30.1 Property (Including Discontinued Operations)

Issued Date: April 20, 2021

Supersedes: June 19, 2019

Applies To: All Boeing

Maintained By: Government Accounting

Authority Reference: PRO-7092, "Authorized Finance Manuals and Handbooks (Accounting, Earned Value, Estimating, Purchase Card, Travel and Expense, and Enterprise Rates and Overhead Management)"

Approved By: Carol Hibbard

Senior Vice President of Finance and Corporate Controller

Summary of Changes: Administrative revision to update authority reference, general naming of organizations and functions, command media references; clarify Cost Accounting and Financial Accounting requirements for capital assets; comply with new U.S. GAAP lease accounting standard ASC 842, clarify Financial Accounting requirements for impairments and discontinued operations: and make minor editorial corrections.

Application to Subsidiaries: Section 30.1 applies to Subsidiaries.

30.1.1 Introduction

This section provides general guidance on accounting for real and personal property in accordance with US generally accepted accounting principles (GAAP), Cost Accounting Standard (CAS) 404, "*Capitalization of Tangible Assets*", and CAS 409, "*Depreciation of Tangible Capital Assets*".

Key topics include general purpose assets; leased assets; tooling costs; determining the asset accountability unit (AAU); capitalization criteria; asset tagging; depreciation of general purpose assets and internal-use software; inventory, transfer, retirement, and reinstatement of assets; and discontinued operations and impairments.

Note: Refer to section 10.1, "Leased Assets" for depreciation of assets held for lease by Boeing Capital Corporation.

30.1.1.1 Overview

Tangible property, including land, land improvements, building structures, machinery and equipment, and program-dedicated tooling, comprises one of the largest categories on The Boeing Company balance sheet. Tangible assets are employed in many aspects of the company's business,

including product design, production, engineering, test and evaluation, delivery, sales and marketing, and general business management functions. The proper classification and recording of property costs is critical to ensuring accurate and timely financial statements and the correct alignment of those costs to benefiting cost objectives.

The lifecycle of tangible property includes long-range planning and budgeting, authorization to procure, acquisition and construction, capitalization, depreciation, routine maintenance and upkeep, regular physical inventory monitoring, transfers, relocations, and redeployments. Eventually, assets deemed to be technologically obsolete, uneconomical to maintain, or surplus to the needs of the company are retired through sale, donation, or scrapping.

General purpose tangible assets are capitalized as property, plant, and equipment (PP&E) and depreciated over service lives intended to reflect their relative period of service to the company, using depreciation methods reflecting their rate of consumption. Program-dedicated assets supporting Boeing Commercial Airplanes products may be capitalized as well, but their depreciation period is linked more closely to program production lifecycles.

This section provides guidance on identifying the variety of property types and their resultant accounting treatments, as well as defining organizational requirements and roles and responsibilities for the planning, acquisition, accounting, accountability, and disposition of tangible property.

All deviations from established capitalization criteria and/or depreciation requirements must be approved in advance by the Boeing Senior Director – Government Accounting and/or the Vice President of Accounting and Financial Reporting, as appropriate.

The Senior Director – Government Accounting shall provide interpretations and issue government cost accounting guidance as necessary for compliance with this section; review requests for government cost accounting deviations to this section and, when appropriate, approve such deviation requests; and coordinate such deviations with the US Government, where necessary.

The Vice President of Accounting and Financial Reporting shall provide interpretations and issue financial accounting and commercial cost accounting guidance under US GAAP, as necessary for compliance with this section; review requests for financial accounting deviations to this section; and, when appropriate, approve such deviations.

The Vice President of Accounting and Financial Reporting and the Senior Director – Government Accounting shall maintain and update this section

as required for financial accounting guidance and for government cost accounting guidance, respectively.

Responsible project or functional management shall:

- Coordinate with Financial Accounting on questions regarding the information contained within this section.
- Use the guidance contained in this section to plan and budget capital asset acquisition.

BU senior financial executive shall:

- Maintain internal controls designed to ensure compliance with this section.
- Coordinate with the office of the Senior Director – Government Accounting and the Vice President of Accounting and Financial Reporting regarding interpretations of this section, and communicate such interpretations as required.
- When appropriate, request deviations to the requirements of this section from the office of the Senior Director – Government Accounting and the Vice President of Accounting and Financial Reporting.
- Provide training, as needed, to employees regarding compliance with this section.

30.1.2 Capital Budget Planning

Capital planning, budgeting, and authorization are performed before Property Accounting's involvement in the process. Property Accounting can become involved in an advisory capacity as requested, however, to determine capital versus expense. The following steps, identified in the first nine boxes in figure 30.1-1, occur before Property Accounting's involvement, which begins with receipt of the capital commitment authorization (CCA).

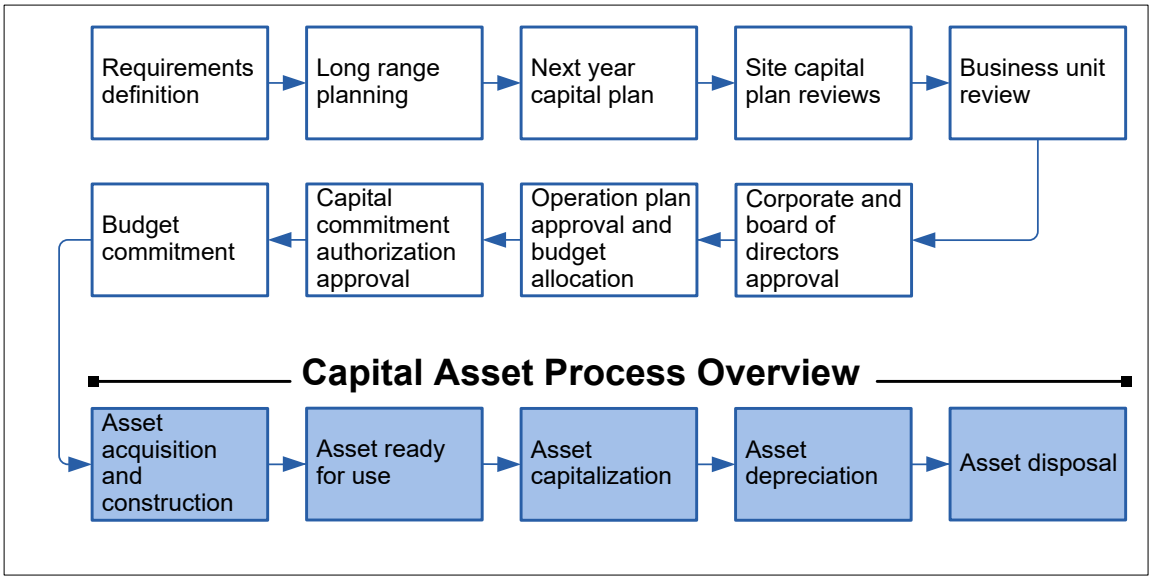


Figure 30.1-1. Lifecycle of a Capital Asset

Project or functional management shall use the guidance contained in this section and in other guidance to plan and budget capital asset acquisitions. Project or functional management shall coordinate with operating group and division Finance on questions regarding the information contained within this section.

Requirements Definition

In response to emerging business requirements in their areas (e.g., testing, engineering, production, design, development, construction, assembly, and marketing and sales), individual departments determine the need for capital assets required to resolve technical problems and support business opportunities. Business cases are developed to identify the problem and describe how the acquisition of a proposed capital asset is the best solution to resolving the problem and supporting the business opportunity. The rough cost of the proposed asset is estimated, and alternative solutions are discussed. To support the long-range business planning (LRBP) process, the organization will identify their requirements for 5 years. All individual organizations within a BU will identify their capital requirements and submit them to a site or BU Capital focal for integration into the BU LRBP.

Long-Range Planning

The site or BU Capital focal collects individual inputs from all the organizations that make up the site or BU grouping and summarizes the capital requirements for each year to arrive at a total capital request proposal for the grouping. While the total dollar amount for all requests is summarized, only large, high-value projects are identified individually. The

focus of the LRBP submittal is to identify the total level of investment required by the BU to support its business opportunities and SOW.

Next-Year Capital Plan

While the LRBP summarizes the total capital request for a 5-year period in broad terms, a more detailed and itemized capital plan is required for year 1 of that 5-year period (i.e., the following calendar year). Detailed business cases supporting the need for specific assets are prepared, and more detailed costs estimates and vendor quotes are received to provide greater granularity of the costs expected. The Next-Year Capital Plan requires a greater level of detailed justification and cost visibility than was provided in the LRBP.

Site Capital Plan Reviews

All the input for a geographic site or region is reviewed by local management for that site or region (e.g., Boeing Defense, Space & Security in the Puget Sound area, St. Louis, and Southern California, and Commercial Airplanes in Everett, Renton, and Auburn.)

Business Unit Review

The individual capital plans from all the sites, regions, and organizations that make up the total BU are summed to the BU level for a total review by senior management (e.g., Commercial Airplanes in Everett, Renton, Auburn, and Charleston make up the total for Commercial Airplanes).

Corporate and Board of Directors Approval

At this point, all the capital plans for the major BUs (Boeing Commercial Airplanes [BCA], Boeing Enterprise Services [ES], Boeing Engineering, Test & Technology [ET&T], Information Technology & Data Analytics [IT&DA], Boeing Global Services [BGS] and Defense, Space & Security [BDS]) are combined for the proposed corporate capital investment. The total planned investment is evaluated by Boeing Corporate Offices and is the basis for the recommendation to the board of directors. The Board of Directors then reviews the recommendation and approves the overall capital plan in December.

Operating Plan Approval and Budget Allocation

Following approval of the LRBP by Corporate and the Board of Directors, Corporate notifies the BUs. The BU capital focal then distributes a budget allocation to the sites and functional organizations that requested budget during the planning process. This allocation notification is accompanied by rules and process guidelines for the commitment of budget to specific projects. These guidelines may include forms, review and approval process steps, timelines and schedules, and authorized signature thresholds by spending level.

Capital Commitment Authorization Approval

The CCA describing the proposed asset and its planned cost is reviewed and signed by a manager with authority over the requesting organization and for the dollar amount proposed.

Budget Commitment

Following this authorization signature, an accounting charge number is assigned to the CCA, which is entered into the Capital Performance System (CAPS). The CCA is then routed to organizations responsible for the procurement or construction of the asset. Application of the charge line on the authorizing document enables labor and non-labor charges to be collected in Construction in Process (CIP).

30.1.3 Capitalization of Tangible General Purpose Assets and Internal-Use Software

Appropriate classification and recording of costs are essential to ensure the integrity of Boeing cost and financial accounting records. The classification of the costs of assets as capital, overhead expense, or task-direct is important to the proper recording and reporting of costs. Exhibits A and B contain examples.

This subsection guidance applies to all company-owned general purpose assets and company-owned or licensed internal-use software and to all company organizations that request, procure, develop, or fabricate general purpose assets and/or internal-use software and includes those organizations responsible for the related classification, planning, budgeting, pricing, and cost accumulation. This subsection guidance does not apply to computer software used in research and development, nor does it apply to computer software included in products that are offered for sale or lease.

This subsection does not apply to special purpose assets or to assets obtained by rental or by operating lease or by any other agreement regarding the use of non-Boeing assets.

The guidance set forth in this subsection is required for both cost accounting and financial accounting purposes and will be the only source of written instruction for use in determining capital treatment of company-owned tangible assets.

BU senior level finance executives shall:

- Coordinate with the Senior Director – Government Accounting and the Vice President of Accounting and Financial Reporting regarding interpretation of this subsection.

- Use the guidance contained in this subsection to properly classify assets for purposes of cost accumulation, pricing, planning, and budgeting.
- Ensure that asset classifications are compliant with this subsection. Provide assistance to management in asset classification determinations.

The Vice President of Accounting and Financial Reporting or delegate shall ensure that any necessary financial accounting adjustments are properly made as required in subsection 30.1.3.2.

Responsible project management shall provide documentation to Finance for proper cost classification.

30.1.3.1 General Guidance for Recording Capital Asset Costs

Financial accounting guidance differs from cost accounting guidance in the following circumstances:

- For financial accounting, only fringe- or payroll-related costs associated with the project's direct labor can be included in capitalized overhead costs. See "Post-implementation Stage Activities and Costs" in subsection 30.1.3.3.
- For financial accounting, costs associated with desktop application software (i.e., off-the-shelf software ready for use without modification, such as word processing, spreadsheet, presentation graphics, database, calendar, and mail functions) are expensed if it does not meet the capitalization requirements of this subsection. See subsection 30.1.3.3.
- For financial accounting, interest incurred while developing computer software or obtaining it for internal use should be capitalized. See subsection 30.1.3.3.
- For financial accounting, the useful life of a retiring asset must be shortened and the depreciation accelerated so that the net asset balance is zero at the date of disposition. See subsection 30.1.7.5.
- For responsibilities of costs for enterprise common software development, see figure 30.1-3.

30.1.3.2 Classifying and Recording Costs for Tangible Capital Assets and Internal-Use Software

Classification and recording of costs for tangible capital assets and internal-use software requires the following:

a. The items and tasks that make up the acquisition cost must be determined.

b. The AAU[1] to which the capitalization criteria are applied must be determined.

c. The expected service life of the AAU must be determined.

d. Application of the asset capitalization criteria to the AAU is required. See subsection 30.1.3.8 for criteria.

e. Treatment of costs incurred subsequent to the acquisition of a tangible capital asset or acquisition or development of internal-use software must be reviewed and evaluated to determine if they meet the criteria for capitalization as betterments and improvements to tangible capital assets or upgrades and enhancements to internal-use software.

f. If acquisition costs do not meet the minimum thresholds for capitalization the costs are not treated as a capital asset.

30.1.3.3 Determining Acquisition Costs

Tangible Capital Assets

The acquisition cost of an asset includes the purchase price of the asset or the cost of initial fabrication and development. The purchase price is the consideration given in exchange for an asset. The price includes trade-ins, discounts, allowances, premiums, expediting fees, and any credits received that reflect an adjustment in the purchase price.

The acquisition cost of an asset also includes those costs necessary to prepare the asset for initial use. Costs necessary to prepare the asset for initial use include those associated with placing the asset in its location and bringing the asset to a condition necessary for normal or expected use.

Training and commissioning costs associated with the acquisition of an asset are not capitalizable. For an example see exhibit A, subsection 2, scenario 3.

Acquisition costs of a tangible capital asset include but are not limited to:

- Final design of the asset to be constructed or acquired.
- The labor and material costs related to initial fabrication, assembly, and installation.

[1] Refer to section 30.1.3.7 for determining the AAU for tangible assets and internal-use software

- Freight charges, equipment rental, temporary construction, and utility distribution systems that directly contribute to the construction of an asset.
- Site preparation costs, including the grading, leveling, and movement of soil.
- Demolition costs (see subsection 30.1.3.4)
- Foundations constructed for the installation of equipment or machinery.
- Utilities, to the point of severability.
- Construction rework costs required to prepare an asset for initial use.
- Costs associated with initial functional checkout and acceptance testing (i.e., verification that the installed asset is in proper working order).
- Critical spare parts (i.e., for emergency replacement) procured in conjunction with the acquisition of the asset being placed into service.
- Sales, Use, Duty and Value-Added taxes paid
- Cost of permits required for construction.

When the purchase price has been reduced by a trade-in allowance on an asset of like kind, the acquisition cost of the newly acquired asset is the sum of the net book value of the traded asset and the cash paid.

When an asset is donated to the company (i.e., the transfer of the asset was unconditional, and no consideration was given), the current market value of the asset is used. If no current market value is available, the fair value of the asset is determined on a case-by-case basis. Contact Financial Accounting Policy for assistance in determining the credit side of the entry.

When an asset is obtained through means other than a purchase (e.g., the transfer of the asset was conditional on a purchase of another asset, and consideration was given for that other asset), the transaction is considered to be a purchase of both assets, and the total cost shall be assigned to the individual assets based on their relative fair values.

For the purpose of determining the acquisition cost of an asset, the purchase price of the asset is not affected by factors such as the method of financing.

For financial accounting purposes, Financial Accounting capitalizes the necessary values for interest costs incurred while the project is under construction and being prepared for its intended use. Interest should be

capitalized to the date the asset is available and ready for its intended use.

The Vice President of Accounting and Financial Reporting or delegate shall ensure that any necessary financial accounting adjustments are properly made.

Acquisition Costs for Internal-Use Software

Certain costs related to the acquisition or development of internal-use software are capitalized as part of the acquisition cost if the capitalization criteria are met. Sales-and-use tax is part of the acquisition cost.

When determining the acquisition costs of internal-use software, costs must be assigned to one of three stages: the preliminary project stage, the application development stage, or the post-implementation stage.

No costs may be considered part of the acquisition cost, nor may any costs be capitalized, until both of the following conditions are met:

a. The preliminary project stage is complete.

b. Management, with the relevant authority, authorizes and commits to funding a computer software project, and it is probable that the project will be completed and the software will be used to perform its intended function.

Independent research and development (IR&D) activities are outside of the capitalization parameters of internal-use software. All costs associated with IR&D will be accounted for in accordance with section 20.1, "Research and Development".

Preliminary Project Stage

Preliminary project stage activities include:

a. Conceptual formulation and evaluation of alternatives.

b. Determination of performance and systems requirements.

c. Determination of whether technology exists to implement.

d. Final selection among alternatives considered.

e. Selection of consultants.

f. Supplier demonstrations and final supplier selection.

g. Preparation for management review.

h. Management approval.

Costs incurred during the preliminary project stage are not included in the acquisition cost of internal-use software. Costs for preliminary project stage activities are expensed in the accounting period in which they are incurred.

Application Development Stage

The activities at the application development stage include:

a. Design of a chosen path, including software configuration and software interfaces.

b. Software coding.

c. Installation of the software to hardware.

d. Testing of software, including parallel testing.

e. Fees paid to a supplier for acquisition of software code incorporated into initial release configuration of the asset.

f. Consulting activities directly related to the development of internal-use software.

g. Employee travel directly associated with the development of internal-use software.

h. Conversion of data from the old system to the new system. Data conversion includes the purging and cleansing of existing data, reconciliation of old data to new data, creation of new data, and the conversion of old data to the new system.

i. User training before installation of internal-use software.

