

GAO Highlights

Highlights of [GAO-15-193](#), a report to congressional requesters

Why GAO Did This Study

The federal government collects, maintains, and uses geospatial information—data linked to specific geographic locations—to help support varied missions, including national security and natural resources conservation. To coordinate geospatial activities, in 1994 the President issued an executive order to develop a National Spatial Data Infrastructure—a framework for coordination that includes standards, data themes, and a clearinghouse. GAO was asked to review federal and state coordination of geospatial data.

GAO's objectives were to (1) describe the geospatial data that selected federal agencies and states use and how much is spent on geospatial data; (2) assess progress in establishing the National Spatial Data Infrastructure; and (3) determine whether selected federal agencies and states invest in duplicative geospatial data. To do so, GAO identified federal and state uses of geospatial data; evaluated available cost data from 2013 to 2015; assessed FGDC's and selected agencies' efforts to establish the infrastructure; and analyzed federal and state datasets to identify duplication.

What GAO Recommends

GAO suggests that Congress consider assessing statutory limitations on address data to foster progress toward a national address database. GAO also recommends that OMB improve its oversight of FGDC and federal agency initiatives, and that FGDC and selected agencies fully implement initiatives. The agencies generally agreed with the recommendations and identified plans to implement them.

View [GAO-15-193](#). For more information, contact David A. Powner at (202) 512-9286 or pownerd@gao.gov.

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GEOSPATIAL DATA

Progress Needed on Identifying Expenditures, Building and Utilizing a Data Infrastructure, and Reducing Duplicative Efforts

What GAO Found

Federal agencies and state governments use a variety of geospatial datasets to support their missions. For example, after Hurricane Sandy in 2012, the Federal Emergency Management Agency used geospatial data to identify 44,000 households that were damaged and inaccessible and reported that, as a result, it was able to provide expedited assistance to area residents. Federal agencies report spending billions of dollars on geospatial investments; however, the estimates are understated because agencies do not always track geospatial investments. For example, these estimates do not include billions of dollars spent on earth-observing satellites that produce volumes of geospatial data. The Federal Geographic Data Committee (FGDC) and the Office of Management and Budget (OMB) have started an initiative to have agencies identify and report annually on geospatial-related investments as part of the fiscal year 2017 budget process.

FGDC and selected federal agencies have made progress in implementing their responsibilities for the National Spatial Data Infrastructure as outlined in OMB guidance; however, critical items remain incomplete. For example, the committee established a clearinghouse for records on geospatial data, but the clearinghouse lacks an effective search capability and performance monitoring. FGDC also initiated plans and activities for coordinating with state governments on the collection of geospatial data; however, state officials GAO contacted are generally not satisfied with the committee's efforts to coordinate with them. Among other reasons, they feel that the committee is focused on a federal perspective rather than a national one, and that state recommendations are often ignored. In addition, selected agencies have made limited progress in their own strategic planning efforts and in using the clearinghouse to register their data to ensure they do not invest in duplicative data. For example, 8 of the committee's 32 member agencies have begun to register their data on the clearinghouse, and they have registered 59 percent of the geospatial data they deemed critical. Part of the reason that agencies are not fulfilling their responsibilities is that OMB has not made it a priority to oversee these efforts. Until OMB ensures that FGDC and federal agencies fully implement their responsibilities, the vision of improving the coordination of geospatial information and reducing duplicative investments will not be fully realized.

OMB guidance calls for agencies to eliminate duplication, avoid redundant expenditures, and improve the efficiency and effectiveness of the sharing and dissemination of geospatial data. However, some data are collected multiple times by federal, state, and local entities, resulting in duplication in effort and resources. A new initiative to create a national address database could potentially result in significant savings for federal, state, and local governments. However, agencies face challenges in effectively coordinating address data collection efforts, including statutory restrictions on sharing certain federal address data. Until there is effective coordination across the National Spatial Data Infrastructure, there will continue to be duplicative efforts to obtain and maintain these data at every level of government.