

Cost Segregation Audit Techniques Guide

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Chapter I

INTRODUCTION

PURPOSE OF THE COST SEGREGATION AUDIT TECHNIQUES GUIDE

This Audit Techniques Guide (ATG) has been developed to assist Internal Revenue Service (Service) examiners in the review and examination of cost segregation studies. The primary goals are to provide examiners with an understanding of

- 1) **why** cost segregation studies are performed for federal income tax purposes;
- 2) **how** cost segregation studies are prepared; and,
- 3) **what** to look for in the review and examination of these studies.

The ATG was developed by a cross-functional team of Service engineers and agents and is not intended as an official IRS pronouncement. Accordingly, it may not be cited as authority.

BACKGROUND

In order to calculate depreciation for Federal income tax purposes, taxpayers must use the correct method and proper recovery period for each asset or property owned. Property, whether acquired or constructed, often consists of numerous asset types with different recovery periods. Thus, property must be separated into individual components or asset groups having the same recovery periods and placed-in-service dates in order to properly compute depreciation.

When the actual cost of each individual component is available, this is a rather simple procedure. However, when only lump-sum costs are available, cost estimating techniques may be required to "segregate" or "allocate" costs to individual components of property (e.g., land, land improvements, buildings, equipment, furniture and fixtures, etc.). This type of analysis is generally called a "cost segregation study," "cost segregation analysis," or "cost allocation study."

In recent years, increasing numbers of taxpayers have submitted either original tax returns or claims for refund with depreciation deductions based on cost segregation studies. The underlying incentive for preparing these studies for federal income tax purposes is the significant tax benefits derived from utilizing shorter recovery periods and accelerated depreciation methods for computing depreciation deductions. The issues for Service examiners are the rationale used to segregate property into its various components, and the methods used to allocate the total project costs among these components.

The most common situation is the allocation or reallocation of building costs to tangible personal property. A building, termed "section (§) 1250 property", is generally 39-year property eligible for straight-line depreciation. Equipment, furniture and fixtures, termed "section (§) 1245 property", are tangible personal property. Tangible personal property has a short recovery period (e.g., 5 or 7 years) and is also eligible for accelerated depreciation (e.g., double declining balance). Thus, a faster depreciation write-off (and tax benefit) can be obtained by allocating property costs to § 1245 property, or by reallocating § 1250 property costs to § 1245 property.

A simple example illustrates the tax benefits of a cost segregation study. In general, a turnkey construction project includes elements of tangible personal property (e.g., phone system, computer system, process piping, storage tanks). It is relatively easy to identify these items as § 1245 property and allocate a portion of the total project costs to them. However, a cost segregation study may also report certain building occupancy items, such as carpeting, wall coverings, partitions, millwork, lighting fixtures, suspended ceilings, doors, as § 1245 property. These items may or may not constitute qualifying § 1245 property depending on particular facts and circumstances, such as the location of the assets and the specific activities for which the project was designed.

In addition to identifying specific project components that qualify as § 1245 property, cost segregation studies may treat portions of building components as § 1245 property. For example, a study may conclude that 15 percent of a building's electrical system directly supports § 1245 property, such as specialized kitchen equipment. Based on that conclusion, the study will then treat 15 percent of the electrical system as § 1245 property. The allocation of building components to § 1245 property is often a contentious issue.

Property allocations and reallocations are typically based on criteria established under the Investment Tax Credit (ITC). A plethora of legislative acts, court decisions and Service rulings have produced complex and often conflicting guidance with respect to property qualifying for ITC, resulting in no bright-line tests for distinguishing § 1245 property from § 1250 property. Related issues, such as the capitalization of interest and production costs under IRC § 263A and changes in accounting method, add to the complexity of this issue.

In a recent landmark decision, the Tax Court ruled that, to the extent tangible personal property is included in an acquisition or in overall costs, it should be treated as such for depreciation purposes. The court also decided that the rules for determining whether property qualifies as tangible personal property for purposes of ITC (under pre-1981 tax law) are also applicable to determining depreciation under current law. [See Hospital Corporation of America, 109 T.C. 21 (1997)] The Service acquiesced to the use of ITC rules for distinguishing § 1245 property from § 1250 property.

Based on these developments, the use of cost segregation studies will likely continue to increase. Unfortunately, there are no standards regarding the preparation of these studies. Accordingly, studies vary widely in terms of the methodology, documentation, depth, format, and expertise of the study's preparer. This lack of consistency, coupled with the complexity of the law in this area, often results in an examination that is controversial and burdensome for all parties.

Examiners reviewing cost segregation studies must determine the proper classification and correct costs of property. In some cases (e.g., small projects) examiners may be able to evaluate a study without assistance. However, other studies may require specialists with expertise, industry experience and specialized training (e.g., Engineers, Computer Audit Specialists and/or Technical Advisors). Examiners should perform a risk analysis as early as possible to determine the depth of an exam and the need for assistance.

SUMMARY AND CONCLUSIONS

Depreciation issues involving cost segregation studies cross all LMSB industry lines and impact SB/SE taxpayers as well. The lack of consistency in cost segregation studies and the absence of bright-line tests for distinguishing property contribute to the difficulties of this issue. The purpose of this ATG is to provide the foundation to a better understanding of cost segregation studies and to provide the examination steps that will facilitate the audit process and minimize burden on taxpayers, practitioners and Service examiners alike.

Chapter 2

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OVERVIEW

In order to better understand the tax controversy surrounding the use of cost segregation studies, it is important to review the relevant legal history and the motivations of taxpayers to allocate costs to personal property. The legislative and judicial history of depreciation, depreciation recapture, and Investment Tax Credit (ITC) are closely related. Accordingly, much of the discussion will focus on the rules and decisions impacting several interrelated Code sections (including ITC that was generally terminated in 1986). By establishing a legal framework for § 1245 and § 1250 property, examiners will have a better understanding of this issue and have a basis for determining property classifications and cost allocations.

The Internal Revenue Code (IRC) has historically authorized depreciation as an allowance for the exhaustion, wear and tear, and obsolescence of property used in a trade or business or for the production of income (IRC § 167 and the regulations thereunder). Several different methods are described for calculating depreciation under IRC §§ 167 and 168, including straight line, declining balance, sum-of-the-years digits, and income forecast. The deduction has generally been calculated with respect to the adjusted basis and useful life of (or recovery period for) the property and by utilizing an appropriate depreciation method. At one time, salvage value was also a factor in the computation. The shorter the useful life (or recovery period), the larger the current tax deduction, thus providing an incentive for tax purposes. Buildings and structural components have substantially longer depreciable lives than personal property. Therefore, it is desirable for taxpayers to maximize personal property costs in order to accelerate depreciation deductions and, hence, reduce tax liability. The remainder of this chapter provides a brief historical perspective of the statutes, rulings and major court cases that relate to depreciation and cost segregation studies.

BULLETIN F

Many attempts have been made to provide bright-line tests for classifying property by its useful life (or recovery period) due to the frequent controversies that have arisen with the determination of economic life. For example, IRS Publication Number 173 (also known as "Bulletin F") was published in 1942 and provided a useful life guide for various types of property based on the nature of a taxpayer's business or industry. Bulletin F identified over 5,000 assets used in 57 different industries and activities and described two procedures for computing depreciation for buildings:

1. Composite Method: A depreciation chart provided a composite rate for buildings, including all installed building equipment. The recommended rates ranged from 1.5% per year for good quality warehouses and grain elevators to 3.5% per year for inexpensive theaters.
2. Component Method: Taxpayers could elect to depreciate the building equipment separately from the structure itself. A list provided lives for various types of structures, ranging from 50 years for apartments, hotels, and theaters, to 75 years for grain elevators and warehouses. A separate list provided lives for over 100 items of installed building equipment, ranging from 5 to 25 years, or the life of the building.

Regulation § 1.167(a)-7(a) allows taxpayers to either depreciate individual items on a separate basis or to combine assets into group accounts and depreciate the group account as a single asset. Historically, some taxpayers have interpreted this to mean that assets can be segregated into components and depreciated separately.

COMPONENT DEPRECIATION

In 1959, the Tax Court recognized the right of taxpayers to calculate depreciation using a component method for newly constructed property [Shainberg vs. Commissioner, 33 T.C. 241 (1959)]. While the building shell was given a useful life of 40 years, the plumbing, wiring, and elevators were assigned a life of 15 years, and the paving, roof, and heating and air conditioning systems were given a useful life of 10 years.

Revenue Procedure 62-21, 1962-2 C.B. 418, superseded Bulletin F and provided safe harbor useful lives based on industry-specific asset classes for taxpayers that met the reserve ratio test (a complex provision). As long as the taxpayer could demonstrate that its retirement policies were consistent with the selected class life, the Service would not challenge the useful life. The asset class for buildings included "...the structural shell of the building and all integral parts thereof...", as well as equipment which services normal heating, plumbing, air conditioning, fire prevention and power requirements, and equipment such as elevators and escalators. Except to the extent the class lives were incorporated into the Class Life Asset Depreciation Range System (ADR), this revenue procedure was revoked for all years after 1970.

Revenue Ruling 66-111, 1966-1 C.B. 46 (subsequently modified by Revenue Ruling 73-410, 1973-2 C.B. 53), addressed the use of component depreciation for used real property, in light of the decision in Shainberg. The ruling concluded that "When a used building is acquired for a lump sum consideration, separate components are not bought; a unified structure is purchased... Accordingly, an overall useful life for the building must be determined on the basis of the building as a whole."

Revenue Ruling 68-4, 1968-1 C.B. 77, concluded that the asset guideline classes outlined in Revenue Procedure 62-21 "...may only be used where all the assets of the guideline class (building shell and its components) are included in the same guideline class for which one overall composite life is used for computing depreciation."

ASSET DEPRECIATION RANGE (ADR)

The elective ADR system was developed for tangible assets placed in service after 1970, with the intent of minimizing controversies about useful life, salvage value, and repairs. It also abolished the controversial reserve ratio test. Under the ADR system as enacted by former IRC § 167(m) and implemented by Revenue Procedure 72-10, 1972-1 C. B. 721, all tangible assets were placed in one of the more than 100 asset guideline classes (which generally corresponded to those set out in Rev. Proc. 62-21). The classes of assets were based on the business and industry of the taxpayer. In addition, each class of assets other than land improvements and buildings was given a range of years (called "asset depreciation range") that was about 20 percent above and below the class life. As long as taxpayers did not deviate from this range in useful lives, the Service would not challenge the useful life. An optional repair allowance method was also permitted at the election of the taxpayer.

