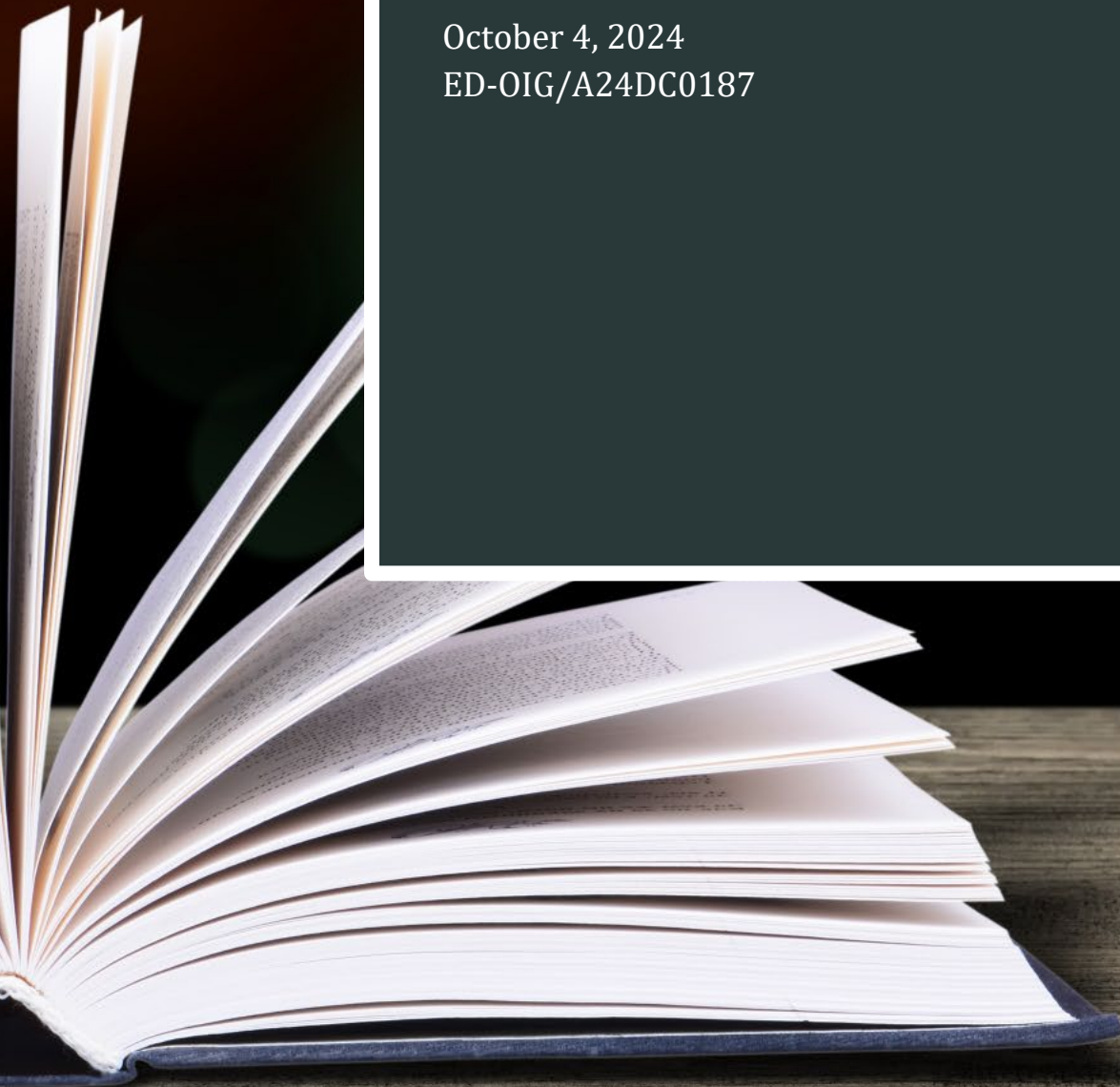




U.S. Department of Education
Office of Inspector General

The Department's Compliance with the Geospatial Data Act

October 4, 2024
ED-OIG/A24DC0187



NOTICE

Statements that managerial practices need improvements, as well as other conclusions and recommendations in this report, represent the opinions of the Office of Inspector General. The appropriate Department of Education officials will determine what corrective actions should be taken.

In accordance with Freedom of Information Act (Title 5, United States Code, Section 552), reports that the Office of Inspector General issues are available to members of the press and general public to the extent information they contain is not subject to exemptions in the Act.



UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF INSPECTOR GENERAL

Audit Services

October 4, 2024

TO: Dr. Matthew Soldner
Acting Director, Institute of Education Sciences

FROM: Sean Dawson /s/
Assistant Inspector General for Audit

SUBJECT: Final Audit Report, "The Department's Compliance with the Geospatial Data Act," Control Number ED-OIG/A24DC0187

Attached is the subject final audit report that consolidates the results of our review of The Department's Compliance with the Geospatial Data Act. We have provided an electronic copy to your audit liaison officer. We received your comments in response to our draft report.

U.S. Department of Education policy requires that you submit a corrective action plan within 30 days of the issuance of this report. The corrective action plan should set forth the specific action items and targeted completion dates necessary to implement final corrective actions on the findings and recommendations contained in this final audit report. Corrective actions that your office proposes and implements will be monitored and tracked through the Department's Audit Accountability and Resolution Tracking System.