Application development stage costs are treated as listed below. See figure 30.1-2 for additional information.

a. Internal and external costs associated with coding, testing, and installation of software developed or obtained for internal use are considered part of the acquisition cost of the asset and are capitalized.

b. User-training costs incurred during the application development stage are not considered development activity. All costs related to user-training activity are expensed.

c. Software and programming costs incurred to incorporate data conversion functionality into the capitalizable application are capitalized.

d. Data conversion costs are expensed as incurred.

Post-Implementation Stage

Post-implementation stage activities include:

a. User training.

b. Maintenance and customer support, including purchased software maintenance agreements and internal costs.

c. Start-up costs related to the installation of software at various geographic locations.

d. Process reengineering that includes but is not limited to:

   1. Redefining the flow of work tasks.

   2. Reassigning particular tasks from one function or organization to another.

   3. Creating new or revised decision criteria.

   4. Defining new or revised informational requirements for task completion, when the output of the process remains essentially the same.

Post-implementation stage costs are treated as listed below. See figure 30.1-2 for additional information.

a. Costs incurred during the post-implementation stage are not included in the acquisition cost of internal-use software. Costs for post-implementation stage activities are expensed as incurred.

b. When the computer software project is complete, tested, and ready for its intended use, capitalization should cease and subsequent costs incurred should not be considered part of the asset acquisition cost.

Figure 30.1-2 shows in the preliminary project, application development, and post-implementation stages which internal-use software tasks are classified as expenses and which are capitalized.

Phase activity	
Preliminary project stage	
Concept formulation	
Evaluation of alternatives	
Determination of performance and systems requirements	
Determination whether technology exists to implement	
Final selection among alternatives considered	
Selection of consultants	
Supplier demonstrations and final supplier selection	

Preparation for management review, review, and management approval	
Application development stage	
Design of chosen path, including software configuration and software interfaces	
Software coding and testing, including parallel testing	
Software-to-hardware installation	
Fees paid to supplier for acquisition of software code incorporated into the initial release configuration of the asset	
Consulting activities directly related to the development of internal-use software	
Employee travel directly associated with the development of internal-use software	
Software and programming costs incurred to incorporate data conversion functionality into the AAU	
Data conversion costs	
General system training development	
BU-specific training development and end-user training	
Process reengineering	
Customer support	
Post-implementation stage	
Process reengineering	
General system training development	
BU-specific training development and end-user training	
Installation start-up costs	
Maintenance	
Customer Support	

Figure 30.1-2. Classification of Internal-Use Software Project Tasks

Capitalizable costs are burdened with overhead according to the incurring organization's disclosed and/or established accounting practices for the capitalization of self-constructed tangible assets.

For financial accounting purposes, only fringe- or payroll-related costs associated with the project's direct labor can be included in capitalized overhead costs.

Responsible project management shall coordinate with Financial Accounting to make the necessary adjustments for financial accounting purposes.

Software intended to be sold, leased, or otherwise marketed as a separate product or as part of another product or process

Software intended to be sold, leased, or otherwise marketed as a separate product or as part of another product or process is outside the capitalization parameters of internal-use software and the guidance in this section does not apply.

For financial accounting purposes, all costs associated with such software should be accounted for in accordance with the provisions of FASB ASC 985-20, "*Software—Costs of Software to be Sold, Leased, or Marketed*".

This includes hosted software where:

- The customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty, and,
- It is feasible for the customer to either run the software on its own hardware or, contract with a third party to host the software.

For cost accounting purposes for CAS-covered segments, all costs associated with such software, including any type of hosted software arrangement, should be accounted for in accordance with Section 20.1, "*Research and Development*".

For financial accounting purposes, consult with Financial Accounting Policy for guidance on how to record these costs.

Software that is not intended to be sold, leased, or otherwise marketed as a separate product or as a part of another product or process

Software that is not intended to be sold, leased, or otherwise marketed as a separate product or as a part of another product or process is within the capitalization parameters of internal-use software and the guidance in this section applies.

For financial accounting purposes, all costs associated with such software should be accounted for in accordance with this procedure, BAM 30.1, "Property (including discontinued operations." This includes hosted software where:

- The customer does not have the contractual right to take possession of the software at any time during the hosting period without significant penalty or,

- It is not feasible for the customer to either run the software on its own hardware or contract with a third party to host the software.

For cost accounting purposes for CAS-covered segments, all costs associated with such software should be accounted for in accordance with BAM 20.1, “Research and Development.”

For CAS-covered segments, interest incurred during the acquisition of software is expensed. If interest is incurred, it must be recorded as unallowable expense.

For financial accounting purposes, interest costs incurred while developing computer software or obtaining it for internal use should be capitalized. Interest should be capitalized to the date the asset is available and ready for its intended use.

Financial Accounting will record the necessary adjustments for financial accounting purposes.

Responsibilities for costs related to certain phases or activities of enterprise-common software development are outlined in figure 30.1-3.

Phase or activity	**Project or BU**
Concept formulation	Project
Evaluation of alternatives	Project
System requirements determination	Project
Selection of chosen path	Project
Selection of consultants	Project
Supplier demonstration and selection	Project
Management review and approval	Project
Fees for acquisition of software code incorporated into the initial release configuration of the asset	Project
Design of chosen path	Project
Software coding and/or testing	Project
Software-to-hardware installation	Project
Travel: software development	Project
Consulting: software development	Project
Data conversion: software and/or programming to incorporate conversion functionality into the AAU	Project
Data conversion: programming	BU

Data conversion costs	BU
Process reengineering that includes but is not limited to redefining the flow of work tasks, reassigning particular tasks from one function or organization to another, creating new or revised decision criteria, and defining new or revised informational requirements for task completion, when the output of the process remains essentially the same.	BU
General system training development	Project
BU-specific training development and end-user training	BU
Installation start-up costs	BU
Maintenance	In accordance with host accounting, not project costs
Customer support	In accordance with host accounting, not project costs

Figure 30.1-3. Responsibility Matrix for Enterprise Software Development Costs

Note: Different charging practices from those in figure 30.1-3 may be appropriate in special circumstances (e.g., where such practices would not result in equitable allocations). If different charging practices will be used for a project, the project-hosting BU will coordinate those practices with the Senior Director – Government Accounting and provide guidance to the supporting BU.

Note: Support from BUs must be authorized by the host via an interorganizational work authorization (IWA). Subject matter expert (SME) support is not charged to projects.

Leased Assets

For accounting guidance on leased assets refer to BAM Chapter 10.1 *Leased Assets*.

Desktop Application Software

For cost accounting purposes, desktop application software is not eligible for capital treatment, whether purchased as individual units or through a site licensing agreement.

For financial accounting purposes, costs associated with desktop application software are expensed if they do not meet the capitalization requirements of this subsection.

The responsible Project Management shall coordinate with the Financial Accounting to make the necessary adjustments for financial accounting purposes.

Operating software, whether purchased separately or as part of the computer hardware it supports, is considered part of the computer hardware AAU when the software is required for the initial outfitting of the computer hardware (subsec. 30.1.3.4).

30.1.3.4 Additional Considerations for Acquisition Cost

Real Property

The acquisition cost of buildings constructed by outside contractors excludes the cost of Boeing construction management activities. Construction management activities include oversight, liaison, incidental inspections, activities performed by field engineers, and other similar efforts incurred in managing construction projects using outside contractors. Construction management activities do not include the direct supervision of construction personnel by Boeing employees. Accordingly, the direct supervision of construction personnel by Boeing employees would be included in the acquisition cost of buildings constructed by outside contractors.

For real property, the acquisition cost will include demolition costs when an existing structure is partially or totally demolished as a necessary part of the construction of a new structure. Demolition costs associated with site preparation when that site receives a real property asset are considered part of the acquisition cost of the asset. Costs associated with the full or partial demolition of real property without replacement are capitalized to the land if the demolition was intended at the time of acquisition and occurs within a reasonable period of time after acquisition; otherwise the costs are expensed as incurred.

Costs of surplus construction material are included in the acquisition cost of the asset. Proceeds from the sale of surplus materials are credited to the acquisition cost of the asset. If proceed amounts are insignificant, the benefiting overhead pool is credited.

Costs of refurbishing a used facility prior to its first use by the company are included in the acquisition cost of the asset.

Environmental mitigation costs are included in the acquisition cost of real property, in accordance with subsection 30.1.3.6.

Personal Property

Costs associated with site preparation necessary for a new personal property asset to be placed into service are considered part of the acquisition cost of the new personal property asset.

Capitalizable site preparation costs include full or partial demolition of real or personal property assets (with which the new asset will interface) as required to place a new personal property asset into service. Removal of a complete personal property asset (whether the asset is to be relocated or retired) in order to provide space for installation of a new asset is considered relocation/rearrangement (not site preparation) and is expensed.

Costs associated with the full or partial demolition of personal property without replacement of the personal property are expensed.

For segments subject to Cost Accounting Standards, the acquisition cost of in-house fabricated assets includes an appropriate share of indirect costs determined in accordance with operating group and division Finance-established burdening practices. Additionally, general and administrative (G&A) overhead is included in capitalizable value only when the asset is the same or similar to normal products of the BU.

For financial accounting purposes, the indirect, burden or G&A costs are not capitalizable. Thus creating a CAS to US GAAP difference that will be recorded and maintained by Financial Accounting.

Design Costs

Costs associated with the conceptual and preliminary design phase of a tangible capital asset are not considered part of the capitalizable acquisition cost, and are therefore expensed. Conceptual and preliminary design include studies that determine which asset is necessary, efforts necessary to determine specifications and requirements that will be incorporated into the final design, decision-making regarding the proper location of an asset, the determination of utility requirements, and environmental impact studies.

The preliminary design phase is considered complete when the drawings, specifications, or requirements for the chosen path have begun.

Any design activities beyond the conceptual and preliminary design efforts are considered final design. Costs associated with final design and final design re-work are capitalized.

All design costs related to a capital project that is subsequently abandoned are not capitalized as a capital asset.

Operating and Application Software

Operating software, whether purchased separately or as part of the computer hardware it supports, is considered part of the computer hardware AAU when the software is required for the initial outfitting of the computer hardware.

For instances when the software is the AAU, see the requirements for capitalization of internal-use software in subsection 30.1.3.

Application software (e.g., machine program for specific part) is not capitalizable as part of the tangible asset.

30.1.3.5 Unique Circumstances

When a capital project has been suspended, project or functional management shall coordinate with the Property Accounting focal for the appropriate cost treatment. The Property Accounting focal will collaborate with the BU Cost Policy and Financial Accounting focals, as necessary. Costs incurred on capital work orders for assets that are abandoned must be credited from the original capital work orders and expensed when the decision for abandonment is made in the current accounting period in accordance with the applicable organization's disclosed and/or established practices. The decision for abandonment should be documented in writing.

Work authorization documentation, as defined in *PRO-35, "Work Authorization Documentation and Charge Line Authorization and Set Up"*, is required for in-house fabricated capital assets and the installation of purchased capital assets. BU Finance must determine that the asset is classified correctly in compliance with this subsection.

Excessive or unusual acquisition costs should be expensed to avoid overstating the value of an asset. For assistance in defining excessive or unusual acquisition costs, contact the Property Accounting focal. The Property Accounting focal will collaborate with the BU Cost Policy focal and Financial Accounting Policy.

When there is uncertainty in whether an internal application development (IAD) project will produce a usable asset, which subsequently will be designed and constructed to perform the function intended, costs of the IAD project, including tangible components incorporated into the potential asset, are initially expensed. The costs initially are expensed because it is unlikely and not probable that a usable asset will be successfully designed, constructed, and retained by the company at the time of authorization.

Cost classification reviews are required to be performed at least annually and in certain circumstances, in accordance with section 20.1, "Research

and Development". Should such review indicate that a change in classification is necessary, an appropriate change in accounting for the costs will be made.

For segments subject to Cost Accounting Standards, if such IAD projects are successfully completed and an asset results that is able to perform its intended use and meets the criteria for capitalization, the estimated replacement cost of the asset is capitalized. Any cost in excess of the estimated replacement cost of the asset remains expensed. For financial accounting purposes the cost remains expensed and no asset is created. This creates a CAS to U.S. GAAP difference that will be recorded and maintained by Financial Accounting.

Abandoned, incomplete, and/or unsuccessful development projects are considered current period expense, as initially authorized.

Procured or in-house fabricated equipment required in performance of a procurement contract, IR&D, IAD, or other noncapital project may require future costs to be capitalized if the resulting asset meets the capitalization criteria:

- When a change in circumstance requires reclassification of equipment to a general purpose asset, the acquisition cost of the asset is the estimated replacement cost of the asset. If the asset and the acquisition cost meet the criteria for capitalization, it is capitalized.
- When a change in use requires the reclassification of equipment to a special purpose asset, the asset is retired, and the net book value is charged to the benefiting contract or project. (*Note: The net book value will be inventoried and eventually expensed through cost of sales.*)

All costs associated with IAD and IR&D will be accounted for in accordance with section 20.1, "Research and Development".

30.1.3.6 Environmental Mitigation Costs

The costs incurred pursuant to an environmental mitigation agreement are considered part of the acquisition cost of the asset. Costs include making infrastructure improvements, environmental restoration, and payments made to local authorities for permit fees and other payments to fund actions or to avoid or minimize adverse environmental impacts as a result of company expansion.

Clean-up costs of Boeing real property do not qualify as capitalized site preparation costs unless the acquisition cost of the asset was reduced by the estimated clean-up costs. For cost accounting purposes, clean-up costs that do not qualify as capitalized site preparation costs are expensed as incurred. For financial accounting purposes, see section 35.2.3 for the

accounting treatment of clean-up costs that do not qualify as capitalized site preparation costs.

Local improvement district costs are capitalized as non-depreciable improvements to land. Improvements include special assessments for local benefits where the predominant effort involves the construction of streets, sidewalks, sewers, and other such improvements to non-Boeing property that increase the value of the adjacent Boeing property.

30.1.3.7 Determining the AAU for Tangible Assets and Internal-Use Software

The asset accountability unit (AAU) determines the asset or assets to which the capitalization criteria are applied.

Individual assets, whether tangible or internal-use software, that meet the capitalization criteria should be treated as separate AAUs to the maximum extent practicable.

For tangible assets:

- Each AAU has a separately identified cost, or the cost of the AAU can be reasonably estimated.
- Each tangible AAU has a unique physical identification. There is a physical distinction for consistently separating assets into AAUs.
- Each AAU is a separate unit that may consist of a number of individual assets when such assets are managed as a total unit. For example, a keyboard, monitor, and computer CPUs are capitalized as a single AAU.

For internal-use software:

- Each internal-use software AAU has a separately identified cost or the cost of the AAU can be reasonably estimated.
- Each internal-use software AAU has a unique identification. A separately controlled AAU may consist of a number of individual assets when such assets are controlled as a total unit.

An asset that meets the criteria for classification as an AAU must not be considered part of another asset or part of a betterment and improvement in the case of a tangible asset or part of an upgrade and enhancement in the case of an internal-use software asset.

An original complement of low-cost equipment constitutes a single AAU for the purpose of a capitalization criteria application.

30.1.3.8 Capitalization Criteria

Criteria for Tangible Capital Assets

The AAU is a single Boeing asset, a grouping of interdependent assets, or an original complement of low-cost equipment.

The AAU is general purpose in nature.

The acquisition cost of the AAU is equal to or greater than $5,000.

The expected service life of the AAU is equal to or greater than 1 year.

Criteria for Original Complement of Low-Cost Tangible Equipment

The AAU is a grouping of assets.

The AAU is general purpose in nature.

The acquisition cost of the AAU is equal to or greater than $100,000 and can include multiple asset categories and ABU funding sources.

The expected service life of the AAU is equal to or greater than 1 year.

Criteria for Internal-Use Software

The AAU is a single Boeing asset or a grouping of interdependent assets.

The AAU is general purpose in nature.

The acquisition cost of the AAU is equal to or greater than $10 million.

The service life of the AAU is equal to or greater than 1 year.

Criteria for Leased Assets

Leased assets are capitalized when they meet the capitalization criteria for tangible capital assets and qualify as finance leases as discussed in BAM Chapter 10.1 *Leased Assets*

Financial Accounting must be notified when a finance lease is signed to ensure proper accounting treatment.

Leasehold betterment and improvement costs incurred to prepare leased property for its initial use are capitalized when the capitalization criteria are met. Refer to BAM Chapter 10.1 *Leased Assets* for more information on accounting for Leasehold betterments and improvements.

General Purpose vs. Special Purpose Assets

General Purpose Assets

A general purpose asset is any asset that may be reasonably used in support of multiple contracts, programs, or projects, even if initially it is to be used in support of only one contract, program, or project. A special purpose asset is any asset that cannot be reasonably used on multiple contracts, programs or projects.

At Commercial Airplanes, when two or more programs share a common production line, those programs shall be treated as one program for purposes of defining a general purpose asset versus a special purpose asset.

For CAS-covered segments, in order to comply with FAR 31.205-40 (“Special Tooling and Special Test Equipment Costs”), the sale of like-type end items via multiple contracts (e.g. lot purchases of the same product) does not constitute a general-purpose situation.

General purpose assets are eligible for capitalization if the capitalization criteria are met.

General purpose asset AAU costs, including internal-use software AAU costs, are to be capitalized when the capitalization criteria are met, regardless of the effort that is being supported (e.g., contract, program, or project).

Special Purpose Assets

Special purpose assets are not considered capital assets and are not eligible for capitalization as general purpose assets.

An asset is considered special purpose if any of the following conditions are met:

- The asset is considered special tooling or special test equipment that is designed and constructed to meet unique requirements with respect to physical configuration, production abilities, performance abilities, or other attributes required by a single contract, program, or project.
- Use on more than one contract, program, or project is considered impossible or impractical without substantial modification or alteration to the design and construction of the asset.
- Substantial modification to a special purpose asset is defined as any alteration whose cost is equal to or greater than $100,000 or 25% of the acquisition cost of the asset.

An asset is treated as task-direct and charged to a specific contract, program, or project if the asset is destroyed in the performance of the contract, program, or project.