If the taxpayer did not elect the ADR system, Revenue Ruling 73-410, 1973-2 C.B. 53, clarified that a taxpayer may utilize the component method of depreciating used property if a qualified appraiser "...properly allocates the costs between non-depreciable land and depreciable building components as of the date of purchase."

ACCELERATED COST RECOVERY SYSTEM (ACRS)

Issues involving salvage value and useful life continued to arise, as well as controversy regarding the repair allowance, so Congress enacted IRC § 168 in 1981 (generally effective for property placed in service after December 31, 1980). The Accelerated Cost Recovery System (ACRS) was intended to provide a less complicated method for computing depreciation (known as "cost recovery") by eliminating salvage value and specifying recovery periods for various classes of assets. Depreciation deductions were calculated based on the applicable depreciation methods, recovery periods and placed-in-service conventions outlined in § 168. In contrast to the elective ADR system, ACRS was mandatory and provided only five (later six) recovery periods. ACRS also allowed for a faster write-off of assets than had been allowed under previous rules (e.g., the 40-year life for real property was reduced to either a 15, 18, or 19-year recovery period, as reflected by the 1985 amendments to ACRS).

MODIFIED ACCELERATED COST RECOVERY SYSTEM (MACRS)

Significant modifications, generally less favorable to taxpayers, were made to ACRS by the Tax Reform Act of 1986 (effective for property placed in service after December 31, 1986). Under the Modified Accelerated Cost Recovery System (MACRS), the recovery period for buildings and structural components increased dramatically. For example, the 15, 18, or 19-year recovery periods for real property are now 39 years for nonresidential real property (or 31.5 years for nonresidential real property placed in service by the taxpayer before May 13, 1993) and to 27.5 years for residential rental property, under the general depreciation system of § 168(a). Equipment and machinery generally fall into the 3, 5, or 7-year recovery periods. Land improvements generally have a 15-year recovery period under the general depreciation system of § 168(a). The wide gap in MACRS recovery periods provides a strong incentive for taxpayers to allocate or reallocate costs of long-lived property to short-lived property, wherever possible.

Revenue Procedure 87-56, 1987-2 C. B. 674, provides the class lives and recovery periods for most MACRS assets. These determinations are based on the specific industry of a taxpayer and the specific activity for which the assets are used. But see discussion of Duke Energy Natural Gas Corporation v. Commissioner, 109 T.C. 416 (1997), rev'd, 172 F.3d 1255 (10th Cir. 1999), nonacq., 1999-2 C.B. xvi; Saginaw Bay Pipeline Co., et al v. United States, 124 F. Supp. 2d 465 (E.D. Mich. 2001), rev'd and rem'd, 2003 FED App. 0259P (6th Cir.) (No.01-2599); and Clajon Gas Co. LP, et al v. Commissioner, 119 T.C. 197 (2002), rev'd, 2004 U.S. App. LEXIS 284 (8th Cir. Mo. Jan. 12, 2004), on page 6.3-8. [Appendix Chapter 6.3](#) provides an overview of recovery period determinations.

EXPENSING PROVISIONS AND BONUS DEPRECIATION - IRC §§ 168, 179, AND 1400L

Another incentive for allocating costs to shorter-lived property is the expensing provision of IRC § 179. The ceiling limitation for expensing capital amounts invested in qualifying section 179 property (qualifying tangible personal property acquired by purchase for use in the active conduct of a trade or business) has steadily increased over time, from \$10,000 per year to over \$25,000 (\$100,000 per year for certain qualifying property placed in service for taxable years beginning after December 31, 2002, and before January 1, 2006). By maximizing the costs allocable to tangible personal property, the taxpayer can not only get an immediate write-off under § 179, but also qualifies for a shorter recovery period under § 168 for any remaining basis in the property. Also, the 30-percent additional first year bonus depreciation allowance pursuant to § 168(k), enacted by the Job Creation and Worker Assistance Act of 2002 (Public Law 107-147), provides even further incentive for taxpayers to segregate property into shorter recovery periods. The Jobs and Growth Reconciliation Tax Act of 2003 recently increased the bonus depreciation under § 168(k) to 50 percent for certain qualifying property acquired after May 5, 2003, and placed in service before January 1, 2006. Section 1400L provides special rules for qualifying property used by a business in the New York Liberty Zone.

WHAT IS TANGIBLE PERSONAL PROPERTY?

While § 167 provides an allowance for depreciation for both tangible and intangible property, § 168 (as written) only applies to tangible property. Since neither § 167 nor § 168 provides a definition of tangible property, one must look to § 48 and the regulations thereunder (prior to the passage of Public Law 101-508) for definitions and examples of tangible property (as well as for buildings and structural components). This area will be discussed further in the following sections.

INVESTMENT TAX CREDIT - IRC § 48

In order to stimulate the economy, Congress enacted Code § 48 in 1962. The ITC was designed to encourage the modernization and expansion of productive facilities through the purchase of certain new or used assets for use in a trade or business. Section 48 generally allowed a tax credit for investment in tangible depreciable property placed in service during the taxable year. The amount of the credit was the "applicable percentage" of the investment in qualifying property placed in service during the taxable year, depending on the useful life of the property and whether it was new or used when acquired. The percentage was initially 7 percent but was later increased to 10 percent (Revenue Act of 1978). The amount of the qualifying investment was limited and the ITC was subject to recapture if the property was not held for its entire useful life. Over the years, many other changes were made to the rules, including reductions in the depreciable basis of property for which ITC was claimed, temporary suspensions, termination, reinstatement, and, ultimately, the general repeal of ITC in 1986. Most of these revisions were related to the perceived economic needs of the country at the time they were enacted.

TANGIBLE PERSONAL PROPERTY

Eligible ITC property is defined in former IRC § 48(a)(1) with reference to IRC § 38 (in fact, eligible property is often referred to as "section 38 property"). It included tangible personal property (other than heating or air conditioning units) and other tangible property (primarily machinery and equipment) that was closely integrated into the taxpayer's trade or business. Land, buildings, structural components contained in or attached to buildings, and other inherently permanent structures, generally were not eligible for ITC. Local law was not controlling with regard to property qualifying as tangible personal property for purposes of ITC.

Treas. Reg. § 1.48-1(c) provides examples of qualifying property, and states that

... 'tangible personal property' means any tangible property except land and improvements thereto, such as buildings or other inherently permanent structures (including items which are structural components of such buildings or structures).

This same subsection states that "tangible personal property" includes

...all property (other than structural components) which is contained in or attached to a building. Thus, such property as production machinery, printing presses, transportation and office equipment, refrigerators, grocery counters, testing equipment, display racks and shelves, and neon and other signs, which is contained in or attached to a building constitutes tangible personal property for purposes of the credit allowed by section 38. Furthermore, all property that is in the nature of machinery (other than structural components of the building or other inherently permanent structure) shall be considered tangible personal property even though located outside a building. Thus, for example, a gasoline pump, hydraulic car lift, or automatic vending machine, although annexed to the ground, shall be considered tangible personal property.

In addition, the regulations provide examples of non-qualifying property. For example, "...buildings, swimming pools, paved parking areas, wharves and docks, bridges, and fences are not tangible personal property."

The Senate Report accompanying the enactment of the Revenue Act of 1978 provided additional insight into Congressional intent by providing further examples of qualifying and non-qualifying property.

...[T]he committee wishes to clarify present law by stating that tangible personal property already eligible for the investment tax credit includes special lighting (including lighting to illuminate the exterior of a building or store, but not lighting to illuminate parking areas), false balconies and other exterior ornamentation that have no more than an incidental relationship to the operation or maintenance of a building, and identity symbols that identify or relate to a particular retail establishment or restaurant such as special materials attached to the exterior or interior of a building or store and signs (other than billboards). Similarly, floor coverings which are not an integral part of the floor itself such as floor tile generally installed in a manner to be readily removed (that is it is not cemented, mudded, or otherwise permanently affixed to the building floor but, instead, has adhesives applied which are designed to ease its removal), carpeting, wall panel inserts such as those designed to contain condiments or to serve as a framing for picture of the products of a retail establishment, beverage bars, ornamental fixtures (such as coats-of-arms), artifacts (if depreciable), booths for seating, movable and removable partitions, and large and small pictures of scenery, persons, and the like which are attached to walls or suspended from the ceiling, are considered tangible personal property and not structural components. Consequently, under existing law, this property is already eligible for the ITC.

[S. Rep. No. 1263, 95th Cong., 2d Sess. 117 (1978), reprinted in 1978-2 C.B. Vol. 1 315,415.]

BUILDINGS AND STRUCTURAL COMPONENTS

Treas. Reg. § 1.48-1(e)(1) provides a detailed explanation of buildings and their structural components for ITC purposes and has been the primary source for guidance, both with respect to component depreciation and cost segregation studies. The term "building" is described as

...any structure or edifice enclosing a space within its walls and usually covered by a roof whereby the structure improves the land, and provides shelter or housing for work, office, display, or sales space. The term includes, for example, structures such as apartment houses, factory and office buildings, warehouses, barns, garages, railway or bus stations, and stores. Such term includes any such structure constructed by, or for, a lessee even if such structure must be removed, or ownership of such structure reverts to the lessor, at the termination of the lease.

Specifically excluded from the definition of the term "building" are the following:

- i. a structure which is essentially an item of machinery or equipment, or
- ii. a structure which houses property used as an integral part of an activity specified in section 1.48(a)(1)(B)(i) if the use of the structure is so closely related to the use of such property that the structure clearly can be expected to be replaced when the property it initially houses is replaced. Factors which indicate that a structure is closely related to the use of the property it houses include the fact that the structure is specifically designated to provide for the stress and other demands of

such property and the fact that the structure could not be economically used for other purposes.

iii.

The term "structural components" is defined in § 1.48-1(e)(2) of the Regulations as

...includes such parts of a building as walls, partitions, floors, and ceilings, as well as any permanent coverings therefor such as paneling or tiling; windows and doors; all components (whether in, on, or adjacent to the building) of a central air condition or heating system, including motors, compressors, pipes and ducts; plumbing and plumbing fixtures, such as sinks and bathtubs; electric wiring and lighting fixtures; chimneys; stairs, escalators, and elevators, including all components thereof; sprinkler systems; fire escapes; and other components relating to the operation or maintenance of a building.

