GAO's Methodology for Assessing Cybersecurity Controls

U.S. Government Accountability Office

December 2, 2021

Agenda

- About GAO
- Discussion of Federal Information System Controls Audit Manual (FISCAM)
- New Cybersecurity Audit Methodology Manual
- Next steps
- Q & A

Source: https://www.gao.gov

GAO's Core Values

MISSION VALUES:

Accountability
Enhance the economy, efficiency, effectiveness,and credibility of the federal government

Integrity
Conduct professional, objective, fact-based, non-partisan, non-ideological, fair, and balanced work

Reliability
Produce timely, accurate, useful, clear, and candid products

PEOPLE VALUES:

Valued
Seek out and appreciate each person's perspectives

Respected
Treat everyone with dignity

Treated Fairly
Foster a work environment that provides opportunities for all

Source: https://www.gao.gov

Diversity, Equity, and Inclusion

Source: https://www.gao.gov

Fiscal Year 2021 Accomplishments

Source: GAO-22-4SP

Recent GAO Blog Posts

Challenges in Mapping the Digital Divide

OCTOBER 19, 2021

The divide between those who had access to broadband and those who did not was highlighted during...

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IRS relies extensively on information technology (IT) to process tax returns, collect taxes...

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Source: https://www.gao.gov/blog

Cybersecurity Work

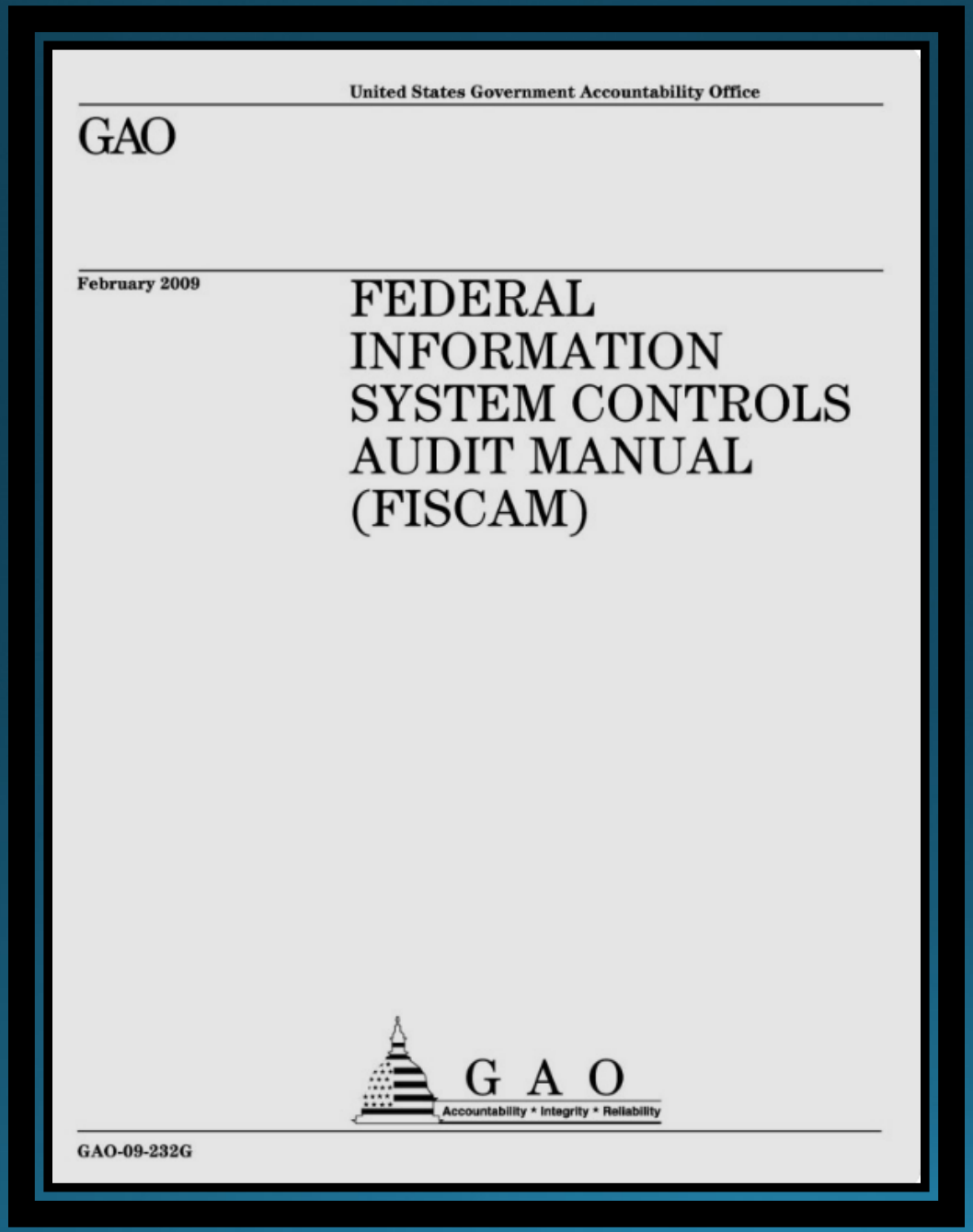
Source: GAO File Photo.