Assets, including internal-use software, that are considered a deliverable or consumable item of a contract, program, or project are task-direct and are not eligible for capitalization as general purpose assets.

30.1.3.9 Costs Incurred Subsequent to the Acquisition of Capital Assets

- Cost for betterments and improvements to an existing tangible capital asset are classified as betterments and improvements when either of the following conditions is met:
  - The asset's service life is extended by at least one year beyond the expected service life assigned to the asset before the betterment and improvement was performed.
  - The asset's productivity is improved beyond the productivity expected before the betterment and improvement was performed. Productivity improvements include increasing the asset's original rate of output, reducing operating costs, adapting the asset to a different use, increasing capacity, or providing the asset with a different capability. (Note: rearrangements of space for a like capability are not considered different use in this analysis.)
- Costs for a betterments and improvement to an existing tangible capital asset are capitalized when either of the following conditions are met:
  - The cost exceeds 25% of the replacement value of the asset being improved and meets or exceeds the minimum acquisition cost threshold of $5,000.
  - The cost is $100,000 or more, regardless of the percentage of the betterment and improvement relative to the cost of the asset.
- Operating system software acquired after the initial outfitting of computer hardware is capitalized if it meets the betterment and improvement criteria.
- Betterment and improvement costs do not include costs associated with activities that maintain an asset at its expected productivity for its estimated useful life (i.e., repairs and maintenance).
- The acquisition and installation cost of an enhanced component or module as a replacement for an existing component or module in a tangible capital asset is capitalized if it meets the betterment and improvement criteria noted above.
- Life or productivity impacts when installing more than one enhanced component or module on a tangible capital asset should be aggregated to assess the appropriate accounting treatment. Individually, each of these components or modules may fail to satisfy the life or productivity criteria. Projects that combine this type of component or module, however, may in the aggregate satisfy the criteria because of their synergistic effect. Costs of projects meeting the life or productivity criteria under this methodology should be aggregated for evaluation against the betterment and improvement cost criteria. Betterment and improvement projects that satisfy the cost criteria are capitalized.
- The cost of an enhanced component or module, or projects comprised of multiple enhanced components or modules, that fail to satisfy the life

and productivity betterment and improvement criteria are expensed. Those betterments and improvements that fail to satisfy the betterment and improvement cost criteria are expensed.

- The acquisition and installation cost of a like-kind component or module as a replacement for an existing component or module is expensed as incurred, since it does not increase the life or productivity of the existing asset. Like kind replacements are maintenance and repair costs incurred to realize the expected productivity or estimated service life of an AAU.
- The company does not retire individual components or modules of AAUs. The cost of replaced components or modules continues to be reflected in accounting records for capitalization and depreciation purposes until the AAU is retired.
- An original complement to a betterment and improvement is capitalized if it satisfies the original complement criteria.

Upgrades and Enhancements to Internal-Use Software

Costs incurred subsequent to the application development phase are considered an upgrade and enhancement when the modification to the internal-use software increases its functionality and enables the internal-use software to perform a task it previously was incapable of performing. An upgrade and enhancement normally requires new internal-use software specifications and may require a change to all or part of existing internal-use software specifications.

Costs for an internal-use software upgrade and enhancement which increases its functionality and enables the internal-use software to perform a task it previously was incapable of performing are capitalized when one of the following conditions is met:

- The costs exceed 25% of the replacement value of the capitalized internal-use software being upgraded or enhanced.
- The costs meet or exceed the minimum acquisition cost threshold of $10 million, regardless of the percentage of the upgrade and enhancement relative to the cost of the internal-use software.

Maintenance and Repairs

Maintenance and repairs to tangible capital assets, internal use software, and non-Boeing assets are not eligible for capital treatment. Maintenance and repair costs are incurred to obtain the expected service life of an asset and can include:

- For real property, maintenance and repair costs include janitorial work, repair of walkways, repavement, plaster, reroofing, defective lighting,

and electrical switches. Costs also include the servicing of mechanical and electrical equipment, the inspection and repair of utility systems, and any other routine maintenance or necessary repair required to keep the asset in good operating condition.

- For personal property, maintenance and repair costs include the protection and preservation of machinery and equipment, part replacement as prescribed, and extraordinary repairs resulting from a defective asset or portion thereof.
- For internal-use software, maintenance and repair costs include preventive, scheduled, or corrective modification of a software application after its entry into production use to address faults, fix defects to logic or code, improve performance, adapt software applications to changes in operating systems or replaced hardware, and assure that applications meet regulatory and security requirements.

Costs incurred for maintenance and repairs activity are charged as follows:

- Maintenance and repairs to tangible capital assets, including leased assets, or internal use software are charged to overhead in the current period.
- Maintenance and repair costs of non-Boeing assets (e.g., repair of government-, customer-, and supplier-furnished equipment) are charged direct to cost objectives in the current period.

Rearrangement and Relocation

Rearrangement and relocation may be necessary to accommodate program changes or to maintain efficiency and economy in business operations.

Costs incurred for the rearrangement and relocation of capital assets are expensed as incurred.

30.1.4 Asset Tagging and Ready for Use Forms

The Asset Tagging and Ready for Use Forms are required to indicate that an asset has been placed in service and can be capitalized and that depreciation can begin.

30.1.4.1 Asset Tagging

To properly account for the cost of capital assets on Boeing financial records, assets must be declared ready for use in a timely manner. Personal property assets also must be tagged for asset accountability purposes, excluding original complement.

Asset Tagging Criteria

This section describes the criteria and process for tagging and declaring a general purpose capital asset ready for its intended use in the Enterprise Accounting System (EAS) Asset Management (AM) module. Program equipment non-tooling assets considered as developmental equipment (e.g., airborne special test equipment [ASTE] and mockups) also are governed by this subsection. This process specifically excludes program equipment tooling assets, however:

- The criteria for equipment identification, delegating responsibility for applying identification tags to equipment, and coordinating identification requirements with requisitioning and procurement organizations will be accomplished by the designated organization appropriate to each BU.
- Blocks of property identification numbers will be provided by ES Property Accounting to the appropriate Capital Budget Administrator Focal or Property Management Focal. This includes both capital and expense tags.
- Severable capital assets must have property identification numbers assigned and property tags affixed to the assets (or ID numbers engraved) by the time the assets are considered ready for use.
- In addition to the capital ID tag, other identification numbers or designators may be applied to capital assets (e.g., maintenance unit numbers on motorized vehicles or material handling equipment, as assigned by Fleet Management).
- For jobs with multiple asset purchases in which the assets can be used independently, a different ready-for-use date can be assigned to each asset depending on when the asset meets the ready-for-use criteria.
- For self-constructed assets comprising multiple asset components that make up a single AAU, a single ready-for-use date applies to the entire job.

30.1.4.2 Asset Tagging Process

The asset tagging process applies to all Boeing organizations involved in the procurement, fabrication, or management of capital assets that will be accounted for by Enterprise Services Property Accounting. This process does not include program equipment tooling.

Enterprise Services Property Accounting will:

- Delegate authority to tag capital assets as agreed with specific organizations.

- Provide process and requirements training to organizations that have the delegated responsibility to tag capital assets.
- Determine and assign the property number range to responsible job focals. Distribute new property tags upon request to the job focals.
- Capitalize assets within 1 month of the ready-for-use date if all other required information is available.
- Provide cost and budget status to Facilities & Asset Management, Finance, and Engineering project focals to prompt awareness of project status and the need for capitalization.
- Maintain a control log of assigned property tags.
- Provide replacement tags when requested.
- Report indicators of lagging ready-for-use assets. BU Finance will research and resolve and ensure that Property Accounting receives accurate and timely information.
- Maintain property control and accountability records for the Boeing-owned capital facilities covered by this subsection.
- Establish and maintain a file for each capital asset construction in process work order, including:
    - Purchase Requisition or authorizing documentation.
    - Capitalization/Ready for Use (RFU) information.
    - Other data pertaining to capital asset construction in process.

The Capital Budget focal, Project focal, or Defense, Space & Security Property Management affixes the appropriate property tag numbers to personal property acquired.

Once the acquisition has been approved, the BU Capital focals indicate the assigned property tag numbers and unit numbers (vehicles only) on the funding authorization document for all tagged capital equipment. The focal forwards the funding purchase requisition which reflects total project cost and assigned property tag numbers, to Enterprise Services Property Accounting.

Enterprise Services (ES), Commercial Airplanes (BCA), Defense, Space, & Security (BDS), Engineering, Test & Technology (ET&T), Information Technology & Data Analytics (IT&DA) and Boeing Global Services (BGS) focals will affix the property tags to personal property and submit completed Asset Tagging and Ready-for-Use Forms to Enterprise Services Property Accounting immediately after the asset is tagged and ready for use.

All BUs using personal property must notify Enterprise Services Property Accounting or Defense, Space & Security Property Management if any capital personal property is missing a tag and obtain a replacement.

Enterprise Services, Commercial Airplanes, Defense, Space, & Security, Facilities & Asset Management, Engineering, Test & Technology, Information Technology & Data Analytics, Boeing Global Services, Engineering, Finance, and Capital focals will:

a. Tag personal property.
    1. The tag should be visible for easy identification during physical inventories. An exception may be made for executive furniture and artwork where the tag can be applied to the back or underside.
    2. If the asset is too small to tag, note the fact on the tagging sheet and return the tag with the completed form to Property Accounting. Assets too small to tag must be engraved with the tag number for future tracking.
    3. System components that meet the basic capitalization acquisition cost criteria and could be easily reused or relocated will be tagged separately with individual property numbers
    4. Betterments and improvements to severable personal property will be capitalized using a property identification number which references the capital asset being improved. The betterment and improvement will have its own cost and ready for use date, but will not have a separate tag affixed to the asset.
    5. Critical spare parts do not require tagging. The cost of critical spare parts will be incorporated as part of the prime AAU.
    6. Original complement is tracked in the asset management systems using a unique property identification number, but the individual assets are not tagged.
    7. Real property is tracked in the asset management systems using a unique property identification number, but the assets are typically not tagged.
b. Indicate the estimated Ready for Use date, building number and asset class in the Capital Planning System (CAPS).
c. Ensure that personal property is tagged by the Ready for Use date.
d. Submit the completed Asset Tagging and Ready-for-Use forms to Property Accounting when the asset is ready for use.
e. Submit a real property cost breakdown to Property Accounting when real property assets are ready for use.

f. When a capital work order/job suspension occurs on active jobs, indicate the reason and time frame on the Asset Tagging and Ready for Use forms.

g. Request a replacement tag from Property Accounting when an original tag is damaged or missing from a capital asset and requires a replacement.

h. Research and resolve aged construction in process (CIP) projects, and ensure that Enterprise Services Property Accounting receives accurate and timely Ready-for-Use information.

30.1.4.3 Ready for Use Form and Trailing Costs Forms

- For personal property jobs, a Ready for Use Form must be submitted within 60 days of the ready-for-use date, regardless of any outstanding trailing charges, to ES Property Accounting to indicate how the costs should be capitalized to individual asset records. Contact ES Property Accounting for details.
- For real property jobs, construction cost breakdowns must be submitted to Property Accounting to indicate how the costs should be capitalized to individual asset records. Contact ES Property Accounting for details.
- Trailing charges received after the initial asset capitalization, which are directly related to the asset's defined scope of work and incurred before the ready-for-use date will be capitalized to the original asset and the original ready-for-use date. These charges must be incidental and relate directly to the asset's defined scope of work.
- Costs incurred after capital work order or job completion are expensed unless they represent the cost of betterments and improvements. Minor pickup items clearly associated with the original contracted Statement of Work (SOW) are capitalized as part of the original asset.

30.1.5 Depreciation of Tangible General Purpose Assets and Internal-Use Software

Note: This subsection does not apply to special purpose assets; special test equipment; program equipment; or assets held for sale, lease or rental.

General Guidelines

This subsection provides guidance for the consistent and objective assignment of depreciation expense of tangible general purpose assets, including internal-use software, to cost and financial accounting periods and for the allocation of such costs to appropriate cost objectives.

Adherence to this subsection will ensure compliance with CAS, Financial Accounting Standards (Accounting Standards Codification), and other authoritative accounting principles. CAS 409, "*Depreciation of Tangible Capital Assets*", provides guidance for assigning costs of tangible capital assets to cost accounting periods and for allocating such costs to cost objectives within such periods in an objective and consistent manner. The standard is based on the concept that depreciation costs should be a reasonable measure of the expiration of service potential of the tangible asset. In adhering to this standard, contractors must demonstrate a systematic and rational flow of the cost of tangible capital assets to benefitted cost objectives over the expected service lives of the assets.

This guidance applies to all company-owned tangible general purpose assets capitalized in accordance with Section 15 of POL-2, "Advancing the Boeing Vision."

The Vice President of Accounting and Financial Reporting shall evaluate the need for a change in estimate disclosure resulting from a change in depreciable lives or depreciation methods.

Segment senior-level Finance executives shall use the guidance contained in this subsection to properly depreciate assets for the purposes of cost accumulation, pricing, planning, and budgeting.

Property Accounting shall:

- Provide Financial Accounting a proposed reclassification accrual of CIP to PP&E and its associated depreciation for assets ready for their intended use but not yet capitalized.

Financial Accounting shall:

- Record the monthly reclassification accrual of CIP to PP&E and its associated depreciation for assets ready for their intended use but not yet capitalized.

The depreciable cost of a general purpose asset, including internal-use software, is its capitalized cost, less its estimated residual value. It is the intention of the company to fully use all assets; therefore, the estimated residual value at the time of capitalization is $0, except as noted below. On disposition, assets are expected to have no value or a value less than 10% of the original cost of the asset. In most cases, the cost of asset removal and disposition equals or exceeds the selling price, unless the asset becomes obsolete or is no longer useful to the company before the end of its original estimated service life. See subsections 30.1.7.3 for further guidance on asset requirements and 30.1.8 for further guidance on asset impairments.

For cost accounting purposes, the estimated residual value for Executive Flight Operations aircraft is 80% of the cost of assets capitalized after July 1, 2007 through December 31, 2017. The estimated residual value for Executive Flight Operations airplanes small airframes (e.g. Bombardier Challengers) is 30% of the cost for the assets capitalized on or after January 1, 2018. The residual value for Executive Flight Operations large airframes continues to be 80% of the cost for the assets capitalized on or after January 1, 2018.

For financial accounting purposes, the estimated residual value for Executive Flight Operations aircraft will be based on the actual anticipated salvage values calculated by Financial Accounting. Differences between the cost accounting and financial accounting depreciation will be recorded by Financial Accounting.

The estimated service life of a general purpose asset is used to determine the cost accounting and financial accounting periods to which the depreciable cost will be assigned (fig. 30.1-4). A change to the service life of any asset category requires that a formal companywide study be completed and detailed facts and data be submitted for review and approval to the Senior Director – Government Accounting and the Vice President of Accounting and Financial Reporting.

Assets capitalized on or after January 1, 2004, will follow the categories, lives, and methods described in figure 30.1-4. Assets capitalized before January 1, 2004, will continue to use the categories, lives, and methods consistent with the heritage disclosed practices for The Boeing Company, McDonnell Douglas Corporation, and Boeing North American.

The depreciation method used for each tangible asset category reflects the pattern of asset consumption over the asset's service life (fig. 30.1-4).

The annual depreciation expense of a general purpose asset, including internal-use software, is allocated to cost objectives on a beneficial or causal basis.

a. Depreciation cost may be charged directly to cost objectives if such costs are made on the basis of usage and only if depreciation costs of all like assets used for similar purposes are charged in the same manner.

b. When assets are part of or function as an organizational unit whose costs are charged to other cost objectives based on measurement of the services provided by the organizational unit, the depreciation expense of the assets is included as part of the cost of the organizational unit.

c. Depreciation expenses not allocated in accordance with items a and b above will be included in the appropriate cost pools.

Tangible capital assets are transferred between divisions at their net book value. See subsection 30.1.7.2 for more information on asset transfers.

30.1.5.1 Determination of Depreciation—Estimated Service Life and Method

Service life determinations are made by considering such factors as economic usefulness to the company, nature of use, intensity of use, and technical or functional obsolescence.

To ensure a practice that is administered on a consistent and practical basis, the service life assigned to any individual asset is to be the same as the service life assigned to the category applicable to that individual asset.

Assets of similar use and type are grouped together in asset categories. Classification of an asset is determined by the asset's functionality (see examples 8 and 9 in Figure A.5-1). The established service lives and depreciation methods for each category of tangible capital assets are contained in figure 30.1-4.

Determination of the appropriate depreciation expense for tangible capital assets requires estimates of both the service life and the likely pattern of asset consumption. In selecting both service life estimates and depreciation methods, many of the same physical and economic factors are considered, including:

- The quantity and quality of expected output and the timing thereof.
- The costs of repair and maintenance and the timing thereof.
- Standby or incidental use of the asset and the timing thereof.
- The technical or economic obsolescence of the asset service lives used by the company.

The estimated service life for internal-use software is 5 years.

Capitalized costs associated with Software as a Service (SaaS) (an intangible asset) will have an estimated service life equal to the noncancellable term of the relevant hosting arrangement plus any options reasonably certain to be exercised.

The depreciation method used for internal-use software is straight line.

Betterments and Improvements

When betterments and improvements extend the useful life of a tangible capital asset, the service life and depreciation method of a comparable used tangible capital asset are chosen. Lives and methods chosen for betterments and improvements made to fully depreciated tangible capital assets which extend the useful life must also reflect the life and method of a comparable used tangible capital asset.

Betterments and improvements placed into service before January 1, 2007 that do not extend the useful life of a tangible capital asset are depreciated over the remaining service life of the improved asset.

Betterments and improvements placed into service on or after January 1, 2007, that do not extend the useful life of a tangible capital asset are depreciated over the service life, and using the depreciation method, of a comparable used asset.

For financial accounting purposes, the treatment of betterments and improvements may be different than for government cost accounting. Contact Financial Accounting to determine the appropriate GAAP treatment of the improved asset.

