

Census Bureau Undertakes Data Collection Modernization

GAO-26-107689, December 2025

After the 2020 Census, the Census Bureau initiated four enterprise-wide programs to modernize and consolidate the IT systems that collect, process, and disseminate data for its surveys. This report focuses on the data collection modernization program, known as Data Ingest and Collection for the Enterprise.

Why This Matters

The Bureau conducts over 100 different censuses and surveys, including the Decennial Census. To assist in collecting and ingesting data, the Bureau's activities have largely relied on numerous survey-specific IT systems. This has resulted in many systems performing duplicative activities.

We previously [reported](#) that the Bureau faced challenges in modernizing and consolidating its IT systems during preparations for the 2020 Census. After the 2020 Census, the Bureau embarked on a large-scale initiative to modernize and consolidate its data collection, storage, and dissemination systems. This effort consists of four integrated, enterprise-wide IT modernization programs:

- **Data Ingest and Collection for the Enterprise (DICE)** focuses on data collection,
- the **Enterprise Data Lake** is intended to modernize data processing and storage,
- **Frames** is expected to organize the data within the Enterprise Data Lake, and
- the **Center for Enterprise Dissemination Services and Consumer Innovation** is aimed at modernizing data dissemination systems.

DICE Program

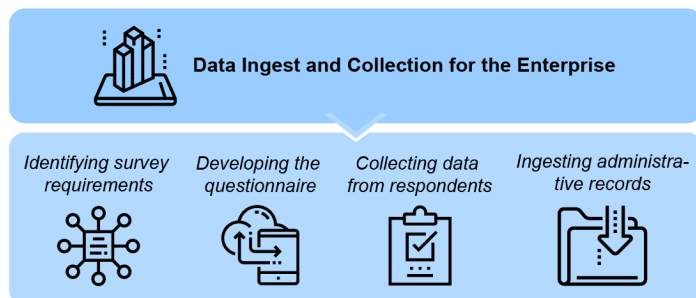
DICE is the Bureau's effort to collect data in a consistent, standardized, and scalable manner across all of its surveys.

DICE is expected to consolidate 37 legacy systems and applications into a suite of 11 enterprise-wide systems. The Bureau expects to develop and deploy system capabilities in a phased approach based, in part, on when (1) surveys are able to transition to the new systems and (2) DICE can deliver capabilities for those surveys.

The Bureau expects DICE to support surveys by:

- providing tools to assist with identifying survey requirements and objectives, and developing survey questionnaires;
- collecting data from respondents through paper, internet, and interview-assisted modes; and
- ingesting administrative records from third party sources, including other federal agencies (e.g., the Internal Revenue Service and Social Security Administration), state and local governments, and commercial entities.

Elements of the Census Bureau's Data Ingest and Collection for the Enterprise (DICE) Program