Critical Infrastructure Protection: Education Should Take Additional Steps to Help Protect K-12 Schools from Cyber Threats. GAO-21-477 Published: May 20, 2021.

Source: insta_photos/stock.adobe.com.

COVID-19: Selected Agencies Overcame Technology Challenges to Support Telework but Need to Fully Assess Security Controls. GAO-21-583 Published: Sep 30, 2021.

Why is FISCAM being updated?



United States Government Accountability Office

GAO

February 2009

FEDERAL INFORMATION SYSTEM CONTROLS AUDIT MANUAL (FISCAM)

GAO

Accountability * Integrity * Reliability

GAO-09-232G

FISCAM Revision

The 2009 FISCAM content has been reorganized to

(1) follow the planning, testing, and reporting phases of an engagement and

(2) move the tables containing the critical elements, control activities, control techniques, and audit procedures for each general and application control category to an appendix.

This appendix has tentatively been re-branded as the FISCAM objectives-based control framework or FISCAM framework.

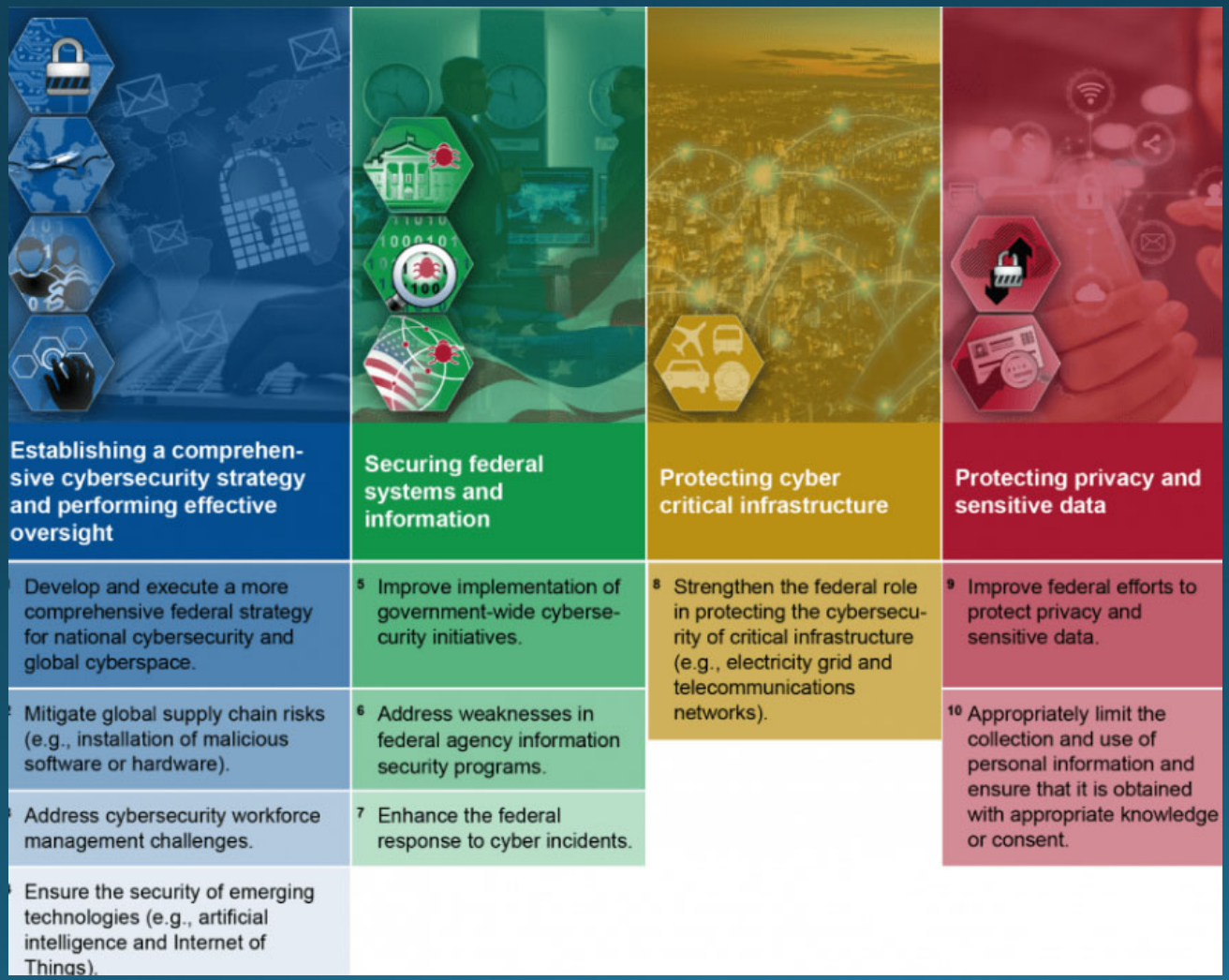
- Section 100 – Introduction
- Section 200 – Planning
- Section 300 – Testing
- Section 400 – Reporting
- Section 500 – Appendices

