



Audit of the Department of Justice's Compliance with
the Geospatial Data Act of 2018 for
Fiscal Years 2021 and 2022



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EXECUTIVE SUMMARY

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Objective

The objective of this audit was to assess the Department of Justice's (Department) progress toward meeting the requirements for covered agencies established under subsection 759(a) of the Geospatial Data Act of 2018 (GDA). The GDA requires the Department to take specific actions to enhance government and private sector use of geospatial data and technology.

The GDA also requires that the Inspectors General of covered agencies conduct an audit of their respective agency's compliance with the GDA requirements every 2 years. This audit covers the Department's efforts to comply with the GDA for fiscal years 2021 and 2022.

Results in Brief

We found that the Department has met 8 of the 13 GDA requirements under subsection 759(a) and made progress towards meeting 4 of the remaining 5 requirements. We were unable to fully assess the Department's compliance with the requirement related to Federal Geographic Data Committee (FGDC) endorsed geospatial data standards. Additionally, we found the Department does not have an accurate inventory of geospatial data assets, including metadata standards. Further, policy improvements are necessary to ensure the Department is not duplicating efforts and wasting resources.

Recommendations

Our report contains eight recommendations to improve the Department's efforts to comply with the GDA. We requested a response to our draft audit report from the Justice Management Division, which can be found in Appendix 2. Our analysis of their response is included in Appendix 3.

Audit Results

Geospatial data is information related to features or events that can be referenced to specific locations relative to the earth's surface, including information derived from remote sensing, mapping, and surveying technologies, images, and aerial photographs. Subsection 759 of the GDA established the responsibilities and reporting requirements of each covered agency.

Department Progress Towards Full Compliance

Our prior audit of the Department's efforts to comply with the GDA, issued in September 2020, found that the Department was not in compliance with any of the 13 GDA requirements under subsection 759(a). Our current audit found that the Department has met 8 of the 13 requirements, which related to its geospatial data strategy, data integration, recordkeeping, resource allocation, industry coordination, use of geospatial data, personal privacy, and lead agency coordination. We also found that the Department has established a comprehensive Department-wide strategy and the Geospatial Community of Interest to enable components to collaborate and coordinate on its geospatial efforts. However, the Department does not have an accurate inventory of geospatial data assets, including metadata standards and still needs to improve policy to ensure the components are not duplicating efforts and wasting resources.

Department Action Still Needed

We determined that the Department has made progress towards meeting 4 of the 13 requirements pertaining to data collection and quality, National Spatial Data Infrastructure contribution, and existing data.

GDA Requirements Awaiting Additional Guidance

We were unable to fully assess the Department's compliance with 1 of its 13 requirements related to FGDC-endorsed geospatial data standards because the FGDC has not yet published these standards.

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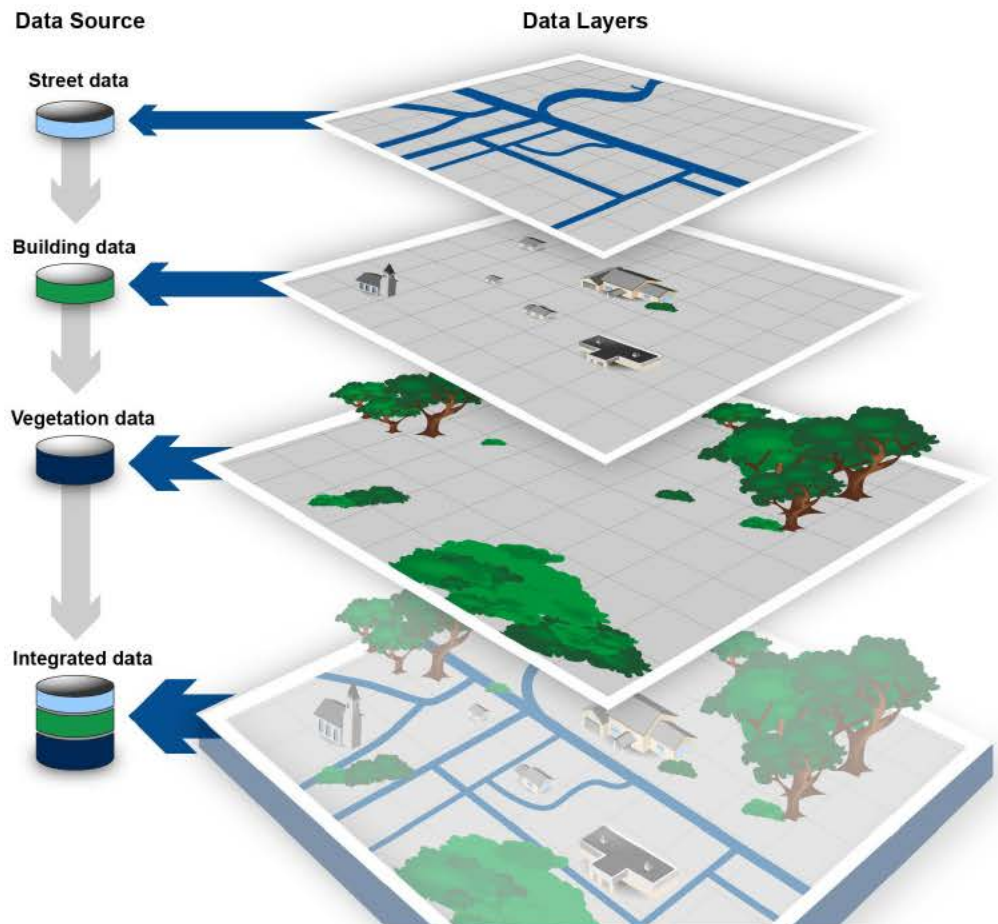
Introduction

Geospatial data is information related to features or events that can be referenced to specific locations relative to the earth's surface. For example, features such as buildings, rivers, and roads can all be identified by geospatial locations. In addition, events such as criminal activity or the spread of COVID-19 can be tracked by geospatial locations. Geospatial data can be analyzed in geographic information systems — systems of computer software, hardware, and data used to capture, store, manipulate, analyze, and graphically present a potentially wide array of geospatial data. The primary function of a geographic information system is to link multiple sets of geospatial data and display the combined information as maps with different layers of information. Assuming that all of the information is at the same scale and has been formatted according to the same geospatial standards, users can potentially overlay geospatial data about any number of specific topics to examine how the data in the various layers interrelate.