Leasehold Improvements

Leasehold improvements are betterments to leased land, buildings, or other assets. Leasehold improvements include Boeing-owned buildings on leased land. The service life for leasehold improvements is the remaining life of the lease, plus renewal options reasonably certain to be exercised (as defined in section 10.1.3.1), or the normal service life of the asset, whichever is less. The depreciation method will reflect the method of a comparable category of asset.

Leased Assets

The cost of an asset capitalized as a finance lease, in accordance with BAM Chapter 10.1 *Leased Assets*, is amortized over a service life equal to the term of the lease, plus renewal options reasonably certain to be exercised (as defined in section 10.1.3.1) using a depreciation method for the appropriate asset category in figure 30.1-4 with the following exception: If a lease is capitalized because it contains a transfer of ownership provision or a bargain purchase option, the cost of the leased asset is amortized over the estimated service life for the appropriate asset category in figure 30.1-4, regardless of the length of the lease term.

Original Complement of Low-Cost Equipment

The estimated service life and method of depreciation used for an original complement of low-cost equipment is generally consistent with the estimated service life and method of depreciation that make up the majority of the value of the original complement, but can be separated into multiple categories.

If an original complement is capitalized in relation to a leasehold improvement or a finance lease, the life of the original complement is the life of the lease or the life of similar assets, whichever is shorter.

Critical Spare Parts

Spare parts that are capitalizable in accordance with subsection 30.1.3.3 are depreciated over the service life of the asset with which they are associated.

Schedule of Service Lives and Depreciation Methods

Assets of similar use and type are grouped together in asset categories. Figure 30.1-4 details the service lives for each category of tangible capital assets and the appropriate depreciation methods:

- S/L = straight line
- 150% DB = 150% of declining balance
- SOYD = sum of the year's digits

Category, with examples	Service life (in years)		Depreciation method	
	New	Used	New	Used
Land improvements (parking lots; sidewalks; sidewalk canopies; landscaping; outdoor lighting systems; fences; roads; monitoring and recovery wells; sewers; fuel farm tank systems; utility distribution systems not within the footprint of the building, such as water, sewer, prime building power, gas, and communication; drainage systems; security gates; barriers)	20	10	150% DB	S/L
Buildings				
Permanent (foundation structure, permanent load-bearing walls, roof, internal floors, integral structural members, pedestrian bridges, windows, doors)	40	25	150% DB	S/L
Semi-permanent (sectional modular buildings, fabric hangars with permanent foundations, building canopies)	20	10	150% DB	S/L

Temporary, excluding structures with permanent foundations (mobile and/or portable facilities, bus stop shelters, relocatable guardhouses, turnstile shelters)	10	5	150% DB	S/L
Building equipment and utilities				
Basic (required for basic building functionality) (Heating, ventilation, and air-conditioning [HVAC], utility control systems, electrical, plumbing, lighting, elevators, security systems, fire suppression systems building systems chiller, and other systems that support basic building functionality)	20	13	150% DB	S/L
Other (not required for basic building functionality) (networking cable and wire; non-building-process utilities; 400 Hz or unique power supply systems; hazardous material supply and disposal systems; process chillers; process HVAC systems; process communications systems; and other systems that support laboratory, test, and/or manufacturing operations)	20	13	SOYD	150% DB
Special support facilities (modular trailers, office plazas, food plazas, and flight line shelters)	5	3	SOYD	150% DB
Test facilities and special-purpose structures (explosion-proof shelters; equipment and machinery enclosures; test equipment enclosures, such as fuel cell enclosure, shield rooms, and clean rooms within a building)	10	7	SOYD	150% DB
Wind tunnels (tunnel and operations areas specific to the wind tunnel)	20	13	SOYD	150% DB

Space chambers (structure and utilities unique to the functional operational process, environmental changers)	10	7	SOYD	150% DB
Factory machinery (milling machines; lathes; riveters; metalworking equipment; robotic equipment; holding fixtures; process tanks; severable power supply components and/or systems, such as substations and generators unique to the process; autoclaves; paint booths; overhead crane systems including rails; fiber-wrap machines; assembly equipment; position systems; welders and joining equipment; drilling equipment; dust-collection systems)	13	9	SOYD	150% DB
Shop equipment (portable tools, drill motors, pallet jacks, access stands, workbenches, seavans, service carts)	16	7	SOYD	150% DB
Test equipment (oscilloscopes, multimeters, test carts, laser scanners, test benches, calibration equipment, computing type equipment integrated and/or embedded in test systems, data-collection and -recording equipment, portable power supplies, inspection equipment)	11	7	SOYD	150% DB
Transportation equipment—heavy trucks (weight of 13,000 lbs. or greater, including fuel tankers, fire trucks, buses, semi-trucks, semi-trailers)	9	6	SOYD	150% DB
Transportation equipment—light trucks (weight lighter than 13,000 lb., including lift trucks, utility vans, licensed pickups)	5	3	SOYD	150% DB

Transportation equipment—passenger (automobiles, sport utility vehicles, passenger vans, limousines)	4	3	SOYD	150% DB
Material handling equipment (forklifts, stackers, tow tractors, unlicensed pickups, mobile jib cranes, dollies, scissor lifts, boom lifts)	10	7	SOYD	150% DB
Airframes (refer to section 30.1.5 for residual values associated with executive aircraft)	8	5	SOYD	150% DB
Jet engines	7	5	SOYD	150% DB
Vessels, ships, tugs, barges	18	12	SOYD	150% DB
Helicopters	7	5	SOYD	150% DB
Computers and peripheral equipment (personal computers [PCs], engineering workstations, servers, mainframes, storage arrays, storage area network devices, printers, plotters, network routers, switches)	5	3	SOYD	150% DB
Communications and computing support (radios/antennas, air conditioners that support computers, mobile data terminals, power distribution units [PDUs], standalone uninterruptable power source/supply [UPSs], video conferencing equipment or system, closed-circuit TV systems, electronic displays, badge readers)	7	5	SOYD	150% DB
Office equipment (copy machines, record storage, retrieval systems, scanners)	8	5	SOYD	150% DB
Office furniture (furniture and fixtures, tables, desks, chairs, cabinets, bookcases, and sales and directory displays)	10	7	SOYD	150% DB

Cafeteria equipment (refrigerators, stoves, dishwashers, food mixers, condiment counters, ice machines, steam tables, deep fryers)	11	7	SOYD	150% DB

Figure 30.1-4. Asset Categories, Service Lives, and Depreciation Methods

Note: This figure is not applicable to special purpose assets; special test equipment; program equipment; or assets held for sale, lease, or rental. The examples listed are not a complete list of all possible assets but are provided as guidance for selecting the appropriate asset category. Effective July 1, 2015, all Category 19 assets (purchased new) with a Net Book Value (NBV) greater than zero will have a 5 year life, prospectively, all Category 19 assets (purchased used) with a NBV greater than zero will have a 3 year life, prospectively, and all Category 9 assets (purchased new) with a NBV greater than zero will have a 16 year life, prospectively.

30.1.5.2 Deviation From Established Service Life or Method

Exceptions to subsection 30.1.5 may be warranted for tangible capital assets or internal-use software acquired for a unique purpose or under special circumstances when a differing service life or depreciation method can be reasonably predicted.

Exceptions also may be warranted for internal-use software when the contract term for a site or usage license varies with the estimated service life.

For any deviation, documentation must be provided by the organization responsible for the asset, and approval must be obtained from the Senior Director – Government Accounting and the Vice President Accounting and Financial Reporting. When appropriate, agreement will be requested from the Corporate Administrative Contracting Officer (CACO) by the Senior Director – Government Accounting.

Documentation and approval requirements also apply when deviations in service life or depreciation method are warranted for betterments and improvements on tangible capital assets or for internal-use software upgrades and enhancements.

30.1.5.3 Ready for Intended Use

Depreciation of a capital asset begins when the asset, as well as any other assets on which its effective use depends, is ready for its intended use as reported to Property Accounting by BU Finance or their designated focal.

BU senior-level Finance executive shall assist Property Accounting to obtain ready-for-intended-use notification forms and schedules from BU Finance, as required.

BU Finance or designated focal shall submit required ready-for-intended-use notification forms and schedules to Property Accounting within 1 month of when the asset is ready for its intended use to ensure timely and proper capitalization of the asset.

Property Accounting shall:

- Capitalize assets within 1 month of receiving ready for intended use notification forms and schedules from Financial Accounting.
- At month-end, provide Financial Accounting a proposed reclassification accrual of CIP to PP&E and its associated depreciation for assets ready for their intended use but not yet capitalized.

Financial Accounting shall record the monthly reclassification accrual of CIP to PP&E and its associated depreciation for assets ready for their intended use but not yet capitalized.

Ready for intended use is defined below for differing types of assets.

Real Property

- A building is functionally ready for occupancy in office, warehouse, factory, or laboratory spaces when the structure is substantially complete (e.g., lights, power, and water are available). The building does not need to be occupied nor does personal property need to be installed. For a new building, official documentation (e.g., a legal certification of occupancy) indicates *ready for intended use*.
- For leased buildings, completion of tenant improvements for first-time occupancy will indicate *ready for intended use*.

Personal Property

- For tangible assets that require installation or modification, the equipment must be in place and the equipment's performance capability must be demonstrated.
- For portable or semi-portable tangible assets that require no installation, modification, or assembly, the company must have received the assets and the equipment's performance capability must be demonstrated.

Internal-Use Software

Depreciation begins when the internal-use software is completed, tested, and ready for its intended use. However, where partial utilization of a capital asset is identified with a specific operation, depreciation shall

commence on any portion of the asset which is substantially completed and used for that operation. If the functionality of the internal-use software project is dependent upon the relationship of several components or sites, depreciation will begin when all components or sites that are functionally dependent on each other are ready for their intended use.

30.1.5.4 Depreciation Conventions

Real Property and Personal Property

For real property, depreciation begins within 1 month after the asset is ready for its intended use. A legal certification of occupancy is used as evidence of the actual date a building was placed in service.

For personal property, the half-year convention is used in determining the assignment of depreciation expense. All personal property capitalized during any accounting period is considered to be originally placed into service on the first day of the second half of the year.

Depreciation is taken through the month of disposition for real and personal property, if the asset is disposed of before being fully depreciated.

Internal-Use Software

For internal-use software, the half-year convention is used in determining the assignment of depreciation expense. All internal-use software capitalized during an accounting period is considered to be originally placed into service on the first day of the second half of the year.

Asset Transfers

Assets that are transferred from one division to another are depreciated through the month preceding disposition on the books of the sending division. The receiving division begins depreciation in the month that the transfer takes place.

Changed Circumstance

Estimates of service life, patterns of consumption, and residual value shall be reexamined for tangible capital assets whenever circumstances change significantly. When changes are made to the estimated service life, residual value, or method of depreciation during the life of a capital asset, the remaining depreciable charges are limited to the net book value of the asset. The revised depreciation charges are assigned to the cost accounting period in which the change is made and to any subsequent periods remaining. Adjustments to depreciation expense because of changed circumstances are not retroactive.

Depreciation Expense Variance

When the depreciation expenses of like tangible capital assets used for similar purposes are charged directly to cost objectives on the basis of usage, standard charging rates are established based on cost. Any variances between the standard and the actual depreciation expense are accounted for in accordance with the established practice of the product or service group.

30.1.6 Capitalizing Commercial Airplane Program Equipment—Special Tooling

Note: Subsection 30.1.6 is applicable to Commercial Airplanes only.

Commercial Airplanes is responsible for ensuring that all Commercial Airplanes tooling is charged to the correct work order authorized by Finance and that all qualifying costs are capitalized and depreciated in the proper manner.

The purpose of this subsection is to establish the accounting and accountability requirements for capitalization of special tooling.

Special tooling within this subsection includes:

- In-plant tooling. Boeing-owned special tooling that is fabricated in plant, purchased from suppliers for in-plant use, or produced by another BU as interorganizational task support for use by Commercial Airplanes or retained for use by the supporting BU.
- Supplier tooling. Tooling fabricated or procured by a subcontractor and retained by the subcontractor or rotating stock tools used between supplier locations and Boeing sites.
- Responsible Project Management shall provide documentation to Finance for Proper Cost Classification

30.1.6.1 Tooling Costs

All Boeing-owned special tooling costs incurred for development and production of all programs will be transferred to a Program Equipment Capital account and depreciated as determined by Financial Accounting. The current depreciation schedule uses an 8-year-life, straight-line method. Terminated programs or programs using contract accounting may use different lives which are approved by Financial Accounting.

Note: Unlike general purpose capital which has a $5,000 minimum threshold, all tooling is capitalized as long as it meets the capitalization criteria for tangible capital assets (sec. 30.1.3.8).

Beginning 2018: Like general purpose capital, capitalizable tooling costs will be uniquely identified in the accounting system by the tool LTSN (Life

Time Tool Serial Number); Tools with acquisition/rework costs below $5,000 may be grouped at a high level Asset ID number by year, program, and location.

Tooling costs initially are collected by reason codes. Boeing Commercial Airplanes BAM 10.3, Appendix 10.3-BCA 4 – Labor Categories and Tool Reason Codes, Table 10-3 BCA4.1 lists reason codes that are capitalizable within Commercial Airplanes.

Capitalization Costs

The following costs are included in the capitalizable amount for tooling:

- Labor, design, fabrication, inspection, and numerical control.
- Inventory overhead and fringe benefits, including design, fabrication, inspection, and numerical control.
- Material.
- Freight-in (e.g., transportation) if applicable.
- Initial installation costs, including the cost of foundations, hookup to utility systems, and functional test costs.
- Task support-in (both tools produced for use by Commercial Airplanes and those retained for use by supporting BUs) net of applicable task support non-inventory credits.
- Costs of modifications to a tool not considered normal and routine maintenance or repair.
- Service (tooling) costs for the use of supplier tooling when Boeing holds paramount rights of tool usage and transfer.
- All other costs not listed above that are associated with placing the equipment in service should be identified to Commercial Cost Accounting, who will determine if the costs are capitalizable.

Costs Excluded From Capitalization

The following costs are not included in the capitalizable amount for tooling:

- Routine maintenance.
- Major or minor repair charges, including rebuilding of tools to place them in usable or renovated condition.
- Charges for repart numbering tools.
- Installation or modification costs required to adapt transferred tooling to a new location.

- Interim testing or quality checkout prior to final tool installation in final location.

Financial Accounting

Financial Accounting supports the capitalization and tax reporting processes for tooling by performing the following actions:

- Provide guidance on whether items or costs should be considered for capitalization when assistance is requested by Cost Management.
- Determine if any capitalization adjustments for prior year costs, as identified by Cost Management, require additional consideration including contacting Financial Compliance as appropriate.
- Set up capitalizable work orders, as needed to align with production work orders.
- Transfer from production work orders to capital work orders on a monthly basis the capitalizable cost of special tooling fabricated in plant, purchased from suppliers, or manually billed from task support BUs.
- Provide Corporate Tax Department with quarterly capitalizable dollar estimates and actuals by program of the cost of special tools to be capitalized within the current year. Foreign and domestic information on supplier tooling is required for book-versus-tax depreciation forecasts.
- Provide Property Accounting with an annual summary of current-year capitalizable special tooling by Project ID. Beginning 2018, when asset value is equal or greater than $5K, the listing will be by Tool LTSN (Life Time Serial Number. When asset value is less than $5K, listing will be by high level Asset ID number by year, program, and location.
- Provide Property Accounting with an annual summary of current-year scrapped and canceled special tooling by work order.
- Provide Property Accounting each quarter with a year-to-date and current quarterly breakdown of capitalizable fabrication special tooling dollars by program into the following categories to in-plant tooling:
    - Labor
    - Material
    - Purchasing

For supplier tooling, costs are provided quarterly at the total cost level and not broken out.

- Provide assistance to Property Accounting in reconciling supplier tooling to ledger accounts.
- Review capitalizable Project ID's/Asset ID (a.k.a. LTSN) annually by July month-end to ensure that all prior year capitalizable and scrapped and cancelled tooling have been reported to ES Property Accounting. Notify Financial Accounting Policy of any capitalization adjustments for prior year costs. Beginning in 2018 for Tax purposes Commercial Cost Accounting had to supply each tool by lifetime serial numbers to Property accounting in order to load all tools over $5,000 into EAS uniquely and tooling below $5,000 LVA (low value asset) at a high level. There are reasons that tooling costs would not be capitalized for Tax purposes. For book purposes once any costs are incurred on a tool, whether it is capitalized for tax purposes or not, Program financial planning amortizes as costs are incurred. For Tax purposes we do not capitalize a tool until the year it is placed into service. Reasons that tooling costs are not capitalized for Tax purposes include abandoned projects, never completed tools or placed into service, the tool has two life time serial numbers that are not tied together and other anomalies.
- Each year Commercial Cost Accounting will review the Tooling in Process Project ID's by program that capture tooling costs to be capitalized. All Program tooling projects that started two years prior, have had no costs for the last 90 days and are less than $10M will be written off as cancelled tooling. Any Program having values greater than $10M will be researched to determine an action plan.
- When Offloads are established with other BUs involving the manufacturing of tooling, include a requirement that the supporting segment's Finance organization will
- Provide Commercial Cost Accounting with:
    - Quarterly estimates on the cost of special tooling to be capitalized within the current year.
    - An annual summary of current-year capitalizable in-plant special tooling by work order.
    - An annual summary of current-year scrapped and canceled special tooling by work order.

Assist Commercial Cost Accounting in reconciling capital work orders to ensure that all capitalizable billings and that capitalized, canceled, and scrapped credits are identified to the correct capital work order.

- Establishes ledger accounts and work orders within the Financial Systems Master Table (FSMT), as appropriate, upon request from Division Finance.

- Records the capitalizable costs of special tooling included in task support billings.
- Coordinates with BUs supporting Commercial Airplanes to establish an understanding of and compliance with Commercial Airplanes definitions of financial categories of inventoriable and capitalizable costs.
- Coordinates with each task support segment in establishing a focal point for resolving problems related to tooling costs, and provide the list of focal point names to Division Finance.
- Documents and disseminates finance accounting instructions relating to Boeing-owned supplier tooling.

