

Memorandum

Software Technology

June 3, 2025

To: Members of the Board
From: Josh R. Williams, Assistant Director
Thru: Monica R. Valentine, Executive Director
Subject: **Software Technology - (Development Paper) - (Topic B)**

INTRODUCTION

At the February 2025 meeting, the Board deliberated recognition guidance for shared software. Staff is now researching and recommending updates as needed to SFFAS 10, *Accounting for Internal Use Software*.

The objective of this meeting is for the Board to review and consider the following staff recommendation:

1. Update recognition and measurement guidance for software development costs to align with agile/iterative development processes

Staff is requesting the Board's feedback on the proposal.

REQUEST FOR FEEDBACK

Prior to the Board's June meeting, please review the attached staff analysis and respond to the questions by June 13, 2025.

NEXT STEPS

Pending Board feedback, staff will further research and propose updates, as needed, to existing accounting guidance in SFFAS 10.

ATTACHMENTS

1. Staff Analysis
2. Prior Board Meeting Discussion Timeline

Analysis

Software Technology

June 3, 2025

INTRODUCTION

Purpose

This staff analysis pertains to the Board's project to update accounting guidance for software technology.

Background

This project began with the Board considering adopting a right-to-use asset framework for cloud-service arrangements. The Board initially considered adopting guidance that the Governmental Accounting Standards Board (GASB) issued in Statement No. 96, *Subscription-Based Information Technology Arrangements*.

During the October 2022 meeting, some members viewed cloud-service arrangements as service contracts while some members thought it reasonable to conceptualize cloud-service arrangements as right-to-use assets. However, most members were concerned that the preparer burden and lack of reporting benefits may not justify the need for asset recognition. The members suggested that disclosures could adequately provide information about how federal entities use cloud-services for operational needs versus purchasing or developing the information technology (IT) resource internally.

During the April 2023 meeting, the Board considered potential preparer burdens and user benefits of four reporting options that staff proposed in a cost-benefit analysis. The Board overwhelmingly supported developing guidance to require reporting entities to disclose cloud-service expenses.

During the October 2023 meeting, the majority of members supported proposed guidance that would establish that reporting entities should apply existing liability and prepaid asset guidance to cloud-service arrangements and expense payments for cloud services as incurred. However, the Board had mixed opinions about whether guidance should require reporting entities to disclose any information on cloud-service arrangements. Staff noted they would defer disclosure guidance proposals and focus on recognition guidance for the software-technology project topics.

At the April 2024 meeting, the majority of members agreed that reporting entities should not capitalize implementation costs for cloud-service arrangements unless the implementation activities result in a distinct internal use software asset, in accordance with SFFAS 10, *Accounting for Internal Use Software*, independent of the associated cloud-service arrangement.

At the December 2024 meeting, the Board agreed on a scope to distinguish software license assets from cloud services for financial statement recognition purposes. The Board also agreed on a recognition guidance framework for perpetual and term-based software licenses.

At the February 2025 meeting, the majority of members agreed to apply the software license accounting framework to shared services. However, some members wanted to further research the costs and benefits of recognizing shared service assets. The Board agreed to move forward in the project but further research the costs and benefits in recognizing shared service assets, particularly for challenges with eliminating intragovernmental transactions for government-wide reporting. Additionally, the Board agreed on a recognition framework for shared software code.¹

RECOMMENDATION NO. 1

Up until this point in the project, the Board has deliberated accounting guidance for topics not currently addressed in level A guidance, such as cloud computing, software licenses, and shared services. Staff is now researching and recommending updates as needed to SFFAS 10, *Accounting for Internal Use Software*.

Staff recommends:

1. Updates to recognition and measurement guidance for software development costs to align with agile/iterative development processes

Staff requests the Board's feedback on the recommendation.

ANALYSIS

The following analysis will discuss:

- Staff research
- Characteristics of agile software development processes
- Current FASAB accounting guidance for software development costs
- Current challenges with accounting for software development costs
- Other standard-setter accounting guidance on software development costs
- Staff analysis and recommendation

¹ See Attachment 2 for a more detailed summary of previous Board meeting deliberations on the software technology project.

Research

For this session, staff coordinated with the working group and other stakeholders to research the current software development environment in the federal government. Staff also requested feedback from the working group to understand the challenges that preparers experience with applying SFFAS 10 to current agile/iterative software development practices.

Additionally, staff researched prior working group correspondence, prior Board meeting deliberations, GAO reports, and other standard-setter guidance. Staff specifically researched the following documents for this paper:

- Agile Alliance, *Accounting for Capitalization of Agile Labor Costs*, Reed and Wyckoff
- FASB Proposed Accounting Standards Update, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Targeted Improvements to the Accounting for Internal-Use Software*, October 29, 2024
- FASB Board Meeting Handout, *Accounting for and Disclosure of Software Costs*, May 7, 2025
- GAO-23-106821, *Information Technology – Agencies Need to Continue Addressing Critical Legacy Systems*, May 10, 2023
- GAO-24-105506, *Agile Assessment Guide – Best Practices for Adoption and Implementation*, November 2023
- GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*, June 2007
- IPSAS 31, *Intangible Assets*, January 2010
- SFFAC 1, *Objectives of Federal Financial Reporting*, September 2, 1993
- SFFAC 5, *Definitions of Elements and Basic Recognition Criteria for Accrual-Basis Financial Statements*, December 26, 2007
- SFFAS 10, *Accounting for Internal Use Software*, October 9, 1998
- Technical Release 16, *Implementation Guidance for Internal Use Software*, January 19, 2016

Staff also held roundtable discussions with preparers and IT personnel from federal entities, staff from GAO ITC and STAA, advocacy groups, and other non-federal stakeholders to understand accounting challenges with agile/iterative development and reporting benefits of recognizing capital software assets on balance sheets.

Characteristics of Agile Software Development

Background

For many decades software development followed a “waterfall” approach that uses linear and sequential phases that concludes with a usable software product after all phases have occurred. For example, the waterfall development process includes: (1) determining requirements, (2) designing the software, (3) developing the software, and (4) testing the software.²

While some software projects still follow the waterfall approach, software projects increasingly follow agile development methods.³ Agile development can encompass many different frameworks⁴ that emphasize developing software in iterations⁵ which management continuously evaluates their functionality, quality, and customer satisfaction.