Each layer of a geographic information system map typically represents a single theme made up of one or more sets of data, each of which could be derived from a source completely different from the others. For example, one theme could represent all streets in a specific area. Another theme could correspond to all buildings in the same area, and others could show vegetation. Analyzing this layered information as an integrated whole can significantly aid decision makers in considering complex choices, such as where to locate a police station to best serve the greatest number of citizens. Figure 1 portrays the concept of data themes in a geographic information system.

Figure 1

Visual Representation of Data Themes in a Geographic Information System



Source: U.S. Government Accountability Office

For many years, the federal government has taken steps to coordinate geospatial activities both within and outside the federal government to discourage the duplication of data and the inefficient use of resources. Beginning in the early 1950s, the federal government began promoting the coordinated use, sharing, and dissemination of geospatial data nationwide through various Office of Management and Budget (OMB) Circulars and Executive Orders. However, in 2015 Congress found that federal efforts to collect this data historically lacked coordination and often were duplicative, resulting in billions of dollars in wasted resources. As a result, the Geospatial Data Act (GDA) was introduced with the goal of improving collaboration across agencies, reducing waste, and providing oversight of the federal government's multibillion-dollar investments in geospatial data.

The GDA was signed into law on October 5, 2018, and is comprised of 12 sections that formalize governance processes related to geospatial data, provide policy and guidance to empower the use of geospatial data and technology, and facilitate broad cooperation between the public and private sectors. The GDA includes in its definition of geospatial data not only information that is tied to a location on the earth but also

information derived from remote sensing, mapping, and surveying technologies, images, and aerial photographs.¹ The GDA specifically excludes classified national security-related geospatial data and activities of the intelligence community and geospatial data and activities of Indian tribes that are not conducted using federal funds. Table 1 provides a brief description of each section of the GDA.

Table 1
Sections of the Geospatial Data Act

Section	Title	Description
751	Findings	Identifies findings leading to the GDA.
752	Definitions	Defines terms used in the GDA.
753	Federal Geographic Data Committee (FGDC)	Codifies the continuation of the FGDC as the primary entity for developing, implementing, and reviewing the policies, practices, and standards relating to geospatial data.
754	National Geospatial Advisory Committee	Codifies the continuation of the National Geospatial Advisory Committee specifying its role in advising the FGDC chairperson relating to the management of federal and national geospatial programs and other activities relating to the implementation of the GDA.
755	National Spatial Data Infrastructure	Defines and establishes the goals of the National Spatial Data Infrastructure and mandates that the FGDC prepare and maintain a National Spatial Data Infrastructure strategic plan.
756	National Geospatial Data Asset Data Themes	Requires the FGDC to designate geospatial data themes for management by federal agencies that it deems would benefit the general population through coordinated development, maintenance, and dissemination.
757	Geospatial Data Standards	Requires the FGDC to establish standards for each National Geospatial Data Asset data theme, including content standards for metadata.
758	GeoPlatform	Directs the FGDC to operate an online “clearinghouse” of publicly available geospatial data and metadata, known as the GeoPlatform, that provides an automated means of accessing covered agencies’ geospatial data.
759²	Covered Agency Responsibilities	Establishes the responsibilities and reporting requirements for each covered agency under the GDA. This section also requires the Inspector General of each covered agency to submit to Congress a

¹ Remote sensing is the science of obtaining information about objects or areas from a distance, typically from aircraft or satellites.

² Section 759 consists of three subsections: 759(a) details 13 responsibilities required to be implemented by each covered agency; 759(b) establishes reporting requirements for covered agencies; and 759(c) requires the Inspector General of each covered agency to submit to Congress a biennial audit report on the collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data by the covered agency.

Section	Title	Description
		biennial audit report on the collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data by the covered agency.
759A	Limitation on Use of Federal Funds	Prohibits the use of federal funds by a covered agency for the collection, production, acquisition, maintenance, or dissemination of geospatial data that does not comply with applicable FGDC standards.
759B	Savings Provision	Establishes a savings provision for the subtitle that precludes the GDA from conflicting with existing law.
759C	Private Sector	Authorizes the FGDC and each covered agency to rely upon and use the private sector for the provision of geospatial data and services, to the maximum extent possible.

Source: Office of the Inspector General (OIG) and GDA

OIG Audit Approach

The GDA requires that the Inspectors General of covered agencies conduct an audit of their respective agency's compliance with the GDA requirements every 2 years. Our [prior audit](#) of the Department of Justice's (Department) compliance with the GDA was issued in September 2020.³ The Council of the Inspectors General on Integrity and Efficiency notified the Senate Committee on Commerce, Science, and Transportation, and the House Committee on Science, Space, and Technology in March 2020 that conducting the mandatory audits as prescribed in the GDA would result in inconclusive reports by the Inspectors General for sections 757 and 759A – two of the three audit requirements identified in the statute. The Inspectors General working group determined that audits focused on the covered agencies' progress toward compliance with the GDA, including the agencies' compliance with requirements under subsection 759(a), would likely provide the best value to the agency, Congress, and the public. As of June 2022, the Federal Geographic Data Committee (FGDC) has not established the standards required to assess compliance with GDA sections 757 and 759A.

Therefore, our audit objective was to assess the Department's progress toward meeting the requirements for covered agencies established in the Geospatial Data Act of 2018 under subsection 759(a). The scope of our audit generally covers the Department's efforts to implement the statutory requirements of the GDA from October 2020 through June 2022.