In accordance with the Inspector General Act of 1978, as amended, the Office of Inspector General is required to report to Congress twice a year on recommendations that have not been completed after 6 months from the date of issuance.

We appreciate your cooperation during this review. If you have any questions, please contact Michele Weaver-Dugan at (202) 360-8454 or Michele.Weaver-Dugan@ed.gov.

Attachment

Results in Brief

The Department's Compliance with the Geospatial Data Act



Why the OIG Performed this Audit

The Geospatial Data Act, enacted on October 5, 2018, formalizes governance processes related to geospatial data, provides policy and guidance to empower the use of geospatial data and technology, and facilitates broad cooperation between the public and private sector. The Geospatial Data Act reduces duplicative efforts and facilitates the efficient procurement of geospatial expertise, technology, services, and data from the rapidly growing geographic community in the United States. Section 759(a) of the Geospatial Data Act lists 13 responsibilities that covered agencies must fulfill.

Additionally, the Geospatial Data Act requires the Inspectors General of covered agencies, not less than once every 2 years, to submit to Congress an audit of the collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data by the covered agency.

The objective of our audit was to review the U. S. Department of Education's (Department) compliance with the requirements outlined under section 759(a) of the Geospatial Data Act. Specifically, we determined whether the Department implemented the 13 covered agency responsibilities listed in section 759(a) of the Geospatial Data Act.

What did the OIG Find?

We found that the Department is in compliance with the applicable responsibilities outlined under section 759(a) of the Geospatial Data Act. Specifically, we found that the Department implemented all 12 of the 13 covered agency responsibilities listed in section 759(a) of the Geospatial Data Act that we reviewed. We were unable to evaluate compliance with one covered agency responsibility as the applicable data standards related to this responsibility have not yet been defined by the Federal Geographic Data Committee and the Office of Management and Budget.

While the Department has continued to meet the requirements of the Geospatial Data Act thus far, we noted concerns regarding the allocation of resources that could negatively impact the Department's ability to remain compliant going forward.

What Is the Impact?

By continuing to implement the covered agency responsibilities listed in section 759(a), the Department is furthering the goals of the Geospatial Data Act. The Department continues to have assurance that it is efficiently managing geospatial data, technologies, and infrastructure. By coordinating with other agencies and organizations involved with geospatial data, the Department is reducing duplicative efforts and facilitating efficient procurement of geospatial expertise, technology, and services. However, if resources allocated for geospatial activities remain static and do not keep pace with growing geospatial needs, the Department's ability to remain compliant with the Geospatial Data Act may be impaired.

What Are the Next Steps?

We made three recommendations related to the Department's continued compliance with the Geospatial Data Act. These included ensuring that the Department continues to implement the covered agency responsibilities listed under section 759(a) of the Geospatial Data Act, ensuring that the Department implements section 759(a)(6) once applicable guidance becomes available, and assessing whether the Department has allocated sufficient resources to support the continued compliance with the Geospatial Data Act.

We provided a draft of this report to the Institute of Education Sciences (IES) for comment. IES agreed with two of our recommendations and partially agreed with one recommendation. IES also provided corrective actions that it plans to take in response to each recommendation. IES's proposed corrective actions, if implemented as described, are responsive to our recommendations. We summarize IES's comments and provide the OIG's responses at the end of the finding. We also provide the full text of the comments at the end of the report (see [IES Comments](#)).

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Introduction

Background

The Geospatial Data Act, enacted on October 5, 2018, formalizes governance processes related to geospatial data,¹ provides policy and guidance to empower the use of geospatial data and technology, and facilitates broad cooperation between the public and private sector. The Act reduces duplicative efforts and facilitates the efficient procurement of geospatial expertise, technology, services, and data from the rapidly growing geographic community in the United States. Section 759(a) of the Geospatial Data Act lists 13 responsibilities that covered agencies must fulfill (See [Appendix B](#)).

In addition, the Act requires Inspectors General to audit the collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data by covered agencies at least once every 2 years. Specifically, the Act requires a review of agency compliance with (1) the geospatial data standards established under section 757, (2) the 13 agency responsibilities listed in section 759(a), and (3) the limitation on the use of Federal funds in section 759A.²

The National Center for Education Statistics (NCES), within the Institute of Education Sciences (IES), is the primary Federal entity for collecting and analyzing data related to education in the United States and other nations. The NCES Education Demographic and Geographic Estimates (EDGE) program designs and develops information resources to help understand the social and spatial context of education in the United States. It uses spatial data collected by NCES and the Census Bureau to create geographic locale indicators, school point locations, school district boundaries, and other types of data to support spatial analysis.

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, and that is generally represented in vector datasets by points, lines, polygons, or other complex geographic features or phenomena. Geospatial data may be derived from, among other things, remote sensing, mapping, and surveying technologies.

² We issued audit reports on the U.S. Department of Education's compliance with the Geospatial Data Act on September 24, 2020, and September 23, 2022. See [The Department's Compliance with the Geospatial Data Act \(2020\)](#) and [The Department's Compliance with the Geospatial Data Act \(2022\)](#).