However, the term "structural components" does not include machinery the sole justification for the installation of which is the fact that such machinery is required to meet temperature or humidity requirements which are essential for the operation of other machinery or the processing of materials or foodstuffs. Machinery may meet the "sole justification" test provided by the preceding sentence even though it incidentally provides for the comfort of employees, or serves, to an insubstantial degree, areas where such temperature or humidity requirements are not essential. For example, an air conditioning and humidification system installed in a textile plant in order to maintain the temperature or humidity within a narrow optimum range which is critical in processing particular types of yarn or cloth is not included within the term "structural components".

SECTION 1245 AND SECTION 1250 PROPERTY

The benefits of the ITC were somewhat offset by the provisions of IRC §§ 1245 and 1250, also enacted in 1962. These Code sections result in the conversion of capital gain to ordinary income on the disposition of a property, to the extent its basis has been reduced by an accelerated depreciation method. The definitions of property for purposes of §§ 1245 and 1250 are very similar to that for ITC and make reference to the regulations under § 48 and the definitions under § 38 property. These interrelated Code sections and the regulations (38, 48, 1245 and 1250) provide the pertinent authority for determining eligibility for ITC. They also determine eligibility for the immediate write-offs under section 179, the appropriate recovery periods for depreciation (§§ 167 and 168) and for depreciation recapture upon a disposition.

The primary issue in cost segregation studies is the proper classification of assets as either § 1245 or § 1250 property. Accordingly, the ITC rules are critical in determining whether a taxpayer has classified property into the appropriate asset class.

Section 1245(a)(3) provides that "section 1245 property" is any property which is or has been subject to depreciation under § 167 and which is either personal property or other tangible property used as an integral part of certain activities. Such activities include manufacturing, production or extraction; furnishing transportation, communication, electrical energy, gas, water, or sewage disposal services. Certain other "special use" property also qualifies as § 1245 property, but is not of a primary concern for purposes of this discussion. It is important to note that § 1245(a)(3) specifically excludes a building or its structural components from the definition of § 1245 property.

Treas. Reg. § 1.1245-3 defines "personal property," "other tangible property," "building," and "structural component" by reference to Treas. Reg. § 1.48-1. As previously discussed, those regulations (§ 1.48-1) provide definitions of tangible personal property that qualifies as § 38 property for ITC.

Section 1250(c) defines "section 1250 property" as any real property, other than section 1245 property, which is or has been subject to an allowance for depreciation. In other words, § 1250 property encompasses all depreciable property that is not § 1245 property.

Land improvements (i.e., depreciable improvements made directly to or added to land), as defined in Asset Class 00.3 of Rev. Proc. 87-56, may be either § 1245 or § 1250 property and are depreciated over a 15-year recovery period. Buildings and structural components are specifically excluded from 15-year property. Examples of land improvements include sidewalks, roads, canals, waterways, drainage facilities, sewers, wharves and docks, bridges, fences, landscaping, shrubbery, and radio and television towers. Note that some activity asset classes also include land improvements such as asset class 57.1 of Rev. Proc. 87-56.

From a statutory standpoint, the primary test for determining whether an asset is § 1245 property eligible for ITC is to determine whether or not it is a structural component of a building. In other words, if an asset is not a structural component of a building, then it can be considered to be § 1245 property. The structural component determination hinges on what constitutes an inherently permanent structure and how permanently the asset is attached to such a structure. Clearly, this is a factually intensive determination and explains the lack of bright-line tests for segregating property into § 1245 and § 1250 classifications.

FUNCTIONAL USE TEST

The early administrative rulings on ITC focused on a "functional use test" to determine whether an asset constituted § 1245 property. Rather than examining the inherent permanency characteristics of the asset, the test evaluated the purpose for which the asset was used. For example, if the asset served a function normally attributable to a structural component or permanent structure, it was not treated as tangible personal property even if it could be moved. However, following several conflicting court decisions which addressed the inherent permanency of particular assets, the Service shifted its focus from the functional use test to an evaluation of factors indicating inherent permanency.

INHERENT PERMANENCY TEST AND THE "WHITECO FACTORS"

Revenue Ruling 75-178, 1975-1 C.B. 9 outlined several criteria to determine § 1245 property classification. These criteria included (1) whether the asset is movable or removable; (2) how the asset is attached to real property; (3) the design of the asset; and (4) whether the asset bears a load.

The classic pronouncement addressing inherent permanency was Whiteco Industries, Inc. v. Commissioner, 65 T.C. 664, 672-673 (1975). The Tax Court, based on an analysis of judicial precedent, developed six questions designed to ascertain whether a particular asset qualifies as tangible personal property. These questions, referred to as the "Whiteco Factors," are:

1. Can the property be moved and has it been moved?
2. Is the property designed or constructed to remain permanently in place?
3. Are there circumstances that show that the property may or will have to be moved?
4. Is the property readily movable?
5. How much damage will the property sustain when it is removed?
6. How is the property affixed to land?

It should also be noted, however, that moveability is not the only determinative factor in measuring inherent permanency. In L.L. Bean, Inc. v. Comm., T.C. Memo. 1997-175, aff'd, 145 F.3d 53 (1st Cir. 1998), it was determined that, even though the structure could be moved, it was designed to remain permanently in place. Thus, it was determined to be an inherently permanent structure.

Examiners should also consider the following points when addressing the Whiteco factors:

- The manner in which an item is attached to a building or to the land,
- The weight and size of the item,
- The time and costs required to move the components,
- The number of personnel required in planning and executing a move,
- The type and quantity of equipment required for a move,
- The history of the item or similar items being moved,
- The time, cost, manpower and equipment required to reconfigure the existing space if the item is removed,
- Any intentions regarding the removal,
- Whether the item is designed to be moved, and
- Whether the item is readily usable in another location.

REPEAL OF ITC AND COMPONENT DEPRECIATION

Due to the significant tax benefits derived from ITC-eligible property, the use of component depreciation proliferated during the 1970's and created problems not unlike those faced today by taxpayers, practitioners, and the Service regarding cost segregation studies. The problem became so pronounced during the late 1970's that Congress disallowed component depreciation as a method of computing depreciation for buildings, simultaneously with the enactment of ACRS in the Economic Recovery Tax Act of 1981 (ERTA) [see IRC § 168(f)(1)]. In addition to the controversies surrounding the determination of qualifying § 1245 property, the driving force behind this action was the disadvantage suffered by smaller taxpayers that could not afford to have expensive ITC studies performed.

In 1986, MACRS reiterated that the use of component depreciation was not allowable. Section 168(i)(6) provides that depreciation for any addition or improvement to property shall be computed in the same manner as the depreciation for the underlying property, as if the underlying property had been placed into service at the same time. [Prior to 1981, an asset composed of separately replaceable components could have been fragmented for depreciation purposes even though the interdependent components were parts of an integrated whole.].

HOSPITAL CORPORATION OF AMERICA v. COMMISSIONER ("HCA") (1997)

A recent landmark decision, Hospital Corporation of America v. Commissioner, 109 T.C. 21 (1997)("HCA"), provided the legal support to use cost segregation studies for computing depreciation. In effect, this decision has reinstated a form of component depreciation.

In HCA, the Service took the position that certain property items were structural components of a building and that § 168(f)(1) prohibited the use of a component depreciation method for computing depreciation on buildings (including structural components). The Service also argued that § 168(f)(1) effectively changed the definition of tangible personal property for ACRS purposes (i.e., after the enactment of ACRS in 1981) by excluding any item attached to the building from being § 1245 property. Accordingly, the prohibition against component depreciation precluded an item from being treated as § 1245 property if it was attached to a building and had utility beyond its relationship to the particular piece of property.

However, Judge Wells ruled that the property at issue was § 1245 property and rejected the Service's argument that findings based on Treas. Reg. § 1.48-1(e) were inapplicable following the enactment of ACRS in 1981. Based on his review of the statutory and regulatory language, as well as case law, Judge Wells concluded that the enactment of ACRS did not redefine § 1250 property to include property that had been § 1245 property for purposes of ITC. Accordingly, the court determined that §168(f)(1), prohibiting component depreciation, applied only to §1250 property.

The HCA ruling effectively reinstated a form of component depreciation for certain building support systems, such as the electrical and plumbing systems that directly serve tangible personal property. Therefore, cost segregation methodologies previously used to allocate the cost of a building between structural components and ITC property can now be used for § 1245 and § 1250 property.

ACTION ON DECISION

The Service did not appeal HCA since it could not state that the court's reasoning and decision were clearly erroneous. In an Action on Decision (AOD CC-1999-008), the Service acquiesced to the validity of the method approved by the court (i.e., pre-1981 ITC tests remained applicable for determining tangible personal property under both ACRS and MACRS). However, the Service non-acquiesced to the court's findings as to which specific assets qualified as tangible personal property. Two cases, LaPetite Academy and Boddie-Noell, were specifically referenced in the AOD with respect to the determination of structural components and tangible personal property. In Boddie-Noell Enterprises, Inc. v. United States, 36 Fed. Cl. 722 (1996), aff'd without op., 132 F.2d 54 (Fed Cir. 1997), the court held that acoustical tile ceilings, a portion of an electrical system and a plumbing system were structural components under the regulations. In LaPetite Academy, Inc. v. United States, 95-1 U.S.T.C. (CCH) 50,193 (W.D. Mo. 1995) aff'd without op., 72 F.2d 133 (8th Cir. 1995), wall panels, kitchen plumbing, bathroom accessories and a portion of the electrical system were held to be structural components under the regulations.

CHIEF COUNSEL GUIDANCE

Chief Counsel issued further guidance to the field in the form of an advice memorandum dated May 28, 1999. It made the following observations and recommendations for field agents examining cost segregation studies:

- The determination of whether an asset is a structural component or tangible personal property is a facts-and-circumstances assessment.
- The use of cost segregation studies must be specifically applied by the taxpayer.
- Allocations must be based on a "logical and objective measure" of the portion of the equipment that constitutes § 1245 property.
- An accurate cost segregation study may not be based on non-contemporaneous records, reconstructed data, or taxpayer's estimates or assumptions that have no supporting records.
- Cost segregation studies should be closely scrutinized by the field.
- A change in depreciation method is a change in method of accounting, requiring the consent of the Secretary or his delegate.