30.1.6.2 Recording Special Tooling Costs

Enterprise Services Property Accounting

- Ensures depreciation of special tooling in Enterprise Accounting System-Asset Management (EAS-AM) is recorded properly.
- Records current-year capitalization of special tooling costs.
- Records capitalization adjustments for prior year costs.
- Records disposition of special tooling costs using Contract Tool Management Application (CTMA) reports. Provides Sales Accounting with project and activity ID or account information pertaining to program equipment, if any sales proceeds are received.
- Prepares quarterly and annual reports for Corporate Tax Department of special tooling.

30.1.6.3 Maintenance of Tooling Records

Accountability will be delegated to the affected organization for maintenance of the records relating to the acquisition, use, control, location, and disposition of property, in accordance with PRO-3652, "*Property Management*".

All Divisions Within Commercial Airplanes

Manufacturing and Supplier Management Tool Accountability organizations will:

- Prepare and maintain accountability records for all special tooling (fabricated and purchased) subject to this guidance. These records will include the following data fields when the record is controlled by Manufacturing (in-plant) or Supplier Management (out-plant):
  - Tool code description
  - Tool number and unit number
  - Lifetime serial number
  - Acquisition date
  - Acquisition hours
  - Make and improvement dollars
  - Original charge number or work order
  - Ownership
  - Location (i.e., state, code)
  - Date of last physical inventory
  - Disposition date and status code
  - Supplier code number
  - Supplier name
  - Source identification (e.g., purchase order or contract number)
- Furnish Property Accounting with lists of scrapped or sold tools as required.
- Ensure that all accountable tools are in the CTMA system.

Note: Long Beach uses the Tooling Management System (TMS) instead of CTMA.

- Provide a cross-reference between renumbered parts and the original part numbers in the CTMA system.
- Perform audits, as required, at suppliers' plants for supplier tooling. Make records available for review by Property Accounting to ensure system adequacy.

Asset Retirement—Commercial Airplanes Program Equipment

Enterprise Services Property Accounting records the write-off of scrapped and canceled tooling and the retirement of capitalized tooling.

1. Property Accounting records disposition of special tooling costs. Retire tooling costs using CTMA reports.
2. Manufacturing or Supplier Management furnishes Property Accounting with lists of scrapped or sold tools as required.

30.1.6.4 Tooling in Possession of Suppliers and Subcontractors – Risk of Loss

For purposes of this subsection, supplier pertains to prime supplier who is liable for the loss and subcontractor pertains to a subtier supplier for the prime supplier.

This subsection documents that when Boeing-owned or supplier-owned property to which Boeing has paramount rights of transfer and usage is placed in the possession of a supplier or subcontractor, the risk of damage or loss and the supplier's liability is documented in the appropriate purchase order notes or subcontract clauses.

This subsection does not apply to tooling when the title remains with the supplier (e.g., such cases where tooling is considered a service charge because of unique industry custom or special arrangements).

Boeing must establish the proper controls regarding supplier liability for use and possession of Boeing- and supplier-owned property. Boeing holds its suppliers liable for loss of or damage to Boeing property, except if:

- A savings in insurance costs can be realized by extending relief from liability.
- The amount of property placed in the possession of the supplier is disproportionate to the total value of the order.
- Suppliers or subcontractors are unable to be self-insured. (*Note: Does not apply to heritage McDonnell Douglas commercial tools.*)

Commercial Airplanes Supplier Management External Tool Accountability will:

- Establish and maintain a system of supplier property control consistent with Boeing policies and procedures and government regulations.

Commercial Airplanes Supplier Management Procurement will:

- Evaluate the supplier's ability to assume responsibility for the property before furnishing property, authorizing fabrication or acquisition of property, or extending relief from liability to the supplier.
- Implement financial liability for property using the following:
  - The "Responsibility for Property" clause of form D1-4100-4045, "Boeing Commercial Airplanes Purchase Order Terms and Conditions", or similar clauses in other Boeing procurement forms or the master contract and general terms agreement (GTA).
  - D33200, "Boeing Suppliers Tooling Document", Section 1.4, Liability when applicable, referred to on the purchase order master contract and GTA
- Process claims for lost supplier tooling by:
  - Defining the cost of the tool for replacement value or acquisition as determined by the contract, supplier relation, costing factors, etc. or contact the Tool Support Group for assistance with tool valuation through the assertion process or valuation tool.
  - Obtaining a chargeline from the procurement organization's Cost Accounting/Finance Analyst.
  - Sending a request for reimbursement to Enterprise Payment Services that includes supplier name, supplier code, dollar amount, reason for the debit, and the accounting chargeline.
  - Absolve suppliers of financial liability for lost or damaged Boeing property, provided one or more of the circumstances previously stated exists.

Commercial Airplanes Supplier Management, External Tooling, Tool Support Group – will provide assistance to procurement agents for tool valuations or other support as required.

ES Enterprise Payment Services will receive requests from procurement agents for debit actions against suppliers and either issue debits against outstanding invoices for payment or issue invoices if there are no outstanding payments due suppliers.

30.1.7 Maintain Asset Accountability

This subsection describes the responsibilities of organizations and individuals for accountability and control relating to the use, physical inventory, transfer and disposition of Boeing-owned capital assets and developmental equipment in EAS AM. It excludes government-owned property, intangible property, and internal-use software.

30.1.7.1 Inventory of Capital Assets and Asset Transfers

Boeing has fiduciary responsibility for accurate accountability, cost accounting, financial, and tax reporting. The Property Accounting EAS AM module—the source for depreciation, property tax, and property insurance reporting—provides capability for keeping accurate inventory of capital asset records. Keeping this inventory up to date is essential for the proper assignment of depreciation expense and accurate tax and property insurance reporting. Verification of physical inventory results are accountable to internal and external audits.

Relocation of assets can change the taxing jurisdiction to which Boeing owes taxes. This may result in overpaying taxes to one taxing jurisdiction and underpaying to the correct jurisdiction. This also may result in additional tax audits. Inaccurate reporting of assets may result in needlessly paying taxes, insurance, storage costs, and so on, on assets that no longer exist.

A complete physical inventory will be performed by each BU at a minimum of once every 3 years. The objective is to ensure that all capital assets are controlled, protected, preserved, and maintained in accordance with applicable procedures.

ES Property Accounting, along with their inventory focals and property custodians, conducts a physical inventory in accordance with BU guidelines. ES Property Accounting will:

- Define the capital asset process.
- Establish a schedule for completion.
- Identify and validate inventory focals for the inventory process.
- Conduct focal orientation meetings as required.
- Distribute the inventory reports to the focals, in accordance with the implementation schedule.
- Receive inventory update information from the focals, including system interfaces where applicable.
- Update the inventory records in EAS AM based on the updates provided in the completed inventory reports.
- Provide metrics upon request to the focal and BU management, indicating progress towards inventory update goals.
- Respond to audit inquiries or corrective actions related to the capital asset inventory process.
- Ensure that inventories are accurate and complete.

- Notify BU management of those items for write-off with remaining net book value.

Each asset record must be updated to reflect the date of the inventory.

Capital assets declared in excess of an organization's needs should be identified as surplus and must be reported to the applicable surplus sales organization.

Assets loaned in excess of 6 months are treated as a transfer.

An annual inventory will be conducted by ES Property Accounting to verify the accuracy of real property inventory records.

Additional cost asset ID numbers are excluded from the inventory process and updated when the original asset ID number is updated.

Assets reported as lost are written off (i.e., retired) in accordance with each BU's and site's direction. Some BUs and sites write off all losses at the time of the reported loss; other BUs and sites have an aging period. For those BUs and sites with an aging period, the period begins with the last recorded inventory date.

Property Accounting performs periodic random sample audits twice a year to verify the accuracy of EAS AM records. This process is conducted by locating and verifying asset tag number, ownership, and physical location (i.e., building, floor, bay or column) of randomly selected capital assets.

Status for Lost Assets

Property Accounting maintains the status for lost assets by following these steps:

- Assign a lost status when applicable to assets declared lost by the Property Custodian. Notify BU Cost Accounting of any lost asset when identified with an original acquisition value of greater than $5M.
- Input an accounting transaction to write off assets that have not been found. Remaining book value is charged to the BU cost objective.
- Update EAS AM to reflect property updates provided by the Property Management or Inventory focal for assets that have been found. Notify BU Cost Accounting of any found asset when identified with an original acquisition value of greater than $5M.
- If lost or stolen property is recovered, the custodian or computing focal must contact ES Property Accounting to reinstate the asset record into EAS AM.

Assets that cannot be located and when evidence of theft exists are reported to Corporate Investigations. Incident also should be reported to uniformed security, as instructed by Corporate Investigations.

BU Inventory Focals

- Coordinate inventory updates with property custodians.
- Validate a property custodian list, upon request, which is used in the inventory process and provide updates as required by the established deadline.
- Attend the focal orientation meeting, as required.
- Receive an inventory report from Property Accounting and distribute to the appropriate property custodians.
- Ensure that a physical inventory is completed by the property custodian and that the results are returned to the focal. Review the completed inventory results for adherence to inventory process instructions and submit to Property Accounting no later than the specified due date.
- Review with property custodian to resolve any incomplete inventories.
- Receive Property Accounting list of lost assets scheduled for retirement. Provide Property Accounting with updated information for assets that are found. Remaining assets will be retired.
- Assist the property custodian and Property Accounting with the processing of asset transfers and mass department and budget conversions.

BU Property Custodians

- Receive and process the inventory report provided by the focal or Property Accounting.
- Physically locate the asset and verify the accuracy of data elements provided on the inventory report. Provide updates for any inaccurate data.
- Add to the inventory report any capital assets found during the inventory process but not on the initial inventory report.
- Return completed inventories to the focal in accordance with the schedule provided by the focal.
- Complete any unfinished inventories as notified by the focal.
- Notify the focal or Property Accounting if the responsible property custodian has changed.
- Assist the focal and Property Accounting in investigating lost or stolen assets. Contact Corporate Investigations to report any stolen assets.

- Identify assets requiring transfer and provide the necessary data to the Inventory focal to process the transfer.
- Complete asset retirement notification.
- Complete an asset update request (either a Property Disposition Authorization – PDA, email or inventory report) and submit to Property Accounting when an asset has been surplused, scrapped, cannibalized, traded-in, or destroyed by the custodial organization. *Note, surplused assets are typically retired based on notification from the Investment Recovery Department in Enterprise Services Group.*
- When sending an asset to the applicable surplus sales organization, do not remove the capital asset ID tag.

Business Management

- Review inventory status and offer support to focals and property custodians as needed to ensure completion of the inventory.
- Provide assistance as needed to the focals for determining final resolution of lost assets.
- Communicate cost impacts associated with the asset write-off to their organizations.
- Approve and acknowledge those items for write-off with remaining net book value.

Investment Recovery or Surplus Property Organization

- Notify Property Accounting when a surplus asset is reassigned to a new budget, organization, or department ID.
- Notify Property Accounting when an asset has been received and held for subsequent disposition, scrapped, traded-in, donated, sold or otherwise disposed of.

Corporate Investigations

- Assign a case number and investigate when a using organization or custodian notifies Corporate Investigations or Security & Fire Protection that an asset has been stolen.

30.1.7.2 Asset Transfers

Property Accounting and Property Management transfer tangible capital assets between divisions at their net book value. They also process property transfer updates using the proper asset update form specified in this subsection and in subsection 30.1.7.6.

- Maintain ledger control of all interdivisional capital equipment transactions.
- Present all requests for transfer of accountability to owner representatives.
- Record property transfers.
- Make updates upon receipt of the asset update form for transfers within the same BU in EAS AM.
- Upon receipt of an approved Capital Asset Request for Transfer (CART) form, generate an intercompany accounting transfer (ICAT) when an asset transfers to another BU (e.g., Enterprise Services to Defense, Space & Security).
- Update the property management systems as required.

30.1.7.3 Asset Retirement—General Purpose Assets

This subsection establishes ground rules for disposition of and accounting for Boeing-owned property (e.g., surplus capital and developmental program equipment) which is declared to be:

- In excess of an organization's requirements.
- Lost.
- Destroyed.
- Damaged beyond economical repair.
- Obsolete.
- Worn out.
- Stolen.

Boeing-owned property that requires some type of disposition activity must be processed as such and entered into the proper accountability system for retirement.

Categories within the scope of this subsection include:

- General purpose capital assets
- Development program equipment, such as mockups, special test and laboratory equipment, flight control rigs, fatigue test vehicles, airborne flight equipment, wind tunnel models, and training devices.

ES Property Accounting will:

- Retire assets in EAS AM upon notification of disposal for property that is surplus, damaged beyond economical repair, worn out, or obsolete.

Notifications come from various sources including the Investment Recovery (aka Surplus Sales) Department, Property Custodians, other focals using the PDA form, and from Corporate Real Estate for real property matters.

- Retire fully depreciated original complement and fully depreciated software assets in EAS AM.
- Ensure retirement transactions from the Computing Inventory Information Management (CIIM) and SPM systems are fed properly into EAS AM.
- Ensure the retirement of "lost" assets is in conformance with business segment practices. Those practices define the length of time an asset is considered lost before it can be retired. If the asset is subsequently found, it will be reinstated. Notify Cost Accounting of any lost or found asset when identified with an original acquisition value of greater than $5M.

Cost Accounting

- Determine if additional consideration is necessary for lost assets when identified with an original acquisition value of greater than $5M as identified by Property Accounting.
- Notify Financial Accounting of found assets when identified with an original acquisition value of greater than $5M as identified by Property Accounting.

Financial Accounting

- **Determine if additional consideration is necessary for found assets when identified with an original acquisition value of greater than $5M as identified by Cost Accounting including contacting Financial Compliance as appropriate.**

All Other Finance will:

- For sales not processed through Investment Recovery, credit proceeds of sales of surplus capital equipment and developmental program equipment for which there is property number identification to general ledger account number 1550000 for clearing by Property Accounting.
- Provide Property Accounting documentation of the sale. Documentation will include property number and sale amount.

30.1.7.4 Asset Retirement—Gains and Losses

Gains and losses on disposition of depreciable property or other capital assets are handled in accordance with the following guidance:

- On disposition of a capital asset, gains and losses are assigned to the cost accounting period in which the disposition occurs.
- The gain or loss for each asset disposed of is the difference between the net amount realized, including insurance proceeds in the event of involuntary conversions, and its undepreciated balance. For cost accounting, the allowable portion of the gain is limited to the difference between the original acquisition cost of the asset and its undepreciated balance and any remaining gain is unallowable.
- In the event that an insured asset is converted (i.e., replaced) involuntarily, any replacement asset shall be treated as a new asset. The new asset shall be valued at the acquisition cost in accordance with Section 30.1.3.
- Gains and losses arising from mass or extraordinary disposition may require a different accounting treatment. When necessary, agreement by the CACO of the accounting treatment will be requested. When necessary, the Senior Director – Government Accounting shall coordinate the accounting treatment with the CACO.
- Gains and losses on disposition of capital assets transferred between organizations and subsequently disposed of within 12 months from the date of the transfer will be assigned to the transferor. This does not apply to arm's-length transactions.
- The gain or loss recognized on disposition of an asset is assigned to the cost accounting period in which the disposition occurs. The gain or loss is allocated to cost objectives in accordance with the established practice of the product or service group.
- In transactions involving real property assets, established or disclosed practice requires sales proceeds to be apportioned based on fair relative values to land and building components. No sales proceeds are attributed to demolished buildings. Gains or losses on the sale of non-depreciable property, such as land, are not allocated to government contracts.
- For trade-ins, no gain or loss is recognized on disposition of a capital asset which is traded in for another, similar asset. The net book value of the traded-in asset shall be included in the acquisition cost of the newly acquired asset.

30.1.7.5 Disposition of Internal-Use Software

When there is an authorized and documented plan to retire an asset, depreciation should continue using the original estimated useful life for cost accounting purposes. At the date of disposition (e.g., software has

been removed or disabled and not able to perform its intended use), any remaining balance should be written down to zero.

For financial accounting purposes, the useful life must be shortened and the depreciation accelerated so that the net asset balance is zero at the date of disposition.

The responsible project management shall coordinate with the Financial Accounting to make the necessary adjustments for financial accounting purposes.

Software is retired from EAS AM when it is fully depreciated.

If facts and circumstances indicate a potential impairment of internal-use software, see subsection 30.1.8 for financial accounting guidance.

30.1.7.6 Asset Reinstatements

Property Accounting and Property Management will reinstate assets in EAS-AM upon notification, and will only reinstate those assets that have an original acquisition cost of $5,000 or greater. Any asset with less than $5,000 of original acquisition cost should be treated as a low-value asset (or expense) and not reinstated into EAS AM. Property Accounting will notify BU Cost Accounting of any found asset when identified with an original acquisition value of greater than $5M.

30.1.8 Discontinued Operations and Impairments

Note: This subsection is for financial accounting treatment only. Impairment charges are not charged to government contracts.

Vice President of Accounting and Financial Reporting or delegate shall:

- Provide guidance with respect to this subsection, including but not limited to consultation as to whether an event or circumstance is deemed to be a triggering event or a discontinued operation.

The Office of the Chief Financial Officer of Boeing International is responsible for providing guidance with respect to non-US entities for non-US disclosure and reporting requirements, in coordination with the Office of the Corporate Controller.

30.1.8.1 Classification of Long-Lived Assets or Asset Groups

The first step in applying the provisions of this subsection is to determine the appropriate classification of the long-lived asset (or asset group) under one of the following categories. Two different models apply, depending on classification as either:

- Held for sale.

- Held and used or to be disposed of other than by sale (i.e., all other long-lived assets [or asset groups]).

Financial Accounting shall identify whether a long-lived asset (or asset group) should be classified as held for sale, held and used, or to be disposed other than by sale. (Note: Consult with Financial Accounting Policy for assets that meet the criteria to be classified as Held for Sale, or for questions on interpretation of the following criteria)

Held for Sale

A long-lived asset (or asset group) shall be classified as held for sale if all of the following six criteria are met:

1. Management, with proper authority, commits to a plan to sell the asset.
2. The asset is available for immediate sale in its present condition, subject only to terms that are usual and customary for sales of such assets.

