Geographic Support Program

Strategic Plan—Fiscal Year 2022 Through Fiscal Year 2026

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Introduction

This Geographic Support Program (GSP) Strategic Plan provides a roadmap of activities and priorities for its execution by the Geography Division (GEO) and partner divisions. The plan identifies goals, objectives, and outcomes. This strategic plan, GSP vision, and associated objectives, along with GEO's portfolio management process are used to prioritize and manage the work needed to accomplish its mission, goals, and objectives.

1. The GSP

The Census Bureau's GSP is an integrated program that provides the infrastructure necessary for the Census Bureau's data collection, processing, tabulation, and dissemination programs for the United States and its territories. The GSP also provides geospatial data and products, and expertise that is shared with our partners in tribal, federal, state, and local governments in addition to international and planning organizations.

The GSP is comprised of the following eight core elements (Figure 1):

Addresses: A national list of addresses and associated points of latitude and longitude.

Features: A national mapping network of roads, highways, rivers, railroads, parks, and landmarks.

Boundaries: A national inventory of boundaries for legal, statistical, and administrative geographic areas, including tribal, state, county, place, and township boundaries; congressional, state legislative, and voting districts; school districts; and census tracts, block groups, and blocks.

Geospatial Reference Data: A national inventory of satellite and aerial imagery.

Frames: Creation of enterprise-wide frames linkable in nature, agile in structure, accessible for production or research on a need-to-know basis, and that adhere to best practices in terms of technology usage, data management, and methodology.

Partnerships: Information and data-sharing relationships with tribal, state, and local governments; federal agencies; international organizations; academia; nonprofit organizations; and the private sector in support of ongoing geospatial programs.

Expertise/Leadership: Knowledge of geographic tools, concepts, and methodologies shared across domestic and international domains, with leadership from the Census Bureau.

MAF/TIGER System: Integrates the geospatial data collected, ingested, updated, and managed as part of these pillars.

1.1 Stakeholders

The GSP has stakeholders who rely upon the geographic framework and products produced from the MAF/TIGER System. Categories of stakeholders and their uses of the MAF/TIGER System are profiled in Table 1.