Governing Bodies and Guidance

The Federal Geographic Data Committee (FGDC) is the primary entity for developing, implementing, and reviewing the policies, practices, and standards relating to geospatial data according to the guidelines and requirements issued by the Office of Management and Budget (OMB). The Geospatial Data Act requires OMB to provide guidance on its implementation within 1 year of enactment. To fulfill this requirement, OMB is revising Circular A-16, “Coordination of Geographic Information and Related Spatial Data Activities,” dated August 19, 2002. However, the circular is still under revision as of July 2024.

The National Spatial Data Infrastructure (NSDI) refers to the technology, policies, standards, and employees necessary to promote geospatial data sharing throughout the Federal, State, Tribal, and local governments and the private sector. The Geospatial Data Act requires the FGDC to lead the development, management, and operational decision making for the NSDI strategic plan and geospatial data policy in accordance with section 755. The strategic plan for the NSDI for 2021 through 2024 describes the actions the FGDC community will take in collaboration with partners to develop and maintain the nation’s critical geospatial infrastructure and to implement the requirements of the Geospatial Data Act. The FGDC solicited public comments on the draft NSDI strategic plan for 2025 through 2035 through early August 2024, and is preparing a revised draft of the plan for review and adoption in early fall of 2024.

Availability of the U.S. Department of Education’s (Department) Geospatial Data

Section 758 of the Geospatial Data Act states that the FGDC “shall operate an electronic service that provides access to geospatial data and metadata for geospatial data to the general public, to be known as the GeoPlatform.... The GeoPlatform shall ... include download access to all open geospatial data directly or indirectly collected by covered agencies” Section 756(b) of the Geospatial Data Act states that

for each National Geospatial Data Asset [(NGDA)] data theme,³ the [FGDC] shall designate one or more covered agencies as the lead covered agencies.... The lead covered agency for [an NGDA] data theme shall be responsible for ensuring the coordinated management of the data, supporting resources ..., and related services and products of the [NGDA] data theme.

³ NGDA data themes are core geospatial datasets that relate to a specific topic or subject.

Additionally, lead covered agencies shall designate a point of contact “who shall be responsible for developing, maintaining, coordination relating to, and disseminating data using the GeoPlatform.”

The GeoPlatform website⁴ is organized by NGDA data themes. Geospatial data related to education, including elementary school district datasets, unified school district datasets, and secondary school district datasets, are available under the Governmental Units and Administrative and Statistical Boundaries data theme. The GeoPlatform website lists the Census Bureau as the agency responsible for managing the datasets and the Theme Lead Agency for the Governmental Units and Administrative and Statistical Boundaries data theme. For each dataset, users can download individual data files and relevant metadata, and can also access the Census Bureau website where the geospatial data can be viewed on an interactive map.

The Department’s geospatial data is available on the EDGE program website⁵ and includes data such as school district boundaries, schools’ geographic location indicators, and school attendance boundaries.

Geospatial Data Act Working Group

On November 30, 2023, the Council of the Inspectors General on Integrity and Efficiency (CIGIE) sent a letter to Congress about the fiscal year 2024 Geospatial Data Act audits, stating that the standards required for implementation of the Act by Covered Agencies have not yet been issued by the FGDC. As a result, the full implementation of the Act is delayed and the Inspector General community is unable to conduct a comprehensive audit in fiscal year 2024. Covered Agency Inspectors General will not be able to assess compliance with two of the three audit requirements. Therefore, similar to prior audits, the fiscal year 2024 audits will focus on assessing the progress of Covered Agencies toward compliance with the Act, including adherence to the requirements outlined in section 759(a).

In the letter, CIGIE stated that this approach is appropriate due to the inherent challenges in determining the precise standards that audits should utilize to assess compliance. Additionally, the limitation on use of Federal funds for noncompliant geospatial data will not apply until 5 years after FGDC’s establishment of standards. Therefore, Covered Agency Inspectors General will not be able to assess compliance

⁴ <https://www.GeoPlatform.gov>.

⁵ <https://nces.ed.gov/programs/edge>.

with the limitation for fiscal year 2024. CIGIE believed this consensus approach would provide each Covered Agency Inspector General with the flexibility to conduct additional testing as needed, depending on the geospatial footprint of the respective Covered Agency. (See [Appendix C](#)).

Finding 1. The Department is in Compliance with the Requirements Outlined under Section 759(a) of the Geospatial Data Act

We found that the Department is in compliance with 12 of the 13 requirements under section 759(a). We were unable to evaluate compliance with one requirement (see requirement (6) below).

The following is a summary of the results of our review for each requirement under section 759(a):

(1) – 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 prepared under section 755(c)

NCES’s geospatial data strategy for developing and maintaining geospatial data relies on four primary principles:

1. Develop geospatial data needed for Department programs and educational research;
2. Share geospatial data in common formats through easily accessible locations;
3. Apply geospatial data and methods to create new data solutions; and
4. Provide supplemental resources to explain and visualize Department geospatial data.