[Note, however, that the recent 5th Circuit opinion in Brookshire Brothers Holding, Inc. & Subsidiaries v. Commissioner, 320 F.3d 507 (5th Cir. 2003), aff'g T.C. Memo. 2001-150, reh'g denied (March 31, 2003), which was adverse to the Service, may impact cases in that circuit. The court affirmed the Tax Court decision that the regulations allow taxpayers to make temporal changes in their depreciation schedules, as well as changes in the classification of property, without the consent of the IRS. However, the 10th Circuit opinion in Kurzet v. Commissioner, 222 F.3d 830 (10th Cir. 2000), was favorable to the government on this issue. Clearly, the issue is unsettled. However, Treas. Reg. § 1.446-1T(e)(2)(ii)(d)(2)(i), effective for taxable years ending on or after December 30, 2003, provides that a change in the depreciation or amortization method, period of recovery, or convention of a depreciable or amortizable asset is a change in method of accounting. See Example 9 of Treas. Reg. § 1.446-1T(e)(2)(iii), which specifically relates to changes based on a cost segregation study. On January 28, 2004, Chief Counsel Notice CC-2004-007 was issued, setting forth Chief Counsel's Change in Litigating Position on the application of § 446(e) to changes in computing depreciation. Examiners are directed to contact either Bonny Dominguez or Phil Whitworth, Change in Accounting Method Technical Advisors, for the most current information (phone numbers 330-253-7339 or -7346, respectively). You can also refer to [Appendix Chapter 6.2](#) for additional information and details regarding Notice CC-2004-007 (January 28, 2004).]

LACK OF BRIGHT-LINE TESTS FOR DISTINGUISHING § 1245 AND § 1250 PROPERTY

A myriad of court cases has addressed the classification of property for ITC purposes. All of the cases are factually-intensive and quite often the opinions of the courts conflict. In addition, though the Service has issued numerous revenue rulings to address specific fact patterns, no bright-line tests have evolved. Because of this problem, significant controversy still exists regarding property classification for depreciation purposes.

It is beyond the scope of this chapter to review all the applicable cases. However, [Appendix Chapter 6.4](#) provides a summary of the major court decisions and pronouncements in this area. This chapter is organized by case name and by construction division per the Construction Specification Institute (CSI) Master Format Division. In addition, specific guidance for the casino and restaurant industries is provided in [Chapter 7.1](#) and [Chapter 7.2](#), respectively.

SUMMARY AND CONCLUSIONS

This chapter has provided a legal framework for distinguishing § 1245 property from § 1250 property and for determining appropriate recovery periods. It cannot be overemphasized that the classification of assets is a factually intensive determination. Based on HCA, the recent AOD, and the 1999 Chief Counsel Advice Memorandum, the use of cost segregation studies is expected to increase. Thus, examiners need to examine and evaluate a cost segregation study in light of the applicable statutes and judicial precedent established for a similar fact pattern.

In the next chapter, we will take a closer look at the methodologies used to prepare cost segregation studies.

Chapter 3

COST SEGREGATION METHODOLOGIES

Introduction

What Are The Most Common Methods Used In Conducting A Cost Segregation Study?

What Are The Attributes Of Various Cost Segregation Methodologies?

Detailed Engineering Approach From Actual Cost Records

Detailed Engineering Cost Estimate Approach

Survey Or Letter Approach

Residual Estimation Approach

Sampling Or Modeling Approach

"Rule Of Thumb" Approach

What Methodology Is Required By The IRS?

Summary And Conclusions

INTRODUCTION

Cost segregation studies are conducted for a variety of reasons (e.g., income tax, financial accounting, insurance purposes, property tax). For income tax purposes, a cost segregation study involves the allocation (or reallocation) of the total cost (or value) of property into the appropriate property classes in order to compute depreciation deductions. The results of a study are typically summarized in an accompanying report, although there is no standard format for either the study or the report.

The methodology utilized in allocating total project costs to various assets is critical to achieving an accurate cost segregation study. Some of the more common methodologies, and their potential drawbacks, are summarized in this chapter. This discussion should assist the examiner in evaluating the accuracy of a particular study and in performing a risk analysis with respect to the depreciation deductions based on that study.

WHAT ARE THE MOST COMMON METHODOLOGIES UTILIZED FOR COST SEGREGATION STUDIES?

Various methodologies are utilized in preparing cost segregation studies, including:

1. Detailed Engineering Approach from Actual Cost Records
2. Detailed Engineering Cost Estimate Approach
3. Survey or Letter Approach
4. Residual Estimation Approach
5. Sampling or Modeling Approach
6. "Rule of Thumb" Approach

Examiners should not necessarily expect to see these terms mentioned in a study or in a report. Methodologies will also be described in varying detail in different reports. However, based on the information in this chapter, an examiner should be able to recognize the attributes of a given study and identify the methods or approaches used (and also identify the potential drawbacks). It should also be noted that other methodologies may be used, although most are merely derivatives of those enumerated above.

WHAT ARE THE ATTRIBUTES OF VARIOUS COST SEGREGATION METHODOLOGIES?

The following discussion takes a closer look at the main components and attributes of each of the methodologies listed above. Keep in mind that these are the steps normally taken in the preparation of a cost segregation study. The examiner's responsibility is to review the steps taken and evaluate the accuracy of the study, as will be discussed in Chapter 5, "Review and Examination of Cost Segregation Studies."

1. Detailed Engineering Approach From Actual Cost Records

The detailed engineering approach from actual cost records, or "detailed cost approach," uses costs from contemporaneous construction and accounting records. In general, it is the most methodical and accurate approach, relying on solid documentation and minimal estimation. Construction-based documentation, such as blueprints, specifications, contracts, job reports, change orders, payment requests, and invoices, are used to

determine unit costs. The use of actual cost records contributes to the overall accuracy of cost allocations, although issues may still arise as to the classification of specific assets.

This approach is generally applied only to new construction, where detailed cost records are available. For used or acquired property and for new projects where original construction documents are not available, an alternative approach (e.g., the "detailed engineering cost estimate approach") may be more appropriate.

The detailed cost approach typically includes the following activities:

1. Identify the specific project/assets that will be analyzed.
2. Obtain a complete listing of all project costs and substantiate the total project costs.
3. Inspect the facility to determine the nature of the project and its intended use.
4. Photograph specific property items for reference. Request previous site photographs that illustrate the construction progress as well as the condition of the property before the project began.
5. Review "as-built" blueprints, specifications, contracts, bid documents, contractor pay requests, and other construction documentation.
6. Identify and assign specific project items to property classes (e.g., land, land improvements, building, equipment, furniture and fixtures, and other items of tangible personal property).
7. Prepare quantitative "take-offs" for all materials and use payment records to compute unit costs.
8. Apply unit costs to each project component to determine its total cost. Reconcile total costs obtained from quantitative take-offs to total actual costs.
9. Allocate indirect costs, such as architectural fees, engineering fees, and permits, to appropriate assets.
10. Group project items with similar class lives and placed-in-service dates to compute depreciation.

The detailed cost approach is the most time consuming method and generally provides the most accurate cost allocations. However, the examiner should recognize that the proper classification and costs of § 1245 property could still be an issue with this method.

2. **Detailed Engineering Cost Estimate Approach**

The detailed engineering cost estimate approach (or detailed estimate approach) is similar to the detailed cost approach. The difference is that the detailed estimate approach estimates costs, rather than using actual costs. This approach is used when cost records are not available or for an acquisition when the purchase price must be allocated.

The detailed estimate approach is methodical, relying on solid documentation and utilizing construction-based documents such as blueprints, specifications, contracts, job reports, change orders, payment requests, invoices, appraisals, etc. When estimates are required, they are based on costing data, either from contractors or from reliable published sources (e.g., R. S. Means or Marshall Valuation Service). The sources of estimating data are clearly referenced, including identification of the specific volume,

page, and item number. Further, the same estimating techniques and unit cost data sources are used for all of the items that comprise the actual cost.

In essence, the steps for this approach are the same as the detailed cost approach, except for Step 7 (in which costs come from contractor estimates or estimating guides). However, if detailed cost estimates are prepared by qualified individuals, and the estimates are reconciled to actual costs, then reasonably-accurate cost allocations are possible.

3. Survey Or Letter Approach

The survey or letter approach is an alternative method for estimating costs. In this approach, contractors and subcontractors are contacted via a survey or letter to provide information on the cost of specific assets that they installed on a particular project. These costs are then used in one of the engineering approaches or in the residual estimation approach (discussed in the following section). Cost allocation using the survey approach involves the following steps:

1. Complete Steps 1 – 6 of the detailed cost approach to identify the specific property items that require cost estimates. Estimates should be reconciled to an actual cost if possible [either to an overall project cost or to an individual system cost (e.g., plumbing, electrical)].
2. Divide property items by contractor and/or subcontractor.
3. Ask contractors and/or subcontractors to provide the quantities and prices of specific property items.
4. Use unit cost estimates obtained from the surveys to determine and allocate property costs.

In situations where the contractor provides actual cost data, the allocations may be reasonably reliable. However, when contractor data is obtained from other sites or projects, the data may not be comparable or reliable. The amount of detail provided by different contractors may also vary. The wide disparity in cost estimation methods dictates the use of caution to ensure that the total allocated costs do not exceed the actual total project cost.

4. Residual Estimation Approach

The residual estimation approach is an abbreviated method in which only short-lived asset costs (e.g., 5- or 7-year property) are determined. Short-lived asset costs are added together and then subtracted from the total project cost. The remaining or "residual" cost is then simply assigned to the building and/or other long-lived assets. Although this method is simpler and less time consuming than the engineering approaches, it can also be less accurate.

It should be recognized that this method generally does not reconcile project costs. In general, residual costs are not estimated or checked for reasonableness. A proper and

"reasonable" residual cost should always be determined and then added back to the total of all short-lived asset costs to check if the total project cost is reconciled.

It should also be understood that different estimation techniques for short-lived assets can produce a skewed result in favor of § 1245 property (e.g., § 1245 property based on single-unit costs for high quality construction, while the building is based on gross square footage).

5. Sampling Or Modeling Approach

The sampling or modeling approach uses a created model (or template) to analyze multiple facilities that are nearly identical in construction, appearance and use (e.g., fast food chains and retail outlets). The use of sampling minimizes resources and costs compared to conducting studies on all properties.

Typical steps are:

1. Stratify properties by type of facility (e.g., free-standing facility, mall location, leased or owned property, etc.).
2. Perform a cost segregation study on a sampling of properties within each stratum.
3. Based on the results in Step 2, develop a standard model for each type of facility.
4. Apply the costs derived from the model(s) to the population on a percentage basis. For example, the model may indicate that 10% of the project costs are allocable to 5-year property. This same percentage is then applied to each facility within the same stratum.