Figure 1. **Core Elements of the Geographic Support Program**

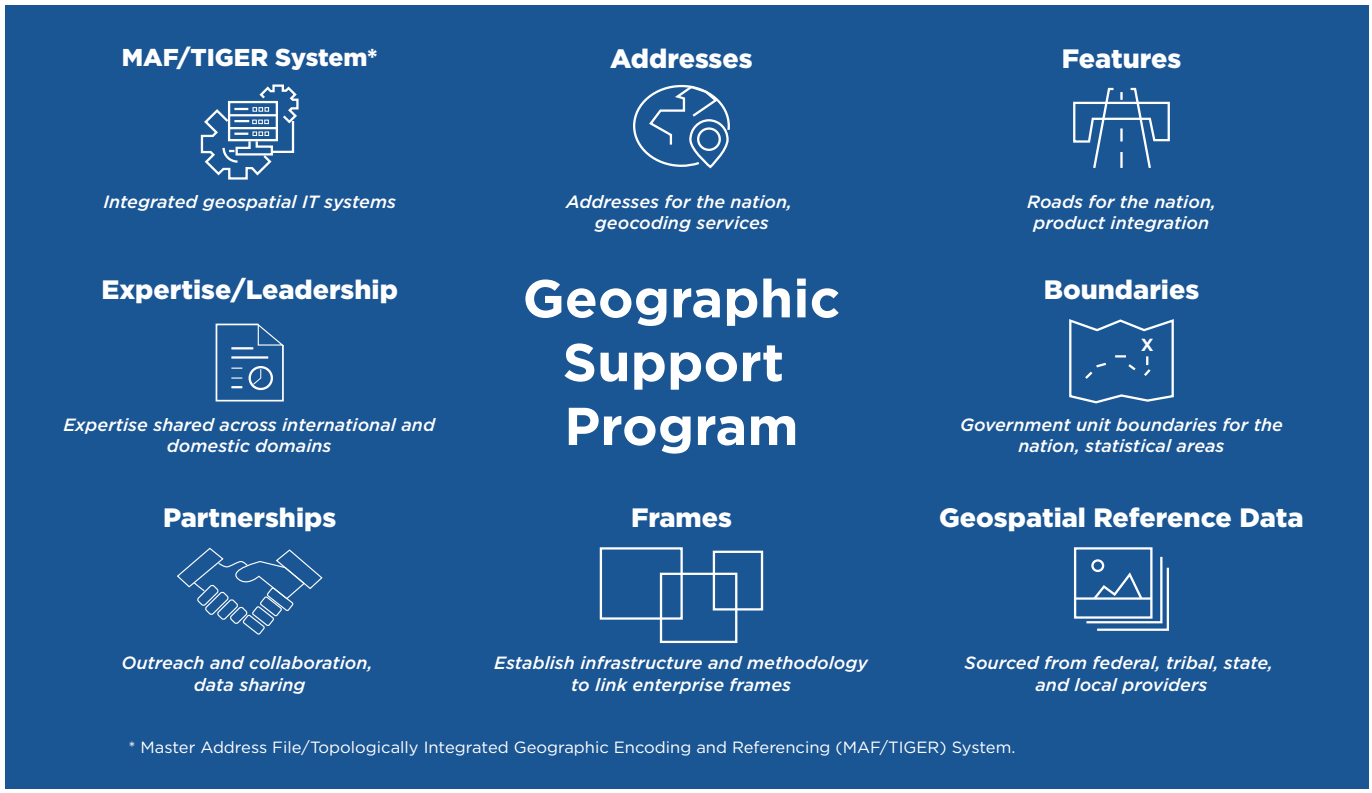


Table 1. **GSP Stakeholders**

STAKEHOLDER	GEO DELIVERABLE
Ongoing Census Bureau Programs	The American Housing Survey, American Community Survey, Economic Census, Population Estimates Program, Small Area Income and Poverty Estimates Program, and other current surveys require an up-to-date geographic framework of addresses, spatial data, and geospatial services to support the data collection and dissemination activities associated with these programs.
2030 Census	The 2030 Census will use the MAF/TIGER System for establishing the census frame, delineating assignment areas, producing spatial data geocoding results, and producing input files for data collection, processing, tabulation, and dissemination.
Census Bureau Partners	Tribal, federal, state, and local governments provide address and spatial data for Census Bureau programs and use geospatial data products derived from the MAF/TIGER System to support local activities, including congressional and state legislative redistricting.
The Federal Geographic Data Committee (FGDC)	The Census Bureau is identified by the FGDC and the Office of Management and Budget (OMB) Circular A-16 as the federal government's Theme Lead for the Governmental Units theme and Co-Lead for the Address theme, including: • Thirty-three datasets from the MAF/TIGER System, including features and boundaries, are publicly available components of the National Spatial Data Infrastructure (NSDI). • Data from the MAF/TIGER System is used in the Homeland Infrastructure Foundation Level Data products, affiliated with the FGDC.
The Geographic Information System (GIS) Community	Businesses, commercial entities, nonprofit organizations, academic researchers, and the public use data derived from the MAF/TIGER System within a myriad of activities in support of their mission.
Oversight	The Congress, the OMB, the U.S. Department of Commerce (DOC), the DOC's Office of the Inspector General, and the General Accountability Office.
Federal Agencies	Many federal agencies rely on spatial data from the MAF/TIGER System, including: • U.S. Geological Survey—TIGER roads are both a layer of The National Map and the source of roads shown on topographic maps and included in the Protected Areas Database of the United States. • U.S. Department of Education, National Center for Education Statistics—as the geographic base used to display and edit school districts in the School District Review Program. • Centers for Disease Control—as a geographic base for research, outreach, and educational programs. • Environmental Protection Agency—for their enterprise GIS. • Federal Emergency Management Agency—as a geographic base for emergency planning and at the time of natural disasters. • National Oceanic and Atmospheric Administration, National Weather Service—as a geographic base for specialized geographies such as fire weather zones. • National Telecommunications and Information Administration—as a geographic base that portrays census geography. • U.S. Department of Agriculture, Natural Resource Conservation Service—for geocoding and routing, cartography, and base maps for their Geospatial Data Gateway. • U.S. Department of Housing and Urban Development—as a geographic base for geospatial support in housing programs. • U.S. Department of Veterans Affairs—as a geographic base for managing veteran programs.
International Organizations	Expertise in geographic concepts, methodologies, data production, and the development of tools, applications, and standards is shared with international organizations including: • The United Nations Committee of Experts on Global Geospatial Information Management. • The Pan American Institute of Geography and History (PAIGH). • U.S. Technical Advisory Group to the International Organization for Standardization (ISO) Technical Committee 211 Geographic information/Geomatics (TC 211). • InterNational Committee for Information Technology Standards (INCITS) L1—Geographic Information Systems (GIS). • International Cartographic Association (ICA) United States National Committee.