We reviewed NCES’s geospatial data strategy and the NSDI strategic plan and found that activities conducted under Principle 2—Share geospatial data in common formats through easily accessible locations—help to achieve several of the NSDI’s objectives. These activities include providing geospatial data as static, downloadable files from the EDGE website, participating in the FGDC, and registering the Department’s geospatial data in the GeoPlatform. Specifically, NCES helps achieve NSDI objectives by

- providing geospatial data as web services with open data standards via the EDGE program (NSDI Objective 3.1. “Increase awareness and broaden the use of national shared services, including the GeoPlatform, to publish, discover, integrate, promote, visualize, analyze, and disseminate national geospatial data. Apply open standards to ensure that shared services can be improved and expanded at minimal effort and cost.”);

- sharing geospatial data with other agencies (NSDI Objective 2.3. “Advance the practice of integrating government and nongovernment data into national datasets, and NSDI Objective 3.3. Update shared services policies and practices to improve the ability of users to discover, qualify, access, combine, and use geospatial services with geospatial data, spatial analytics, and nonspatial data”);
- improving communication across federal agencies (NSDI Objective 4.2. “Develop processes and tools, in collaboration with partners, to promote effective communication and knowledge exchange about the benefits and uses of geospatial data, technology, and the NSDI.”), and;
- learning about data sources that may be useful for Department activities (NSDI Objective 3.1. “Increase awareness and broaden the use of national shared services, including the GeoPlatform, to publish, discover, integrate, promote, visualize, analyze, and disseminate national geospatial data. Apply open standards to ensure that shared services can be improved and expanded at minimal effort and cost.”).

We also reviewed the Department’s strategic plan for fiscal years 2022–2026 and found that NCES’s geospatial data strategy helps support Strategic Objective 5.2—“Strengthen agency-wide data governance and build capacity to improve data access, data management, and enterprise data analytics in support of agency goals.” According to the Department’s strategic plan, the Department’s Data Strategy addresses new and emerging mandates, such as open data by default, interagency data sharing, and data standardization. As mentioned above, NCES achieves this by using the EDGE program to provide geospatial data as web services with open data standards. Additionally, NCES shares geospatial data with other agencies and improves communication across federal agencies by registering data assets in the FGDC’s GeoPlatform. Finally, while the FGDC has not yet adopted any data standards since the passage of the Act, the NCES EDGE program produces data in common industry-standard formats and makes data available as easily accessible web services.

NCES’s geospatial data strategy is published on its website.

(2) 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

The Department continues to maintain geospatial data on the NCES EDGE website. NCES stated that data related to public schools, school districts, and postsecondary institutions are gathered, created, and published annually. The data is available in common formats and can be downloaded as a data file or viewed on an interactive map.

This allows any user to access and explore the Department's geospatial data without specialized software. Users can also access data from previous years through the EDGE website. We found that the number of previous years maintained on the EDGE website varied for each category of data and noted that some of the data dates back to 1995. We noted that the Department's geospatial data is also available on GeoPlatform.gov and Data.gov.

(3) Promote the integration of geospatial data from all sources

The web services architecture of the EDGE website allows for the integration of data from other agencies and sources. We noted that the EDGE website's Locale Lookup tool integrates NCES data with Urban and Metropolitan Areas developed by the Census Bureau, Opportunity Zones⁶ developed by the Department of Treasury, Congressional Districts determined by states, and an interactive map that combines data from other federal and non-federal sources.

NCES has continued to pursue data integration by developing and maintaining its growing collection of geospatial data, as mentioned above. In addition, NCES attended conferences to learn about data integration opportunities and to introduce NCES resources to potential new users, including the annual NCES Summer Data Forum and Conference and the 2023 National Rural Education Association's National Forum to Advance Rural Education.

(4) 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

NCES's geospatial data are in the process of being included in the Department's records schedules. Specifically, the "IES Information Inventory" records schedule lists the different types of records created by IES and the corresponding retention policy. As of July 2024, the draft records schedule was with the National Archives and Records Administration and expected to be approved within 12–18 months. The IES Information

⁶ The Tax Cuts and Jobs Act established opportunity zones to spur private investment in distressed communities throughout the country. Opportunity zones are defined by individual census tract, nominated by America's governors, and certified by the U.S. Secretary of Treasury. Under certain conditions, new investments in opportunity zones may be eligible for preferential tax treatment. There are 8,764 opportunity zones in the United States.

Inventory states that all geospatial data will be maintained until the retention policy is approved.

(5) 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 Committee

The Department's geospatial data-related activities are funded through the IES Statistics program. This funding supports the collection, analysis, and dissemination of education-related statistics in response to both legislative requirements and to the particular needs of data providers, data users, and educational researchers. NCES stated that resources allocated for the EDGE program cover demographic, economic, and geographic data production and dissemination, and that NCES provides as much attention to geospatial activities as resources allow. NCES staff also represent the Department on the FGDC Steering Committee and the FGDC Geospatial Data Act Working Group.

While the Department has continued to meet the requirements of the Act thus far, we noted concerns regarding the allocation of resources that could negatively impact the Department's ability to remain compliant going forward. In its fiscal year 2023 FGDC self-assessment, NCES stated that it has not received new resources to support or enhance geospatial activities since the passage of the Act in 2018. According to the NCES Statistician, NCES lacks sufficient human and financial resources to manage and lead the growing demands on the EDGE program, and NCES is challenged to maintain basic, core operations.

As discussed under requirement (7) below, NCES has two Interagency Agreements with the Census Bureau. NCES coordinates with a production team of Census Bureau staff to produce the Department's geospatial data. Because of insufficient staff on the NCES side, the Census Bureau has reduced the number of staff on its production team accordingly. As a result, NCES's capacity to produce certain data products has been affected. According to the NCES Statistician, some products will need to be eliminated or significantly reduced in the future. Additionally, the NCES Statistician stated that the lack of resources has compromised the EDGE program's ability to design and develop future geospatial data and to fully support geospatial needs in other parts of the Department.