In contrast to waterfall, agile frameworks use frequent reviews and customer feedback to help ensure that the software product delivers high-value requirements to the end user. The following diagram compares the waterfall and agile frameworks.

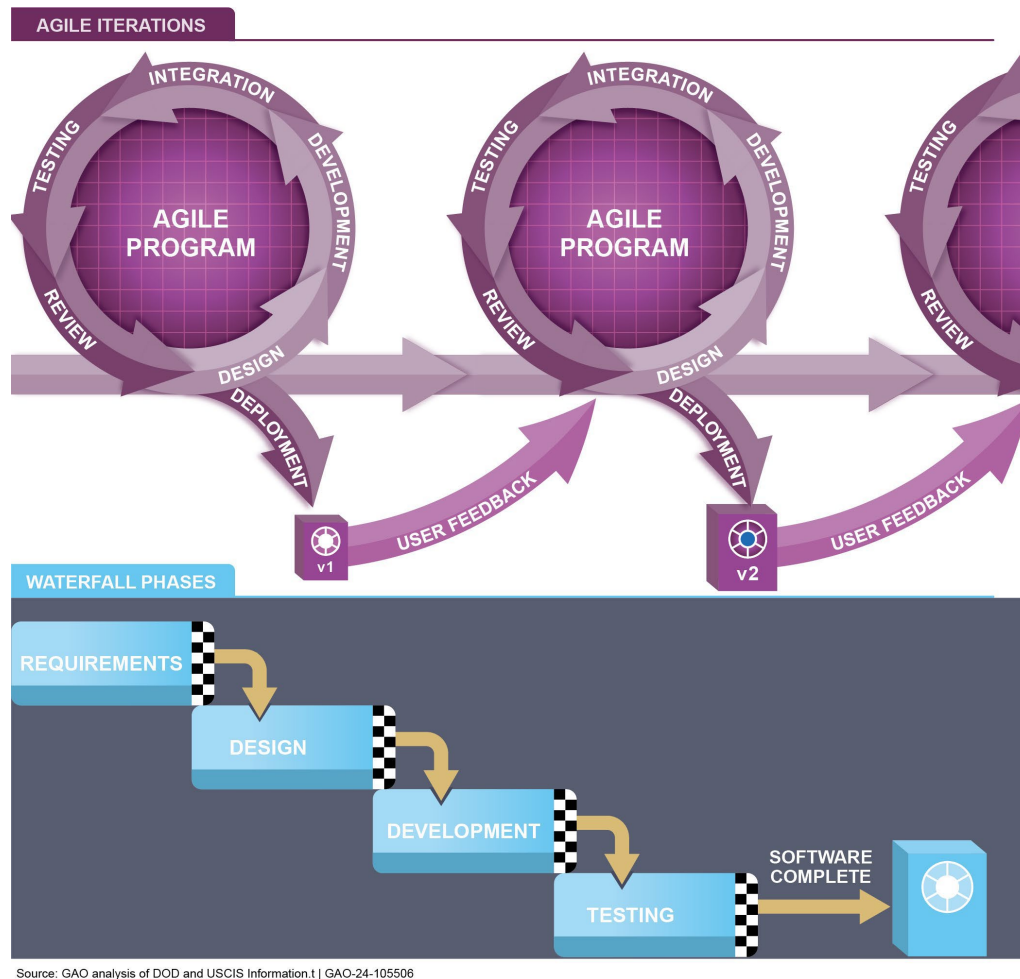
Diagram on following page

² GAO-24-105506, *Agile Assessment Guide – Best Practices for Adoption and Implementation*, November 2023

³ Agile software development is an umbrella term used to describe software development methods that incrementally deliver working segments of a product in short iterative cycles instead of delivering a usable product only once at the end of a sequential process. This typically involves cross-functional collaboration among development, operational, and security interests to leverage constant feedback from the end-user to improve the functionality of the product through multiple iterations and provide constant support.

⁴ Examples of commonly used software development methods with agile frameworks include, Kanban, Scrum, DevSecOps, etc.

⁵ An iteration is a predefined recurring period of time in which working software is created. Similarly, a release is a planned segment of capabilities that provide useable functionality to the end user.



The diagram illustrates how requirements, design, development, and testing are performed concurrently in small iterations for agile and sequentially in waterfall development. The agile framework results in frequent software releases (e.g., yearly, monthly, or even weekly) that continuously enhances, maintains, or deploys additional components based on user feedback. Whereas the waterfall framework typically takes years before working software is tested and released to end-users.

Stakeholder Feedback

In summary, the working group and other stakeholders provided the following feedback about how federal agencies use agile software development:

- Feedback indicates that federal agencies mostly use agile development. However, some federal agencies reported that they also sometimes use waterfall methods (or a hybrid of the two) depending on the project.

- With agile development, federal agencies still plan upfront to develop overarching goals and objectives for the software. The iterative releases need to fit with the overall goals and objectives.
- Several federal agencies indicated that they view agile software development as a continuous software improvement process and that the software is never complete. One federal entity stated that with agile, there is a very brief planning phase and then all phases are happening concurrently and continuously, often for several years.
- With agile development, each iterative release includes research, design, and development activities. However, acceptance testing still occurs before an iterative increment is released for use. Research, design, development, and maintenance activities can occur simultaneously across multiple iterations.
- With agile development, the iterative software releases can result in enhancements to a prior software component, bug fixes/maintenance, or new software components. Some iterative releases can serve as standalone software components with distinct end-user functions while other iterations are dependent on one another for a complete end-user function.

Working group feedback also indicates that, like waterfall, federal agencies use both contract labor and internal labor, and they acquire software licenses and cloud services when developing software using agile development.

Current FASAB Guidance

FASAB issued SFFAS 10, *Accounting for Internal Use Software* in 1998 when waterfall development methods were prevalent. As such, the Board built the accounting guidance for developed software in SFFAS 10 around linear phases for software development. Specifically, paragraphs 10-20 state:

10. Software's life-cycle phases include planning, development, and operations. This standard provides a framework for identifying software development phases and processes to help isolate the capitalization period for internal use software that the federal entity is developing.

11. The following table illustrates the various software phases and related processes. The steps within each phase of internal use software development may not follow the exact order shown below. This standard should be applied on the basis of the nature of the cost incurred, not the exact sequence of the work within each phase.