   If a condition exists that will not be transferred to the buyer of the asset (or asset group) and could affect the timing of the asset (or asset group) transfer, the asset (or asset group) is not available for immediate sale. For example, if a backlog exists that will not be transferred to the buyer but will affect the timing of the transfer, the asset group is not available for immediate sale. Alternatively, if backlog exists that will be transferred to the buyer and will not affect the timing of the transfer, the asset group is available for immediate sale.
3. An active program to locate a buyer and other actions required to complete the plan to sell the asset have been initiated.

   An active program to sell real property assets consists of officially engaging a broker to market the property for sale.
4. The sale of the asset is probable, and transfer of the asset is expected to qualify for recognition as a completed sale, within 1 year. See FASB ASC 360-10-45-11, formerly SFAS No. 144, "*Accounting for the Impairment or Disposal of Long-Lived Assets*", paragraph 31, for exceptions to this requirement.

   In the case of significant partial or total divestitures, board or CEO approval is required (see POL-1, "*Delegation of Authority to Authorize Business Transactions and Agreements and to Commit Company Resources*"). Also, no significant contingencies (e.g., labor negotiations or financing arrangements for the buyer) should exist. In addition, pending Hart-Scott-Rodino (HSR) rulings may or may not represent a significant contingency based on the circumstances. HSR is an antitrust law that requires companies to obtain approval from the FTC

before they merge. As this process is customary for most transactions, only special or significant concerns about HSR rulings would result in this condition not being met.

5. The asset is being marketed actively for sale at a price that is reasonable in relation to its current fair value.

   In the case of real property assets, the company will have engaged a broker to market the property for sale. For significant partial or total divestitures of an asset group, the company will have received a competitive offer from a prospective buyer. The offer is evidence that the company has a reasonable price.

6. Actions required to complete the plan indicate that it is unlikely that significant changes will be made to the plan or that the plan will be withdrawn.

If at any time, all six criteria are no longer met, the asset shall be reclassified as either to be held and used or to be disposed of other than by sale. (If the six criteria are met after an externally reported quarterly balance sheet date but before filing the applicable Form 10-K or 10-Q with the SEC, the asset shall continue to be classified as held and used in the financial statements when issued.)

Held and Used

A long-lived asset (or asset group) for which there are no intentions of selling or disposing is considered held and used. However, long-lived assets intended to be leased to third parties in the future should be classified as held and used assets.

To Be Disposed of Other Than by Sale

A long-lived asset (or asset group) to be abandoned, exchanged for a similar productive asset, or distributed to owners in a spin-off shall continue to be classified as held and used until disposed of.

An asset that will be abandoned is considered disposed of when it ceases to be used. An asset that will be exchanged for similar productive assets or distributed to owners is considered disposed of when it is exchanged or distributed.

30.1.8.2 Accounting Treatment

Held for Sale

A long-lived asset (or asset group) classified as held for sale shall cease being depreciated or amortized upon such classification and shall be measured at the lower of its carrying amount or fair value less the estimated cost to sell in the period in which the asset (or asset group) is classified as held for sale. Subsequently, if changes in estimated fair value

occur, a gain shall be recognized, but not in excess of the cumulative loss previously recognized.

If an asset previously held for sale is reclassified as held and used, the asset shall be measured at the lower of the following:

- Carrying amount before being classified as held for sale, adjusted for depreciation and amortization that would have been recognized.
- Fair value at the date the asset is reclassified as held and used. (See step 2 of impairment test in subsec. 30.1.8.3 to determine fair value.)

Financial Accounting shall perform analysis of possible impairment of long-lived assets (or asset groups) held for sale in accordance with the guidance in this subsection.

All asset impairment assessments shall be reviewed by Financial Accounting Policy.

Held and Used or to Be Disposed of Other Than by Sale

A long-lived asset (or asset group) classified as held and used or to be disposed of other than by sale (e.g., by abandonment in an exchange for a similar productive long-lived asset (or asset group) or distributed to owners) shall continue to be classified and treated as held and used until disposed of (as defined in subsec. 30.1.8.1). After disposal, the provisions of subsection 30.1.8.4 shall be applied and, in the case of abandoned assets, the accounting treatment for held for sale assets described above shall be applied.

Financial Accounting shall identify any triggering events indicating possible impairment of long-lived assets (or asset groups) to be held and used and to be disposed of other than by sale in accordance with subsection 30.1.8.3 and figure 30.1-5. Consult with Financial Accounting Policy as necessary. If a triggering event has occurred, the Financial Accounting shall perform steps 1 and 2 of impairment test (as applicable), in accordance with subsection 30.1.8.3 below to determine the appropriate impairment loss, if any, to recognize.

30.1.8.3 Testing Long-Lived Assets or Asset Groups for Impairment

Types of Assets Subject to Impairment Testing

All long-lived assets (or asset groups) are subject to impairment testing.

When to Test for Impairment

- Long-lived assets (or asset groups) to be held and used or disposed of other than by sale shall be tested for impairment when a triggering event occurs.

- Identification of events or circumstances that constitute triggering events is often subjective and difficult to assess. Consultation with Financial Accounting Policy is required if serious consideration is being given to a potential triggering event to ensure consistent application across BUs.

Financial Accounting performs a preliminary evaluation and informs BUs of sales activities (e.g., land and buildings) that may potentially qualify as either (1) held for sale or (2) held and used and meet the trigger described in figure 30.1.-5 regarding the expectation that an asset will more likely than not be sold before the end of its previously estimated useful life. Communication to BUs includes all relevant information behind the preliminary evaluation, including but not limited to estimated sales prices, estimated impairment, sales dates, repositioning costs, and authorization status.

Figure 30.1-5 includes examples of triggering events and types of evidence that may support the occurrence of a triggering event. The list is not all-inclusive.

	Trigger	**Examples**
a	Decrease in market price	Asset generally will meet this trigger if a loss from sale is expected.
b	Adverse change in use or physical condition	Asset generally will meet this trigger if the asset has become or is expected to become idle or vacant.
c	Adverse change in legal factors or business climate that affects value of asset	Asset generally will meet this trigger if there is an adverse change in legal factors or business climate as identified by an adverse change in program or contract revenue or cost estimates. Leased aircraft generally meet this trigger if the projected future lease rates decline, customer files bankruptcy, or lease is restructured for concessions. Leased aircraft generally meet this trigger if there is a decline in the collateral value determined by Boeing Capital Corporation.
d	Higher than expected acquisition costs	Asset generally will meet this trigger if there are higher than expected acquisition cost estimates as defined by subsection 30.1.3.3, which includes costs necessary to prepare the asset for initial use.

e	Continued operating or cash flow losses associated with the use of asset	Asset generally will meet this trigger if there are continued operating or cash flow losses as identified by program or contract revenue and cost estimates.
f	Asset is more likely than not to be sold or otherwise disposed of significantly before the end of its useful life	Asset will generally meet this trigger if there is at least a 50% chance of sale or disposition before the end of its previously determined useful life. Leased aircraft generally meet this trigger as identified by Investment Committee approvals. *Note: Boeing Capital leadership reviews intent to sell or hold the assets annually, as well as any time a new or amended lease is authorized.*

Figure 30.1-5. Examples of Triggering Events

How to Test for Impairment

If a triggering event has arisen, giving rise to an impairment test, the following analysis must be performed:

Step 1 of Impairment Test

- Compare the long-lived asset's (or asset group's) book value (original cost less any impairment recorded to-date, accumulated depreciation and amortization) to its estimated, undiscounted future net cash flows.

- Undiscounted future cash flows shall be estimated in the following manner:
    - Include only those amounts directly associated with or directly resulting from the operations and ultimate disposal of the asset or asset group.
    - Exclude interest charges that are expensed as incurred.
    - Do not include any effects from income taxes.
    - Use assumptions consistent with those incorporated into the company's planning cash flow projections (e.g., LRBP and forecasts) and update as necessary.
    - Exclude future capital improvements and other expenditures that would increase the service potential of the asset or asset group.
    - Use a probability-weighted approach when there is more than one possible outcome.
    - Include cash flow projections representing the remaining useful life of the primary asset within an asset group. If the primary asset's life is shorter than any other asset in the group, the term of cash flow projections included shall assume the sale of the asset group at the end of the remaining useful life of the primary asset.

To determine which asset in an asset group is the primary asset, first identify all significant long-lived assets in the asset group. Next, evaluate the following factors to help determine which of the asset group's significant long-lived assets is its primary asset. The following three factors should be considered to determine the primary asset:

- Would other assets of the group have been acquired by the entity without the long-lived asset?
- What is the level of investment required to replace the long-lived asset?

- What is the remaining useful life of the long-lived asset relative to other assets of the group?

If the sum of undiscounted future net cash flows is greater than the book value, no further action is necessary. If the book value is greater than the sum of undiscounted future net cash flows, step 2 must be performed to compute the amount of impairment that will be recorded for this asset or asset group.

Step 2 of Impairment Test

Compare the long-lived asset's (or asset group's) net book value (i.e., original cost less any impairment recorded to-date, less accumulated depreciation and amortization) to its fair value. Any excess of net book value over fair value represents impairment.

A long-lived asset's (or asset group's) fair value shall be determined using one of the following valuation techniques:

- Market approach. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities, including a business.
- Income approach. The income approach uses valuation techniques to discount future amounts (e.g., cash flows) to a single present amount. The discount rate should be obtained from the company's Treasury department.
- Cost approach. The cost approach is based on the amount that currently would be required to replace the service capacity of an asset (often referred to as *current replacement cost*).

  Valuation techniques used to measure fair value shall be applied consistently, unless a change in the facts and circumstances causes another technique to become more representative of fair value. Revisions resulting from a change in the valuation technique or its application shall be accounted for as a change in accounting estimate, in accordance with FASB ASC 250-10, formerly SFAS 154, "*Accounting Changes and Error Corrections*". (*Note: a change in accounting estimate shall be accounted for in the period of change and future periods.*)

Valuation techniques consistent with the market approach, income approach, or cost approach shall be used to measure fair value using the following inputs, listed in order of preference (i.e., level 1 inputs are most reliable, and level 3 inputs are least reliable):

a. Level 1 inputs: current quoted market price in active markets for identical assets or liabilities.

b. Level 2 inputs: other than quoted prices either directly or indirectly observable, including:

i. Quoted prices for similar assets or liabilities in active markets.

ii. Quoted prices for identical or similar assets or liabilities in markets that are not active (i.e., markets in which there are few transactions for the asset or liability, the prices are not current, price quotations vary substantially either over time, or little information is released publicly).

iii. Inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates and yield curves observable at commonly quoted intervals, volatilities, estimated prepayment schedule, loss severities, credit risks, and default rates).

iv. Inputs derived principally from or corroborated by observable market data by correlation or other means (market-corroborated inputs).

c. Level 3 inputs: unobservable inputs that reflect the company's own assumptions about the data that market participants would use in pricing the asset or liability, if that data is available without undue cost and effort.

An impairment loss for an asset group reduces historical cost basis of the assets of the group to the revised fair value and resets accumulated depreciation to zero. The loss is allocated to the long-lived assets of the group on a pro rata basis using the relative book values of those assets. The loss allocated to an individual long-lived asset of the group should not reduce the book value of that asset below its fair value whenever that fair value is determinable without undue cost and effort. If there is only one long-lived asset in the asset group, the entire impairment is allocated to that asset.

Once an asset has been impaired, the adjusted book value of the long-lived asset shall be the new cost basis (accumulated depreciation is set back to zero) to be depreciated or amortized over the remaining useful life of the asset, and the impairment cannot be reversed.

All Step 1 and Step 2 asset impairment tests shall be reviewed by Financial Accounting Policy.

30.1.8.4 Reporting Discontinued Operations

Financial Accounting shall identify whether the disposition or classification as held for sale of a long-lived asset (or asset group) constitutes a discontinued operations, in accordance with the guidance in this subsection. Consult with Financial Accounting Policy as necessary.

For purposes of this subsection, a component is defined as a set of assets and liabilities that comprises operations and cash flows and clearly can be distinguished operationally and for financial reporting purposes (i.e., income and cash flow statements that can be prepared for a component). A component may be a reportable segment (as disclosed in the company's segment reporting footnote), operating segment, reporting unit (as defined in the goodwill impairment testing records maintained by Financial Accounting Policy), subsidiary, or asset group.

Consult with Financial Accounting Policy for assistance in determining whether a set of assets is considered a component.

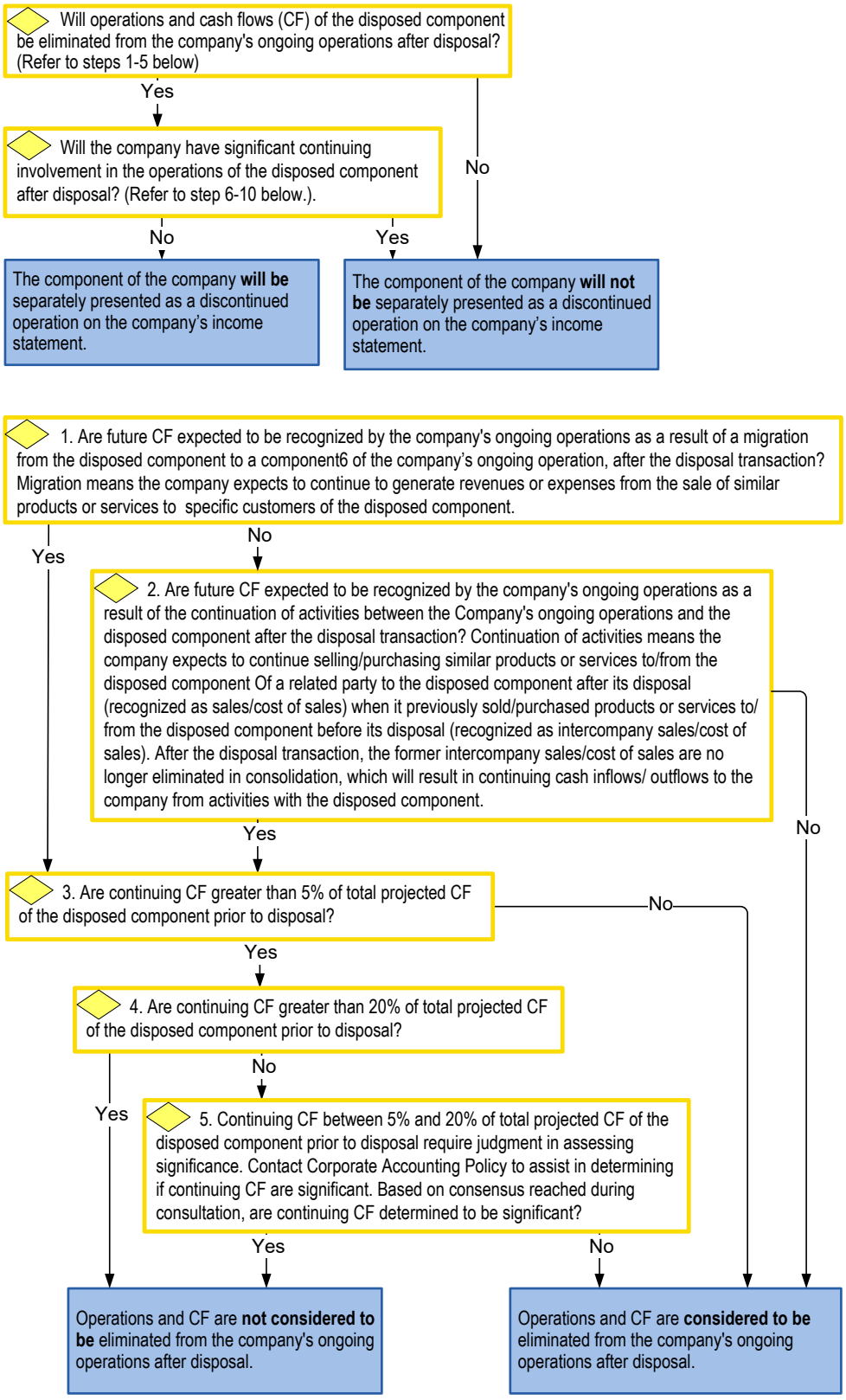
A component of the company that either has been disposed of or is classified as held for sale shall be presented separately as a discontinued operation on the company's income statement if both of the following conditions are met (see fig. 30.1-6 for further guidance on each condition):

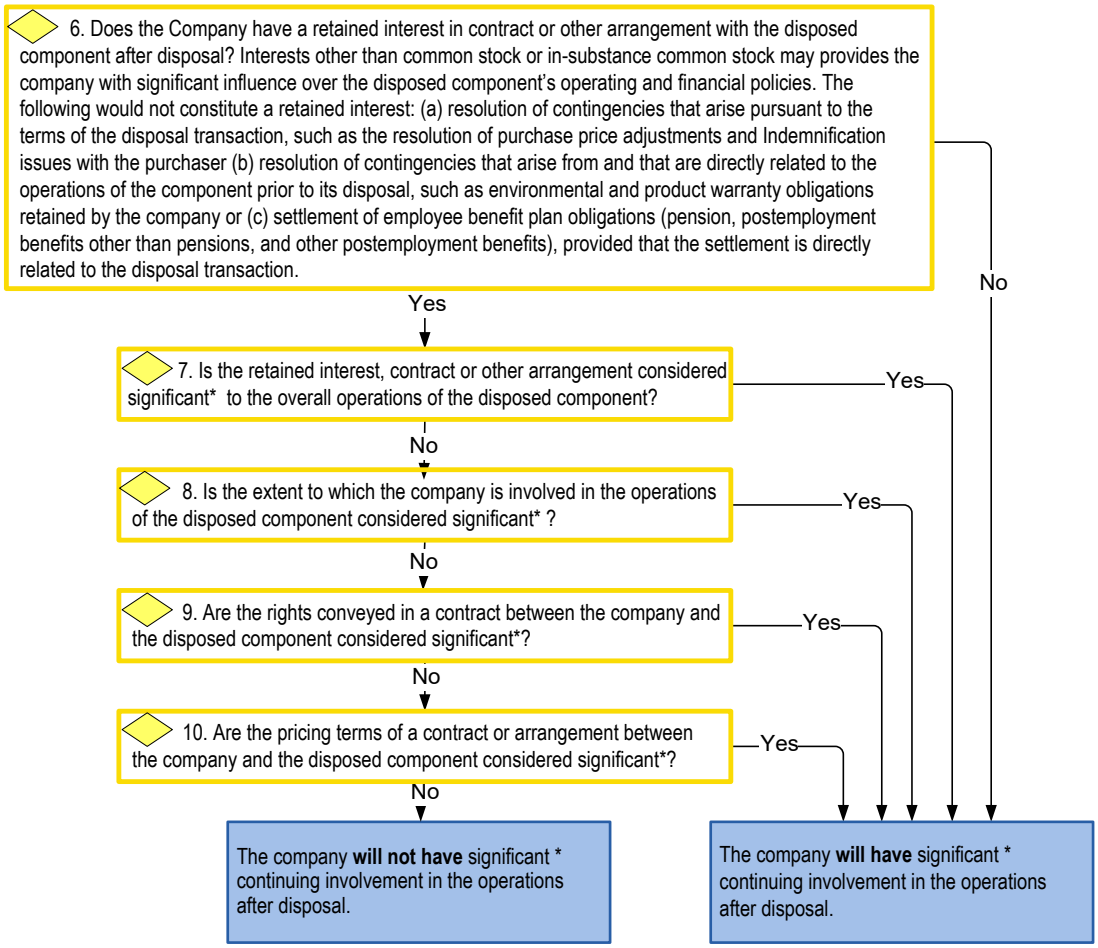
- The operations and cash flows will be or have been eliminated from the company's ongoing operations.
- The company will not have any significant continuing involvement in the operations after disposal.

