April 30, 2018

Ms. Susan M. Cosper  
Director of Technical Application and Implementation Activities  
Financial Accounting Standards Board  
401 Merritt 7  
PO Box 5116  
Norwalk, CT 06856-5116


Dear Ms. Cosper:

We appreciate the opportunity to comment on the Proposed Accounting Standards Update, Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract; Disclosures for Implementation Costs Incurred for Internal-Use Software and Cloud Computing Arrangements (the Proposal). Bank of America Corporation provides a diverse range of banking and non-banking financial services and products domestically and internationally. As one of the world’s largest financial institutions, we held approximately $2.3 trillion of consolidated assets on the balance sheet as of March 31, 2018.

We are supportive of the Board’s effort to address the accounting for implementation costs of a cloud computing arrangement and note that the Proposal is responsive to the changing landscape of software sourcing and access. We have responded below to the questions put forth by the Board in the Proposal; however, we highlight the following points from our responses:

• We think that the definition of “hosting arrangement” requires change to address certain fact patterns developing in practice (Question 2). We have suggested edits to the definition and believe such will clarify its scope consistent with the intent of the Proposal.

• We note that the internal use software model, while still functional, was established in 1998. We believe the subtopic should be refreshed; for example, we think that data conversion costs should qualify for capitalization along with other implementation costs as the converted data provides multi-year benefits. We note, however, that we would not want to see the Proposal delayed if the Board were to take up such a project.

• Lastly, we think a variation of the modified retrospective approach should be permitted, notably allowing for the capitalization of costs incurred prior to adoption for projects not yet placed into service at the adoption date. These costs would then be amortized over the term of the hosting arrangement (Question 8).

See Appendix A for our responses to the questions presented by the Board.
We appreciate the opportunity to express our views in this letter. Should you have any questions, please feel free to contact Michael Tovey (980.387.6061) or me (980.387.4997).

Sincerely,

John M. James
Senior Vice President and Corporate Controller

cc: Paul Donofrio, Chief Financial Officer
    Rudolf Bless, Chief Accounting Officer
    Michael Tovey, Accounting Policy Executive
Appendix A

**Question 1:** Should eligible implementation costs of a hosting arrangement that is a service contract be capitalized using the guidance on internal-use software, recognized in profit or loss over the term of the hosting arrangement as defined in this proposed Update, and presented in the same line item in the statement of income as the fee associated with the hosting arrangement? If not, what accounting is more appropriate and why?

We support capitalizing implementation costs incurred in association with a hosting arrangement that is a service contract using the existing guidance in Accounting Standard Codification Subtopic 350-40 – *Internal-use software* (Subtopic 350-40). These costs provide benefits over the life of the hosting arrangement, clearly meeting the definition of an asset. We also support recognizing the capitalized costs in the income statement in the same line item as the fees associated with the hosting element (service) of the arrangement over the term of the arrangement, as detailed in the Proposal.

**Question 2:** This proposed Update includes an amendment to the definition of hosting arrangement in the Master Glossary. Do you agree with the amendment, and do you have any other concerns with the definition, as amended?

We support amending the definition of hosting arrangements. We agree with the change in the master glossary to remove the reference to “the licensing of software projects,” as this Proposal could be relevant regardless of whether the hosting arrangements provide the customer with a license to the underlying software.

Further, we suggest removing the phrase “rather, the software application resides on the vendor’s or a third party’s hardware” from the definition of hosting arrangements. We believe the phrase is not needed and may inadvertently limit the scope of this guidance. There are circumstances, driven mainly by a combination of regulatory and security considerations, where cloud-hosted software (for which we will not take possession of source code) resides on servers, which may be leased, that may be located on our premises. We are concerned that a hardware’s leased status (i.e., finance or operating), for example, could be used to determine whether an in-scope cloud hosting arrangement exists. In this case, we believe that the nature of the hosting arrangement is the same and the eligible implementation costs should be capitalized, regardless of where the software resides or which entity is deemed to own the hardware for accounting purposes. Given the many variations of cloud hosting arrangements, software service contracts, including hardware and maintenance elements, we think that removal of that phrase meets the Board’s objective and would remove the risk of unduly limiting the scope of this guidance.

**Question 3:** Is additional guidance needed to determine whether the amendments in this proposed Update apply to arrangements that include a minor hosting arrangement?

No. We believe additional guidance is not needed. A minor hosting arrangement is unlikely to result in significant implementation costs and in the event it did, the Proposal’s guidance should govern.

**Question 4:** Can the guidance for determining the project stage (that is, preliminary project stage, application development stage, or post-implementation stage) in Subtopic 350-40 be consistently applied to a hosting arrangement? Why or why not?