FISCAM Time Frames

- Exposure Draft – anticipated release summer 2022
- Final Publication – TBD

Cybersecurity Audit Methodology Manual

Four major cybersecurity challenge areas



Source: GAO analysis

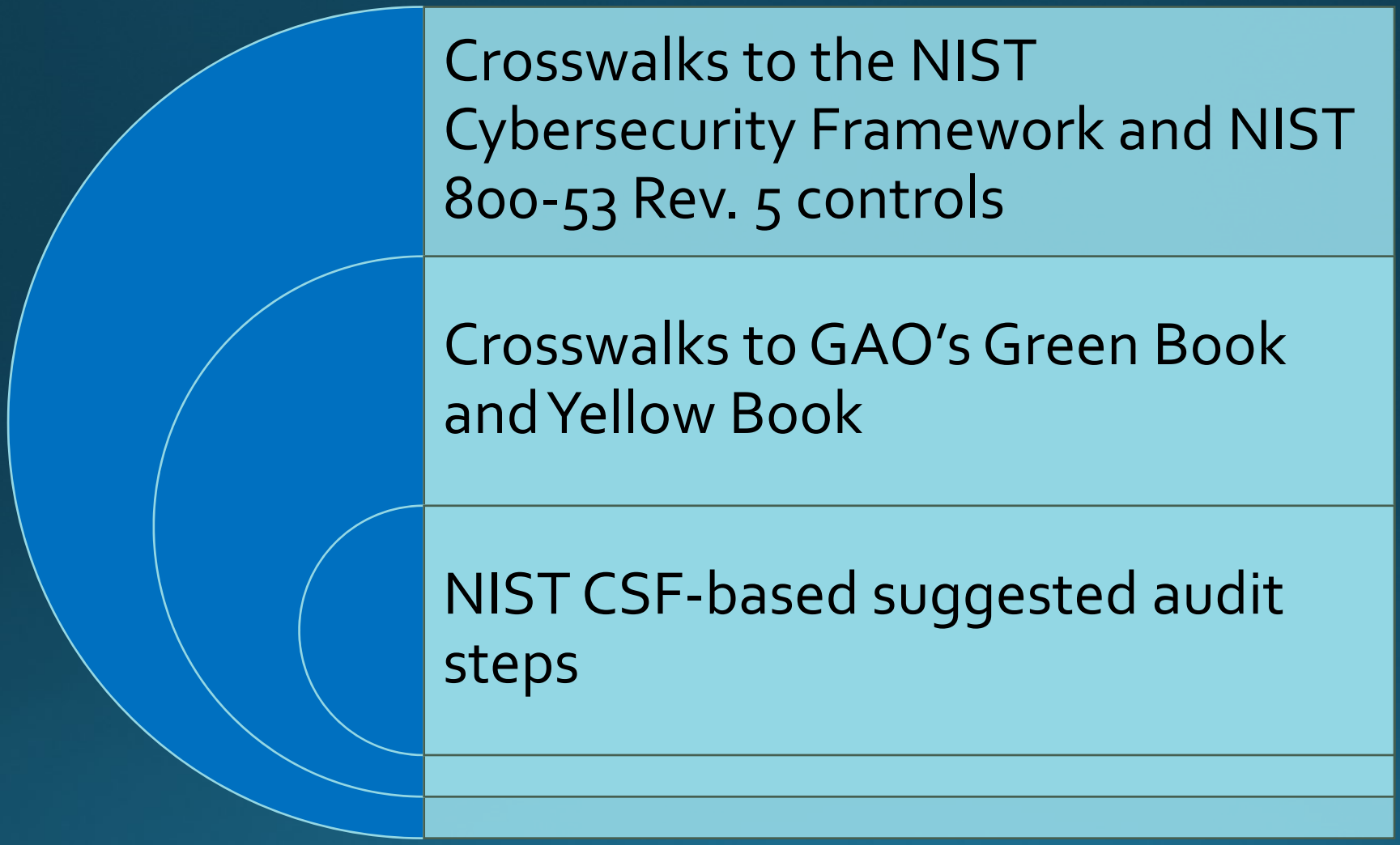
Cybersecurity Audit Methodology Manual

New and experienced auditors can use the new IT cybersecurity audit methodology manual for FISMA and cybersecurity related audits.

The control activities listed in this manual are consistent with: the NIST Cybersecurity Framework (CSF), NIST 800-53 Rev. 5, other NIST publications, and Office of Management and Budget cybersecurity control-related policies and guidance, among others.

The procedures listed in the Cybersecurity Audit Methodology Manual are intended to be flexible, provide a framework and starting point to assess the enhanced security requirements, and can be tailored to the needs of the auditor.

Features


Crosswalks to the NIST Cybersecurity Framework and NIST 800-53 Rev. 5 controls
Crosswalks to GAO's Green Book and Yellow Book
NIST CSF-based suggested audit steps

Draft Outline

- **Chapter 1.** Use and Application. Who will use this manual and what is the purpose.

- **Chapter 2.** General Planning. How to plan for the audit.

- **Chapter 3.** Audit Steps. Suggested detail audits steps for areas such as: assets and risk management; protecting systems and information; logging and monitoring; incident response; and contingency planning.

- **Appendixes**
  - NIST CSF-based suggested audit steps (Excel spreadsheet)
  - Mapping NIST CSF to Green Book (Excel spreadsheet)
  - Mapping NIST CSF to other NIST publications

Challenges

- Information Security vs. Cybersecurity
- Criteria used (NIST 800-53 or NIST Cybersecurity Framework)
- Detailed steps vs. high-level examples and concepts
- Zero Trust Architecture
- Cloud computing, FedRAMP, StateRAMP

Cybersecurity Audit Methodology Manual Time Frames

- Draft publication – beginning of 2022
- Final Publication – summer 2022

Differences between FISCAM and CAMM

- The ***Federal Information System Controls Audit Manual*** **(FISCAM)** revision will continue to support assessing information system controls related to financial audits, attestation engagements, and certain performance audits.

- The ***Cybersecurity Audit Methodology Manual*** will support both information security and cybersecurity performance audits.

Have Feedback?

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Q & A

Thank you!

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