GSA GEOSPATIAL DATA STRATEGY

Fiscal Years 2023-2025

Table of Contents

Executive Summary

The U.S. General Services Administration (GSA) serves the American people by promoting management best practices and efficient operations for Federal agencies across the U.S. Government. For more than 70 years, GSA has executed its mission to provide innovative and cost-effective solutions for Government and public customers in real estate, acquisition, and technology services. GSA is committed to continuously improving its service to the public by maximizing data – including geospatial data – as a strategic asset.

The Geospatial Data Act of 2018 (GDA) was signed into law on October 5, 2018.[1] The Federal Geographic Data Committee (FGDC) operates under Office of Management and Budget (OMB) Circular A-16 and the GDA. It provides leadership for the National Spatial Data Infrastructure (NSDI) using a portfolio management approach, and oversight of national themes, or groupings, of spatial datasets in the Federal Government's geospatial data inventory. GSA's geospatial datasets fall under the "Real Property" theme which focuses on spatial representation of real property assets only, and does not seek to describe special purpose functions of real property such as those found in the Cultural Resources, Transportation, or Utilities themes. Additionally, GSA consumes geospatial dataset from several National Geospatial Data Asset (NGDA) themes through collaboration with theme leads from other Federal agencies as well.

This strategy includes goals and supporting objectives that directly support the GDA and the National Spatial Data Infrastructure (NDSI) Strategic Plan (2021–2024). It defines GSA's vision, goals and objectives for making geospatial data, technologies, and services more widely available, well managed, and more useful to GSA, its partners, and the public. In particular, GSA will enhance the management and promote the use of its geospatial programs, leverage shared services (both within and outside

[1] The Geospatial Data Act of 2018 (GDA) was signed into law on October 5, 2018. The GDA was included as a component of the FAA Reauthorization Act (H.R. 302, P.L. 115-254). The GDA is now in U.S. Code, Title 43 – Public Lands, Chapter 46: GEOSPATIAL DATA.#

the Agency), and continue to lead the national geospatial community by engaging with other sectors and users of its geospatial data and services.

Strategic Vision and Goals

In support of the Agency's overall mission, GSA will make geospatial data, technologies, and services more widely available, well managed, and more useful internally and externally by setting the following clear direction.

Geospatial Data Strategy Vision	Geospatial Data Strategy Mission
The effective, efficient, and universal use of geospatial information in support of all mandates and operations of the General Services Administration (GSA), its customers, and public needs.	To mainstream the use of geospatial information across GSA for unified, integrated, and accessible information, analysis, and visualization for evidence based decision-making and action in support of mandates.

Drivers and Expected Outcomes

The goals of this strategy represent three strategic drivers: people, process, and technology. GSA believes that to effectively deliver on the outcome of this strategy we must first empower our people. Second, GSA must embrace a geospatial governance process that delivers optimal data management practices. Finally, GSA must embrace the future of technology and equip our geospatial community with the right tools to drive data-driven decision making and ensure that the agency's outcomes are aligned to GSA's Data Strategy, and to GSA's agency responsiblilites.

This GSA Geospatial Strategy includes goals and supporting objectives that directly support the GDA, the NDSI Strategic Plan (2021–2024), and GSA's Data Strategy (FY 23-25). GSA's Data Strategy is aligned to the broader agency-wide vision outlined in the GSA Fiscal Year 2022-2026 Strategic Plan.

Strategic Drivers	Expected Outcome(s)	Aligned to:	GDA Alignment
People	• Foster a diverse geospatial workforce • Training and upskilling	Goal #1	GDA Section 759 (a): 4, 7
Process	• Geospatial Inventory • Geospatial Data and Metadata Standards • Data Quality • Data Sharing and Visibility	Goal #2	GDA Section 759 (a): 1, 2, 3,6, 9, 11 ,12, 13
Technology	• Geospatial data and Geographic Information System (GIS) infrastructure aligned to mission requirements • Scalable framework • Connected Services	Goal #3	GDA Section 759 (a), 10

Definitions and Scope

Definition: The Geospatial Data Act of 2018 (GDA) defines geospatial data as—

> (A) means 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;
>
> (B) may be derived from, among other things, remote sensing, mapping, and surveying technologies;
>
> (C) includes images and raster datasets, aerial photographs, and other forms of geospatial data or datasets in digitized or non-digitized form" (43 U.S.C. 2801(5)(A–C)).

Scope: In order to determine if an agencies existing geospatial datasets should be included (in scope), of the GDA, agencies will need to review Geospatial datasets with their respective SSO Data Governance groups, determine if use cases exist beyond GSAs utilization and whether the Geospatial requirements meets the FGDC guidelines for NGDA inclusion:

> The Geospatial Dataset is:
>
> 1. Used by multiple Federal agencies and(or) partners
> 2. Applied to achieve Presidential priorities
> 3. Required to meet shared mission goals of multiple Federal agencies
> 4. Expressly required by statutory mandate

The FGDC reviews and approves dataset inclusion for the "Real Property" theme which consists of the PBS Inventory of Owned and Leases Properties (IOLP) and the Federal Real Property Profile Management System (FRPP MS) databases.