A frequent issue is the accuracy of the sampling results. In some cases, the sampling method may not be statistically valid. In addition, a population less than 50 could limit the accuracy of a sampling technique, unless an appropriate sampling error is considered. Also, despite the fact that facilities within certain strata may appear to be very similar, variations in building codes, geographic location, and material and labor costs may make it difficult to determine an appropriate model. Statistical sampling is discussed in more detail in [Chapter 5](#), "Review and Examination of a Cost Segregation Study," and in [Appendix Chapter 6.5](#).

6. "Rule Of Thumb" Approach

Some cost segregation studies are merely based on a "rule of thumb" approach. In general, this approach uses little or no documentation and is based on a preparer's "experience" in a particular industry. For example, a preparer will estimate § 1245 property as a fixed percentage of project cost by relying on previously determined "industry averages" (e.g., 40% for a manufacturing facility). An examiner should view this approach with caution, since it lacks sufficient documentation to support its allocation of project costs.

WHAT METHODOLOGY IS REQUIRED BY THE IRS?

Neither the Service nor any group or association of practitioners has established any requirements or standards for the preparation of cost segregation studies. The courts have addressed component depreciation, but have not specifically addressed the methodologies of cost segregation studies.

The Service has addressed this issue but only briefly, i.e., Revenue Ruling 73-410, 1973-2 C.B. 53, Private Letter Ruling (PLR) 7941002 (June 25, 1979), Chief Counsel Advice Memorandum 199921045 (April 1, 1999). These documents all emphasize that the determination of § 1245 property is factually intensive and must be supported by corroborating evidence. In addition, an underlying assumption is that the study is performed by "qualified" individuals or firms, such as those employing "...personnel competent in design, construction, auditing, and estimating procedures relating to building construction" (PLR 7941002).

Despite the lack of specific requirements for preparing cost segregation studies, taxpayers still must substantiate their depreciation deductions and classifications of property. Substantiation using actual costs is generally preferable to the use of estimates. However, in situations where estimation is the only option, the methodology and the source of any cost data should be clearly documented. In addition, estimated costs should be reconciled back to actual costs or purchase price.

SUMMARY AND CONCLUSIONS

Cost segregation studies are prepared for a variety of reasons (e.g., income tax, financial accounting, insurance purposes, property tax), and many different methodologies and procedures are used. While neither the Service nor any group or association of practitioners prescribes a specific methodology, there are certain approaches (e.g., studies based on actual costs or on proper estimation techniques) that produce more accurate and reliable allocations. Despite the use of one of these more reliable methods, issues may still arise with respect to the proper classification of § 1245 property.

Methodologies that yield accurate cost allocations expedite the Service's review, saving time and resources for taxpayers, practitioners, and Service examiners alike. A study that is both accurate and well documented is considered (in this ATG) a "quality" cost segregation study. The specific characteristics that comprise a quality study are described in [Chapter 4](#), "Principal Elements of a Quality Cost Segregation Study and Report".

Chapter 4

PRINCIPAL ELEMENTS OF A QUALITY COST SEGREGATION STUDY AND REPORT

Introduction

What Is A Quality Cost Segregation Study?

Principal Elements Of A Quality Cost Segregation Study

1. Preparation By An Individual with Expertise and Experience
2. Detailed Description Of The Methodology
3. Use Of Appropriate Documentation
4. Interviews Conducted With Appropriate Parties
5. Use Of A Common Nomenclature
6. Use Of A Standard Numbering System
7. Explanation Of The Legal Analysis
8. Determination Of Unit Costs And Engineering "Take-Offs"
9. Organization Of Assets Into Lists Or Groups
10. Reconciliation Of Total Allocated Costs To Total Actual Costs
11. Explanation Of The Treatment Of Indirect Costs
12. Identification And Listing Of Section 1245 Property
13. Consideration Of Related Aspects (e.g., IRC § 263A, Change in Accounting Method And Sampling Techniques)

Principal Elements Of A Quality Cost Segregation Report

1. Summary Letter/Executive Summary
2. Narrative Report
3. Schedule Of Assets
4. Schedule Of Direct and Indirect Costs
5. Schedule Of Property Units And Costs
6. Engineering Procedures
7. Statement Of Assumptions And Limiting Conditions
8. Certificate
9. Exhibits

Summary And Conclusions

INTRODUCTION

As discussed in the last chapter, there are no standards for cost segregation studies. Thus, examiners will encounter a wide variety of studies and reports, as well as documentation. For example, some studies will be very brief. Other studies may be quite voluminous and complex. Regardless of the length of a study or the methodology used, a cost segregation study and report should always:

1. classify assets into property classes (e.g., land, land improvements, building, equipment, furniture and fixtures);
2. explain the rationale (including legal citations) for classifying assets as either § 1245 or § 1250 property; and,
3. substantiate the cost basis of each asset and reconcile total allocated costs to total actual costs.

WHAT IS A "QUALITY" COST SEGREGATION STUDY?

A "quality" cost segregation study is a study that is both accurate and well-documented with regard to the three points above. Quality studies greatly expedite the Service's review, thereby minimizing audit burden on all parties. A quality study contains a number of characteristics, which are set forth below.

PRINCIPAL ELEMENTS OF A QUALITY COST SEGREGATION STUDY

The 13 principal elements of a quality study are:

1. [Preparation By An Individual With Expertise And Experience](#)
2. [Detailed Description Of The Methodology](#)
3. [Use Of Appropriate Documentation](#)
4. [Interviews Conducted With Appropriate Parties](#)
5. [Use Of A Common Nomenclature](#)
6. [Use Of A Standard Numbering System](#)
7. [Explanation Of The Legal Analysis](#)
8. [Determination Of Unit Costs And Engineering "Take-Offs"](#)
9. [Organization Of Assets Into Lists Or Groups](#)
10. [Reconciliation Of Total Allocated Costs To Total Actual Costs](#)
11. [Explanation Of The Treatment Of Indirect Costs](#)
12. [Identification And Listing Of Section 1245 Property](#)
13. [Consideration Of Related Aspects \(e.g., IRC § 263A, Change In Accounting Method And Sampling Techniques\)](#)

1. Preparation By An Individual With Expertise And Experience

The preparation of cost segregation studies requires knowledge of both the construction process and the tax law involving property classifications for depreciation purposes. Unfortunately, there are no prescribed qualifications for cost segregation preparers. However, a preparer's credentials and level of expertise may have a bearing on the overall accuracy and quality of a study.

In general, a study by a construction engineer is more reliable than one conducted by someone with no engineering or construction background. However, the possession of specific construction knowledge is not the only criterion. Experience in cost estimating and allocation, as well as knowledge of the applicable law, are other important criteria.

A quality study identifies the preparer and always references his/her credentials, experience and expertise in the cost segregation area.

2. Detailed Description Of The Methodology

Chapter 3 discusses the most common methodologies used in preparing cost segregation studies. However, an actual study may be based upon a variation or combination of methods and, in fact, may not even identify by name the method used.

A quality study always describes the methodology that was used and details the steps that were taken to classify assets and determine costs.

3. Use Of Appropriate Documentation

A quality study uses contemporaneous documentation to classify assets and determine costs. Documentation supporting a quality study will vary, depending on whether a property is new or used or whether original construction documents are available. The documentation in a quality study for both new and used properties is detailed below.

A. New Construction

- Allocation of Land and Land Development Costs

A quality study explains the treatment of land and land development costs, (e.g., roads, sewer lines, storm drains, utility mains, survey and subdivision costs). Generally, these costs are allocated to non-depreciable land accounts. Also included in this account are the costs of improvements or land that are transferred to a local municipality (to obtain approval for subdividing or for a change in use).

- Site Visit

A quality study includes a site visit to gain a better perspective and understanding of the design and purpose of the project, as well as the use of specific assets. Before-and-after photographs are used to establish land and site preparation costs (i.e., surveying, clearing, grubbing, general grading and compaction).

- Blueprints, Construction Drawings And Contract Payments

- A quality study reviews all pertinent construction documentation. The taxpayer's capital expenditure request is reviewed to ascertain the intended functional use of a building and other assets included in the project. Site, architectural, and engineering plans, as well as "as-built" drawings, blueprints and bid documents, are all reviewed and referenced in a quality study. The specific assets deemed to be § 1245 property are clearly highlighted or otherwise identified on the "as-built" drawings. Project specifications are analyzed to determine conformity to the

blueprints. Purchase and change orders are also reviewed to ascertain cost information, changes in costs, and details of the work performed.

- A quality study reviews The General Contractor's Applications for Payment (AIA Forms G-702 and G-704) to ascertain what was actually paid for during construction. In addition, subcontractor payment applications, as well as invoices paid for items outside the scope of the general contractor's work, will be reviewed to provide greater insight and detail of the construction. Actual or estimated costs are cross-referenced to the supporting documentation.

A. Acquired or Used Properties

Unlike cost segregation studies performed on newly-constructed property, those performed on acquired or used property will likely be based on estimates and/or reconstructed costs.

- Purchase Price Allocations
A quality study documents how purchase price was allocated between land, land improvements, building and other assets. Land value is always determined first and is based on "highest and best use." In simple terms, highest and best use means the probable use of land that results in its highest value. The balance of the purchase price is then allocated to the building and to other assets.
- Addresses Physical Deterioration and Functional Obsolescence
The lack of cost records and the age of a property add to the uncertainty in determining its value or cost. In making this determination, a quality study always accounts for the physical deterioration and functional obsolescence of assets. It also provides the documents and the corroborating evidence used to determine values or costs.
- Site Visit
As for new construction, a quality study includes a site visit, as well as photographic evidence, to assist in identifying the assets and in determining the allocations of values or costs.
- Review of Purchase or Lease Agreements and Appraisals
When original construction documents are not available, a quality study will support its allocations by using other corroborating evidence (e.g., purchase/lease agreement, appraisals). A quality study will review the purchase agreement as a first step. If the property is leased, the lease agreement will be reviewed and documented. A quality study will also review any appraisals, if applicable. The availability of historical construction records will also be addressed in a quality study (i.e., if these are not available, the study will indicate what efforts were made to obtain these records).

1. **Interviews Conducted With Appropriate Parties**

Interviews with contractors and subcontractors, as well as with taxpayers and property managers, are quite valuable in ascertaining the specific use of a property and the construction process involved. A quality study documents all interviews conducted with appropriate parties, thus adding credibility to the depth and accuracy of its study. However, the examiner should recognize that subcontractor work details can be difficult to obtain since taxpayers generally have had no direct contact with them. In addition, general contractors may also be reluctant to share certain information because of confidentiality (e.g., profit margins).