To accomplish our objective, we interviewed personnel from the Justice Management Division (JMD) Office of the Chief Information Officer (OCIO), including the Assistant Director of the Chief Technology Office, who also serves as one of the tri-chairs for the Geospatial Community of Interest (GCOI) and the Data Architecture Working Group (DAWG). We also interviewed the remaining two GCOI tri-chairs from the Federal Bureau of Investigation (FBI) and Drug Enforcement Administration (DEA) and another sitting member of the GCOI from the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). In addition, we

³ U.S. Department of Justice Office of the Inspector General, [Audit of the Department of Justice's Compliance with the Geospatial Data Act of 2018](#), Audit Report 20-113 (September 2020), <https://oig.justice.gov/news/doj-oig-releases-report-doj-compliance-geospatial-data-act-2018>.

evaluated the Department's policies governing geospatial data and reviewed the Department's Justice Data Catalog to identify any geospatial data assets relevant to the requirements of the GDA.⁴

⁴ The Justice Data Catalog is an online repository of metadata input into the system by users within the Department community. Users entering the data into the catalog indicate whether the data has a geospatial theme.

Audit Results

We found the Department has established a comprehensive Department-wide strategy for ensuring that it meets the Geospatial Data Act (GDA) requirements and met 8 of the 13 GDA requirements under subsection 759(a). We also found that the Department has made some progress towards meeting four of the remaining five requirements, but additional actions are needed to fully comply with the GDA subsection 759(a). In addition, we were unable to fully assess compliance with the remaining requirement related to Federal Geographic Data Committee (FGDC) endorsed geospatial data standards because the FGDC has not yet published any endorsed standards. Finally, we found that the Department's Geospatial Data Strategy and Geospatial Community of Interest (GCOI) enable the components to collaborate and coordinate on its geospatial efforts. However, the Department does not have an accurate inventory of geospatial data assets, including metadata standards, and additional policy improvements are necessary to ensure the components are not duplicating efforts and wasting resources.

Improvements in the Department's Compliance with the Geospatial Data Act

The GDA requires that the Inspectors General of covered agencies conduct an audit of their respective agency's compliance with the GDA requirements every 2 years. In our prior audit of the Department's efforts to comply with the GDA, issued in September 2020, we found that the Department had not established a comprehensive Department-wide strategy for ensuring that it meets the GDA requirements. Rather, the individual Department components generally were responsible for developing and implementing policies and procedures concerning geospatial data. As of December 2020, the recommendations to the Department were closed.

During the prior audit, we also found that while the Department had made progress toward compliance with 8 of the 13 GDA requirements outlined in subsection 759(a), it had made little or no progress toward compliance with 3 of the requirements. Additionally, we were unable to fully assess compliance with the two remaining requirements because the FGDC had not finalized the National Spatial Data Infrastructure strategic plan and performance standards. Since our prior audit, the Department has met 8 of the 13 GDA requirements under subsection 759(a) and made some progress towards meeting 4 of the remaining 5 GDA requirements; however, we were still unable to fully assess the Department's compliance with the remaining requirement related to FGDC-endorsed geospatial data standards, as shown in Table 2.

Table 2

Improvements in Department's Compliance with the Geospatial Data Act Since the Prior Audit

Section		FY 19-20 Status	Current FY 21-22 Status
759(a)(1)	Geospatial Data Strategy	Unable to assess	Meets Requirements
759(a)(2)	Geospatial Data Collection	No Progress	Made Progress
759(a)(3)	Geospatial Data Integration	Made Progress	Meets Requirements
759(a)(4)	Approved Agency Record Schedules	Made Progress	Meets Requirements

	Section	FY 19-20 Status	Current FY 21-22 Status
759(a)(5)	Geospatial Resource Allocation	Made Progress	Meets Requirements
759(a)(6)	Geospatial Data Standards	No Progress	Unable to fully assess
759(a)(7)	Industry Coordination	No Progress	Meets Requirements
759(a)(8)	Use of Geospatial Data	Made Progress	Meets Requirements
759(a)(9)	Personal Privacy Protection	Made Progress	Meets Requirements
759(a)(10)	National Spatial Data Infrastructure Contributions	Unable to assess	Made Progress
759(a)(11)	Use of Existing Geospatial Data	Made Progress	Made Progress
759(a)(12)	Geospatial Data Quality	Made Progress	Made Progress
759(a)(13)	Lead Covered Agency Coordination	Made Progress	Meets Requirements

Source: GDA and OIG

Compliance with the Geospatial Data Act – Section 759(a)

Section 759 of the GDA establishes the responsibilities, reporting, and audit requirements for each covered agency under the Act. This section is split into 3 subsections: (a) details 13 responsibilities required to be implemented by each covered agency; (b) establishes reporting requirements for covered agencies related to their geospatial data strategy, budget submission, and data asset inventory; and (c) requires biennial audits by the covered agencies' Inspectors General to include reviews of compliance with geospatial data standards established under GDA section 757, the 13 requirements under subsection 759(a), and the limitation on the use of federal funds under section 759A. As previously stated, our audit examined the Department's progress toward compliance with the 13 requirements established in the GDA subsection 759(a), which are discussed in the following sections of this report.

Geospatial Data Strategy

GDA subsection 759(a)(1) requires that covered agencies prepare, maintain, publish, and implement a strategy for advancing geographic information and related geospatial data and activities appropriate to the mission of the covered agency, in support of the strategic plan for the National Spatial Data Infrastructure. The National Spatial Data Infrastructure is described as the technology, policies, criteria, standards, and employees necessary to promote geospatial data sharing throughout the federal, state, tribal, and local governments, as well as the private sector. The FGDC is responsible for coordinating the federal government's development of the National Spatial Data Infrastructure. The FGDC published an updated strategic plan for the National Spatial Data Infrastructure in November of 2020. In December 2020, the Department issued the Geospatial Data Strategy that identifies its GDA responsibilities and the alignment of the Department Data Strategy goals to the National Spatial Data Infrastructure Strategic Plan. Additionally, the Department's Geospatial Data Strategy identifies the GCOI, under the purview of the Department's Data Governance Board, as the entity responsible for the implementation of the Department's Geospatial Data Strategy. We examined the Department's Geospatial Data Strategy and determined that it meets the requirements of GDA subsection 759(a)(1).

Geospatial Data Collection

GDA subsection 759(a)(2) requires that covered agencies collect, maintain, disseminate, and preserve geospatial data such that the resulting data, information, or products can be readily shared with other federal agencies and non-federal users. According to the Office of the Chief Information Officer (OCIO), the public website data.gov is the main forum for sharing the Department's metadata information on public and restricted-public data assets with federal and non-federal users.⁵ During our prior audit, we found that despite the fact that as of August 2020 the Department had shared nearly 1,000 public data assets on data.gov, none of the data assets were designated as geospatial. As of May 12, 2022, OCIO provided us an inventory from data.gov that listed 85 Department geospatial data assets. However, we identified issues related to the accuracy of the Department's listing of geospatial data assets.