12. In the preliminary design phase, federal entities will likely do the following:

a. Make strategic decisions to allocate resources between alternative projects at a given time. For example, should programmers develop new

software or direct their efforts toward correcting problems in existing software?

b. Determine performance requirements (i.e., what it is that they need the software to do).

c. Invite vendors to perform demonstrations of how their software will fulfill a federal entity's needs.

d. Explore alternative means of achieving specified performance requirements. For example, should a federal entity make or buy the software? Should the software run on a mainframe or a client server system?

e. Determine that the technology needed to achieve performance requirements exists.

f. Select a vendor if a federal entity chooses to obtain COTS software.

g. Select a consultant to assist in the software's development or installation.

13. In the software development phase, federal entities will likely do the following:

a. Use a system to manage the project.

b. Track and accumulate life-cycle cost and compare it with performance indicators.

c. Determine the reasons for any deviations from the performance plan and take corrective action.

d. Test the deliverables to verify that they meet the specifications.

14. In the post-implementation/operational phase, federal entities will likely do the following:

a. Operate the software, undertake preventive maintenance, and provide ongoing training for users.

b. Convert data from the old to the new system.

c. Undertake post-implementation review comparing asset usage with the original plan.

d. Track and accumulate life-cycle cost and compare it with the original plan.

15. *Entities should capitalize the cost of software when such software meets the criteria for general property, plant, and equipment (PP&E). General PP&E is any property, plant, and equipment used in providing goods and services.*

16. *Although the measurement basis remains historical cost, reasonable estimates may be used to establish the capitalized cost of internally developed software, in accordance with the asset recognition and measurement provisions herein. For internally developed software, capitalized cost should include the full cost (direct and indirect cost) incurred during the software development stage. Such cost should be limited to cost incurred after*

a. management authorizes and commits to a computer software project and believes that it is more likely than not that the project will be completed and the software will be used to perform the intended function with an estimated service life of 2 years or more and

b. the completion of conceptual formulation, design, and testing of possible software project alternatives (the preliminary design stage).

17. *Such costs include those for new software (e.g., salaries of programmers, systems analysts, project managers, and administrative personnel; associated employee benefits; outside consultants' fees; rent; and supplies) and documentation manuals.*

18. *For COTS software, capitalized cost should include the amount paid to the vendor for the software. For contractor-developed software, capitalized cost should include the amount paid to a contractor to design, program, install, and implement the software. Material internal cost incurred by the federal entity to implement the COTS or contractor-developed software and otherwise make it ready for use should be capitalized.*

19. *All data conversion costs incurred for internally developed, contractor-developed, or COTS software should be expensed as incurred, including the cost to develop or obtain software that allows for access or conversion of existing data to the new software. Such cost may include the purging or cleansing of existing data, reconciliation or balancing of data, and the creation of new/additional data.*

20. *Costs incurred after final acceptance testing has been successfully completed should be expensed. Where the software is to be installed at multiple sites, capitalization should cease at each site after testing is complete at that site.*

In 2016, FASB issued TR 16, *Implementation Guidance for Internal Use Software*, which addresses agile software development, among other topics. TR 16 provides limited guidance through level C GAAP to help federal entities account for agile software development costs within the waterfall/linear framework in SFFAS 10.

Paragraph 34 of TR 16 provides guidance with how to account for iterative software releases as software modules/components. Specifically, paragraph 34 states:

34. The IUS development phases listed in SFFAS 10, paragraphs 10-14, and within this TR could be applied to agile development projects on an iteration basis. If an iteration developed meets the module or component asset definition in accordance with SFFAS 10, paragraph 33, and as discussed in paragraph 15 of this TR, then it could be treated as an individual IUS project and would be accounted for in accordance with SFFAS 10. If the numbers of iterations are dependent on the outcomes of multiple processes for a complete function, the cost incurred in these iterations should be grouped together based on the nature of the activities (capital or expense) and treated as one project for the purposes of recognition, measurement, and disclosure in accordance with SFFAS 10. Any future incremental releases that result in additional functionality can be treated as an enhancement of the original IUS project and accounted for in accordance with SFFAS 10.

Working Group Feedback

The working group provided feedback on the challenges that federal entities currently face when accounting for software development costs using SFFAS 10 and TR 16 guidance. A summary of the feedback is below:

- The majority of respondents stated that the current guidance is outdated and that it is not practical to account for software development costs based on three distinct categorical phases in the current agile environment. However, some respondents indicated that they believed it was still practical to account for software development costs in the SFFAS 10 framework. Staff notes that some federal entities reported still using the waterfall approach (or both) for software development and suggested that SFFAS 10 guidance apply to both waterfall and agile methods.
- Several respondents stated that the lines between the three phases blur and it is difficult to identify and separate costs into the distinct categories once the software is being developed. For example, federal entities stated that some design, planning, and testing of alternative costs occur within each development iteration and that planning is never complete. Furthermore, planning, design, development, and operational costs could occur for multiple software component iterations at the same time.
- Several federal entities indicated that the term “final acceptance testing” is difficult to apply in agile development. This is because it is difficult to determine when capitalization cutoff should occur and amortization should begin with the multiple iterative releases that occur frequently, sometimes on a weekly basis. There is a variety in practice among federal entities when placing capitalized software assets in service. With agile development, some federal entities capitalize multiple distinct software assets based on iterative releases while some federal entities reported placing one larger software asset in service at the end of the entire project, similar to the waterfall approach.

- Several federal entities stated that the experimental nature of agile development can make it difficult for management to determine if it is more likely than not that a software project will be completed and perform its intended functions, making it difficult to determine when to begin capitalizing costs.

Overall, feedback indicates that federal entities are generally able to apply SFFAS 10 to agile development out of necessity, but it is becoming more difficult and impractical to do so. Furthermore, feedback suggests a significant amount of variety exists among federal entities when accounting for software development; particularly regarding categorizing development costs by the three phases, determining when to begin capitalization, and determining capitalization cutoff for the various iterative software releases.

Other Standard-setter Guidance

Both GASB and FASB provide guidance for internally developed software that is similar to the SFFAS 10 guidance referenced above.⁶ The IPSASB intangible asset guidance provides general recognition guidance for internally generated intangible assets that applies to internally developed software.⁷ However, IPSASB standards do not provide specific guidance for internally developed software.

