

A report to Congressional Requesters

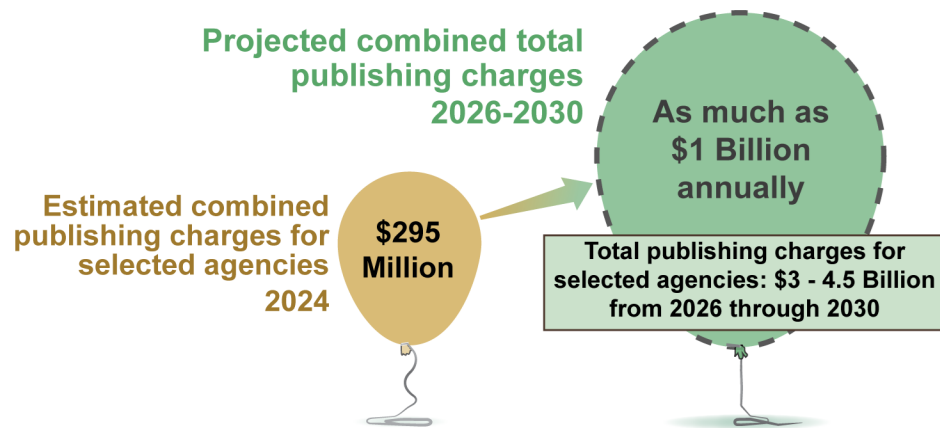
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What GAO Found

In 2022 The Office of Science and Technology Policy (OSTP) directed federal agencies to make research results freely accessible to the public immediately when published. In response, seven of the nine agencies GAO reviewed issued updated plans or policies. The Department of Transportation and the Nuclear Regulatory Commission were still drafting updated plans and policies at the time of our review. Five agencies' plans or policies fully met OSTP's guidance. The National Science Foundation's and U.S. Department of Agriculture's plans did not fully address OSTP's guidance for reuse rights. These rights describe how others can share, modify, or use the research. Better alignment with OSTP's guidance could help ensure this research can be built upon by others.

Amid the federal shift to public access, publishers are changing their business models to remain viable without subscription revenue and will require authors to pay to have their publications made open access. Agencies allow grant funds to cover these charges. Assuming historical patterns continue, the new policies and publishers' responses may result in significant agency cost growth. This would mean less money for research (see figure). However, only the National Institutes of Health has planned to manage these potential costs. Additional analysis could help other agencies better manage costs, which may triple annually.

Estimated Spending on Publishing Charges for Selected Agencies



Source: GAO analysis of SciVal database and Open Dataset of Publication Charges. | GAO-26-107738

Increased public access can improve the visibility of research and enable readers to identify problems with specific publications more quickly. However, according to stakeholders GAO spoke with, pay-to-publish models may encourage publishers to lower publication standards to publish more articles.

In 2024, OSTP published an economic analysis on expanding public access, but it did not fully reflect all five of GAO's key elements of an economic analysis. Notably, the scope did not address the goal of estimating the potential costs and other effects. Ensuring that future analyses are consistent with the key elements can help agencies better understand the cost implications of their new policies.

Why GAO Did This Study

The U.S. government is one of the largest funders of scientific research globally. The results of federally funded research are ordinarily shared through scholarly publications. But many of these publications were restricted to paid subscribers. GAO was asked to examine agencies' efforts to implement OSTP's 2022 guidance.

This report examines: (1) the extent to which selected agencies' public access plans and policies are consistent with federal guidance, (2) how the scholarly publishing industry is responding to the federal shift to public access and how this affects selected agencies and journal market dynamics, (3) the potential effects of expanding public access to federally funded research, and (4) the extent to which OSTP's 2024 economic analysis of public access followed GAO's key elements for an economic analysis.

GAO selected nine agencies with a mix of research funding levels and assessed their public access plans and policies against OSTP guidelines. GAO reviewed available literature and data and interviewed nongovernmental stakeholders, such as publishers and universities. Further, GAO assessed OSTP's economic analysis against GAO's key elements that serve as a framework for assessing an economic analysis.

What GAO Recommends

GAO is making 11 recommendations to nine agencies to ensure public access plans meet federal requirements and assess budgetary and economic effects of expanding public access. Four of these agencies concurred with GAO's recommendations and five agencies had no comments.