Guiding Principles

1. Enable strategic leadership:

Strong leadership and commitment at the highest level is critical to enhance the long-term value of investments in geospatial information.

2. Foster collaboration and cooperation:

Fostering these ways of approaching work including with GSA Service areas, businesses, academia, nongovernmental organizations, are a critical component for the delivery of Organization mandates.

3. Design for reliability, transparency and accountability:

Data and information are authoritative, developed and shared based on the understanding that the work of the GSA is open and transparent, while also in accordance with relevant information management policies.

4. Drive insightfulness, accessibility and actionability:

Geospatial information provides insight for better decision-making and action-taking, and it must be made accessible and actionable by everyone.

5. Build to create sustainability and value:

Geospatial information must be sustainable to advance social, economic and environmental development. It must provide value to enhance effectiveness, efficiency and impact for the Organization through data for action.

FY 23-25 Geospatial Strategy Goals

The GSA geospatial strategic goals are aligned to, and embedded within the GSA Data Strategy goals, and are identified with alignment below. This alignment ensures the geospatial dataset interested are included in the Data Strategy implementation planning, resourcing and priorities are considered at the agency level and that standards and governance can be applied evenly. GSA's goals are:

1. Train and empower the GSA workforce on their responsibilities and improve data skills.

- This goal seeks to empower GSA staff by providing the necessary training and support to fulfill data responsibilities.
- GIS training needs will be assessed and coordinated under the data strategy and communication to the geospatial data community through the GIS Center of Excellence (COE) website and newsletter will also support this alignment.

2. Improve data sharing, privacy, and transparency for appropriate use of GSA data.

- This goal aims to break down organizational silos and make data easily identifiable and appropriately shareable across GSA SSOs to maximize data as a strategic asset and encourage collaboration.
- Geospatial data will be managed and shared along with implementation plans within the data strategy and any associated governance controls will be in place where applicable in the GIS system.

3. Use authoritative source and trusted data for seamless integration and unified data-driven decision-making across GSA.

- GSA has identified significant barriers to data-driven decision-making through the data maturity assessment. The GSA Learning Agenda and Evaluation Plan identifies common business questions to support the business needs and determine the authoritative or best source for each business scenario.
- The data cataloging and inventory effort will include geospatial data and a supplemental inventory will also be completed annually to ensure dataset owners are following metadata standards and cybersecurity policies.

4. Modernize enterprise data architecture and mature analytics capabilities.

- GSA will continue to mature its data capabilities by expanding the existing EDA. The future state will provide all necessary services across the data lifecycle, including data management, computing power, analytics tools, and reporting capabilities. Moving all GSA shared and analytic data into a single enterprise data architecture using cloud infrastructure will be instrumental in maximizing the business value from data across GSA.
- This effort will also include GIS shared services to ensure there is a uniform GIS architecture built upon the shared data services and data architecture.

By being strategic GSA will enhance the management, and promote the use of our geospatial programs, leverage shared services (both within and outside the Agency), and continue to lead the national geospatial community by engaging with other sectors and users of its geospatial data and services.

References

a. Federal Geographic Data Committee's (FGDC) Geospatial Standards
b. Executive Order (EO) 12906, Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure (NSDI)
c. OMB Circular A-16 Coordination of Geographic Information and Related Spatial Data Activities
d. E-Government Act 2002, Title II, Federal Management and Promotion of Electronic Government Services (as it pertains to Electronic Geospatial Government Services)
e. OMB Circular A-130, Management of Federal Information Resources (as it pertains to managing Geospatial Information and Data).
f. 2142.1 CIO P CHGE 1 GSA Data Quality Handbook
g. The Federal Geographic Data Committee (FGDC
h. FGDC Definitions
i. National Spatial Data Infrastructure (NSDI)
j. NGDA Real Property Themes
k. GIS Center of Excellence (COE) (available only to those on GSA's network)
l. GIS Standards Document (available only to those on GSA's network)
m. Geospatial Data Act of 2018 (GDA)
n. Metadata Validation Process (available only to those on GSA's network)
o. GSA Data Catalog (for authorized users only)
p. GSA's Public Buildings Service's (PBS) Process for Inventory of Owned and Leased Buildings (IOLP)
q. GSA's Federal Real Property Profile Management System (FRPP MS)
r. 3490.3 PBS CHGE 1 Security for Sensitive Building Information Related to Federal Buildings, Grounds, or Property
s. Federal Real Property Public Data Set Data Limitations
t. Federal Geospatial Platform
u. Data.Gov