FASB recently issued Proposed Accounting Standards Update, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Targeted Improvements to the Accounting for Internal-Use Software*. In this exposure draft, FASB sought public feedback on a proposal to modernize its accounting guidance for developed software.

According to the proposal, stakeholders have encouraged FASB to better align accounting practices with how software is now developed because the current guidance is outdated and lacks relevance given the evolution of software development. As a result, there are challenges in applying the current internal-use software guidance, which has led to variety with how reporting entities determine when to begin capitalizing software costs.

Specifically, many entities have shifted from using a prescriptive and sequential development method (e.g., waterfall) to using an incremental and iterative development method (e.g., agile). FASB's current internal-use software accounting requirements do not specifically address software developed using an incremental and iterative method.

Therefore, the main provisions of the FASB proposal are as follows:

- *The amendments in the proposed update would remove all references to a prescriptive and sequential software development method (referred to as “project stages”) throughout Subtopic 350-40. The proposed amendments would specify*

⁶ GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*, par. 9-14; and FASB *Intangibles—Goodwill and Other—Internal-Use Software*, par. 350-40-25 thru 30.

⁷ IPSAS 31, *Intangible Assets*, par. 49-65

that an entity would be required to start capitalizing software costs when both of the following occur:

- *Management has authorized and committed to funding the software project.*
- *It is probable that the project will be completed and the software will be used to perform the function intended (referred to as the “probable-to-complete recognition threshold”).*
- *In evaluating the probable-to-complete recognition threshold, an entity may have to consider whether there is significant uncertainty associated with the development activities of the software (referred to as “significant development uncertainty”). Factors to consider in determining whether there is significant development uncertainty include whether:*
 - *The software being developed has novel, unique, unproven functions and features or technological innovations.*
 - *The entity has determined what it needs the software to do (for example, functions or features), including whether the entity has identified or continues to substantially revise the software’s significant performance requirements.*
- *Additionally, the proposed amendments would supersede the website development costs guidance and incorporate the recognition requirements for website-specific development costs from Subtopic 350-50 into Subtopic 350-40.*

FASB noted that current guidance requires entities to capitalize development costs incurred for internal-use software depending on the nature of the costs and the project stage during which they occur. Stakeholders have said that applying this guidance can be challenging because entities have trouble differentiating between the project stages, particularly in an iterative development environment.

FASB believes that the amendments in the proposed update would improve the operability of the guidance by removing all references to software development project stages so that the guidance would be neutral to different software development methods, including methods that entities may use to develop software in the future.

At the May 2025 meeting, the FASB affirmed the proposed amendments discussed above and directed the staff to draft a final Accounting Standards Update for vote by written ballot.⁸

⁸ See FASB project page at [Accounting for and Disclosure of Software Costs](#)

Staff Analysis

Staff agrees with federal entity comments that the prescriptive nature of SFFAS 10, which is based on a waterfall model, does not fit with the iterative and evolving nature of agile development. Working group feedback indicates there is a growing need for a more flexible and principles-based approach to account for internally developed software.

Furthermore, staff believes that TR 16 guidance is limited because it applies level C GAAP to help account for agile software development based on level A GAAP (SFFAS 10) that the Board developed around waterfall/linear frameworks. Staff believes this is a significant reason why there is variety with how federal entities account for agile software development.

Therefore, staff believes the Board should update the level A guidance in SFFAS 10 using aspects of the FASB proposal and TR 16 for a more principle-based and flexible accounting guidance that federal entities can apply to waterfall and agile development methods, or future development methods as the software technology environment continues to evolve.

Staff Recommendation

Staff recommends the following updates to modernize the recognition and measurement guidance in SFFAS 10 to better align with agile software development methods. The proposed paragraphs would replace SFFAS 10, paragraphs 10-20:

Recognition

Costs to Be Expensed as Incurred

1. Reporting entities should expense costs incurred prior to meeting the requirements in paragraph 4 (*below*).
2. Reporting entities should expense all training costs as incurred.
3. Except as noted in paragraph 11.e., reporting entities should expense data conversion costs as incurred. The process of data conversion from old to new systems may include purging or cleansing of existing data, reconciliation of data between old and new systems, creation of new or additional data, and the actual conversion of old data to the new system.

Costs to be Capitalized

4. Reporting entities should begin capitalizing costs when both of the following occur:

- a. Management authorizes and commits to funding the software development. Examples of authorization and commitment to funding software development include the execution of a contract with a third party to develop the software, approval of expenditures related to internal development, or an agreement to obtain the software from a third party.
 - b. It is more likely than not that the software development will be completed and be used to perform the function(s) intended with an estimated service life of 2 years or more (referred to as the probable-to-complete recognition threshold).
- 5. If there is significant uncertainty associated with the development activities of the software, the probable-to-complete recognition threshold described in paragraph 4.b. is not met. Once the significant development uncertainty has been resolved, a reporting entity should evaluate the requirements in paragraph 4 to determine when to begin capitalizing costs. The following are factors that may indicate that there is significant development uncertainty and that the probable-to-complete recognition threshold is not considered to be met:
 - a. The software being developed has novel, unique, unproven functions and features, or technological innovations.
 - b. The significant objectives of the software have not been identified or continue to be substantially revised.
- 6. Capitalization should cease once the software is ready for its intended use and final acceptance testing is successfully completed. If an iterative release results in a software module or component with a standalone function that benefits end users, reporting entities should account for it as an individual software asset.⁹ If an iterative release is dependent on the outcomes of other releases for a complete function, reporting entities should account for the cost incurred for these iterations as one software asset.¹⁰
- 7. After recognizing a software asset in accordance with paragraph 6, reporting entities should account for subsequent iterative releases as either maintenance, enhancements, or a separate software asset in accordance with this Statement.

⁹ An iteration is a predefined recurring period of time in which working software is created. Similarly, a release is a planned segment of capabilities that provide useable functionality to the end user.

¹⁰ Each iterative release may have its own acceptance testing before moving forward to the next iteration and final acceptance testing may not always occur. Reporting entities should use judgment to identify a point in time for capitalization cutoff purposes, such as the date that management releases a minimum viable product that provides value to end users.