2. **Use Of A Common Nomenclature**

The use of creative or misleading nomenclature to describe property items, rather than common and clearly understood terms, detracts from the quality of a study. "Creative" descriptions may be used to disguise the true nature or character of an asset (e.g., a building sewage or water piping system referred to as "process piping"; an emergency exit sign termed "decorative placard").

A quality study always uses terminology consistent with the blueprints and other project documents (e.g., contract specifications, pay requests, etc.). The use of common and clearly understood terms facilitates Service review and avoids the confusion caused by misleading terms.

3. **Use Of A Standard Numbering System**

The use of a standard numbering system, such as the Construction Specification Institute (CSI) Master Format Division, is helpful but not mandatory. A quality study numbers assets consistent with the contract bid documents and pay requests. This numbering system facilitates classifying property for computing depreciation and thus expedites the Service's exam.

The CSI format categorizes costs by specific building systems or components, such as concrete, carpentry, metals, woods and plastics, mechanical, electrical, and lighting. Other typical groupings of assets may include land, land improvements, furniture and fixtures, electrical systems, plumbing systems, equipment, etc. Refer to [Appendix Chapter 6.6](#), which provides a more detailed discussion of standard numbering systems.

4. **Explanation Of The Legal Analysis**

A quality study contains a thorough legal analysis, including relevant citations, to support its § 1245 property classifications. While the treatment of some items may be fairly clear based on consistent judicial decisions, there are many instances in which court decisions may appear to be contradictory or to which the Service has not acquiesced. These apparent contradictions generally reflect the intensely factual basis that underlies the proper classification of property. As might be expected, the proper classification of property is the source of much audit controversy.

The legal discussion in a quality study recognizes these contradictions and attempts to reconcile them to the specific facts and circumstances of the property at issue. An accurate analysis of the statutes and judicial precedent adds to the overall quality of a study and facilitates the Service's review.

5. **Determination Of Unit Costs And Engineering "Take-Offs"**

Once property items or assets have been identified and assigned to property classes (e.g., building and personal property), their respective costs must be determined. In order to determine a cost for each unit or class of property in a project or component system, total project costs (or total component system costs) must generally be broken down. This breakdown process is commonly known as engineering "take-offs".

In a quality study, engineering "take-offs" are carefully documented to show derived unit costs, and individual property units are clearly identified or highlighted on the "as-built" blueprints. For new construction, the cost of property items in an engineering take-off can generally be obtained from actual cost records. However, when actual costs are not available, costs must be estimated.

Cost estimates can vary widely depending on which estimating guide is used and whether costs are for "high" or "low" quality construction. In a quality study, cost estimates are always reconciled to an acquisition price, a total project cost, or to a component system cost to ensure the accuracy of an allocation. The proper use of an estimation technique is another frequent source of audit controversy. A quality study minimizes this controversy by clearly explaining and documenting the methodology used to assign costs to each asset.

6. **Organization Of Assets Into Lists Or Groups**

Typically, a study lists assets by recovery period (e.g., land, land improvements, furniture and fixtures, electrical systems, plumbing systems, equipment). A quality study's asset listings tie to a taxpayer's fixed asset ledger, which also facilitates the Service's review.

7. **Reconciliation Of Total Allocated Costs To Total Actual Costs**

It is important that the same estimating technique be used on all of the items that reconcile to a purchase price, a project cost, or to a particular component cost. If different methods or cost guides are used on different property items (e.g., one method for tangible personal property and a different method for the building), cost distortions arise. A quality study always reconciles total allocated costs to total actual costs in order to ensure the accuracy of its allocations.

A quality study also considers and lists separately-acquired § 1245 property to prevent possible duplication. For example, if the total project cost includes furniture, fixtures and equipment (FFE), then it is appropriate to allocate costs to those items. However, if FFE is acquired separately and not included in the total project cost, then it is not appropriate to assign costs to FFE.

8. Explanation Of The Treatment of Indirect Costs

A quality study lists all the costs associated with a particular project, including both direct and indirect costs, and explains the treatment of any indirect costs. Direct costs are the labor and material costs for specific items or assets. Indirect costs, also referred to as "allocables," are intangible costs that are incident to the construction of a facility. Indirect costs must be allocated proportionately to the basis of the specific assets to which they relate.

Indirect costs also include expenditures that should not be allocated to the entire project but rather assigned to the property class to which they relate. Costs to survey and subdivide land, grade the land to prepare a building pad, and construct offsite improvements are generally allocable only to land. On the other hand, costs for building permits, general conditions, and contractor overhead and profit are typically allocated to assets on a pro-rata basis.

Generally, indirect costs do not relate to the placement of business machinery, or furniture and fixtures since these assets are typically purchased and installed under separate contracts. However, indirect costs that specifically relate to components of personal property may be assigned to § 1245 property. For example, costs for special consultants (e.g., for computer wiring and process engineering) or costs to design the computer system may be assigned directly to that system. In addition, it may be reasonable to allocate certain indirect costs, such as liability insurance, bonds, and overhead/profit, where it can be shown that the total amount of the indirect costs is based upon the pro rata cost of each class of property.

The treatment of indirect costs is another area of frequent controversy. A quality study explains the purpose of each indirect cost, describes its allocation, and explains any deviations from commonly accepted practice.

9. Identification And Listing Of Section 1245 Property

A quality study lists § 1245 property (including amounts) and shows any § 1250 property reclassified to § 1245 property.

10. Consideration Of Related Aspects (i.e., IRC § 263A, Change in Accounting Method and Sampling Techniques)

A quality study addresses related aspects, such as IRC § 263A, change in accounting method, and sampling techniques.

The uniform capitalization (UNICAP) rules of § 263A(a) require the capitalization of all direct costs and certain indirect costs allocable to real property and tangible personal property produced by the taxpayer. Self-constructed assets and property built under contract are treated as property "produced" by the taxpayer. Furthermore, § 263A(f) requires the capitalization of certain interest expense incurred in connection with the production of property.

Although the courts have not uniformly agreed, it is the position of the Service that a change in depreciation method, recovery period, or convention for depreciable property constitutes a change in accounting method. Therefore, the use of a cost segregation study to reclassify property and/or reallocate costs requires the consent of the Commissioner. Please refer to [Appendix Chapter 6.2](#) for more information regarding the current status of this issue.

Studies may utilize sampling techniques when taxpayers have a large number of substantially similar properties, such as retail or food stores. Studies may use such techniques as statistical sampling, modeling, or judgmental sampling.

When conducted properly, statistical sampling can be a reliable technique. However, improper sampling techniques may result in a final answer that does not accurately reflect a valid estimate. Factors addressed in a quality study's sampling technique include the definition of the population being sampled, the size of the population, a description of any stratification techniques, and the consideration of sampling error.

A modeling approach may also be used to segregate property costs. This approach uses created models to approximate the different types of units involved. If the models are properly analyzed, then this method may be reasonably accurate when applied to the entire population. However, as discussed in Chapter 3, the delineation of strata may be difficult and is often an area of controversy. Furthermore, issues may arise as to whether the sampling method is statistically valid.

Some studies may rely solely on a judgmental sampling technique, which carries a higher level of risk due to the elements of subjectivity involved. A judgment sample is typically selected on the basis of perceived similarities and is not statistically valid. However, under certain, limited circumstances, the use of a judgment sample may be appropriate. In such a case, the underlying basis for the selection of particular units in a judgment sample must be rational and supported by adequate data.

A quality study addresses these related audit issues and comments on the treatment of these items for tax purposes, especially where the amounts are restated for prior tax years.

PRINCIPAL ELEMENTS OF A QUALITY COST SEGREGATION REPORT

A cost segregation report reflects a study's methodology and conclusions. The amount of detail included in a report varies considerably since there is no standard or prescribed format. The following elements are found in a quality report.

1. Summary Letter/Executive Summary

A quality report contains a summary to identify: the preparer, the date of the study, the taxpayer (or client), the subject property, and the property components classified as land, land improvements, building, or personal property.

2. Narrative Report

A quality report discusses the theory, definitions and the rationale behind the study in the narrative section. This section generally includes a more detailed description of the

property/facility (i.e., a physical description and an explanation of the use for which it is intended, as well as a legal description of the property and its location). In addition, the narrative section highlights the regulations, rulings and court cases that support classifying assets as § 1245 property. The narrative also discusses the types and sources of data used (e.g., cost records, contracts, purchase agreements, published estimates) as well as how they were used. A list of potential data sources is included in [Appendix Chapter 6.6](#).

3. Schedule Of Assets

A quality report has a schedule of assets that are the focus of the study. Generally, this schedule ties directly to the taxpayer's depreciation records. When a taxpayer reallocates costs of assets already "on the books," a quality report clearly identifies the specific assets impacted (and includes depreciation records from both before and after the reallocation).

4. Schedule Of Direct and Indirect Costs

A quality report lists all direct and indirect costs associated with a project. Indirect costs allocated to § 1245 property are clearly identified and explained. Separately-acquired assets are listed and discussed in the report to avoid duplication errors. Costs subject to IRC § 263A are also addressed.

5. Schedule Of Property Units And Costs

A quality report provides a schedule of property units and costs (with property descriptions) that are segregated into land, § 1245 property, and § 1250 property. This schedule is the final product of the study and serves as the basis for computing depreciation.

6. Engineering Procedures

A quality report describes the engineering procedures and methodology for determining the cost of each property unit. It also identifies the specific taxpayer records that were reviewed and discusses whether actual cost records or estimating techniques were utilized to break costs into smaller components. A record of inspections and/or interviews is included as well. The use of a common nomenclature or a standard numbering system is also referenced and/or explained.

7. Statement Of Assumptions And Limiting Conditions

A quality report describes the general understanding and conditions applicable to the report. This information may also provide an indication of the overall quality of the study.

8. Certification

A quality report certifies that the person who signed the report actually developed the analysis, opinions, and conclusions of the report. This section may also include the resume' or state the credentials and/or level of experience of the preparer.

9. **Exhibits**

A quality report generally includes various exhibits, such as the "Client Cost Sources" and the "Cost Source Reconciliation." These exhibits show the "book" (accounting) records on which the preparer relied in deriving total costs, and may include a reconciliation of the study to the fixed asset ledger. Photographs and/or videos may also be included as exhibits to assist in understanding the assets in the study.

