



TECHNICAL BRIEF · BASED ON GAO-25-107795 · GOVERNMENT-WIDE, DOW, HHS

THE 11 LEGACY SYSTEMS GAO SAYS CANNOT WAIT

8 of 11

MOST CRITICAL FEDERAL LEGACY SYSTEMS WHOSE MODERNIZATION PLANS WERE NOT FULLY DOCUMENTED

GAO named the 11 federal legacy systems most in need of modernization in July 2025 and found that plans for 8 of them were not fully documented. Seven agencies, DoW and HHS among them, now hold recommendations to write plans with milestones, the work, and the legacy system's disposition.

THE FINDING

In July 2025, GAO published [Information Technology: Agencies Need to Plan for Modernizing Critical Decades-Old Legacy Systems](#) (GAO-25-107795). It reviewed 69 legacy systems and named the 11 most critical, held by 10 agencies. GAO withheld the system names for sensitivity and used numbers instead.

Drawing on GSA's Modernization and Migration Management (M3) Playbook, GAO said a documented plan should include, at a minimum, milestones to complete the modernization, a description of the work, and details on the disposition of the legacy system. Plans for 8 of the 11 weren't fully documented. Two systems, at DoW (formerly DoD) and Energy, had no plan at all.

PLAN STATUS (MILESTONES, WORK DESCRIPTION, LEGACY DISPOSITION)	AGENCY (SYSTEM)
All three documented	DHS (6), Interior (7), EPA (11)
No plan	DoW (3), Energy (4)
Partial on all three	Commerce (2), HHS (5)
Mixed	Agriculture (1), Transportation (8), Treasury (9, 10)

In the mixed group, Agriculture and Transportation documented milestones but not the work, and only partly addressed the legacy system's disposition. Treasury's System 9 had no disposition at all, and System 10 was partial on milestones and disposition.

In the sensitive version, GAO made eight recommendations to seven agencies: Agriculture, Commerce, Defense, Energy, HHS, Transportation, and Treasury. Each asks for a plan that covers all three elements.

WHY IT KEEPS HAPPENING

GAO asked for the same thing six years earlier. Its 2019 review, [GAO-19-471](#), found that only Interior's and Defense's plans for that year's 10 most critical systems contained all three elements. Of those 2019 systems, only 3 were modernized by February 2025.

Plans go stale. DoW had a 2015 plan for System 3, a 60-year-old contract management system, that was never implemented. Energy said its October 2023 proposal was no longer viable. HHS had no updated plan reflecting System 5's new 2035 completion date.

Seven of the eight systems with incomplete or missing plans reportedly have modernizations underway anyway. The 11 systems range from about 23 to 60 years old and together cost about \$754 million a year to operate and maintain.

WHY IT MATTERS TO YOUR BID

GAO warns that undocumented plans raise the likelihood of cost overruns, schedule delays, and project failure. Any program office holding one of the eight recommendations has to produce a plan GAO will accept, and the contractors around that system feed it.

A sustainment recompile will ask how the offeror keeps the system running while the agency plans its exit, and a modernization already in flight needs the missing milestones and disposition written down. The incumbent sustainment contractor usually holds the dependency maps, batch schedules, and interface knowledge that the plan has to draw on.

DoW concurred with its recommendation; HHS neither agreed nor disagreed. Either way, a technical volume that shows how the three elements get documented, and who signs off on each, answers the finding directly.

TECHNICAL APPROACH

This is the assessment-and-roadmap work in Avalon's [Application Modernization service](#), described at the methodology level. It runs in the agency's own repositories and tooling, in unclassified environments, and produces the three elements GAO checks.

- 1. Map the system before planning it.** Inventory the codebase and run static analysis for size, language mix, complexity, dead code, and embedded business rules. Map every upstream feed, downstream consumer, batch job, and shared database. Read the current SSP and POA&M against the stack for unsupported components under NIST SP 800-53 SA-22.
- 2. Write the description of the work as a disposition.** Score the system against one decision from the standard set (retain, rehost, replatform, refactor, rearchitect, rebuild, or replace and retire) on mission criticality, technical health, cost, and compliance exposure. The scoring workbook and written rationale become the work description the agency can defend to GAO and its budget office.
- 3. Turn the roadmap into dated milestones.** Sequence increments by risk and dependency, using strangler-frog slices where the system changes, each with a functional-parity baseline and rollback criteria. Mark each slice that is a significant change under NIST SP 800-37 Rev. 2, so reauthorization checkpoints carry dates.

4. **Write the legacy system's disposition before any build.** For every retire or replace decision, set the exit test, a capped parallel run, records disposition under NARA schedules, license termination, and infrastructure release. This is the element missing or partial at Agriculture, Commerce, HHS, Transportation, and both Treasury systems.

For COBOL and Assembly stacks like Treasury's, the plan names the disposition and milestones; transforming mainframe code is specialist work outside this scope.

WHAT "FIXED" LOOKS LIKE

GAO's own table shows the standard. DHS, Interior, and EPA documented all three elements for Systems 6, 7, and 11, with planned completion dates of September 2026, August 2027, and December 2028.

For the eight recommendations, these are targets:

- Dated completion and interim milestones tied to funding and reauthorization checkpoints.
- A description of the work backed by a disposition decision and its evidence.
- A legacy disposition covering data, records, licenses, and infrastructure, with an exit test.

STATUS CHECK

OPEN GAO's Matter for Congressional Consideration, to require major agencies to develop modernization plans for these systems, was open as of GAO's last update, February 2026, with no legislative action yet. The eight agency recommendations sit in the sensitive version, and gao.gov does not publish their status.

TEAMING FIT

NAICS	541512, 541511
AVALON'S SUB ROLE	Legacy system assessment, evidence-scored disposition, milestone roadmap with reauthorization checkpoints, and decommission plan under the prime's sustainment or modernization task order
SMALL-BUSINESS STATUS	Small business; HUBZone (in progress)
LIKELY VEHICLES	GSA MAS (SIN 54151S IT Professional Services); GSA Alliant 3; GSA OASIS+

If sustainment or modernization of a DoW or HHS legacy system is in your capture plan, Avalon teams as the sub that writes the milestones, work description, and disposition GAO says the plan is missing.

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This brief analyzes publicly released oversight reports. It does not describe work Avalon performed for any agency named.