A gain or loss recognized for a long-lived asset (or asset group) classified as held for sale that is not a component shall be included in income from continuing operations.

Identification of events or circumstances that constitute discontinued operations is often difficult to assess; therefore, consultation with Financial Accounting Policy is required if consideration is being given to a potential discontinued operation.

Figure 30.1-6 that follows is a decision tree to determine whether a component of the company that has been disposed of or is classified as held for sale, referred to within this subsection as the disposed component, or shall be presented as a discontinued operation.





* *Significance should be evaluated using both quantitative and qualitative factors based on the overall operations of the disposed component.*

Figure 30.1-6. Discontinued Operation Decision Tree

30.1.8.5 Presentation and Disclosures for Discontinued Operations and Impairments

Financial Accounting shall record any impairments or disposals of long-lived assets (or asset groups) to support financial statement presentation requirements (including possible presentation of discontinued operations), in accordance with the guidance in figure 30.1-7 below.

Financial Accounting shall notify SEC Reporting of any impairments or disposals of long-lived assets (or asset groups) to support financial statement disclosure requirements (including possible disclosure of discontinued operations), in accordance with the guidance in figure 30.1-7 below.

Figure 30.1-7. Presentation and Disclosures for Discontinued Operations and Impairments

Figure 30.1-7 provides financial statement presentation and disclosure guidance for discontinued operations and impairments of assets held for sale, held and used, and held to be disposed of other than by sale are classified and disposed as appropriate.

Financial statement sections	Assets held and used or to be disposed of other than by sale	Assets held for sale*	
		Continuing operations	Discontinued operations
Balance sheet classification;	Classified as either PP&E, customer financing, or other assets.	Generally classified as PP&E. For Boeing Capital, customer financing assets remain classified as customer financing as Boeing Capital's business is customer financing in nature. All other customer financing assets are reclassified as PP&E as the company no longer has a long-term intention to lease the property.	Notify Financial Accounting of financial statement line-item balances.

Income statement classification;	Impairment of assets should be recognized in the same line item as the associated depreciation (i.e., cost of products, cost of services, or G&A).	An impairment loss and any subsequent changes in an impairment loss should be recognized in the same line item as the associated depreciation (i.e., cost of products, cost of services, or G&A) except when impairment results from a disposal of a business, in which case the impairment is recognized in gain or loss on dispositions. A gain or loss recognized from the sale of a long-lived asset (or asset group) shall be included in income from continuing operations (i.e., gain or loss on dispositions).	The income (or loss) and any gains (or losses) are reported as a separate component of income before extraordinary items and the cumulative effect of account changes. Prior periods are recast to show comparable information.
Cash flow classification;	Impairments are recognized as noncash items in operating activities.	Impairments are recognized as noncash items in operating activities. PP&E asset dispositions are classified as investing. Customer financing asset dispositions are classified as operating.	Cash flows are reported as separate line items in the operating, investing, and financing sections, as appropriate.

*An asset (or asset group) classified as discontinued operations also is classified as held for sale. Not all held-for-sale assets (or asset groups) also are classified as discontinued operations. See subsection 30.1.8.4 to determine whether a discontinued operation classification is appropriate for a held-for-sale asset (or asset group).

Contact Financial Accounting Policy and SEC Reporting for additional disclosure information required for asset impairments, held for sale, or discontinued operations.

Exhibit A Capitalizing Tangible General Purpose Assets—Examples

This subsection provides examples and discussion regarding a variety of capitalization scenarios for different types of tangible general purpose assets. Be aware that differing circumstances may require different accounting treatments.

A.1 Computing Equipment, Desktop Application and Operating Software, and Telecommunications Equipment

1. An organization requires a general purpose computer. The computing system that meets their requirements for initial use includes a keyboard, central processing unit (CPU), monitor, operating system software, boards that provide for expanded memory and communication, and various application software programs. The cost of the package is $6,500, with none of the components costing more than $900. The application software costs $700. A computing system is managed as an asset accountability unit (AAU) and includes all integral components required to prepare for its initial general purpose use. Application software is not considered an integral part of the AAU and, therefore, should be expensed as incurred by the Business Unit. The computing system should be capitalized at a cost of $5,800 regardless of how the individual components are ordered, initially installed, or subsequently replaced or disposed of.

2. The company purchases a personal computer that meets the minimum acquisition cost and service life thresholds. Although the personal computer is expected to be used solely for a specific independent research and development (IR&D) project, it is of a generic configuration and will be used in a normal and customary manner (i.e., it is not a special purpose asset). Because the computer meets the minimum acquisition cost and service life thresholds and is a general purpose asset, the cost of the computer must be capitalized as a general purpose asset rather than charged task direct to the project.

3. Improvements costing $10,000 are made to a general purpose computer that has a replacement cost of $35,000 and an expected life of five years. The project extends the computer's economic life for an additional 10 months, but does not increase the productivity of the computer. Because the project neither satisfies the service life or productivity criteria of a betterment and improvement, the cost is expensed.

4. Improvements costing $10,000 are made to a general purpose computer that has a replacement cost of $35,000. The improvements double the number of users able to use the computer but do not extend the service life of the computer. Because the improvement provides additional capacity or capability (i.e., increases productivity) and the improvement cost is more than 25 percent of the replacement cost of the computer, the cost of the improvement is capitalized as a betterment and improvement.

5. Installation costs of $5,000 are required to install a newly acquired $30,000 general purpose computer. These costs are necessary to bring the asset into initial use and are capitalized as part of the acquisition cost of the computer.

6. A computer that meets the minimum acquisition cost and service life thresholds is purchased for use on a specific IR&D project. The computer will be rewired and reconfigured in IR&D testing. The asset could not be brought back to its general purpose use without spending in excess of 25 percent of its acquisition cost. The computer is charged to the IR&D project as a special purpose asset and is expensed in the current period.

7. Non-severable components of local area networks (LAN) are installed in an existing building at a cost of $200,000. These components consist of permanently installed items such as cable and associated hardware. LANs provide a different capability to the existing building, thereby increasing the productivity of the building. The cost of the non-severable LAN components is capitalized as a betterment and improvement to the building.

8. The operating system software, which has been considered part of the computer hardware AAU, for a partially depreciated large-scale computer is completely replaced at a cost of $250,000. The new software increases the hardware's computing rate of output. Because the new operating software exceeds the minimum cost thresholds for betterments and improvements and increases productivity, the cost is capitalized.

9. An operating system software upgrade is installed on a server at a cost of $4,000. The server had an acquisition cost of $25,000. Because the operating software cost does not exceed the minimum threshold for betterments and improvements, the cost is expensed.

Figure A.1-1. Capitalizing Computing Equipment, Desktop Application and Operating Software, and Telecommunications Equipment

A.2 Factory and Shop Machinery and Equipment

1. In outfitting a new assembly line, small LVA tools valued at $55,000 are acquired. This complement of small tools is expected to be generally replaced within a year as a result of loss, theft, breakage, and physical wear and tear. These tools do not meet either the minimum service life or cost threshold for capitalization as an original complement. Therefore, the cost of the small tools and any future replacements is expensed as incurred.

2. A new building is placed into service. In preparing the building for its intended use, a number of equipment items are acquired. Each item has a service life of more than one year. The items cost less than $5,000 each but in the aggregate amount to $110,000. Because all items meet the minimum service life threshold and the $100,000 criterion for original complement of low-cost equipment, these costs are capitalized.

   Note: When applying the $100,000 threshold, all categories of assets in all business units are combined. For example, $60,000 of low-value Commercial Airplanes shop tools and $70,000 of ES low value office furniture would exceed the $100,000 threshold when combined.

3. A complex factory machine is purchased and installed for a price of $200,000. Because the workers assigned to operate the machine are unfamiliar with its use, the vendor will provide training to an initial group of employees. If the cost for this training is included in the price of the asset (i.e., the price of the asset will be $200,000 regardless of whether or not the training is provided by the vendor), then the asset is to be capitalized at a cost of $200,000. If the cost of the training is separate from the cost of the asset (i.e., the asset will cost $180,000 if the training is not provided, and $200,000 if the training is provided), then the asset is to be capitalized at a cost of $180,000 and the training costs of $20,000 are to be expensed as incurred.

   Note: It is the responsibility of the buying organization to ensure that the purchase documentation includes the cost segregation necessary to comply with this accounting treatment.

4. A factory machine is destroyed in circumstances covered by insurance (e.g., flood, earthquake) and is replaced. The destroyed factory machine is retired and a gain or loss recognized based on its net book value adjusted for insurance proceeds. The acquisition of the replacement factory machine represents a separate transaction and will be capitalized at its acquisition cost without regard to insurance proceeds.

5. A power supply for a heavy press is replaced. The power supply and press have been controlled as separate AAUs and each meets the minimum service life and acquisition cost thresholds. The new power supply is capitalized as a separate AAU, and the old asset is retired.

6. Two machines are modified to increase their output at a cost of $5,000 each. The replacement cost of the first machine is $15,000 and the second one is $35,000. The cost of modifying the first machine exceeds the betterment and improvement criterion of 25 percent of the replacement cost of the machine and must be capitalized. The cost of modifying the second machine does not exceed the betterment and improvement criterion of 25 percent of the replacement cost of the machine or $100,000 and is expensed as incurred.

7. Modification of a filter on a capitalized factory parts production machine costs $120,000. The modification is required by new environmental regulations and will enable the machine to screen out a greater number of contaminants. The filter on this machine has been capitalized as part of the machine AAU. The modified filter does not increase the capability or productivity of the machine (i.e., does not increase parts production); therefore, the cost of the modification must be expensed as incurred.

8. Modification of a filter costs $120,000 on a capitalized factory scrubber unit whose productivity is measured in terms of its ability to screen out contaminants. The modification will enable the factory scrubber to screen out a greater number of contaminants, thereby increasing the productivity of the factory scrubber. The filter on this factory scrubber has been capitalized as part of the factory scrubber AAU. Because the modification increases the productivity of the scrubber and costs more than $100,000, it is capitalized as a betterment and improvement.

9. A special equipment foundation is required to install a newly acquired $130,000 factory production machine. The freight charges on the machine are $2,000. Foundation construction and installation labor and materials, including the rental of a cement mixer, cost $15,000. As costs necessary to bring the asset into initial use, these costs are to be capitalized as part of the acquisition cost of the machine.

10. As part of a rearrangement and relocation, machinery and equipment foundations are relocated at a cost of $20,000. These are not capitalizable betterment and improvement costs because they do not increase the service life or productivity of the assets and do not represent costs necessary to bring the asset into initial use.

11. A production machine, whose design and construction enables it to be used on multiple commercial programs, is assigned to provide dedicated support to a single commercial program in a dedicated program facility. Based on the longevity of the program, this machine is not expected to support other programs during its service life. This machine is capitalized as a general purpose asset. An asset that may be used on multiple contracts, programs, or projects must be classified as a general purpose asset even when the asset is expected to be used on a single contract, program, or project for its entire service life.

12. Various jigs, dies, fixtures, molds, and patterns are acquired for a program. These tools were designed and built to be used in the production of parts that are unique to a specific commercial program. Each tool may not be used on any other current or anticipated future program without requiring modification and alteration costs greater than $100,000 or 25 percent of its replacement value. These tools are considered special purpose assets and charged as tooling cost.

13. Material handling equipment is designed and constructed to meet special handling requirements necessary to accommodate new design and material technologies that are unique to a specific program. Although the equipment may be used on other programs that use traditional design and material technologies, such use would result in an impractical and inefficient utilization of the capabilities of the equipment unless substantial modification is performed at a cost in excess of $100,000 or 25 percent of the cost of the equipment. There are no current or future programs that are reasonably expected to require this type of equipment. This equipment is treated as a special purpose asset.

14. A parts-holding fixture is initially designed and constructed for the production of parts that are specific to a single commercial program. The fixture incorporates new production innovations that enable it to adjust to a wide range of part sizes and shapes. Because of its built-in flexibility to accommodate a wide range of part sizes and shapes, this equipment is expected to be used in the future on multiple programs or projects. The cost of this equipment is capitalized as a general purpose asset.

15. An air-handling unit is replaced on the roof of a building at a cost of $200,000. The air-handling unit is a separate, stand-alone AAU not supporting the building's general air handling requirements. The cost of replacing the air-handling unit is capitalized separately (assuming the minimum service life threshold is met).

Figure A.2-1. Capitalizing Factory and Shop Machinery and Equipment

A.3 Land and Buildings

1. An inside portion of an existing Boeing owned building is demolished and a new white room manufacturing facility is built in that space at a cost of $1 million. Incidental to the project, the location of a cafeteria is changed without a significant change to its overall capacity. The white room and cafeteria are considered part of the building AAU. The addition of the white room provides an added capability and, therefore, its cost must be capitalized as a betterment and improvement to the building (i.e., asset addition). The demolition cost to prepare for the white room is capitalized because this partial demolition met the criteria for capitalization. Changing the location of the cafeteria is considered rearrangement and relocation cost. Costs associated with changing the location of the cafeteria are expensed as incurred. Costs of additions of AAUs (e.g., personal property) are separately capitalized.

   Note: When reasonably identified or estimated on a separate basis, the costs of enhanced components or modules are compared to the betterment and improvement criteria and capitalized or expensed accordingly. Replacement of like-kind components or modules, rearrangements, relocations, and maintenance and repair costs, when practically identified or estimated on a separate basis, are expensed as incurred in all cases.

2. Transformers are replaced on the roof of a building at a cost of $200,000. The operation of the transformers is interdependent upon and an integral portion of the building's electrical utility systems and is not a separate capital asset. The cost of replacing the transformers is expensed as incurred because it does not increase the service life or productivity of the building.

3. A tile floor in an office building is covered with carpeting at a cost of $110,000. The project, while meeting rising employee cosmetic standards, does not increase the service life or productivity of the building. Also, the original tile floor was capitalized as part of the building AAU. The cost is expensed as incurred.

4. An office building is renovated at a cost of $2 million. The renovation is expected to extend the service life of the building (which had an original life of 40 years) by 15 years. An integral part of the renovation project is to repair the roof of the building. The cost of this repair is separately identified. Although this roof repair is made concurrent with the renovation that is extending the life of the building, the roof repair cost is treated as repair and maintenance. Costs for repair and maintenance are expensed as incurred. The balance of the renovation is capitalized as a betterment and improvement.

5. A new building is constructed and capitalized with a 40-year life. The cost of the original roof is included in the capitalized value because it is part of the original building AAU. After 15 years it is determined that the roof of the building needs to be replaced at a cost of $150,000. The cost of the roof must be expensed as incurred because it does not increase the productivity of the building or extend its service life beyond its original 40-year life.

6. A guard room costing $90,000 is added to a building that has a replacement cost of $1 million. The guard room does not qualify as a betterment and improvement because the cost is less than $100,000 and less than the 25 percent of replacement cost. The cost of the guard room is expensed as incurred.

7. A new wing costing $800,000 is added to an existing building that has a replacement cost of $5 million. The cost of the addition exceeds the $100,000 threshold that is required for capitalization of betterments and improvements. The cost of the addition is capitalized as a betterment and improvement.

8. Rearrangement and construction of offices and meeting rooms in an area that was formerly an open bay office area costs $200,000. No other renovation or modernization is taking place. The project does not increase the service life or productivity of the building and does not represent a change in use (e.g., office space to office space). The project is expensed as incurred as rearrangement and relocation.

9. A laboratory area is constructed for $200,000 in an area that was formerly an office area. The project is considered to be a productivity improvement because it is a change in use (e.g. office to laboratory). The cost is capitalized as a betterment and improvement.

10. As part of a larger renovation project that will extend the service life of the building by 10 years, offices and meeting rooms costing $200,000 are built in an area that was formerly an open bay office area. The cost of building the new offices and meeting rooms is expensed as incurred as rearrangement and relocation. The remaining elements of the renovation must be separately considered to determine the proper classification as capital or expense.

11. Refurbishment of a facility in which maintenance had been delayed for many years costs $500,000. The refurbishment includes repairs of buildings and roofing, replacement of lighting and other building components, rework of utility systems to reach health and safety standards, and other overdue painting and repair work. The project does not increase the service life of productivity of the facility. The cost of this maintenance is expensed as incurred.

12. Sound insulation is added in a factory area to help protect employees' hearing. The addition of sound insulation, which costs $800,000, does not increase the service life or productivity of the building. The addition merely maintains the building's service life and productivity at the expected level by meeting current health standards. The cost is expensed as incurred.

13. Seismic upgrades are made to an existing building at a cost of $1 million. The seismic upgrades represent a major renovation effort to strengthen and reinforce (not replace) certain basic structural features of the building. Although the service life of the building is arguably extended, the improved nature of the design of the building provides a basis for capitalization. Furthermore, there is no pyramiding of costs where the original cost of the building excludes such design enhancements. The cost of the seismic upgrades is capitalized as a betterment and improvement.