Additional Considerations for Website Development Costs

8. Website hosting fees paid to an internet service provider should be expensed over the period of benefit.
9. Accounting for website content involves issues that also apply to other forms of content or information that are not unique to websites. Reporting entities should expense costs to input content into a website.
10. Costs to obtain and register an internet domain should be evaluated for capitalization under paragraph XX (reference future intangible asset guidance)

Measurement

Capitalizable Costs

11. Capitalized costs of software developed or obtained for internal use should include the following:
 - a. Direct costs of materials and services consumed in developing or obtaining internal-use software. Examples of those costs include but are not limited to the following:
 - i. Fees paid to third parties for services provided to develop the software
 - ii. Costs incurred to obtain software licenses from third parties
 - b. Payroll and payroll-related costs (for example, costs of employee benefits, travel expenses, etc.) for employees who spend time directly on the internal-use software development. Examples of employee activities include but are not limited to, design of chosen path, including software configuration and software interfaces, coding, installation to hardware, and testing.
 - c. Indirect costs incurred for software development.¹¹
 - d. Interest costs incurred while developing internal-use software.
 - e. Costs incurred to develop or obtain software for data conversion purposes.

Recognition Guidance Analysis – Expense vs. Capitalization

Paragraphs 1-5 provide streamlined recognition guidance for determining when to expense and capitalize software development and is based on FASB's proposed

¹¹ See SFFAS 4, *Managerial Cost Accounting Standards and Concepts* for guidance for accounting for direct and indirect costs.

updates. The proposed language removes the references to the software development phases from SFFAS 10 as well as the types of costs that can occur in each phase.

Paragraph 1 would require that federal entities expense software development costs up until management determines that the software project has met the capitalization requirements in paragraphs 4.a.-b. To begin capitalizing software development costs, management must have authorized and committed to funding the software development and determined that it is more likely than not the software will be completed and used for its intended purpose. Paragraphs 2-3 would require federal entities to always expense training and data conversion costs, which is what SFFAS 10 currently requires.

The proposed guidance in 4.a.-b. is similar to SFFAS 10, par. 16.a.-b. but with significant differences. For example, the proposed guidance would no longer require the completion of the preliminary design stage because the new guidance would eliminate the linear development stage requirements. Additionally, the proposed guidance in paragraph 4.a. would specifically require that management authorize and commit to funding the development of the software. Some federal entities suggested that commitment to funding the software would provide more certainty that the software will go into production and can serve as a distinct decision point to begin capitalization.

Paragraph 5 would introduce new guidance not currently present in SFFAS 10 to help management determine if the capitalization requirements in 4.b. are met. Working group feedback indicated that federal entities face challenges with determining when it is more likely than not that the software will ultimately perform its intended function for end users due to the experimental and evolving nature of the software with agile development.

Paragraph 5 would clarify that it is not more likely than not that the software will perform its intended function if there is significant development uncertainty. Paragraphs 5.a.-b. then provide management criteria to determine whether there is significant development uncertainty, such as if the software has novel and unproven functions, or if the objectives of the software are uncertain and/or if management continues revise them.

Recognition Guidance Analysis – Unit of Account

Paragraphs 6-7 provide guidance on capitalization cutoff and unit of account considerations for asset recognition. For paragraph 6, staff combined aspects of SFFAS 10, par 20 and TR 16, par. 34 to establish clear cutoff points, such as final acceptance testing or release of a minimal viable product, for management to determine when to place a software asset in service. Paragraph 6 also provides clarifying guidance for how management should determine whether to capitalize iterative releases as standalone software assets or group multiple iterations together as one asset.

Paragraph 7 would provide further guidance clarifying how to account for multiple iterative software releases after reporting entities recognize an initial software asset. This guidance would direct that federal entities should consider subsequent iterative software releases as either maintenance, enhancements, or new standalone software

components. Federal entities would need to refer to applicable accounting guidance for these topics.¹²

Additional Considerations for Website Development Costs

Neither SFFAS 10 nor TR 16 specifically addresses how to account for website development costs. However, research indicates that federal entities have typically considered software related to websites as IUS applicable to SFFAS 10 guidance.

Like FASB's current proposal, staff believes the Board should include minor supplemental recognition guidance for a few transactions unique to website related costs.¹³ Paragraphs 8-9 would require federal entities to expense internet service provider fees and website content creation. Paragraph 10 would require federal entities to consider asset recognition requirements for internet domain registration costs in accordance with intangible asset standards, which the Board is currently developing.¹⁴

Measurement Analysis – Capitalizable Costs

The proposed guidance in paragraph 11 would replace paragraphs 17-18 in SFFAS 10 to provide a distinct "Measurement" section in the guidance to address the types of costs that federal entities should capitalize once the paragraph 4 criteria are met. For example, paragraph 11.a. addresses external costs for service contracts and software licenses that federal entities incur when developing software.

Paragraph 11.b. addresses internal costs, such as labor and travel costs for federal employees who spend time directly on developing the internal-use software. Paragraph 11.b. also provides some examples of the types of work activities that could qualify as direct work, such as coding, installation, and testing.

Staff believes providing examples of work activities for capitalization is preferable to the current prescriptive guidance in SFFAS 10, par. 17 that lists actual job titles that could apply to capitalized development costs. Staff believes federal entities should consider actual work functions that contribute to the direct development of the software rather than broad job positions.

Paragraph 11.c. states that reporting entities should also include indirect costs in developed software asset values in accordance with SFFAS 4, *Managerial Cost Accounting Standards and Concepts*. This approach aligns with current accounting guidance in SFFAS 10, par. 16. When issuing SFFAS 10, the Board determined that reporting entities should include indirect internal costs when capitalizing developed

¹² Staff plans to research and propose updates to SFFAS 10 maintenance and enhancement guidance at a later meeting.

¹³ The FASB proposal to update its software guidance proposes eliminating its comprehensive website development guidance in 350-50 and adding minor supplemental guidance in 350-40 for website development. The Board believes that website development costs can apply to IUS guidance and separate standards for website development are no longer needed.