2. GSP Mission

The GSP:

- Maintains and updates the most current, accurate, and complete address, feature, boundary, and imagery data for the Census Bureau's staff, customers, partners, and data users.
- Provides the geographic subject matter and information technology foundation for the Census Bureau's economic, demographic, and geospatial data products and services.
- Supports and maintains the geospatial infrastructure necessary for the Census Bureau's census and survey data collection, processing, tabulation, and dissemination programs for the United States and its territories.
- Supports and maintains boundaries for geographic areas that are used throughout the federal government for statistical data tabulation and dissemination, analysis and decision-making, and program implementation.

3. Assumptions and Constraints

This section identifies the assumptions and constraints that will continue to affect the GSP through execution of this strategic plan.

- The GSP will operate within the constraints of U.S.C. Title 13, as well as U.S.C. Title 15 and U.S.C. Title 26, as needed.
- The GSP will operate within the constraints of federal geographic, address, and statistical standards.
- The GSP will provide the geographic framework for the Census Bureau, maintaining the MAF/TIGER System to ensure that the maps, address list, spatial data, and address and geographic reference files meet the geographic requirements of all Census Bureau programs.
- The GSP will continue to update the MAF/TIGER System in support of the 2030 Census and the reimbursable current surveys and other nondecennial consumers.
- The GSP will continue its partnership programs to acquire authoritative data for continual MAF/TIGER System improvement from tribal, state, and local governments. The GSP will comply with the terms-of-use restrictions on local government and commercial data.
- The GSP will actively engage with stakeholders and industry experts to identify and respond to customer needs.
- The GSP will research and implement, as necessary, new technologies in consultation with independent subject-matter experts.

4. Goals and Objectives

Over the next 5 years, the GSP's activities will directly support three goals from the Census Bureau's 2022–2026 Strategic Plan goals, while also continuing to achieve mission excellence and supporting existing geographic partnership programs and geospatial data products. Each goal is organized into component objectives, each of which has one or more desired outcomes. The goals and objectives identify what is to be achieved.

Table 2: **Strategic Alignment**	
CENSUS BUREAU STRATEGIC PLAN	**GEOGRAPHIC SUPPORT PROGRAM STRATEGIC PLAN**
Goal 1: Stakeholder Engagement	The GSP will continuously maintain active partnerships with tribal, state, and local government partners, other federal agencies, and international and planning organizations to ensure the GSP and its associated geospatial data offerings meet their needs.
Goal 2: Continuous Commitment to Innovation	The GSP will encourage reasonable risk-taking and innovation along with continuous assessment and improvement of applications and systems, processes, geographic partnership programs and geospatial data offerings to meet the needs of our stakeholders.
Goal 3: Internal Organizational Progress	The GSP will operate as a strategic, integrated program to serve the GEO and the Census Bureau enterprise. The GSP is supported by an adaptive workforce that effectively communicates across working groups, divisional, and interdivisional teams to meet the needs of our stakeholders.

Goal 1

The GSP will continuously maintain active partnerships with tribal, state, and local governments, other federal agencies, and international and planning organizations to ensure the GSP and its associated geospatial data offerings meet their needs.

The GSP depends on partnership and collaboration to deliver the program mission and seeks to expand and create new opportunities to engage with stakeholders, while maintaining existing stakeholder relationships. Sustaining partnerships between various entities and the GSP enables the ongoing exchange of ideas, methods, tools, expertise, and lessons learned necessary to understand our stakeholders' needs and develop GSP data products, programs, and services accordingly.

Objective 1.1

Engagement with existing and new stakeholders.

The GSP will continue to foster existing relationships while conducting outreach with new partners to provide customers with the data they need for decision-making purposes.