Specifically, the NCES Statistician noted that NCES has not been able to produce some data products, to include those related to school structures and campus parcels. These data are needed to improve the spatial accuracy of existing school point locations, which consist of single points of latitude and longitude. The NCES Statistician stated that

some data products have not been expanded as needed, including the geographic locale framework that supports statistical and grant programs. Inadequate resources have limited NCES's ability to develop subtypes of existing geographic areas, additional rural indicators for school districts, and processes and tools needed to identify students from rural households. This affects the Department's ability to target grants and assistance to different types of geographic areas.

The NCES Statistician also noted that other data products have been designed and prototyped, but could not be completed or sustained, including geostatistical poverty indicators. School poverty is a primary driver of state education funding, and the Department needs school poverty indicators to support decisions regarding education grants. According to the NCES Statistician, the Department has not sufficiently invested in new data solutions to measure school poverty, which would result in improved state and federal funding allocations and grant decisions.

We noted that a new contract was awarded in June 2024 for managing the EDGE public facing resources, and two EDGE program staff were hired in 2022 and 2023. However, the new contract was awarded to replace a previous one that ended, and, according to the NCES Statistician, the two new hires were needed to return the EDGE program to the minimum staffing level it had in previous years. One of the new staff was hired to help restore production capacity in coordination with the Census Bureau, and the other was hired to take over the EDGE program's Contracting Officer Representative role, which was previously assigned to a Contracting Officer Representative in another program. According to the NCES Statistician, the new staff help to meet the basic needs of the EDGE program but do not address the additional responsibilities of the Geospatial Data Act and overall acceleration of geospatial data use by researchers and the public.

(6) Use the geospatial data standards, including the standards for metadata for geospatial data, and other appropriate standards, including documenting geospatial data with the relevant metadata and making metadata available through the GeoPlatform

We were unable to evaluate the Department's compliance with this requirement. As of July 2024, the FGDC has not adopted or endorsed any standards since the passage of the Act because FGDC is awaiting guidance from OMB. Once OMB issues the guidance, FGDC plans to review it and implement standards accordingly.

While there are no official standards for metadata yet, NCES stated that all geospatial data have been designed with appropriate data standards and metadata to ensure they can be registered in Data.gov, GeoPlatform.gov, and other data portals that apply metadata validators.

(7) 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, building upon existing non- Federal geospatial data to the extent possible

NCES relies on other agencies and sources of information to produce the Department's geospatial data. NCES coordinates with the Census Bureau to produce geospatial data via two Interagency Agreements. According to the Interagency Agreement documentation, NCES relies on geographic data and spatial analysis from the Census Bureau to clarify the context and conditions of education in the United States. These data include geocodes, locale indicators, and administrative boundaries.

In addition, NCES works with agencies of State and local governments, institutions of higher education, and the private sector to collect and build upon non-Federal geospatial data using nationally representative and local-level surveys. These include the NCES Common Core of Data, NCES Private School Survey, and NCES Integrated Postsecondary Education Data System.

NCES has continued to host an annual Summer Data Forum and Conference. The Forum is comprised of representatives from state and local education agencies, the Federal government, and other organizations with an interest in education data. The most recent conference was held in August 2023. We noted that the NCES Statistician was listed as a presenter for one of the sessions held during the most recent conference. The session included a discussion of the primary surveys, data products, and analytic tools provided by the EDGE program, and how the EDGE data are applied for research, policy, and program administration.

As noted above, NCES uses the EDGE website to maintain and share the Department's geospatial data. In addition, the Census Bureau has published the Department's geospatial data on GeoPlatform.gov.

(8) Use geospatial information to—(A) make Federal geospatial information and services more useful to the public; (B) enhance operations; (C) support decision making; and (D) enhance reporting to the public and to Congress

The NCES EDGE website makes the Department's geospatial data available to the public through an interactive map, so that users without specialized software can access it. As discussed under requirement (7) above, NCES staff hold an annual data conference that includes demonstrations of the ways the Department's geospatial data can be used.

Additionally, we found that the EDGE website describes the information found in each category of geospatial data and gives examples of how the data can enhance operations and support decision making. Examples provided include school district boundaries, schools' geographic location indicators, and school attendance boundaries.

NCES stated that geospatial data are used to help the Department determine formula grant allocations. NCES met with organizations overseeing the Supporting America's School Infrastructure Grant Program to discuss current and future geospatial data layers that may be useful in assessing the quality of local school and campus infrastructure. The Environmental Protection Agency's Clean School Bus grant program relies on NCES locale data to prioritize grants to remote rural school districts. NCES school points and locale boundaries directly affected grants for the Rural Education Achievement Program, and NCES geospatial layers and geospatial applications were used to identify and visualize TRIO⁷ program grants for postsecondary institutions.