SUMMARY AND CONCLUSIONS

This chapter described the principal elements of a "quality" cost segregation study and report. The degree to which a cost segregation study/report conforms to these elements will likely dictate the scope and depth of an examination. As is clear in [Chapter 5](#), "Review And Examination Of A Cost Segregation Study," a quality study and report will expedite the exam process and, ultimately, minimize audit burden on taxpayers, practitioners and examiners alike.

Chapter 5

REVIEW AND EXAMINATION OF A COST SEGREGATION STUDY

Introduction

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1. Review A Copy Of The Cost Segregation Study And Report
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3. Conduct A Risk Analysis To Evaluate Audit Potential
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 - A. Newly-Constructed Property
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 1. Review Sampling Techniques
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 5. Summarize The Findings And Discuss The Challenged Assets With The Taxpayer
 6. Prepare The Final Report Or The Notice Of Proposed Adjustments

Summary And Conclusions

INTRODUCTION

The preceding chapters described the legal framework for classifying assets ([Chapter 2](#)), common methods used to segregate costs ([Chapter 3](#)), and elements of a quality cost segregation study and report ([Chapter 4](#)). This chapter provides suggested audit steps for reviewing and examining a cost segregation study.

The appropriate audit steps depend on the nature and size of the segregation project as well as on the overall quality of the study. Cost segregation is a factually intensive determination that is based on complex tax law and engineering analysis. While agents may be able to evaluate the adequacy of some cost segregation studies (e.g., smaller projects), other studies may require specialists with expertise, industry experience and specialized training.

The Engineering Program in LMSB is the principal source of technical expertise for examining cost segregation studies. The Computer Audit Specialist (CAS) Program in LMSB is also available to provide assistance when a study is based on statistical sampling. Formal advice, using the referral process, should be solicited through the LMSB web site (IRWEB/LMSB/Field Specialists/, and select Engineers or CAS) and the Specialist Referral System (SRS). Informal advice is also available by contacting your local specialist group.

The suggested audit steps are presented below in an outline format. In order to have a better understanding of these steps, examiners may want to refer to [Appendix Chapter 6.6](#) for a brief overview of the construction process. While some steps will not apply to all studies, each step should be carefully considered before moving on to the next one.

1. [Review A Copy Of The Cost Segregation Study And Report](#)
 2. [Verify The Cost Basis And Reconcile Depreciation Records](#)
 3. [Conduct A Risk Analysis To Evaluate Audit Potential](#)
 4. [Interview The Preparer](#)
 5. [Inspect The Property](#)
 6. [Review And Verify The Classes of Property](#)
 7. [Perform A Cost Analysis](#)
 - A. [Newly-Constructed Property](#)
 - B. [Existing Property](#)
1. [Review Sampling Techniques](#)
 2. [Consider IRC § 263A](#)
 3. [Consider Change In Accounting Method](#)
 4. [Research The Law, The Regulations And Appropriate Rulings](#)
 5. [Summarize The Findings And Discuss The Challenged Assets With The Taxpayer](#)
 6. [Prepare The Final Report Or The Notice Of Proposed Adjustments](#)

STEPS FOR REVIEWING A COST SEGREGATION STUDY AND REPORT

1. Review A Copy Of The Cost Segregation Study & Report

If the taxpayer has claimed depreciation deductions based on a cost segregation study, the examiner should review and evaluate the study and report.

- Request a copy of the Cost Segregation Study/Report. Refer to the IDR Exhibits in [Appendix Chapter 6.7](#) for suggested language.
- Request a copy of the Letter of Engagement to determine the scope of the study.
- Determine the Nature of the Fee Arrangement.
 - Many firms charge a fee based primarily on the size of the project. Out-of-pocket expenditures are generally added to this cost.
 - Some firms use contingency fees where cost is based primarily on the tax benefits received from a study. Contingency fee arrangements create the incentive to maximize § 1245 costs, usually through "aggressive" legal interpretations and/or by inappropriate cost or estimation techniques. Accordingly, examiners should closely scrutinize studies performed on contingency fees.
- Read the Entire Report.
- Evaluate the Study with respect to its depth, accuracy and methodology. What methodology was used (see Chapter 3)? How does the study and report compare to the quality elements described in Chapter 4?
- Determine the Cost Allocation Process and the Source of any Unit Costs. How were costs allocated? Were actual costs or estimates used? How were unit costs determined?
- Review the Property Units and the Types of Assets.
 - Assets are generally classified into various units or groups of assets and are often listed in both a "Summary" and "Detail" format.
 - The "**Property Unit Summary**" is a summary of the unit (asset) groupings by land, land improvements, 3-year, 5-year, 7-year, 10-year, 15-year, 20-year, 27.5-year and/or 39-year property.
 - The "**Property Unit Detail**" is a detailed asset schedule within each unit (asset) grouping that describes the assets and shows their costs.

- An example of a unit grouping is "Kitchen Equipment--Plumbing". Within this grouping, the Property Unit Detail schedule might list the floor drain, grease trap, or sink.
- Abbreviated methodologies may not classify assets into property units. Nevertheless, assets still must be identified, supported and documented in a cost segregation report.

1. Verify The Cost Basis And Reconcile Depreciation Records

Examiners should reconcile the basis of property in a study to basis in the taxpayer's books and records.

- Request Detailed (Asset-by-Asset) Depreciation Schedules that tie to the return. Determine how the study assets are shown on the depreciation schedules.
- Review Tax Depreciation Schedules to verify that tax basis reconciles with the study; note any differences. Are fixtures, furnishings and equipment included in the study? Are they on other cost recovery schedules? Have these costs been duplicated?
- Request Prior Year Tax Depreciation Schedules that correspond to the study's assets. Do these schedules reconcile to depreciation for prior year returns? Property reclassified to a shorter recovery period must be depreciated using the proper method pursuant to IRC § 168(b). For example, if straight-line depreciation was used for other property placed in service for a given recovery period during the same year that the reclassified assets were placed in service, then IRC 168(b)(3) requires that the reclassified assets must also be depreciated using the straight-line method. The election to use straight-line depreciation is irrevocable pursuant to IRC § 168(b)(5).
- Request Contemporaneous Documentation to Substantiate and Verify the Basis of Assets.
- Determine Whether Basis was Properly Allocated to land, non-depreciable land improvements (general land grading, off-site street improvements) and/or other property types aside from those considered by the study.
 - Were any project costs allocated to land or land improvements? Many studies allocate almost all costs to building and personal property, instead of allocating appropriate amounts to land, land improvements, or other long-lived assets. In the case of acquired property, it is often appropriate to assign a large portion of an acquisition price to land, prior to allocating the remaining purchase price to other property.

1. Conduct A Risk Analysis To Evaluate Audit Potential

Conduct a risk analysis to evaluate the audit potential and determine audit scope.

- Review the Descriptions in the Property Unit Detail Schedule to determine the type of property in each unit (or group).
- Review the Classification of Property Units and its reasonableness.
- Compare the Study's Property Descriptions and Classifications To Revenue Procedure 87-56, 1987-2 C.B. 674. Are there any deviations that may indicate a potential audit issue? Can you identify specific assets that might need to be viewed during a tour of the projector facility?

Common situations suggesting audit potential include the following:

- Mixed asset types in the same unit (or group).
- Building elements or leasehold improvements included in short-lived property units.
- Minimal or no dollar amounts assigned to land, non-depreciable land improvements, building, or other long-lived assets.
- Use of "creative" nomenclature or inconsistent titles and descriptions to disguise the true character of a property asset. Does the study nomenclature reflect the construction records and blueprints?
- Request Additional Information (as needed) to determine audit potential.
 - Issue IDR's to determine the classification of items not readily understood (refer to [Appendix Chapter 6.7](#) for suggested language).
 - Request contemporaneous records (permits, design studies, contractor payment records, contracts, purchase orders, invoices) to verify the costs and descriptions of property as well as to ascertain their functional use. This will facilitate the determination of the proper asset classification pursuant to Revenue Procedure 87-56. For example, machinery located in a chemical plant is 5-year property instead of 7-year property if it meets the requirements of Asset Class 28.0 (refer to [Appendix Chapter 6.3](#) for information on asset classes).
 - Request the "Capital Expenditure Request" to verify project costs and identify related purchases (it may also help determine the intended use of the property).

- In some cases, it may be more appropriate for the preparer of the study to respond to the document requests.
- Supporting documents may include computer files, hardcopy files, plans, etc. A Computer Audit Specialist can assist in viewing computer files not ordinarily viewable on IRS computers.
- Summarize Your Preliminary Findings.
Quantify the tax impact of potential audit issues, such as:

- The cost basis of items that are in question or dispute or are unsubstantiated.
- Assets that have been misclassified
- Double deductions for separately-acquired assets.
- The use of improper depreciation methods.
- The incorrect placed-in-service date.
- Large look-back computation (i.e., the study reflects a change in method of accounting, with the return reflecting a deduction for depreciation not deducted in prior years)

- Determine the Need for Specialists (e.g., Engineers and/or Computer Audit).
Specialists may be required to assist in the examination of complex projects. It is important that specialists be involved in the audit as early as possible. Informal assistance may also be requested when needed.

- A study with significant tax impact generally requires the assistance of specialists. These studies will typically have a large number of assets or complex assets.
- A study that allocates estimated costs between § 1245 and § 1250 property (particularly electrical or plumbing component systems) typically requires the assistance of an Engineer. Engineers can provide the expertise needed for the proper development and resolution of the issue.
- Studies involving numerous assets or allocations may require the assistance of a Computer Audit Specialist (CAS) to process the data and/or evaluate any statistical sampling methods.

- Determine the Scope and Depth of Your Examination.

Risk analysis is a subjective process based on the experience, knowledge and judgment of the examiner. Guidelines provided in the previous chapters will assist examiners in evaluating

the overall accuracy and adequacy of a study as well as in determining audit potential and scope. Studies with little tax impact should be closed expeditiously. Studies with significant tax impact should be considered for additional review and examination and will generally require specialist assistance.

1. Interview The Preparer

- Schedule an Interview with the Preparer. If possible, this should be completed before or contemporaneous with the on-site inspection (see Step 5). The interview should address the scope and assumptions of the study and any observations of the project or facilities. Possible interview questions include:
 - Were the properties inspected at the time of the study?
 - Were photographs and/or video media taken and/or relied upon in classifying property?
 - Were sampling techniques used?
 - What cost estimating guides were used? Where are the guides located (for purposes of verifying estimates)?
 - What documentation was used to establish the cost basis and particular use of a property item?
 - How was the cost of each property item identified, segregated, and classified?
 - Where are the workpapers?