Outcomes for Objective 1.1

1. The GSP will consult with external stakeholders to learn how their missions and needs have evolved and to assess how the contents and access to geospatial data products need to evolve to better serve them and their respective communities.
2. The GSP will consult with internal stakeholders across the enterprise to ensure their data needs are met. The GSP will expand the frequency, quality, and output of collaborations with all stakeholders.

Objective 1.2

Improve the external stakeholder experience.

The GSP relies on external stakeholders' participation in programs to ensure the Census Bureau can continuously produce high-quality data in an efficient and effective manner. The GSP will also ensure that engagements are simple and efficient.

Outcomes for Objective 1.2

1. The GSP will introduce a Partner Portal, where tribal, state, and local governments can receive customized and controlled access to Census Bureau geographic and statistical information unique to their government, as well as enable them to update contact information; receive and respond to program invitations; download data and products; securely upload and update authoritative geographic data (addresses, features, boundaries, and geographic reference data); view historical participation information; and correspond with Census Bureau officials regarding their community—all without requiring licensed commercial software.
2. The GSP will engage with representatives of the geospatial industry to understand the current landscape of technologies and data services that could complement or support ongoing partnership activities.
3. The GSP will continuously re-evaluate the content, timing, and dissemination methods for program documentation to provide more useful information to program participants.
4. The GSP will enhance existing applications, partnership programs, and informational materials to improve the user experience.
5. The GSP will re-evaluate all GSP partnership programs with the end user in mind to ensure a simple and efficient process is implemented.

Goal 2

The GSP will encourage reasonable risk-taking and innovation along with continuous assessment and improvement of applications and systems, processes, geographic partnership programs, and geospatial data offerings to meet the needs of our stakeholders.

The GSP has historically provided the address and spatial data infrastructure necessary for the Census Bureau's data collection, processing, tabulation, and dissemination programs for the United States and its territories. As we look towards the future, the GSP will build upon program successes while encouraging appropriate risks, learning from our failures, and implementing modern technology and techniques to improve upon our geographic programs and geospatial data products.

Objective 2.1

Encourage innovation within the day-to-day GSP workflows.

The GSP will foster an environment where reasonable risk-taking is accepted, failure is used as an educational opportunity, and employees are encouraged to adopt an innovative mindset.

Outcomes for Objective 2.1

1. The GSP will encourage innovation in its information technology development by expanding use of the public cloud to take advantage of the increased scalability, elasticity, and ability to auto-scale for meeting capacity demands; modernizing existing applications to enable greater utilization of public cloud where appropriate and performing market and industry research to identify opportunities to further modernize and improve the MAF/TIGER System.
2. The GSP will evaluate new and innovative geospatial technologies to further expand upon existing capabilities.
3. The GSP will increase use and adoption of automated tools and batch software.
4. The GSP will explore automating the processing of data submissions from receipt to update and consider an all-in-one approach in data submission that eliminates the need for partners to use multiple systems to submit data.

5. The GSP will identify and use automated methodologies and technologies such as automated change detection and machine learning to enable efficient and effective identification of change on the landscape and use results to prioritize outreach efforts for areas most in need of address or spatial update.

Objective 2.2

Creation of an enterprise-wide linked frames.

The Census Bureau's ability to meet the need for high-quality, timely data to support analysis and data driven decision-making requires more efficient linkages between its foundational datasets, the geospatial frame, business frame, job frame, and demographic frame.

Outcomes for Objective 2.2

1. The GSP will enhance the MAF by matching addresses across the MAF, governments' MAF, Business Register, and the Longitudinal Employer-Household Dynamics (LEHD) files and expand coverage in the MAF to include the full range of addresses needed to support all Census Bureau economic and demographic programs.
2. The GSP, through the Enterprise Frames Program, will support creation of one enterprise-wide Demographic Frame.
3. The GSP, through the Enterprise Frames Program, will support development of a multisource Job Frame.
4. The GSP, through the Enterprise Frames Program, will support combining business information from the LEHD Program's Quarterly Census of Employment and Wages and the Business Register.
5. The GSP, through the Enterprise Frames Program, will support evaluation of the potential to create household and family linkages.
6. The GSP, through the Enterprise Frames Program, will support development of a plan for incorporating new or expanding technology into an integrated frames paradigm.

