Our consideration of internal controls for administering the accountability of GDA would not necessarily disclose all matters that might be significant deficiencies. Because of the inherent limitations on internal controls, or misstatements, noncompliance may occur and not be detected.

CRITERIA

- Geospatial Data Act of 2018 (GDA)

PRIOR REPORTS

We previously issued the following report in accordance with the biannual requirement of the GDA:

- DOL Needs to Do More to Implement the Geospatial Data Act of 2018, Report No. 23-20-004-01-001 (September 30, 2020)

The U.S. Government Accountability Office (GAO) released the following reports that directly pertain to the scope of our audit:

- *Geospatial Information: Progress Needed on Identifying Expenditures, Building and Utilizing a Data Infrastructure, and Reducing Duplicative Efforts*, Report No. GAO-15-193
- *Geospatial Information: OMB and Agencies Need to Make Coordination a Priority to Reduce Duplication* (GAO-13-94)
- *Geospatial Information: Better Coordination Needed to Identify and Reduce Duplicative Investments* (GAO-04-703)

The GDA includes requirements for multiple reports from the FGDC, from GDA covered agencies and lead covered agencies, and from agency Inspectors General. Links to these GDA-required reports can be found on the FGDC website at <https://www.fgdc.gov/gda/gda-reports/index.html>.

APPENDIX B: CDO'S RESPONSE TO THE REPORT

U.S. Department of Labor

Office of the Assistant
Secretary for Policy
Washington, D.C. 20210



Thursday, September 19, 2022

MEMORANDUM FOR: CAROLYN HANTZ
Assistant Inspector General for Audit

FROM: SCOTT GIBBONS
Chief Data Officer *sg*

SUBJECT: Response to Recommendations in the Office of Inspector
General's Bi-Annual Audit on Compliance with the Geospatial
Data Act of 2019.

I appreciate the opportunity to respond to the Office of Inspector General's (OIG) findings and recommendations regarding Department of Labor (Department) compliance with the requirements of the Geospatial Data Act of 2018 (GDA or Act). I appreciate OIG's characterization of progress at the Department in addressing prior audit recommendations and meeting the requirements of the law, and I broadly agree with the findings identified during the audit, and the recommendations to help move our data governance forward. However, I also believe that there is some important context that should be presented while reviewing the findings and determining what appropriate next steps the Department should take to continue implementation of the GDA.

First, it continues to be important to note that the GDA has a single set of requirements for all agencies, regardless of the extent to which the agency collects, manages, or uses geospatial data or assets to meet their mission. The Department does almost no geospatial data collection or analysis beyond capturing addresses in administrative data. While all agencies need to properly administer the data they collect and depend on to guide their work, the scope of location data in meeting the missions of the agencies within the Department is minor.

Second, most production IT databases and data systems are exceedingly heterogeneous in terms of platforms, products, information architecture, and data quality controls. Making large scale changes at this time would involve extensive triage to numerous, inconsistent, legacy systems, and this would be prohibitively expensive, complicated, and time consuming given the potential benefit to DOL's mission. The Department must continue to balance approaches to meet the requirements of the GDA in a manner that is consistent with our use of location and geospatial data, the current and prospective state of our information technology architecture and systems, and the utility that would be realized by the Department in more consistent and optimal geospatial data collection, management, and use.

Third, I appreciate the acknowledgement by the auditing team that the absence of clear guidance in how to implement the requirements of the GDA creates practical challenges for the

Department in assessing compliance and organizational risk in rushing towards implementing systemic governance without clarity in government-wide standards.

The Department has a number of activities underway that will help to address the recommendations including expanded use of existing address standardization, validation and geocoding services. Consistent with the audit findings, the Department will update our Geospatial Data Strategy and data standards for location data, and create a plan for data governance to cover the emerging types of geospatial data identified in the audit such as data from drones.

Thank you again for your cooperative approach to conducting this audit on a short timeline and in recognizing the limited context for geospatial data at the Department. We appreciate the opportunity to comment on this and anticipate addressing the findings during FY 2023 by coordinating new policy and guidance through the Data Board and Departmental management.

cc: Raj Nayak
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APPENDIX C: ACKNOWLEDGEMENTS

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