¹⁴ An internet domain is a readable version of a website's IP address, such as fasab.gov.

software to be consistent with and comparable to purchased software and contractor developed software cost recognition.¹⁵

Paragraph 11.d. states that federal entities should also capitalize interest incurred when developing software, like interest during construction for PP&E. The working group did not identify instances when they have incurred interest related to software development, but some federal entities indicated that it was possible. Some federal entities do borrow funds from the Technology Modernization Fund to develop IUS, with the expectation of repaying the fund through future savings.¹⁶

Paragraph 19 of SFFAS 10 currently requires that reporting entities expense all data conversion cost, including costs incurred to develop or obtain software for purposes of data conversion. Proposed paragraph 11.e. introduces a caveat for data conversion cost recognition by clarifying that any software acquired or developed for the purposes of data conversion would align with the scope of internal use software in SFFAS 10, par. 2 and reporting entities should therefore consider for capitalization. Staff believes any software developed or acquired for internal-use purposes should be considered for capitalization criteria.

Working Group Feedback

The working group generally supported the recommended guidance updates and did not note any significant concerns. Staff incorporated several working group suggestions and edits in the proposed guidance above.

In line with the proposed guidance, several federal entities confirmed that they do not categorize agile IUS projects in the three traditional phases and use activities and deliverables to determine whether to capitalize or expense costs based on the substance of the iterative release. Some federal entities stated that the proposed guidance would provide a solid accounting foundation that allows flexibility for management to apply judgment for determining whether to capitalize or expense software development costs.

Some working group members noted accounting challenges with agile software development not addressed by the proposed guidance. For example, a few working group entities stated that individual iterative software releases can fall below capitalization thresholds, misaligning with materiality of the cumulative software development effort.

Staff notes that SFFAS 10, par. 24 and TR 16, par. 18 currently provide guidance on capitalization thresholds and state that reporting entities should use both qualitative and quantitative factors to establish their own materiality thresholds for modules or components of the software system. Staff believes this guidance would apply to iterative

¹⁵ See SFFAS 10, par. 58-61.

¹⁶ [Technology Modernization Fund – The work of TMF represents a close partnership between the TMF Board, TMF Program Management Office \(PMO\), and the Office of Management and Budget \(OMB\).](#)

software releases, or a combination of iterative releases, if they provide a standalone function for end users in accordance with proposed paragraph 6 above. Staff will further research and recommend updates to capitalization threshold guidance, if needed, to the Board at a future meeting.

Based on feedback, staff believes there is a variety of accounting practices among reporting entities with regards to the timing of asset recognition with agile software development due to practical and operational challenges. Some federal entities stated how it is impractical to recognize iterative software releases as assets on a weekly basis. Some federal entities indicated that they operationalize the accounting requirements by recognizing software asset components at predefined periods, such as quarterly. Some federal entities stated that weekly iterative release are typically for maintenance purposes and that iterative releases that require asset capitalization occur less frequently. Finally, some federal entities stated that iterative releases occur less frequently, such as every 6 months.

Staff believes it is best for each reporting entity to determine the timing of asset recognition for IUS through internal policy applying principle-based accounting guidance. While agile software development presents unique challenges due to the frequency of iterative releases, other principle-based accounting guidance requires internal policy addressing the timing of asset or liability recognition, such as PP&E and accruals. Alternatively, the Board could consider addressing this issue through implementation guidance in the future.

A few federal entities suggested that proposed paragraph 4.b. above should state, “It is **likely** that the software development will be completed and be used to perform the function(s) intended with an estimated service life of 2 years or more (referred to as the probable-to-complete recognition threshold).” SFFAS 10 currently uses “more likely than not” for determining when to recognize an IUS asset, which equates with “probable” as typically used in other FASAB guidance.¹⁷

The term “likely” would indicate a higher threshold for asset recognition than “more likely than not.” The federal entities believed that the substance of the proposed asset recognition requirements in paragraphs 4 and 5 above represented a higher asset recognition threshold (i.e., “likely” instead of “more likely than not”).¹⁸

However, several federal entities were not concerned with the guidance continuing to use “more likely than not” because they would apply the overall guidance for determining when to capitalize software development costs and do not consider the semantic differences between likely and more likely than not when making those judgments. Additionally, one federal entity believed that the guidance should continue to use “more likely than not” to remain consistent with FASAB’s other standards.

¹⁷ For IUS and liability recognition, FASAB has historically used “probable” as equating to “more likely than not” for recognition thresholds. One exception is that SFFAS 5, par. 33 equates “probable” to “likely” specifically for legal contingent liabilities.

¹⁸ The proposed FASB guidance uses the term “probable”, which they define as “the future event or events are likely to occur.”

A few non-federal stakeholders supported federal entities continuing to recognize developed IUS as assets and supported FASAB updating the accounting guidance for the modern software development environment. One stakeholder noted that they did not believe the guidance updates would result in any significant financial statement recognition impacts.

Final Thoughts

The primary purpose of the proposed guidance is to reduce preparer burden by streamlining software development guidance in SFFAS 10 to apply to the current software development environment. Staff believes the proposed guidance would effectively modernize SFFAS 10 to provide principle-based accounting guidance for software development costs that would be flexible enough for federal entities to apply to current and future software development methods as the federal software environment continuously evolves.

It is possible that the proposed guidance could result in less asset capitalization if management determines that the development effort does not meet the probable-to-complete threshold in accordance with paragraphs 4-5. However, the working group did not indicate that this impact would be significant. Furthermore, staff believes it is appropriate for accounting guidance to establish a high bar for asset recognition when there is significant development uncertainty.

Question for the Board:

1. Does the Board agree with staff's recommended updates to modernize the recognition and measurement guidance in SFFAS 10 to better align with agile software development methods? Please provide your feedback on staff's analysis and recommendation.

Next Steps

Pending Board feedback, staff will further research and propose updates, as needed, to existing accounting guidance in SFFAS 10. Staff next plans to consider SFFAS 10 updates for enhancement and maintenance costs as well as useful life estimation in conjunction with the intangible assets project.

Prior Board Meeting Discussion Timeline

February 2022

At the February 2022 meeting, staff presented an issues paper that provided a framework for developing reporting guidance updates for software technology assets. Specifically, the issues paper recommended a scope and project plan for developing updates for software guidance based on specific needs identified during research. The scope consists of four major categories of software resources that staff plans to address individually in the following order:

1. Cloud-service arrangements
2. Shared services
3. Internal use software updates
4. Other software technology

The Board overwhelmingly supported staff's recommended scope and planned approach. Additionally, members supported staff's approach of addressing each scope category separately but noted that the categories would ultimately overlap and relate to one another.