Goal 3

The GSP will operate as a strategic, integrated program to serve the GEO and the Census Bureau enterprise. The GSP is supported by an adaptive workforce that effectively communicates across working groups, divisional, and interdivisional teams to meet the needs of our stakeholders.

Successfully supporting our stakeholders, conducting geographic partnership programs, and providing the enterprise with data and services starts with maintaining and supporting our workforce.

Objective 3.1

Training and continued support of employees.

Meeting the goals and mission of the GSP starts with building and maintaining an excellent workforce. The GSP is committed to providing all employees the resources they need to achieve success today and plan for the challenges of the future.

Outcomes for Objective 3.1

1. The GSP will engage with its staff to provide the necessary tools, knowledge, and training needed.
2. The GSP staff will have opportunities for career development and mentorships.
3. The GSP staff will be engaged at all levels of the GEO.
4. The GSP staff will have opportunities for trainings through the GEO University course offerings.

Objective 3.2

Evolving the GSP mindset.

Our collective efforts are maximized when we collaborate and best understand how our individual contributions support the goals of the GSP. The GSP will foster an environment that encourages working with others.

Outcomes of Objective 3.2

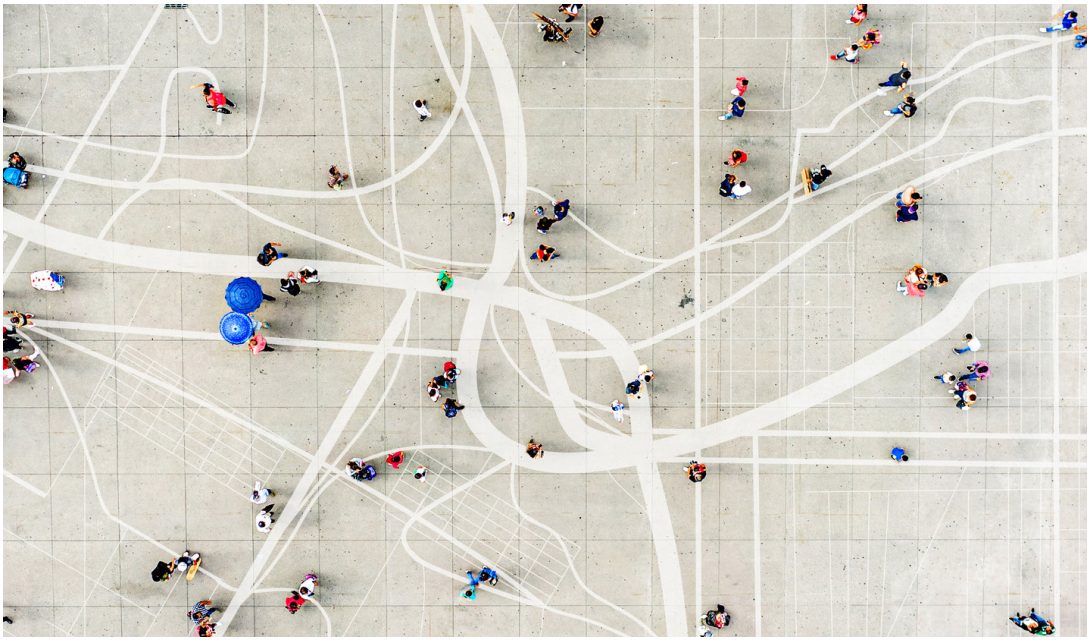
1. Within the GSP, employees will be encouraged to work collaboratively, to solve problems, meet the needs of our stakeholders, and support the mission of the GSP and the enterprise.

2. The GSP will encourage widespread understanding of the component parts of the program and how the work of the GSP and decisions, research findings, and work activities support the GSP and the enterprise.

Objective 3.3

Evaluation of internal systems and processes.

To effectively fulfill our mission, the GSP will be committed to continuous evaluation of our internal systems and processes. We will ensure these systems and processes are optimized to meet the needs of our stakeholders and to support the enterprise.

Outcomes of Objective 3.3

1. The internal systems and processes of the GSP will be efficient and support the GSP in pursuing its mission.
2. The GSP will continually monitor and evaluate opportunities to modernize and adapt processes to respond to changes on the landscape.