Finally, we found examples of reports to the public and to Congress produced by the Department that incorporate geospatial data:

- The School Pulse Panel collects data on a range of topics that have relevance to federal policymakers, stakeholders within the Department, public school leaders across the country, and the general public. The School Pulse Panel relies on NCES's geospatial data to help select a survey sample, disaggregate the data by school location and disaggregate the data by school neighborhood poverty.
- NCES's annual Conditions of Education publication fulfills a congressionally mandated reporting requirement. This publication provides information about the conditions of students and schools in different types of geographic areas.
- The Department's College Scorecard project provides data to help students and families compare college costs and outcomes. The College Scorecard incorporates basic NCES geospatial data such as locale boundaries and postsecondary school locations.
- NCES staff provided guidance to the authors of Why Rural Matters, a non-federal publication about rural education conditions, to help clarify the social

⁷The term "TRIO" was coined in the late 1960s to describe a series of three educational opportunity programs—Upward Bound, Talent Search, and Student Support Services. TRIO programs have since been expanded and improved to provide a wider range of services and to reach more students who need assistance.

and economic conditions in rural schools and communities.

(9) Protect personal privacy and maintain confidentiality in accordance with Federal policy and law

The Department's geospatial data does not include personally identifiable information. The data mainly consists of school locations and boundaries, and no personally identifiable information is collected. However, we noted that the Interagency Agreements between the Department and the Census Bureau include standard language regarding protection of personal information and maintaining confidentiality.

(10) Participate in determining, when applicable, whether declassified data can contribute to and become a part of the National Spatial Data Infrastructure

As noted above, the Department's geospatial data assets are limited to publicly reported institutions or local government entities and therefore do not include personally identifiable information, classified data, or declassified data.

(11) 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

NCES is the primary Federal entity for collecting, analyzing, and reporting data related to education in the United States. NCES's geospatial data is produced in collaboration with the Census Bureau, using existing survey and census data. The scope of the Department's geospatial data is relatively small and specialized around schools and school districts.

(12) To the maximum extent practicable, ensure that a person receiving Federal funds for geospatial data collection provides high-quality data

The Department does not have any private contracts for the development or collection of geospatial data. As noted above, the Department's geospatial data is produced in collaboration with the Census Bureau. We noted that the Interagency Agreement documentation states that the Census Bureau will follow NCES statistical and publication standards.

(13) 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

The NCES Statistician is the contact for coordination with the Census Bureau (the lead covered agency for the data theme used by the Department). We noted that the NCES Statistician is listed as a point of contact on the Interagency Agreement documentation.

Since our inaugural audit of the Department's compliance with the Geospatial Data Act in fiscal year 2020, NCES has remained consistent in its efforts to comply with the covered agency responsibilities outlined in section 759(a). These efforts are well informed and largely headed by the NCES Statistician, who has been directing the NCES EDGE program for 9 years and serves as the designated point of contact for coordination with the lead covered agency. The NCES Statistician also represents the Department on the FGDC Geospatial Data Act Working Group. The primary focus of this group has been the 13 covered agency responsibilities under section 759(a) and assessing the progress that covered agencies have made in meeting the requirements.

Additionally, we found that the NCES Commissioner represents the Department as the Senior Agency Official for Geospatial Information on the FGDC Steering Committee, a policy-level interagency group responsible for providing leadership and direction in support of OMB Circular A-16 related activities, and the development of the NSDI. The Steering Committee's central focus is to provide the executive leadership for the coordination of federal geospatial activities between, among, and within agencies.

By continuing to implement the covered agency responsibilities listed in section 759(a), the Department is furthering the goals of the Geospatial Data Act. The Department continues to have assurance that it is efficiently managing geospatial data, technologies, and infrastructure. By coordinating with other agencies and organizations involved with geospatial data, the Department is reducing duplicative efforts and facilitating efficient procurement of geospatial expertise, technology, and services. However, if resources allocated for geospatial activities remain static and do not keep pace with growing geospatial needs, the Department's ability to remain compliant with the Geospatial Data Act may be impaired.

Recommendations

We recommend that the Director for IES:

- 1.1 Ensure that the Department continues to implement the covered agency requirements listed under section 759(a) of the Geospatial Data Act.
- 1.2 Ensure that the Department implements section 759(a)(6) once applicable guidance becomes available.
- 1.3 Assess whether the Department has allocated sufficient resources to NCES to support continued compliance with the Geospatial Data Act and advance the

Department's geospatial work and take the appropriate responsive actions that are within NCES's direct responsibilities.

IES Comments

IES stated it agreed with recommendations 1.1 and 1.2, and partially agreed with recommendation 1.3.

For recommendation 1.1, IES stated that it will continue to take steps to comply with the Department's responsibilities under the Geospatial Data Act and will ask NCES to initiate and keep IES apprised of discussions with the Census Bureau regarding its staffing, data, and other support for IES's interagency geospatial data activities.

For recommendation 1.2, IES stated that NCES will continue to engage with the FGDC and its subcommittees to ensure that NCES incorporates appropriate standards and provides metadata in appropriate platforms. NCES will also work with the Department's Chief Data Officer to ensure that the Department can apply this guidance when available to any other geospatial data.

For recommendation 1.3, IES stated that it agrees in part with the recommendation as it relates to resources within IES's control. IES stated that, as written, the proposed recommendation may imply the Department and IES have broader control over resources and funding than either the Department or IES actually have. IES noted that the availability of resources may require interagency cooperation with the Census Bureau, and the availability of funding is ultimately determined by Congress. IES stated that it plans to work with the Department to assess the resources sufficient for NCES to support continued compliance with the Geospatial Data act, including how prior support from the Census Bureau needs to be considered as part of NCES's assessment of resources needed. IES suggested that the end of the recommendation be revised to recommend that the Director of IES "...take those appropriate responsive actions that are within NCES's direct responsibilities."