The Board decided to first focus on reporting-guidance needs for cloud-service arrangements. Research indicated that federal entities are using cloud services at an increasing rate for operational purposes similar to internally developed software, generally due to the need for less investment risk and more flexibility to alter the amount and type of services received based on current needs. Therefore, it is critical to address reporting guidance for this commonly used software-technology resource to ensure reporting consistency throughout the federal government.

April 2022

At the April 2022 meeting, staff presented characteristics of cloud-service arrangements along with an asset-guidance framework for which to apply the characteristics. The framework analyzes previous asset-guidance decisions that will assist the Board when deliberating whether cloud-service arrangements can represent assets in the federal government. There were three primary takeaways from the discussion:

- The National Institute of Standards and Technology's (NIST) cloud-computing characteristics are widely accepted and used in the federal government.
- Based on the asset-guidance framework, it is appropriate to approach cloud-service arrangements as lease-type transactions that provide a federal entity

access to a provider's software technology resources for the federal entity to use as internal use software for a specified period.

- More research and outreach is needed to develop an informed decision on whether cloud-service arrangements can meet all of the essential characteristics of an asset established in SFFAC 5, Definitions of Elements and Basic Recognition Criteria for Accrual-Basis Financial Statements.

The Board generally supported using the NIST's cloud-computing characteristics for developing financial reporting guidance for cloud-service arrangements. Several members agreed with staff's observation that federal entities widely use the NIST cloud-computing characteristics and that it is practical to defer to the information technology (IT) professionals when describing cloud-service arrangements.

The Board generally agreed with staff's proposed asset-guidance framework and observation that it is particularly important to continue to research and deliberate whether cloud-service arrangements can meet the essential characteristics of an asset from SFFAC 5. Some members noted that for an asset to exist, the cloud-service arrangement must represent economic benefits and services that the federal government can use in the future. Other members stated that it is critical to determine whether a consumer of a cloud service could control access to the economic benefits and service of the underlying resource and, particularly, if the user could deny or regulate access to others in accordance with the arrangement.

June 2022

At the June 2022 meeting, two panelists from the General Services Administration (GSA) provided the Board an educational session on cloud-service arrangements. The panelists provided members an overview of the characteristics, service models, and deployment models of cloud computing and discussed ways that federal entities procure and pay for cloud services. Additionally, Board members, staff, and panelists discussed potential financial reporting needs and challenges associated with cloud-service arrangements.

August 2022

During the August 2022 meeting, the Board continued deliberations on reporting guidance for cloud-service arrangements. Staff presented an issues paper that proposed:

- A framework of cloud-service arrangements that could meet the essential characteristics of an asset for financial reporting purposes
- Potential benefits and challenges of reporting cloud service arrangements as assets in federal financial reports

The Board generally supported staff's analysis on whether certain cloud-service arrangement categories could meet the SFFAC 5 essential characteristics of an asset. Some members recommended more research to better understand how federal entities typically incur costs for long-term cloud-service arrangements. One member recommended more research and deliberation on whether cloud-service arrangements are typical service contracts or if they are more akin to leases or right-to-use assets. Another member recommended consideration of how other standard-setters made their determinations on asset reporting for cloud-service arrangements.

The Board also generally agreed with staff's analysis on the user benefits and preparer challenges with reporting cloud-service arrangements as assets in federal financial reports. One member stated that the identified reporting challenges were valid but thought that they could be overcome with proper guidance. A few members suggested further research and deliberation on the financial reporting benefits with note disclosure options versus asset recognition in financial statements. One member added that it was important to continue to seek out a wide range of federal financial report users that have an interest in cloud-service arrangement reporting.

October 2022

During the October 2022 meeting, the Board continued deliberations on reporting guidance for cloud-service arrangements. Staff presented an issues paper that:

- Analyzes how other standard-setting bodies have deliberated the differences between a service contract and a right-to-use asset, along with how those positions have influenced their cloud-service reporting guidance; and
- Examines FASAB's previous discussions of tangible right-to-use assets and service contracts and analyzes whether cloud-service arrangements in the federal environment resemble right-to-use assets or service contracts.

The Board had different opinions on whether multi-year cloud-service arrangements were right-to-use assets or service contracts. One member favored referring to cloud-service arrangements as service contracts because it was difficult to conceive how an entity could exclude others from using an intangible right-to-use asset. Another member stated that cloud services and other types of service contracts possessed a spectrum of right-to-use asset and service components and was concerned that deciding cloud-service arrangements are right-to-use assets could open the door to considering whether other types of service contracts include right-to-use assets.

Several members agreed it was reasonable to conceptualize cloud-service arrangements as right-to-use assets but were concerned that the associated preparer burden and lack of reporting benefits may not justify the need for asset recognition on the balance sheet. The members suggested that disclosures could adequately provide

information about the extent that federal entities use cloud-services for mission and operational needs versus purchasing or developing the IT resource internally.

April 2023

At the April 2023 meeting, staff presented a cost-benefit analysis that considered potential preparer burdens and user benefits for the following financial reporting options for cloud-service arrangements:

1. Balance sheet recognition
2. Commitment disclosure
3. Expense disclosure
4. Expense recognition only

The Board overwhelmingly agreed with the cost-benefit analysis and supported staff's recommendation that reporting guidance should require federal entities to disclose cloud-service expenses. Most members agreed that expense disclosure was optimal after considering the potential preparer burdens and user benefits of each reporting option. Additionally, the majority of members initially favored disclosing cloud-service expenses in required supplementary information rather than financial statement notes.

June 2023

At the June 2023 meeting, staff recommended definition and scope language for the Board's consideration in developing cloud-service arrangement standards. The purpose of the definition is only to inform readers about cloud-computing resources in the federal environment that the standards will address. However, the purpose of the scope is to provide authoritative guidance by explaining the economic transactions associated with cloud-service arrangements that would and would not apply to the standards.

The Board generally agreed to include the cloud-computing definition developed by the National Institute of Standards and Technology (NIST) Special Publication 800-145, The NIST Definition of Cloud Computing, in the draft reporting guidance proposal. The Board generally agreed that the NIST definition along with a reference to the special publication thoroughly explains cloud-computing resources and including the definition in the standards would help readers understand the reporting guidance. Two members voiced concern that the NIST definition was detailed and technical and, therefore, may not be the most effective definition for financial reporting guidance. One member generally preferred to use a more generic and broad definition to provide flexibility in the reporting guidance.