The public and restricted-public data assets published on data.gov originate from a separate internal application that provides a central inventory of all Department data assets – the Justice Data Catalog – where users throughout the Department enter metadata for public and non-public data assets they have collected on a quarterly basis. In December 2020, the Department added the "Theme" field to the metadata entered into the Justice Data Catalog, which data.gov uses to flag a data asset as geospatial. We found that data assets entered into the Justice Data Catalog prior to December 2020 and designated as "spatial," were automatically classified as "geospatial." However, our prior audit determined that the "spatial" metadata field within the Justice Data Catalog did not contain sufficient information necessary to determine if the data assets met the GDA definition of geospatial data.

As part of its Justice Data Catalog quality control practices, OCIO conducts a quarterly Integrated Data Collection effort instructing the contributing components to review and update their entries into the catalog, including adding any new entries. As part of this process, OCIO performs a quality assurance check to confirm that metadata submitted for data assets is complete but does not ensure the metadata accurately identifies the data asset's attributes. We requested that OCIO review the inventory of 85 geospatial data assets from data.gov to determine if they were correctly identified as geospatial data assets. Based on its review, OCIO determined that only 8 of the 85 data assets were correctly identified as geospatial data assets. Of the remaining 77 data assets, 57 were not geospatial data assets and 20 were identified as not applicable because the data assets had been archived or were not available. Additionally, OCIO compared the Justice Data Catalog inventory to the data.gov inventory of geospatial data assets to determine if all geospatial data assets were included on data.gov, and found that nine parental data assets from the Justice Data Catalog were not accurately identified as geospatial data assets on data.gov.⁶

After identifying the differences in the inventories, OCIO stated that the Department is refining the definition of geospatial data and is currently developing an accurate and complete inventory of geospatial data. Without an accurate inventory the Department cannot meet the requirements of subsection 759(a)(2) to collect, maintain, disseminate, and preserve geospatial data in a manner that enables the Department to readily share it with other users. Therefore, we recommend that JMD: (1) establish a working definition of geospatial data and communicate that criteria to Department components to ensure geospatial data assets

⁵ As it relates to geospatial data, the term metadata 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.

⁶ Parental data assets have a hierarchical relationship with multiple data sets.

are reported accurately in the Justice Data Catalog, (2) develop and enact a plan to identify all un-classified geospatial data assets within the Department, and (3) develop and implement a quality assurance process to verify geospatial data assets are accurately identified as part of the Integrated Data Collection process.

Geospatial Data Integration

GDA subsection 759(a)(3) requires that covered agencies promote the integration of geospatial data from all sources. As part its Integrated Data Collection effort, on a quarterly basis OCIO instructs components to review and update their entries into the Justice Data Catalog, including adding any new entries and incorporating data from all available sources, which is a new requirement as of November 2020. Additionally, the Department's GCOI was relaunched in August 2020 with a renewed focus on maturing geospatial capabilities at the component level, including the implementation of the GDA requirements. The GCOI is led by tri-chairs from OCIO, Federal Bureau of Investigation (FBI), and Drug Enforcement Administration (DEA) and its members include geospatial data practitioners from across the Department components. GCOI meetings occur every other month and allow members to present geospatial information and resources. GCOI presentations included geospatial application use cases, a Department geospatial virtual showcase, topics on collaboration between Department and non-Department entities, and information from geospatial vendors. We reviewed the GCOI's activities and in conjunction with the quarterly Integrated Data Collection effort, in our judgment, these activities demonstrate that the Department has met the requirements of GDA subsection 759(a)(3).

Approved Agency Record Schedules

GDA subsection 759(a)(4) requires that covered agencies ensure 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).⁷ OCIO officials stated that the Department policy directs components to work with their records managers to ensure the availability of all NARA-approved record schedules, including geospatial data assets. We examined the Department's records management policies and found that they require geospatial data to be maintained in accordance with record schedules approved by NARA. In our judgment, these activities demonstrate that the Department has met the requirements of GDA subsection 759(a)(4).

Geospatial Resource Allocation

GDA subsection 759(a)(5) requires that covered agencies allocate resources to fulfill the responsibilities of effective geospatial data collection, production, and stewardship with regard to related activities of the covered agency, and as necessary, to support the activities of the FGDC. OCIO officials stated that it has completed the Department geospatial data strategy and utilizes the GCOI and Data Architecture Working Group (DAWG) to facilitate geospatial resource allocation. OCIO provided the email distribution list, meeting slides, and agendas from the GCOI, minutes and e-mail invite list from meetings of the Department's Chief Information Officer (CIO) Council, and the DAWG meeting slides and meeting invite list to support their statements on resource allocation. Additionally, OCIO provided a draft geospatial data policy, which is intended to be inserted into two broader Department policy documents. This draft policy defines the executive roles and responsibilities and the governance boards, councils and committees, and component

⁷ The NARA Records Schedule provides mandatory instructions to all NARA staff regarding how to maintain the agency's operational records and what to do with them when they are no longer needed for current business.

oversight managers required specific to Geospatial data. We reviewed the documentation and determined that Department's CIO Council, GCOI, and DAWG committees provide evidence of a methodology for working across components on geospatial efforts and includes the authority, scope, purpose, membership, procedures, and relationships for resource allocation across the executive and practitioner levels. In our judgment, these activities demonstrate that the Department has met the requirements of GDA subsection 759(a)(5); however, OCIO should finalize and enact the draft policy on geospatial data as soon as possible.

Geospatial Data Standards

GDA subsection 759(a)(6) requires covered agencies to use the geospatial data standards, including the standards for metadata for geospatial data, and other appropriate standards, that include documenting geospatial data with the relevant metadata and making metadata available through the [GeoPlatform](#). GDA section 758 defines the GeoPlatform as an electronic service that provides access to geospatial data and metadata to the general public.