OIG Response

IES's proposed corrective actions, if implemented as described, are responsive to our recommendations. We made minor changes to recommendation 1.3 based on IES's comments.

Appendix A. Scope and Methodology

To answer our objective, we gained an understanding of the Department's implementation of section 759(a) of the Geospatial Data Act. We reviewed applicable laws, directives, and other regulatory criteria and guidance related to the Department's responsibilities under the Geospatial Data Act. In addition, we conducted interviews of an NCES official responsible for the Department's geospatial data. We also reviewed prior Office of Inspector General, Government Accountability Office, and other Federal agencies' audit reports related to our audit objective.

Implementation of Section 759(a) of the Geospatial Data Act

We met with an NCES official to discuss the Department's implementation of section 759(a) of the Geospatial Data Act. We reviewed the Department's geospatial data strategy. We obtained copies of meeting minutes and presentations related to the Department's implementation of the Geospatial Data Act. We reviewed geospatial data available on the Department's EDGE website, as well as GeoPlatform.gov and Data.gov. We obtained documentation of the Department's Interagency Agreements with the Census Bureau. We also obtained the draft update to the Department's records schedules. Finally, we reviewed a selection of reports to the public and Congress that incorporate the Department's geospatial data.

Use of Computer-Processed Data

While we reviewed electronic platforms such as the EDGE website, GeoPlatform.gov, and Data.gov, we did not utilize the data itself and instead focused on the data's existence. Therefore, we determined that an assessment of the reliability of computer-processed data was not required.

We conducted fieldwork from June 2024 through August 2024. We provided our audit results to IES officials on August 21, 2024.

Compliance with Auditing Standards

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.

Appendix B. Section 759(a) Covered Agency Responsibilities

Section 759 Covered Agency Responsibilities

(a) Each covered agency shall

- (1) 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 prepared under section 755(c);
- (2) 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;
- (3) promote the integration of geospatial data from all sources;
- (4) 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;
- (5) 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 Committee;
- (6) use the geospatial data standards, including the standards for metadata for geospatial data, and other appropriate standards, including documenting geospatial data with the relevant metadata and making metadata available through the GeoPlatform;
- (7) 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, building upon existing non- Federal geospatial data to the extent possible;
- (8) use geospatial information to—
 - (A) make Federal geospatial information and services more useful to the public;
 - (B) enhance operations;

(C) support decision making; and

(D) enhance reporting to the public and to Congress;

(9) protect personal privacy and maintain confidentiality in accordance with Federal policy and law;

(10) participate in determining, when applicable, whether declassified data can contribute to and become a part of the National Spatial Data Infrastructure;

(11) 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;

(12) to the maximum extent practicable, ensure that a person receiving Federal funds for geospatial data collection provides high-quality data; and

(13) 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.

Appendix C. Communication of Planned Audit Approach



COUNCIL OF THE INSPECTORS GENERAL ON INTEGRITY AND EFFICIENCY

November 30, 2023

The Honorable Maria Cantwell
Chairwoman
The Honorable Ted Cruz
Ranking Member
Committee on Commerce, Science,
and Transportation
United States Senate
Washington, D.C.

The Honorable Frank Lucas
Chairman
The Honorable Zoe Lofgren
Ranking Member
Committee on Science, Space,
and Technology
U.S. House of Representatives
Washington, D.C.

Dear Chairpersons and Ranking Members:

The Council of the Inspectors General on Integrity and Efficiency (CIGIE) appreciates your leadership on geospatial data issues. The Geospatial Data Act of 2018⁸ (the Act) mandates oversight through Federal Inspectors General (IG) to ensure effective implementation of the related requirements. Specifically, the Act requires biennial IG audits to evaluate the following:

1. Covered Agencies' compliance with geospatial data and metadata standards established under the Act.
2. Covered Agencies' compliance with responsibilities outlined in the Act.
3. Covered Agencies' compliance with the limitation of Federal funding for noncompliant datasets.⁹

We are writing this letter on behalf of CIGIE to inform you about an important timing concern related to the biennial audits conducted by the IG community. The standards required for implementation of the Act by Covered Agencies have not yet been issued by the Federal Geographic Data Committee (FGDC). As of now, there is no projected release date available. Consequently, the full implementation of the Act is delayed, which in turn limits the IG community's ability to conduct a comprehensive biennial audit in

⁸ Pub. L. No. 115-254, Subtitle F (2018), codified at 43 U.S.C. §§ 2801-2811.

⁹ 43 U.S.C. § 2808(c).

Fiscal Year 2024. We cannot assess compliance with two of the three audit requirements (specifically, audit evaluation tasks 1 and 3 listed above). To address this challenge, CIGIE has taken proactive measures to establish a consensus within the IG community on an audit approach for the Fiscal Year 2024 audits.

After careful deliberation and similar to our prior audits, the Covered Agency IG representatives have concluded that audits focused on assessing the progress of Covered Agencies toward compliance with the Act, including their adherence to the Act's requirements outlined in section 759(a), 43 U.S.C. § 2808(a), would offer the most value to the covered agencies, Congress, and the Public.