Yes. Cloud computing arrangement implementation costs are similar to internal-use software project implementation costs, such that the same guidance for determining the project stage can be applied. However, we note that Subtopic 350-40 is based on guidance issued in 1998. Given the significant developments in software development, sourcing and distribution, we believe the Board should consider undertaking a project to reconsider how this guidance can be refreshed and improved. For example, it is unclear why data conversion costs should not be capitalized with other hosting implementation costs given that such costs may be significant and the converted data provides a benefit over the life of the hosting arrangement. We note that the basis of such in SOP 98-1 relates to a position originally taken in guidance issued in 1970 (refer to paragraph 24 of APB Opinion No 17), which no longer holds. We would not oppose the Board simply noting that data conversion costs are eligible for capitalization.
in regards to a hosting arrangement; nevertheless, we recognize that some may argue that changing elements of the internal use software model is beyond the scope of the Proposal. Hence, our suggestion that the Board further research this matter.

**Question 5:** Should an entity apply an impairment model to implementation costs of a hosting arrangement that is a service contract that is different from the impairment model included in Subtopic 350-40? Why or why not?

No. The existing impairment model in Subtopic 350-40 appropriately addresses the impairment of implementation costs associated with hosting arrangements.

**Question 6:** Do you agree with the disclosures included in the proposed amendments? If not, what additional disclosures do you recommend, or what disclosures should be removed and why?

We believe that the current disclosure requirements in Subtopic 350-40 are sufficient. The value of the incremental disclosure requirements being proposed is not clear and we believe they need refinement. For example, large corporations maintain complex system architectures and landscapes composed of thousands upon thousands of software elements, some of which will be acquired, some internally developed and others hosted. Further, individually, those elements are likely to be financially immaterial and thus not warrant further disclosure. “A general description of the terms and conditions” for internal use software does not make sense as any such software is developed to meet internal demands with no terms and few, if any, conditions. Furthermore, we would expect that qualifying costs for capitalization consist mainly of consulting, other vendor costs and relevant personnel expense. Given the role of technology infrastructure, we believe that the disclosure focus should be on the amount of costs capitalized, the amount amortized and the amount impaired. An entity’s amortization policy would be useful as well.

**Question 7:** Should the disclosures included in the proposed amendments be applied to internal-use software and hosting arrangements that include a software license? Why or why not?

We are in support of making consistent the disclosure requirements for all projects within the scope of Subtopic 350-40. However, as noted above, those disclosure requirements need further refinement.

**Question 8:** Should an entity be permitted to elect prospective transition or retrospective transition? If not, please explain what transition method should be required and why. If an entity elects prospective transition, should the entity apply the transition requirements to each hosting arrangement, each module or component within a hosting arrangement, or costs of the hosting arrangement?

An entity should be permitted to elect prospective or retrospective transition. In addition, we would propose that there should be a modified retrospective approach that permits issuers to capitalize eligible implementation costs incurred prior to the adoption date for all projects not yet placed into service at the adoption date. We recognize that some entities may not be able to identify those costs without undue cost and effort and hence we note that said transition approach be optional. This optional approach would best reflect the effects of hosting arrangements “in process” as of the adoption date and the associated amortization in future periods.

For those electing a prospective or modified retrospective approach, we believe that the election should apply to all hosting arrangements which seems to be the intended unit of account in the Proposal. It is clear that hosting arrangements may be structured and go live in stages (i.e., module by module); however, an entity should apply the Proposal to all arrangements in scope. If a hosting arrangement includes multiple modules, an entity should develop appropriate principles for identifying, capitalizing and amortizing qualifying implementation costs over the life of the arrangement, which may be best defined at the arrangement level or the module level, depending on facts and circumstances.
**Question 9:** Should an entity be required to provide the transition disclosures specified in the proposed amendments? If not, please explain what transition disclosures should be required and why.

We agree with the transition disclosures.

**Question 10:** How much time would be needed to implement the proposed amendments? Should early adoption be permitted? Do entities other than public business entities need additional time to apply the proposed amendments? Why or why not?

We believe that the time needed to implement the proposed amendments will depend on the transition method selected. Companies that have policies and processes for capitalizing internal use software will likely be able to adopt the Proposal on a prospective or modified retrospective basis in an expeditious manner. We recommend early adoption be permitted to allow entities to begin applying guidance at the earliest possible opportunity.

**Question 11:** Should the proposed amendments be more broadly applied to similar transactions beyond hosting arrangements or be limited to transactions based on the scope of the proposed amendments? If more broadly applied, what transactions are similar to those included in the scope of the proposed amendments?

Conceptually, we believe that all service contracts with implementation costs should be treated similarly; notwithstanding, we acknowledge that such a position is well beyond the scope of this guidance and merits further research and debate. Hence, we believe the Proposal should be finalized and would recommend a research project as a next step if the Board sees value in studying this issue further.