The FGDC has endorsed geospatial metadata standards, which are published on its website. Therefore, we were able to assess the Department's efforts specific to metadata standards. According to OCIO, metadata uploaded to the Justice Data Catalog is transferred into data.gov and then geospatial metadata from data.gov is transferred into GeoPlatform. OCIO distributed an updated Job Aid, dated May 9, 2022, to the components that identifies the three accepted geospatial metadata standards that components should be utilizing.

As of the initiation of this audit, none of the Department's identified geospatial data assets in data.gov were available on GeoPlatform and OCIO stated that they were unclear on the metadata requirements for data assets to be transferred from data.gov to GeoPlatform. OCIO officials provided emails between the FGDC GeoPlatform team and OCIO to document their progress in working on this issue. According to the emails, OCIO was notified in October 2021 of the requirements necessary for data assets to be transferred into GeoPlatform and chose not to pursue the guidance. However, during the audit, OCIO completed a proof-of-concept upload of a single Department data asset to GeoPlatform. OCIO stated that due to the upload they are now fully aware of the metadata requirements for data assets to be ingested into GeoPlatform and updated the Job Aid provided to components. We recommend that JMD: (1) ensure that all un-classified geospatial data assets adhere to FGDC-endorsed metadata standards; and (2) develop and enact a plan to make all metadata for the Department's geospatial data assets that are approved for public release available on GeoPlatform.

While we found the Department was addressing a portion of this standard related to metadata, the GDA does not specify the standards that apply to this subsection and the FGDC has not published comprehensive standards for this subsection. As a result, we were unable to fully assess the Department's compliance with this subsection.

Industry Coordination

GDA subsection 759(a)(7) requires covered agencies to coordinate and work in partnership 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, while building upon existing non-federal geospatial data, to the extent possible. We found

that there is a Department-wide effort, through the GCOI and DAWG, to work in partnership with other federal, state, local and tribal government agencies; institutions of higher education, and the private sector to collect, integrate, maintain, disseminate, and preserve geospatial data. For example, the FBI collaborates with the U.S. Department of Homeland Security on its Homeland Infrastructure Foundation-Level Data database and the GCOI maintains a working relationship with the National Geospatial-Intelligence Agency to collaborate and leverage the agency's capabilities. We examined meeting minutes from meetings of the Department Chief Information Officer Council demonstrating that geospatial information is promoted to all non-GCOI entities as well as to the GCOI members. The meeting minutes contained multiple instances where information related to the GDA was disseminated to stakeholders. In our judgment, these activities demonstrate that the Department has met the requirements of GDA subsection 759(a)(7).

Use of Geospatial Data

GDA subsection 759(a)(8) requires covered agencies to use 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 Congress. The Department demonstrated its compliance with this subsection using the following examples.

- The Department publishes the public and restricted-public entries from its Justice Data Catalog to data.gov for view and use by the public. Entries into the Justice Data Catalog are made by users at the individual Department components, who designate in the Justice Data Catalog whether the data assets they steward have a geospatial theme to it.
- The FBI's Crime Data Explorer, which is made available to the public, is an online interactive data tool that law enforcement entities and the public can use to easily access, view, and understand the vast amount of crime data collected and published by the FBI Uniform Crime Reporting Program. The FBI Uniform Crime Reporting Program consists of four data collections: (1) the National Incident-Based Reporting System, (2) the Summary Reporting System, (3) the Law Enforcement Officers Killed and Assaulted Program, and (4) the Hate Crime Statistics Program.
- The Bureau of Alcohol, Tobacco, Firearms and Explosives' (ATF) Federal Firearm Licensee burglaries and robberies data is posted to its website.

We recognize that the FBI Uniform Crime Reporting and ATF Federal Firearm Licensee theft-related data are only two of possibly many data collections that the Department can use 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, and the Department components should make a continual effort to identify and maximize the use of all of the Department's publicly available geospatial data. However, in our judgment, these activities demonstrate that the Department has met the requirements of GDA subsection 759(a)(8).

Personal Privacy Protection

GDA subsection 759(a)(9) requires covered agencies to protect personal privacy and maintain confidentiality in accordance with federal policy and law. OCIO stated that new information systems require the completion of a Privacy Impact Assessment, and the Department must now comply with a new

cybersecurity requirement to tag the sensitivity of documents. In addition, the Department has several policies in place requiring components to protect personal privacy, including safeguarding personally identifiable information.

We obtained a recent Privacy Impact Assessment prepared in March 2022 by JMD for the Department Personnel Geospatial Dashboard, or GEO Dashboard, to ensure the Department is operating in compliance with required privacy policies. Based on our review of the information assessed and contained in the Privacy Impact Assessment for the GEO Dashboard, the Privacy Impact Assessment preparation process serves as an effective tool for ensuring the proper assessment, management, and mitigation of privacy risks associated with the creation, collection, use, processing, storage, maintenance, dissemination, disclosure, or disposal of personally identifiable information in Department information systems. We reviewed the provided Department privacy policies and determined that they, when followed, should effectively protect personal privacy, and maintain confidentiality in accordance with federal laws and regulations. In our judgment, these activities demonstrate that the Department has met the requirements of GDA subsection 759(a)(9).

National Spatial Data Infrastructure Contributions

GDA subsection 759(a)(10) requires covered agencies to participate in determining, when applicable, whether declassified data can contribute to and become part of the National Spatial Data Infrastructure. The National Spatial Data Infrastructure Strategic Plan for 2021-2024 was finalized and issued in November 2020 and makes it clear that participating agencies in the FGDC are responsible for determining if they have contributable data assets and making them available to the public. Pursuant to Executive Order 13526, "Classified National Security Information," the Department has three programs it uses to declassify information: (1) the Automatic Declassification Program, (2) the Systematic Declassification Program, and (3) the Mandatory Declassification Review Program. As previously mentioned, during the Department's quarterly Integrated Data Collection efforts, OCIO instruct components to conduct a quality control review of their data entries in the Justice Data Catalog to ensure they are complete and accurate; this instruction includes ensuring declassified data assets are added to the inventory.