In our view, this approach is appropriate due to the inherent challenges in determining the precise standards that audits should utilize to assess compliance at this time. Moreover, it is important to note that the limitation on the use of Federal funds for noncompliant geospatial data will not apply until 5 years after FGDC's establishment of standards. As such, compliance with the limitation is not yet auditable.

This approach would provide each Covered Agency IG with the flexibility to conduct additional testing as needed, depending on the geospatial footprint of the respective covered agency. The relevant IG would make this determination as they see fit.

Furthermore, among the 16 federal agencies specified under the Act, more than half of them do not accumulate or publish substantial or significant volumes of new geospatial assets on a biennial basis. Consequently, many IG audit teams are contemplating the adoption of weighted or risk-based approaches. Additionally, the CIGIE Legislation Committee has encouraged Congress to repeal the requirement that IGs conduct a biennial audit to allow IGs the flexibility to assess the risks of geospatial data at the agencies they oversee and provide a cost-effective, risk-based review if appropriate.

Should you or your staffs have any questions about our approach or other aspects of our collective Geospatial Data Act oversight activities, please do not hesitate to contact us at 202-208-5475. In the alternative, please feel free to have your staff contact Andrew Cannarsa, CIGIE's Executive Director, at 202-292-2603.

Sincerely,



Mark L. Greenblatt
Chair, Council of the Inspectors General on
Integrity and Efficiency
Inspector General, U.S. Department of the Interior



Robert P. Storch
Chair, Council of the Inspectors General on
Integrity and Efficiency, Technology Committee
Inspector General, U.S. Department of Defense

cc: The Honorable Gary C. Peters, Chairman
The Honorable Rand Paul, Ranking Member
Committee on Homeland Security and Government Affairs

The Honorable James Comer, Chairman
The Honorable Jamie Raskin, Ranking Member
House Committee on Oversight and Accountability

U.S. Department of Education
Office of Inspector General
ED-OIG/A24DC0187

The Honorable Jason Miller, Deputy Director OMB and Executive Chair, Council of the
Inspectors General on Integrity and Efficiency

The Honorable Gene Dodaro, Comptroller General GAO

Appendix D. Acronyms and Abbreviations

CIGIE	The Council of the Inspectors General on Integrity and Efficiency
Department	U.S. Department of Education
EDGE	Education Demographic and Geographic Estimates
FGDC	Federal Geographic Data Committee
IES	Institute of Education Sciences
NCES	National Center for Education Statistics
NGDA	National Geospatial Data Asset
NSDI	National Spatial Data Infrastructure
OMB	Office of Management and Budget

IES Comments



Institute of
Education Sciences

550 12th Street SW
Washington, DC 20202

October 3, 2024

Michele Weaver-Dugan
Regional Inspector General for Audit
Internal Operations/Philadelphia Audit Team
Office of Inspector General
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, D.C. 20202-1510

Reference: Control Number ED-OIG/A24DC0187

Dear Ms. Weaver-Dugan:

Thank you for the opportunity to review and comment on the Office of Inspector General's (OIG) September 27, 2024, draft audit report, "The Department's Compliance with the Geospatial Data Act" (ED-OIG/A24DC0187). As Acting Director of the Institute of Education Sciences (IES), I am pleased to respond. We appreciate the finding that the Department continues to meet the requirements of the Geospatial Data Act. IES also recognizes the work that went into the draft report and appreciates the opportunity it presents for the U.S. Department of Education (Department) and IES to more closely review this issue.

I have reviewed the draft report and offer the following responses to the OIG's recommendations.

Recommendation 1.1: Ensure that the Department continues to implement the covered agency responsibilities listed under Section 759(a) of the Geospatial Data Act.

IES Response: We concur with this recommendation and will continue to take steps to comply with the Department's responsibilities under the Geospatial Data Act. I will ask NCES to initiate, and keep me apprised of, discussions with the Census Bureau regarding its staffing, data, and other support for IES's interagency geospatial data activities.

Recommendation 1.2: Ensure that the Department implements Section 759(a)(6) once applicable guidance becomes available.

IES Response: We concur with this recommendation. NCES will continue to engage with the Federal Geographic Data Committee (FGDC) and its subcommittees to ensure that NCES incorporates appropriate standards and provides metadata in appropriate platforms. We will also work with the Department's Chief Data Officer to ensure the Department can apply this guidance when available to any other geospatial data.

Recommendation 1.3: Assess whether the Department has allocated sufficient resources to NCES to support continued compliance with the Geospatial Data Act and advance the Department’s geospatial work and take appropriate actions in response.

IES Response: We concur in part with this recommendation as it relates to resources within IES’s control. As written, the proposed recommendation may imply the Department and IES have broader control over resources—which may require interagency cooperation with the Census Bureau—and funding—which Congress ultimately determines—than either the Department or IES actually have. Working with the Department, IES plans to assess the resources sufficient for NCES to support continued compliance with the Geospatial Data Act, including how prior support from the Census Bureau needs to be considered as part of NCES’s assessment of resources needed. For this reason, we suggest that the recommendation be revised along the following lines: “Assess whether the Department has allocated sufficient resources to NCES to support continued compliance with the Geospatial Data Act and advance the Department’s geospatial work and take **those appropriate responsive actions that are within NCES’s direct responsibilities.**”

Thank you for the opportunity to review and respond to the draft audit report. I appreciate the professionalism and cooperation demonstrated by the audit team when working with our staff.

Sincerely,

Matthew Soldner
Acting Director