14. As part of a rearrangement and relocation, $200,000 is spent on changes to an existing building, including movement of partitions and revision and updating of building installations (such as light, ventilation, heat, and similar utilities, including minor extensions to secondary utility systems). These changes do not increase the service life or productivity of the building. The cost of the changes is expensed as incurred.

15. A five-acre tract of land is purchased for $2 million. Closing costs and fees on the transaction totaled $105,000. All of these costs with the exception of prorated property taxes are part of the acquisition cost of the land and are capitalized.

16. A section of a data center is renovated to accommodate the addition of several new capital servers. The cable and wire are a non-severable asset that will remain in the building and may be available for use by other equipment if the servers are removed. The cable and wire meeting the capitalization criteria associated with the installation of the server are capitalized as building equipment.

17. The company purchases contaminated land requiring significant clean-up. In accordance with the purchase agreement, the $1,000,000 purchase price of the land is reduced by the $200,000 estimated cost of the clean-up such that the net price paid for the land is $800,000. (Note that the $1,000,000 purchase price of the land is considered to be the fair value of the land exclusive of any environmental contamination). The acquisition cost of the land is $1,000,000 which is the sum of the $800,000 net price paid for the land and the $200,000 reserve established for the estimated cost of the clean-up.

If the future actual clean-up costs are equal to the $200,000 reserve, no adjustment to the acquisition cost will be required. The acquisition cost of the land remains $1,000,000.

If future actual clean-up costs are in excess of the $200,000 reserve, the excess costs are expensed as incurred. The acquisition cost of the land remains $1,000,000.

If future actual clean-up costs are less than the $200,000 reserve, the acquisition cost will be credited by the difference between the $200,000 reserve and the actual clean-up cost. If, for example, the actual clean-up costs are $100,000, the acquisition cost of the land will decrease to $900,000 and the remaining reserve of $100,000 will debited to zero.

18. Soil contamination is discovered at the construction site for a new building. Clean-up of the construction site must be completed before the construction activities can resume. Clean-up costs of Boeing real property do not qualify as a capitalizable site preparation cost. Although the need for clean-up was discovered because of the construction activity, the clean-up must be treated in the same manner as other environmental expenses and cannot be viewed as a normal and predictable cost component of a building. Therefore, the cost of the clean-up activities is expensed as incurred for cost accounting purposes. For financial accounting purposes, see section 35.2.3 for the accounting treatment of clean-up costs that do not qualify as capitalizable site preparation costs.

19. Clean-up activities are performed by Boeing on Boeing land because of soil contamination from leaking underground tanks. The contamination was unknown at the time the land was purchased. To perform these clean-up activities, the company acquires a groundwater treatment system that meets the minimum acquisition cost and service life thresholds. The cost of the groundwater treatment system is not considered to be general-purpose in nature. Groundwater treatment systems are designed and acquired to remediate specific chemicals at a specific geographic site. When treatment of the contamination at that site is complete, the equipment is removed and disposed. The groundwater treatment system equipment is not relocated and reused at another site. Therefore, the cost of the groundwater treatment system is expensed as incurred for cost accounting purposes. For financial accounting purposes, capitalization of equipment, such as a groundwater treatment system, is permitted if the purpose of the equipment is to mitigate or prevent environmental contamination that has yet to occur and that otherwise may result from future operations or activities. Since this groundwater treatment system is being used to perform clean-up activities for existing contamination it should not be capitalized. See section 35.2.3 for the financial accounting treatment of this groundwater treatment system.

20. A subcontractor is hired by Boeing to clean up a non-Boeing dump site. The clean-up will be performed using subcontractor-owned waste treatment equipment. Because this is a non-Boeing land site and there are no Boeing assets involved, there is no basis for capitalizing the costs associated with this clean-up. The cost of the clean-up activities is expensed as incurred for cost accounting purposes. For financial accounting purposes, see section 35.2.3 for the accounting treatment of clean-up costs.

21. An environmental sampling van is acquired at a cost of $30,500 to test contaminated soil, air quality, and radiation levels at multiple Boeing locations. The van is capitalized since it is general-purpose in nature, and meets the minimum acquisition cost and service life thresholds.

Figure A.3-1. Capitalizing Land and Buildings

A.4 Office Equipment, Furniture, and Fixtures

1. A renovation costing $500,000 is made to an office building that extends the useful life of the building by more than one year. In addition to the cost of renovation, new modular furniture is purchased for the renovated office space. All single components cost less than $5,000 each, but the total cost of the furniture is $120,000. Because the new modular furniture cost is not incurred for the initial outfitting of the building, it does not qualify as an original complement and is expensed as incurred. The $500,000 renovation cost is capitalized.

2. Old office furniture is replaced with new modular furniture in an existing Boeing owned or -leased office area at a cost of $105,000. The individual furniture components cost less than $5,000 each. The furniture is not an original complement of low-cost equipment because it is going into an existing office are. The cost is expensed as incurred.

3. New office areas are constructed within an existing building. The new office areas include conversion of existing manufacturing areas and construction of new floor space and therefore is capitalizable. Part of the project includes the purchase of $250,000 for furniture components that cost less than $5,000 each. The cost of the furniture is capitalized as an original complement to a betterment and improvement.

Figure A.4-1. Capitalizing Office Equipment, Furniture, and Fixtures

A.5 Test Equipment

1. A general purpose piece of test equipment with a life of 15 months is acquired at a cost of $5,700. Because the asset meets the minimum service life and acquisition cost thresholds, the cost of the asset is capitalized.

2. A general purpose piece of test equipment and a power supply that is essential to the operation of the test equipment are purchased. Both items meet the minimum service life and acquisition cost thresholds. Although the cost of the power supply is separately stated on the invoice, the items are not separately managed assets for purposes of modifications, replacements, relocations, and retirements. The test equipment and power supply are capitalized as a single AAU.

3. A general purpose piece of test equipment and a power supply are purchased. The power supply is in its own casing and is connected to the test equipment by wires only. The power supply is designed to provide versatile support to a number of different test equipment items. The cost of the power supply is not separately stated, but the separate costs can be estimated. Based on this estimate, both items meet the minimum service life and acquisition cost thresholds. The test equipment and power supply are managed as separate assets. The test equipment and the power supply are treated as separate AAUs, and the costs are capitalized separately.

4. Special handling and installation is required for a piece of newly acquired general purpose test equipment. The equipment meets the minimum service life and acquisition cost thresholds. Freight charges, handling, and installation labor and material costs are incurred. Because these costs are necessary to bring the asset into its initial use, these costs are capitalized as part of the acquisition cost of the test equipment.

5. A piece of test equipment is purchased for use on a specific IR&D project at a cost of $10,000. The equipment is of a unique configuration with no reasonable general purpose application and, therefore, is treated as a special purpose asset and charged as expense to the benefiting IR&D project.

6. A piece of test equipment was properly charged task direct to firm fixed price contract A as a special purpose asset. Initially, there was no anticipated use for this equipment after the completion of the contract A; however, the equipment was later modified for use on contract B of a program that was recently awarded. The unanticipated use of this equipment on contract B does not require an adjustment to the costs of the equipment, which were properly recorded against contract A based on then-existing facts and circumstances. The acquisition costs of this equipment will remain charged against contract A. Assuming the required modifications for use by contract B do not enable the equipment to serve a general purpose, the cost of the modifications is directly charged to contract B. If the required modifications for use by contract B enable the equipment to serve a general purpose and the modifications qualify as a betterment and improvement, then the cost of the modifications is capitalized as general purpose equipment.

7. Costs for a piece of equipment being developed for the factory environment as part of a proof-of-concept internal application development (IAD) project are expensed as incurred. During the project, it is determined the project will be successful and the decision is made to use the equipment in the factory environment. At the conclusion of the project, the estimated replacement cost of the equipment is determined to be $5,500. The equipment is capitalized as an asset for $5,500.

8. A computer is acquired to be used in a lab for testing purposes. Under its current configuration it can function as a computer in other applications. Because an asset is classified based on its functionality the computer will be classified as a computer.

9. A computer is acquired and modified to an extent that it can no longer function as a computer in other applications without significant modification. The modified configuration only allows the asset to function as a piece of test equipment. Because the asset's functionality has been converted to test equipment, it will be classified and capitalized as such.

Figure A.5-1. Capitalizing Test Equipment

A.6 Other

1. Asset A with a Net Book Value (NBV) of $5,500 and a fair value of $5,000, is traded-in for a like-kind asset B, with a fair value of $6,000. Cash of $1,000 is paid along with asset A to acquire asset B. Asset B will be capitalized at $6,500, which is made up of NBV of asset A of $5,500 plus the cash paid of $1,000. The fair value of asset A is not a factor in determining the capitalized cost of asset B. The NBV of asset A, $5,500, is retired from the accounting records, and cash is credited for $1,000.

Figure A.6-1. Other Capitalizations

Exhibit B Capitalizing Internal-Use Software - Examples

This exhibit provides examples and discussion regarding capitalization scenarios for internal-use software. Be aware that differing circumstances may require different accounting treatments.

Item	Capitalization
A.	The company purchases a site license for a group of internal-use software modules and associated maintenance, consulting, and training services. The total value of the purchase contract must be allocated to each of the elements of the contract based on relative fair values. The fair value of the maintenance, consulting (except for contract design, coding, and testing), and training will be expensed. The fair value of the internal-use software module license and contract design, coding, and testing is eligible for capitalization, if the total capitalizable cost meets or exceeds the $10 million threshold and the license covers 1 year or longer.
B.	A BU undertakes the development of a new companywide accounting system using a purchased internal-use software package. The accounting system is considered a single AAU. The cost or allocated fair value of the software modules equals $7 million. The project application development phase includes 40 person-years of software design, coding, and testing activity, as well as 10 person-years of management and administration. The burdened labor for the 40 person-years of design, coding, and testing activity (approximately $3.5 million) is eligible for capitalization. The remaining project activities are user training and customer support. The costs of management and administration, training, and customer support are expensed. Because the cost eligible for capitalization exceeds the $10 million threshold, the implemented system is capitalized at

	$10.5 million ($7 million for the cost of software, plus $3.5 million for burdened labor for project personnel).
C.	A BU undertakes the development of a system that is composed of three unrelated, independent modules. Because the modules are independent, they are treated as separate AAUs. Each individual AAU must meet the capitalization criteria. Capitalization occurs and depreciation begins when each AAU is complete, tested, and ready for its intended use.
D.	Boeing undertakes a multiyear development of a new performance tracking system. The tracking system is considered a single AAU. Costs eligible for capital treatment during the application development phase of the project include 80 person-years of design, coding and testing activity ($8.8 million burdened labor) and $1.6 million in software associated with data conversion. There is no other purchased software involved. Because the costs eligible for capital treatment exceed the $10 million dollar threshold, the costs are capitalized. Capitalization occurs and depreciation of the performance tracking system begins when the system is complete, tested, and ready for its intended use.
E.	A BU undertakes the development of a new internal-use software system. The total cost eligible for capitalization is less than the $10 million threshold. All cost associated with the project is expensed as incurred.
F.	An engineering organization purchases a $12 million software package for use in a research and development project, and there is no alternative future use for the software. Because research and development cost is not eligible for capitalization as internal-use software, the cost is expensed as incurred.
G.	A BU undertakes a multiyear internal-use software development project. During the preliminary design phase, all costs are expensed as incurred. At the end of the preliminary design phase, the project team recommends an approach and project plan to the responsible executive or management board. When the responsible executive or management board formally approves the approach and project plan, the collection of capital costs begins, assuming it meets the $10 million and 1 year thresholds. Capitalization occurs and depreciation begins when the system is complete, tested, and ready for its intended use. All other costs associated with the project are expensed as incurred.

H.	A BU undertakes the development of an enterprise wide internal-use system. Costs for the project are divided into four specific statements of work. The first category is the core system that benefits all BUs. The other three categories relate to cost of implementation specific to each BU. Costs eligible for capitalization exceed the $10 million threshold for both the core system and one BU. Eligible costs are capitalized as separate AAUs for the core system and the BU incurring more than $10M in capitalizable costs. The costs eligible for capitalization are less than the $10 million threshold for the other two BUs. The costs associated with the other two BUs are expensed as incurred.

Figure B-1. Capitalizing Internal-Use Software

Exhibit C Examples of Depreciation Applications

Note: Depreciation calculations are examples only and are not intended to reflect specific system calculations or factors. EAS-AM calculates annual depreciation based on net book value and remaining life at the beginning of each calendar year.

C.1 Straight-Line

Definition: A method of depreciation in which the costs or other basis of the asset is deducted in equal amounts over the asset's useful life.

Scenario

A company recently purchased a large machine for use in manufacturing its product. The machine was purchased on January 1, 2014, for an original cost of $1,195,000. The residual or salvage value is $0. The useful life is 5 years.

Parameters

Cost: The original cost of the asset.

Residual or salvage value: The value the asset will have at the end of its expected useful life.

Useful life: The period(s) over which depreciation is measured. For this example, 1 period = 1 year.

Convention: Half year

Example

Cost: $1,195,000

Residual or salvage value: $0

Useful life: 5 years

Convention: Half year

Calculation

(Cost–residual value)/useful life = 1 year's depreciation

Calculate half year convention for years 1 and 6.

Step-by-Step

1. ($1,195,000 - $0)/5 = $239,000. $239,000/2 = $119,500 (year 1)
2. ($1,195,000 - $0)/5 = $239,000 (years 2 through 5)
3. ($1,195,000 - $0)/5 = $239,000. $239,000/2 = $119,500 (year 6)

Year	Depreciation expense	Accumulated depreciation	Remainder to depreciate

Figure C.1-1. Straight-Line Depreciation Example

C.2 Sum of the Year's Digits (SOYD)

Definition: A method of accelerated depreciation based on a formula developed from the expected useful life of the asset. Depreciation is calculated at a decreasing rate applied to the depreciable cost of the asset.

Scenario

A company recently purchased a large machine for use in manufacturing its product. The machine was purchased on January 1, 2014, for an original cost of $1,195,000. The residual or salvage value is $0. The useful life is 5 years.

Parameters

Cost: The original cost of the asset.

Residual or salvage value: The value the asset will have at the end of its expected useful life.

Useful life: The period(s) over which depreciation is measured. For this example, 1 period = 1 year.

Convention: Half year

Example

Cost: $1,195,000

Residual or salvage value: $0

Useful life: 5 years

Convention: Half year

Calculation

1. Calculate the denominator: Useful life = Y; Y(Y+1)/2=SOYD
2. Identify the numerator: Remaining life = X
3. Calculate the depreciation: X/SOYD x cost of the asset - any salvage value

Step-by-Step, Year 1

1. 5(5+1)/2 = 15
2.
   a. Year 1 = 5, year 2 = 4.5, year 3 = 3.5, year 4 = 2.5, year 5 = 1.5, year 6 = .5
   b. Dep. rate: Yr 1=.1667, yr 2=.3000, yr 3=.2333, yr 4 =.1667, yr 5=.1000, yr 6= .0333
3. ((5/15)/2) x ($1,195,000 - $0) = $199,207 (year 1)

   (4.5 / 15) x ($1,195,000 - $0) = $358,500 (year 2)

   (.5 / 15) x ($1,195,000 - $0) = $ 39,793 (year 6)

Year	Depreciation expense	Accumulated depreciation	Remainder to depreciate

Figure C.2-1. SOYD Depreciation Example

C.3 Declining Balance

Definition: A method of accelerated depreciation by which each year's depreciation is a percentage of the reduced basis of the asset. The depreciative value is computed by using a fixed rate, which is applied to

the undepreciated cost of the asset. Conversion from the declining balance method to the straight line method of depreciation occurs at the beginning of the calendar year in which the straight-line method would exceed the declining balance method.

Scenario

A company recently purchased a large machine for use in manufacturing its product. The machine was purchased on January 1, 2014, for an original cost of $1,195,000. The residual or salvage value is $0. The useful life is 5 years.

Parameters

Cost: The original cost of the asset.

Residual or salvage value: The value the asset will have at the end of its expected useful life.

Useful life: The period(s) over which depreciation is measured. For this example, 1 period = 1 year.

Convention: Half year

Example

Cost: $1,195,000

Residual or salvage value: $0

Useful life: 5 years

Declining balance %: 150

Convention: Half year

Calculation

Net book value/useful life x declining balance = 1 year's depreciation

Net book value/remaining life (once reverted to straight line) = 1 year's depreciation

Step-by-Step

1. 150% factor = (1/life) 150% = .30
2. Year 1:

   (($1,195,000) x .30)/2 = $179,250 (½ year of asset depreciation taken)
3. Year 2:

   ($1,195,000 - $179,250) x .30 = $304,725 (150% declining balance depreciation)

($1,195,000 - $179,250)/4.5 = $225,722 (straight-line depreciation on net book value and remaining life)

Note the 150% declining balance exceeds straight-line depreciation

4. Year 3:

   ($1,195,000 - $179,250 - $304,725) x .30 = $213,308 (150% declining balance depreciation)

   ($1,195,000 - $179,250 - $304,725)/3.5 = $203,150 (straight-line depreciation)

   Note the 150% declining balance exceeds the straight-line depreciation and is therefore used

5. Year 4:

   ($1,195,000 - $179,250 - $304,725 - $213,308) x .30 = $149,315 (150% declining balance depreciation)

   ($1,195,000 - $179,250 - $304,725 - $213,308)/2.5 = $199,087 (straight-line depreciation)

   Note: straight line depreciation exceeds 150% declining balance depreciation and is used for the remaining years

6. Year 5:

   ($1,195,000 - $179,250 - $304,725 - $213,308 - $199,087)/1.5 = $199,087 (straight-line depreciation)

7. Year 6:

8. (($1,195,000 - $179,250 - $304,725 - $213,308 - $199,087 - $199,087)/.5)/2 = $99,543 (straight-line depreciation for last half-year)

Year	Depreciation expense	Accumulated depreciation	Remainder to depreciate

***Convert to straight line**

Figure C.3-1. Declining-Balance Depreciation Example