The Department has made progress towards compliance with GDA subsection 759(a)(10) by having programs in place to declassify data, contributing publicly accessible geospatial data to the Justice Data Catalog, and requiring Department components to perform quarterly reviews of its data entries to ensure they are complete, accurate, and include declassified data. We conducted interviews with two of the GCOI tri-chairs from the FBI and DEA, and another sitting member of the GCOI from the ATF, and found that it is not evident that the components know specifically how to address the requirement to ensure declassified data is included in the Justice Data Catalog because the guidance provided is vague and open to individual interpretation. Consequently, the Department may not be sharing all declassified geospatial data with the public. Therefore, we recommend that JMD develop and provide to all components specific guidance on how to identify declassified geospatial data and determine whether it can contribute to and become part of the National Spatial Data Infrastructure.

Use of Existing Geospatial Data

GDA subsection 759(a)(11) requires covered agencies to 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. The Department has a 5-year Enterprise License

Agreement that allows all Department employees, contractors, and task force personnel to use geographic information system tools to accomplish their individual missions. Users of the Enterprise License Agreement have access to a database that includes maps, applications, and data layers uploaded by vendors and thousands of other organizations that can be utilized or combined to create new maps and applications. Based on our review of the database, including the information contained within that is accessible to all users in the Department, the database provides a useful tool in ensuring multiple reliable sources are searched for existing geospatial data and can help inform a decision on whether funds should be expended for geospatial data collection. We reviewed the Department IT management and acquisition policies—Department Policy Statement 0903 and Draft Department Policy Statement 0903.01—that address IT acquisitions and the IT Acquisition Review Board. The IT Acquisition Review Board is responsible for conducting reviews of IT acquisition requests to ensure, among other things, that IT acquisitions align with Department and IT strategic goals, promote sharing of geospatial data, capture contracts, cooperative agreements, and grants that deal with geospatial data, data generated or accessed through the investment is available in open format and with an open license, and data generated or acquired by the acquisition will be cataloged in the Justice Data Catalog.

In our judgment, for large acquisitions, the policies governing the IT Acquisition Review Board process should ensure the Department components are not collecting duplicative geospatial data. However, for small acquisitions that may not meet the threshold for IT Acquisition Review Board, the Department should ensure its components are searching the map database available through its Enterprise License Agreement, or other trusted sources, for existing data before expending funds for geospatial data collection. Therefore, we recommend that the JMD establish policy requiring Department components to search all reliable sources for existing geospatial data prior to submitting an IT acquisition request or expending funds for geospatial data collection.

Geospatial Data Quality

GDA subsection 759(a)(12) requires covered agencies, to the maximum extent practicable, to ensure that a person receiving federal funds for geospatial data collection provides high-quality data. OCIO stated that geospatial data quality is addressed through its Department-wide collaborative efforts like the GCOI. We were unable to confirm OCIO's statement because there are no documented discussions related to this requirement in the GCOI meeting documents provided. Because the Department is currently revising its policy statement covering IT acquisition oversight practices, this is an opportune time to incorporate new guidance on ensuring geospatial data collection services provide high-quality data in accordance with the GDA. Therefore, we recommend the JMD establish policy requiring IT acquisition requests for geospatial data products and services include a description of the data quality requirements prior to going through the IT acquisition review process.

Lead Covered Agency Coordination

GDA subsection 759(a)(13) requires covered agencies to appoint 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 covered agency. OCIO has appointed the JMD OCIO Chief Information Officer as the Senior Agency Official for Geospatial Information. The Senior Agency Official for Geospatial Information is responsible for ensuring compliance with the GDA and for coordinating with lead covered agencies for the collection, acquisition, maintenance, and dissemination of National Geospatial Data Asset

data themes used by the Department. In our judgment, this activity demonstrates that the Department has met the requirements of GDA subsection 759(a)(13).

Conclusion and Recommendations

During our prior audit, issued in September 2020, we found that the Department had made progress toward compliance with 8 of the 13 GDA requirements under subsection 759(a), made little or no progress toward compliance with 3 of the requirements, and we were unable to fully assess compliance with the 2 remaining requirements. Since our prior audit, the Department has met 8 of the 13 GDA requirements under subsection 759(a). However, while the Department has made progress towards meeting four of the remaining five GDA requirements, additional actions are still needed. Finally, we were still unable to fully assess the Department's compliance with one of the remaining requirements. As a result, we make eight recommendations to improve the Department's efforts to comply with the GDA.

We recommend that JMD:

1. Establish a working definition of geospatial data and communicate that criteria to Department components to ensure geospatial data assets are reported accurately in the Justice Data Catalog.
2. Develop and enact a plan to identify all un-classified geospatial data assets within the Department.
3. Develop and implement a quality assurance process to verify geospatial data assets are accurately identified as part of the Integrated Data Collection process.
4. Ensure that all geospatial data assets adhere to FGDC-endorsed metadata standards.
5. Develop and enact a plan to make all metadata for the Department's geospatial data assets that are approved for public release available on GeoPlatform.
6. Develop and provide to all components specific guidance on how to identify declassified geospatial data and determine whether it can contribute to and become part of the National Spatial Data Infrastructure.
7. Establish policy requiring Department components to search all reliable sources for existing geospatial data prior to submitting an IT acquisition request or expending funds for geospatial data collection.
8. Establish policy requiring IT acquisition requests for geospatial data products and services include a description of the data quality requirements prior to going through the IT acquisition review process.

APPENDIX 1: Objective, Scope, and Methodology

Objective

The objective of the audit was to assess the Department of Justice's (Department) progress toward meeting the requirements for covered agencies established in the Geospatial Data Act of 2018 (GDA) under subsection 759(a).

Scope and Methodology

Our audit covers the Department's efforts to implement the statutory requirements of the GDA for fiscal years 2021 and 2022. To accomplish our objective, we interviewed personnel from the Department's Justice Management Division (JMD) Office of the Chief Information Officer (OCIO), including the Assistant Director of the Chief Technology Office, who also serves as the Department's alternate Senior Agency Official for Geospatial Information. In addition, we evaluated the Department's policies governing geospatial data and reviewed the Department's Justice Data Catalog to identify any geospatial data assets relevant to the requirements of the GDA.

Statement on Compliance with Generally Accepted Government Auditing Standards

We conducted this performance audit in compliance with generally accepted government auditing standards (GAGAS). 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.