The Board also generally agreed to include staff's recommended scope language in the draft reporting guidance proposal. The scope includes the following guidance:

- A cloud-service arrangement is defined as a contract or agreement that provides a federal entity access to IT resources over a network, provided by a vendor in exchange for consideration, without the federal entity taking possession of the IT resource.
- The Statement applies to cloud services that federal entities acquire from nongovernmental vendors for internal use purposes in accordance with paragraph 2 of SFFAS 10, Accounting for Internal Use Software, as amended.
- The Statement does not apply to
 - cloud-based IT services acquired from other federal entities (such as, but not limited to shared services);
 - internally developed or purchased commercial off-the-shelf software that is reported in accordance with SFFAS 10 and TR 16, Implementation Guidance For Internal Use Software;
 - licensed software that allows the federal entity to possess and control the underlying software resource on its own hardware or systems that is reported in accordance with SFFAS 10 and TR 16; or
 - arrangements that provide the federal entity the right to control the use of property, plant, and equipment that is reported in accordance with SFFAS 54, Leases, as amended.

The Board generally agreed that the Board should revisit the definition and scope if a need arises while deliberating reporting requirements. Staff recommended that the Board eventually consider if the scope should also include shared services.

October 2023

At the October 2023 meeting, the Board deliberated financial statement recognition and note disclosure requirements for cloud-service arrangements.

The proposed recognition guidance would establish that reporting entities should apply existing liability and prepaid asset guidance to cloud-service arrangements and expense payments for cloud services as incurred. Additionally, the proposed guidance would require reporting entities to disclose total annual cloud-service expenses along with a general description, terms and conditions, and risks and benefits of significant cloud-service arrangements in financial statement notes.

The Board generally supported the proposed recognition guidance but preferred the guidance to directly reference existing liability and prepaid asset recognition

requirements in SFFAS 1, Accounting for Selected Assets and Liabilities. The Board had mixed opinions about whether the guidance should require reporting entities to disclose information on cloud-service arrangements.

Some members supported the requirements to disclose annual cloud-service expenses along with some of the proposed qualitative information on significant cloud-service arrangements. The members viewed cloud services as significant to federal IT spending and supported a forward-looking approach with issuing reporting guidance to address a fundamental change with how federal agencies use software technology resources.

However, some members did not support any of the proposed note disclosure requirements because they viewed the requirements as too burdensome relative to the benefits. The members questioned why the Board would require the note disclosures for cloud-service arrangements when the Board does not require reporting that level of information for other service contracts.

Some members did not believe that annual cloud-service costs would ever be material relative to what the federal government spends each year. Other members acknowledged that may be true for government-wide and some component entity financial reports. However, the members believed that the information would be useful to some stakeholders and thought it beneficial for reporting entities to have the reporting guidance to apply if cloud-service arrangements are determined by a reporting entity to be qualitatively or quantitatively material now or in the future.

For now, staff will defer disclosure guidance proposals and focus on recognition guidance needs for the software-technology project topics.

April 2024

At the April 2024 meeting, the Board deliberated accounting options for implementation costs associated with cloud-service arrangements. The majority of members agreed that reporting entities should not capitalize implementation costs for cloud-service arrangements unless the implementation activities result in a distinct internal use software asset, in accordance with SFFAS 10, *Accounting for Internal Use Software*, independent of the associated cloud-service arrangement.

August 2024

At the August 2024 meeting, the Board discussed an accounting guidance framework for software licenses. The framework includes the following working definitions:

- A software license is a legal instrument that provides a federal entity the right to use a software resource under specific terms and conditions. Software licenses allow the federal entity to install and control the underlying software on its own IT

hardware. This term does not apply to software that federal entities access over a network on a hosted platform as part of a cloud-based SaaS arrangement.

- A perpetual software license is a non-expiring license that provides a federal entity the right to use a software resource indefinitely.
- A term-based software license is a temporary license that provides a federal entity the right to use a software resource for a specified period.

The Board also discussed key distinctions between a software license and cloud-service arrangement.

December 2024

At the December 2024 meeting, the Board agreed to move forward with the following accounting guidance framework for software licenses:

Software license Guidance Scope - This guidance applies to internal use software that a reporting entity has the right and ability to either run the software on its own hardware or contract with another party, unrelated to the vendor, to host the software.

Perpetual Software License Recognition and Measurement - Reporting entities should account for perpetual software licenses as a purchase of software and capitalize and amortize the cost over its estimated useful life. Reporting entities should recognize a liability for any software licensing fees not paid upon acquisition of the license.

Term-based Software License Recognition and Measurement - If a term-based software license has a useful life of two years or more, the reporting entity should recognize an asset for the cost of the license and a liability for any software licensing fees not paid upon acquisition of the license. The useful life of the asset should not exceed the binding arrangements of the contractual or legal terms of the software license. If the binding arrangements are for a limited term that can be renewed, the useful life of the asset should include the renewal period(s) only if the cost to renew is nominal.

Some members suggested that the Board also consider disclosure guidance to address reporting needs for software licenses with option periods, such as disclosing probable future costs associated with renewal periods. Additionally, some members emphasized that the Board should also consider accounting guidance for software license transactions that do not meet the useful life threshold for asset recognition to ensure accounting consistency across federal entities.

February 2025

Software Technology – Shared Software

The majority of members agreed with staff's recommendation to apply the software license accounting framework, which the Board had approved during the December 2024 meeting, to shared services. Several members believed that it was appropriate and consistent to apply the same asset recognition framework to software assets that federal entities may acquire through intragovernmental arrangements. However, several members wanted to further consider the materiality of asset recognition for shared services and the potential challenges of performing intragovernmental transaction eliminations for the government-wide report.

Based on deliberations, the Board agreed to move forward in the project but further research the costs and benefits of recognizing shared service assets, particularly for challenges with eliminating intragovernmental transactions for government-wide reporting.

Additionally, the Board agreed with the following recognition framework for shared software code: "Reporting entities should not recognize software acquired from other federal entities at no cost. However, reporting entities should recognize costs incurred to further develop or enhance the software if such costs result in a distinct internal use software component with significant additional capabilities." Members generally believed the recommended framework was consistent with the cost recognition framework in SFFAS 10, Accounting for Internal Use Software, and would be easy to apply to existing guidance.