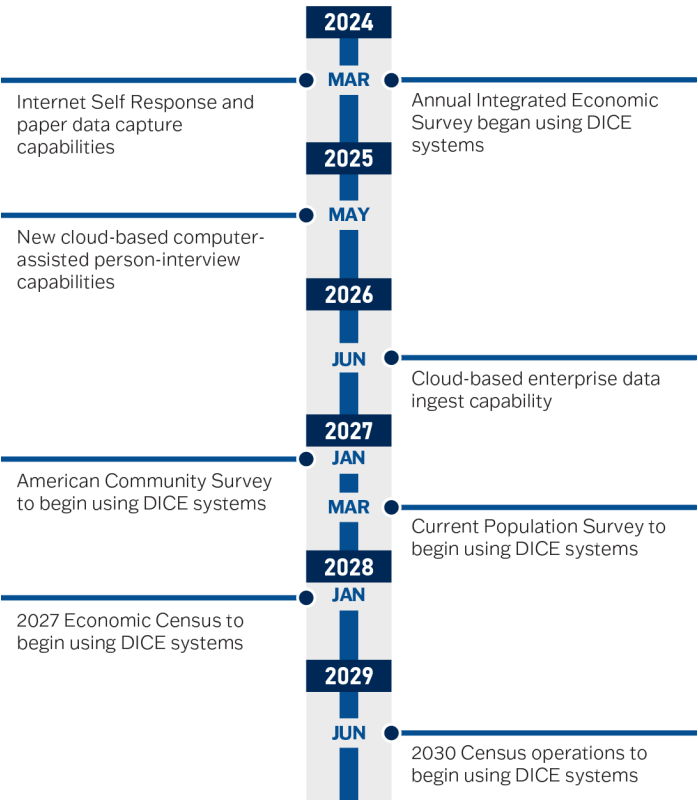
Source: GAO analysis. | GAO-26-107689

DICE Cost, Status, and Schedule

The Bureau initiated the DICE program in 2021; in 2024, it finalized a baselined cost estimate of about \$1.08 billion through 2033. The program's approach to delivering system capabilities is driven, in part, by survey needs. As of November 2025, nine surveys or survey tests (such as the Annual Integrated Economic Survey, which provides national data on business revenues and expenses) had begun using DICE systems. The Bureau has also begun using DICE systems for development of an additional 42 surveys or survey tests (including the American Community Survey and the 2030 Census).

The following timeline depicts selected key milestones on when capabilities are expected to be delivered and surveys are expected to use DICE.

Selected Key Milestones for Census Bureau’s Data Ingest and Collection for the Enterprise (DICE) Implementation



Source: GAO analysis of Census Bureau data. | GAO-26-107689

Data Collection Modernization Challenges and Risks

Modernizing its data collection systems has historically been a challenge for the Bureau. In preparing for the 2020 Census, the Bureau attempted to consolidate its data collection and processing systems into an enterprise-wide modernization program called Census Enterprise Data Collection and Processing (CEDCaP).

However, we reported that the Bureau had difficulties in managing risks, requirements, cost, and schedule for CEDCaP. We made eight recommendations aimed at addressing these challenges that the Bureau subsequently implemented. Among other things, the Bureau incorporated lessons learned into planning for DICE. These lessons included enhancing requirements and risk management and cost estimating.

Consistent with lessons learned, the Bureau is currently tracking several risks that could impact the program’s cost and schedule. For example, the program is monitoring multiple risks related to funding legacy solutions to support selected surveys. This could limit funding for replacement systems. The program is also tracking a risk due to the DICE schedule prioritizing survey onboarding dates instead of the time frames to deliver capabilities. The Bureau reported that this prioritization could limit the program’s ability to track progress in delivering those capabilities. We have ongoing work evaluating the Bureau’s progress in managing these and other risks, and in implementing other leading practices for the DICE program.

Going forward, prioritizing IT decisions and demonstrating DICE’s capabilities will be important. This can help the Bureau deliver its planned functionality for future surveys, including the 2030 Census.

About GAO:

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, supports Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. This document is not an audit product. It contains information updated by GAO based on prior audit work. We provided a draft of this report to Commerce for review and comment. Commerce did not have any comments on the report. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any statements within this product.

Connect with GAO on [Facebook](#), [X](#), [LinkedIn](#), [Instagram](#), and [YouTube](#). Subscribe to our [Email Updates](#). Listen to our [Podcasts](#). Visit GAO on the web at <https://www.gao.gov>.

Contact Us:

For more information, contact: Kevin Walsh, Director, Information Technology and Cybersecurity, WalshK@gao.gov.

Public Affairs: Sarah Kaczmarek, Managing Director, Media@gao.gov.

Congressional Relations: A. Nicole Clowers, Managing Director, CongRel@gao.gov.

Contributors: Kate Sharkey (Assistant Director), Carlton Maynard (Analyst-in-Charge)

Source (cover photo): Timon/stock.adobe.com

This work of the United States may include copyrighted material, details at <https://www.gao.gov/copyright>.