Internal Controls

In this audit, we performed testing of internal controls significant within the context of our audit objectives. We did not evaluate the internal controls of the Department to provide assurance on its internal control structure as a whole. Department management is responsible for the establishment and maintenance of internal controls in accordance with OMB Circular A-123. Because we do not express an opinion on the Department's internal control structure as a whole, we offer this statement solely for the information and use of the Department.⁸

In planning and performing our audit, we identified internal control components and underlying internal control principles as significant to the audit objective. Specifically, we assessed the design, implementation, and operating effectiveness off the Department's written policies and process controls pertaining to Geospatial data within our scope. The internal control deficiencies we found are discussed in the Audit Results section of this report. However, because our review was limited to those internal control components and underlying principles that we found significant to the objectives of this audit, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

⁸ This restriction is not intended to limit the distribution of this report, which is a matter of public record.

Compliance with Laws and Regulations

In this audit we tested, as appropriate given our audit objective and scope, records, procedures, and practices, to obtain reasonable assurance that the Department's management complied with federal laws and regulations for which noncompliance, in our judgment, could have a material effect on the results of our audit. Our audit included examining, on a test basis, the Department's compliance with the following laws and regulations that could have a material effect on the Department's operations:

- Public Law 115-254, Subtitle F – Geospatial Data (Geospatial Data Act of 2018)

This testing included interviewing personnel from JMD OCIO, examining geospatial data policies, practices and procedures, and assessing internal controls. As noted in the Audit Results section of this report, we found that the Department did not fully comply with the GDA requirements established in subsection 759(a).

Computer-Processed Data

During our audit, we obtained information from data.gov and the Department's Justice Data Catalog. We did not test the reliability of those systems as a whole, therefore any findings identified involving information from those systems were verified with documentation from other sources. We determined that the data was sufficiently reliable for the purposes of this report.

APPENDIX 2: The Justice Management Division Response to the Draft Audit Report

Department of Justice
GDA of 2018
Technical Comments on Draft OIG Audit Report
09/14/2022

Thank you for the opportunity to comment on the Draft OIG Audit Report of the DOJ Compliance with the Geospatial Data Act of 2018 for the Fiscal Years 2021 and 2022. The report provided the following conclusion and recommendations. The Department's comments are in-line:

Conclusion: During our prior audit, issued in September 2020, we found that the Department had made progress toward compliance with 8 of the 13 GDA requirements under subsection 759(a), made little or no progress toward compliance with 3 of the requirements, and we were unable to fully assess compliance with the 2 remaining requirements. Since our prior audit, the Department has met 8 of the 13 GDA requirements under subsection 759(a). However, while the Department has made progress towards meeting four of the remaining five GDA requirements, additional actions are still needed. Finally, we were still unable to fully assess the Department's compliance with one of the remaining requirements. As a result, we make eight recommendations to improve the Department's efforts to comply with the GDA.

DOJ Comments: As noted in the Office of the Inspector General draft report, the Department has made progress in implementing the provisions of the Geospatial Data Act, as well as provided evidence supporting our effort to satisfy the statute's provisions. We appreciate the efforts of the Audit Team and agree continued action to build on our progress will see the Department achieve further success in implementing these statutory provisions.

Recommendation 1. Establish a working definition of geospatial data and communicate that criteria to Department components to ensure geospatial data assets are reported accurately in the Justice Data Catalog.

DOJ Response: The Department agrees with the recommendation and will continue work with the Geospatial Community of Interest (GCOI) to establish a working definition that will be disseminated to Components through the Data Governance Board (DGB). The Department aims to establish the working definition by the end of Q1 FY2023.

Recommendation 2. Develop and enact a plan to identify all un-classified geospatial data assets within the Department.

DOJ Response: The Department agrees with the recommendation and has drafted an initial Geospatial Data Quality Framework to ensure our data assets are more accurately identified. The Department aims to complete the Framework by the end of Q2 FY2023.

Recommendation 3. Develop and implement a quality assurance process to verify geospatial data assets are accurately identified as part of the Integrated Data Collection process.

DOJ Response: The Department agrees with the recommendation and will integrate the Geospatial Data Quality Framework (mentioned above in recommendation 2) with the IDC process guidance and Geospatial Data Inventory Job Aid, by the end of Q3 FY2023.

Recommendation 4. Ensure that all un-classified geospatial data assets adhere to FGDC-endorsed metadata standards.

DOJ Response: The Department agrees with the recommendation and is aligning the geospatial metadata hosting approach currently in development to FGDC-endorsed metadata standards to promote consistency and common practice across the Department. The Department aims to complete this effort by the end of Q2 FY2023.

Recommendation 5. Develop and enact a plan to make all metadata for the Department's geospatial data assets that are approved for public release available on GeoPlatform.

DOJ Response: The Department agrees with the recommendation and will be hosting a series of collaborative strategic sessions between data and geospatial practitioners within the Department to develop the geospatial metadata hosting plan. The Department aims to release the Plan to the GeoPlatform by the end of Q3 FY2023.

Recommendation 6. Develop and provide to all components specific guidance on how to identify declassified geospatial data and determine whether it can contribute to and become part of the National Spatial Data Infrastructure.

DOJ Response: The Department agrees with the recommendation and is refining an internal job aid to assist data stewards with inventorying geospatial data. The job aid addresses the mechanism for defining geospatial data and the process that must be adhered to enable GeoPlatform harvesting. Once harvested into GeoPlatform, the Department's geospatial data is available for public use and contribute to the National Spatial Data Infrastructure (NSDI). The Department intends to complete and distribute the job aid to all components by the end of Q3 FY2023.

Recommendation 7. Establish policy requiring Department components to search all reliable sources for existing geospatial data prior to submitting an IT acquisition request or expending funds for geospatial data collection.

DOJ Response: The Department agrees with the recommendation and has incorporated a requirement to search all reliable sources for existing geospatial data prior to submitting an IT acquisition request or expending funds for geospatial data collection into our draft policy for geospatial data. The Department intends to publish the policy by the end of Q2 FY2023.

Recommendation 8. Establish policy requiring IT acquisition requests for geospatial data products and services include a description of the data quality requirements prior to going through the IT acquisition review process.

Department of Justice
GDA of 2018
Technical Comments on Draft OIG Audit Report
09/14/2022

DOJ Response: The Department agrees with the recommendation. It has incorporated a statement requiring that IT acquisition requests for geospatial data products and services include a description of the data quality requirements prior to going through the IT acquisition review process. This statement has been incorporated into our draft policy for geospatial data. The Department intends to publish the policy by the end of Q2 FY2023.

APPENDIX 3: Office of the Inspector General Analysis and Summary of Actions Necessary to Close the Audit Report

The OIG provided a draft of this audit report to the Department's Justice Management Division (JMD) Office of the Chief Information Officer (OCIO). JMD OCIO's response is incorporated in Appendix 2 of this final report. In response to our audit report, JMD OCIO agreed with our recommendations and discussed the actions it will implement in response to our findings. As a result, the status of the audit report is resolved. The following provides the OIG analysis of the response and summary of actions necessary to close the report.

Recommendations for JMD OCIO:

- 1. Establish a working definition of geospatial data and communicate that criteria to Department components to ensure geospatial data assets are reported accurately in the Justice Data Catalog.**

Resolved. JMD OCIO agreed with our recommendation. JMD OCIO stated in its response that it will continue work with the Geospatial Community of Interest to establish a working definition that will be disseminated to components through the Data Governance Board. The Department aims to establish the working definition by the end of the first quarter of FY 2023. As a result, this recommendation is resolved.

This recommendation can be closed when we receive evidence that JMD OCIO has established a working definition of geospatial data and disseminated it to components.

- 2. Develop and enact a plan to identify all un-classified geospatial data assets within the Department.**

Resolved. JMD OCIO agreed with our recommendation. JMD OCIO stated in its response that it has drafted an initial Geospatial Data Quality Framework to ensure Department data assets are more accurately identified. The Department aims to complete the Framework by the end of the second quarter of FY 2023. As a result, this recommendation is resolved.

This recommendation can be closed when we receive evidence that JMD OCIO has developed and enacted a plan to identify all un-classified geospatial data assets within the Department.

- 3. Develop and implement a quality assurance process to verify geospatial data assets are accurately identified as part of the Integrated Data Collection process.**

Resolved. JMD OCIO agreed with our recommendation. JMD OCIO stated in its response that it will integrate the Geospatial Data Quality Framework mentioned above in recommendation 2 with the Integrity Data Collection process guidance and Geospatial Data Inventory Job Aid by the end of the third quarter of FY 2023. As a result, this recommendation is resolved.

This recommendation can be closed when we receive evidence that JMD OCIO has developed and implemented a quality assurance process to verify geospatial data assets are accurately identified as part of the Integrated Data Collection process.

4. Ensure that all un-classified geospatial data assets adhere to FGDC-endorsed metadata standards.

Resolved. JMD OCIO agreed with our recommendation. JMD OCIO stated in its response that it is aligning the geospatial metadata hosting approach currently in development to FGDC-endorsed metadata standards to promote consistency and common practice across the Department. The Department aims to complete this effort by the end of the second quarter of FY 2023. As a result, this recommendation is resolved.

This recommendation can be closed when we receive evidence that JMD OCIO has ensured that all un-classified geospatial data assets adhere to FGDC-endorsed metadata standards.

5. Develop and enact a plan to make all metadata for the Department's geospatial data assets that are approved for public release available on GeoPlatform.

Resolved. JMD OCIO agreed with our recommendation. JMD OCIO stated in its response that it will be hosting a series of collaborative strategic sessions between data and geospatial practitioners within the Department to develop the geospatial metadata hosting plan. The Department aims to release the plan to the GeoPlatform by the end of the fourth quarter of FY 2023. As a result, this recommendation is resolved.

This recommendation can be closed when we receive evidence that JMD OCIO has developed and enacted a plan to make all metadata for the Department's geospatial data assets that are approved for public release available on GeoPlatform.

6. Develop and provide to all components specific guidance on how to identify declassified geospatial data and determine whether it can contribute to and become part of the National Spatial Data Infrastructure.

Resolved. JMD OCIO agreed with our recommendation. JMD OCIO stated in its response that it is refining an internal job aid to assist data stewards with inventorying geospatial data. The job aid addresses the mechanism for defining geospatial data and the process that must be adhered to in order to enable GeoPlatform harvesting. Once harvested into GeoPlatform, the Department's geospatial data are available for public use and contribute to the National Spatial Data Infrastructure. The Department intends to complete and distribute the job aid to all components by the end of the third quarter of FY 2023. As a result, this recommendation is resolved.

This recommendation can be closed when we receive evidence that JMD OCIO has provided all components specific guidance on how to identify declassified geospatial data and determine whether it can contribute to and become part of the National Spatial Data Infrastructure.

- 7. Establish policy requiring Department components to search all reliable sources for existing geospatial data prior to submitting an IT acquisition request or expending funds for geospatial data collection.**

Resolved. JMD OCIO agreed with our recommendation. JMD OCIO stated in its response that it has incorporated a requirement to search all reliable sources for existing geospatial data prior to submitting an IT acquisition request or expending funds for geospatial data collection into their draft policy for geospatial data. The Department intends to publish the policy by the end of the second quarter of FY 2023. As a result, this recommendation is resolved.

This recommendation can be closed when we receive evidence that JMD OCIO has established policy requiring Department components to search all reliable sources for existing geospatial data prior to submitting an IT acquisition request or expending funds for geospatial data collection.

- 8. Establish policy requiring IT acquisition requests for geospatial data products and services include a description of the data quality requirements prior to going through the IT acquisition review process.**

Resolved. JMD OCIO agreed with our recommendation. JMD OCIO stated in its response that it has incorporated a statement requiring IT acquisition requests for geospatial data products and services include a description of the data quality requirements prior to going through the IT acquisition review process into their draft policy for geospatial data. The Department intends to publish the policy by the end of the second quarter of FY 2023. As a result, this recommendation is resolved.

This recommendation can be closed when we receive evidence that JMD OCIO has established policy requiring IT acquisition requests for geospatial data products and services include a description of the data quality requirements prior to going through the IT acquisition review process.