1. Inspect the Property

In general, the Service engineer (if assigned) is responsible for arranging the on-site inspection, which provides the opportunity to view the assets in question. Inspections also help identify underground utilities, off-site improvements and general grading costs that may have been misclassified as § 1245 or § 1250 property. Overall, the inspection provides information to assist in determining classifications of § 1245 and § 1250 property.

- Prior to Scheduling the Tour, Complete your Review of the Study in order to identify specific assets and concerns that require inspection.
- Prepare a List of Assets/Items that Warrant Inspection and provide it to the taxpayer beforehand. Ask additional questions and/or view additional property components during the tour as needed.
- Plan the Inspection to Minimize Time and Travel Costs. For cases involving multiple properties of similar character, consider inspecting only a representative number of properties or facilities.

- Take a Camera or Video Recorder (Camcorder) to record the condition of the property. Confirm beforehand that photography will be allowed/permissible.
- Request that the Property Manager/Maintenance Engineer be Available During the Tour. It is important that someone familiar with the physical attributes and workings of the property be available to answer questions and provide access to non-public areas.
- Request that the Preparer Attend the Tour if possible. He/she can identify the physical attributes of specific assets and explain how they were classified.
- Request Access to Plans, Drawings and Contract Documents that are located on-site.
- Prepare an IDR in duplicate so that any requested items received during the inspection can be noted and an acknowledgement copy of the IDR can be left with the taxpayer.
- View the Project Site and Note Features that impact the cost allocations and property classifications. Consider the following points:
 - Location - Record the address and locate it on a map for future reference. What is the character of the neighborhood and how does the location impact land value? Is there any other property for sale in the area? Note the real estate company name and the address of the property for future reference.
 - Topography - Observe the topography and determine whether the land was initially hilly or low-lying. Did the project include the general grading of the land? Were large amounts of fill required in order to build?
 - Site Conditions - Determine whether the project included the subdividing or rezoning of land. Did it require environmental or land use permits, or the construction of access roads? Were off-site improvements (e.g., streets, sidewalks, sewers, storm drains) constructed? Were any of these improvements dedicated to the local municipality?
 - Condition of Property - Is the property new or old, worn or renovated? Were the materials modern or old?
 - Project Records – Where are the original project records (e.g., drawing, plans, contracts, payment records) located? Ask for the names of employees who may have particular knowledge of the construction. Request interviews with such individuals as needed.

- Individual Assets - View each challenged asset to gain a thorough understanding of the facts and circumstances that affect its classification and cost. Ask the site manager how the facility is used and how individual assets operate.
- Cost Data - Discuss the methodology that was used to determine the cost of assets. Were standard cost guides used to estimate costs? Ask on-site maintenance and facility operations personnel about local construction and repair costs in order to verify the estimated costs in a study.
- Prepare Notes and Drawings for future reference.
 - Obtain sufficient information to properly classify each challenged asset.
 - When possible, obtain local cost data to verify estimates and cost allocations.

1. Review And Verify The Classes Of Property

Review the study again to determine whether property classifications are correct.

- Are Assets Classified into their Proper Groups, such as?
 - Land
 - Non-Depreciable Land Improvements (i.e., all off-site construction and general land grading expenses)
 - Depreciable Land Improvements
 - Buildings, Structural Components and Other § 1250 Property
 - Office Furniture, Fixtures and Equipment
 - Information Systems
 - Building Systems (e.g., mechanical, electrical, plumbing)
 - Process Systems (e.g., process piping)
 - Non-Residential Real Property
 - Other Miscellaneous Property
- Are Assets Assigned to the Proper Asset Class and Recovery Period?
 - The classification of assets as either § 1245 or § 1250 property is a factually intensive determination with no bright line tests.
 - Refer to [Chapter 2](#), "Legal Framework" and to [Appendix Chapter 6.4](#) for a summary of the pertinent law and judicial precedent with respect to the classification of property.
 - Recovery periods are either specifically assigned by statute (IRC § 168 and the Regulations thereunder) or are determined pursuant to Revenue Procedure 87-56, 1987-2 C.B. 674. Refer to [Appendix Chapter 6.3](#), "Depreciation Overview," for further information on recovery periods.

- Common Audit Issues

A common issue is the allocation of specific components or a portion of a building system to § 1245 property. The issue is often the result of poor documentation and/or improper legal support.

- Example 1

Some studies may include a specific component of a building's electrical system (e.g., plug outlet, switch, branch circuit) as being allocable to the piece of tangible personal property that it supports (e.g., dishwasher, garbage disposal, etc.). Accordingly, the component item is treated as § 1245 property (7-year MACRS). However, if that same electrical component item can be used for other pieces of equipment, the Service examiner may consider it to be part of the building's general electrical system. Accordingly, it would then be classified as part of the building as § 1250 property (39-year MACRS).

- Example 2

Some studies allocate a portion of the primary electrical feeder circuit that carries electricity to one specific item of equipment or machinery as § 1245 property. The use of a "standard" percentage of electrical costs is a common approach. However, in the Service's view, these types of allocations should be based on usage or load studies designed to ascertain the percentage of electricity allocable to specific § 1245 property (as opposed to supporting the general function or maintenance of the building). Examiners can also check whether a company was reimbursed for the sales tax paid on electricity used in manufacturing; this information may provide insight as to the correct percentage. In summary, the examiner should conduct an in-depth analysis of the allocation and supporting documentation when a standard percentage is used.

- Example 3

Some taxpayers have filed claims based on a cost segregation study of leased property. Typically, leases were assigned to 39-year recovery property on the original returns. Subsequently, the taxpayer re-determines its allowable depreciation on the basis that the acquisition was for goodwill rather than for the lease. The benefit is a potential 15-year amortization of goodwill pursuant to IRC § 197 (if the acquisition otherwise qualifies under § 197). Examiners should closely scrutinize allocations of this type.

- List Assets into the Proper Asset Class and Recovery Period.

- 1. Perform A Cost Analysis**

Once proper classifications and recovery periods have been determined, the next step is to determine the costs allocable to individual assets. This determination will depend on whether the asset is newly constructed or is a purchased or existing facility. It is important to realize that cost determinations are very time consuming. Therefore, it is recommended that

examiners determine that significant discrepancies exist, or are strongly suspected, before undertaking Steps 7A or 7B below.

A. Cost Analysis Of Newly-Constructed Property

Actual cost records should be available from the preparer, taxpayer, general contractor, and/or other third parties. Cost records should be requested for significant property items only.

- Gather Background Information.
 - Secure total project costs by requesting information related to the construction project billings.
 - Review construction drawings, blueprints and specifications.
 - Blueprints and specifications identify property items, construction methods and locations of items within the structure.
 - Review the "as-built" drawings if available (generally available from the taxpayer, architect, contractor, local building department, local fire department, or insurance carrier). Review the most "up-to-date" drawings as well. These drawings are typically found in the engineering or property manager's office and can be accessed during the inspection.
 - Request the building and occupancy permits, which can assist in establishing the placed in service date.
 - Request photographs of the site showing the condition of the property before the project began. This will help determine whether significant site preparation or general grading costs were incurred.
- Request Contemporaneous Records to Substantiate the Cost Basis of Assets in the Study.
 - Contract documents specify how payments are made and typically require payment requests to be broken down into individual items of property. The American Institute of Architects (AIA) Form G-702 is used to process payments on nearly all construction projects. This form requires contractors to break down their payment requests into amounts for each individual building system or trade (e.g., site preparation, grading, concrete, wood, electrical).
 - Purchase orders and invoices are another source of cost data.
- Analyze the Total Project Costs.
 - Review the Contractor's Requests for Payment in AIA Forms G-702 and G-703.

- Review capitalized costs including change orders, indirect costs and out-of-pocket costs. Test for completeness by looking for any missing elements (e.g., land shaping costs may be in a separate contract).
- Review invoices for any pre-purchased installed equipment. On large construction projects, the taxpayer may separately pre-purchase items that have a long delivery time (e.g., large capacity electrical sub-stations or transformers). The examiner should verify if any pre-purchased electrical equipment is included in the total project cost.
- Reconcile Total Project Costs in the Taxpayer's Records with the Total Project Costs in the Study.
 - Request a copy of the taxpayer's general ledger data to support the fixed asset amounts on the depreciation schedule. How does it compare it to the amounts shown in the study?
 - Typically, the property unit numbers or reference numbers found in a study do not track the taxpayer's accounting entries. Find out what sources the preparer used in preparing his/her study.
 - Verify that the total project cost in the study reconciles to the total cost basis of assets in the taxpayer's books and records. The revenue agent is in the best position to do this since he/she is the most familiar with the taxpayer's accounting methods. The agent will also know where to look for other costs that should be in the building account, but may have been expensed or otherwise entered improperly into another account.
 - Compare all data with the contemporaneous cost records.
 - List any unsupported basis for potential disallowance.
- Reconcile Detailed Cost Breakdowns to individual property elements.
 - Actual cost records should be used whenever possible.
 - Review the taxpayer's internal "Job Cost Reports." Typically, a preparer relies on these documents to derive the unit costs (assuming that the cost and description of the assets in the Job Cost Reports are accurate).
 - The study methodology should be disclosed in the Assumptions and Limiting Conditions section of the report.
 - A careful analysis of the Job Cost Reports may yield significant audit adjustments because the taxpayer does not always properly classify items that are listed in this report. For example, the Job Cost Report includes a code for Furniture and Fixtures. Within this code are multiple records of vendors from whom the taxpayer claimed to have purchased items, such as

furniture and fixtures. The preparer included the total cost as § 1245 property and listed it in the study as "FF&E." However, upon requesting contracts for each of the vendors under this heading, the Service examiner discovered that some of these assets were actually § 1250 property and, therefore, concluded that these costs were erroneously included in "FF&E."

Therefore, it is important that the examiner review the vendor contracts in the Job Cost Reports, especially those that detail the "Description of Work", to verify asset costs.

- Prepare a List of Items/Costs that are Not Properly Substantiated.
- Compute the Correct Costs (as necessary) for individual items or groups of property.
- Review the Cost Segregation Study/Report Again.
 - Review the study for its style and order of presentation. The narrative typically describes the order of the development of costs and the spreadsheets show the analysis and sequence.
 - Review the Study conclusions and recommendations.
 - Review the Assumptions and Limiting Conditions.
 - Verify that the assumptions and limiting conditions are consistent with the facts developed from the inspection and the review of drawings and specifications.
- Analyze How the Detailed Cost Breakdown was Prepared.
 - Review Direct Costs.

Typically, cost segregation studies will incorporate a mixture of §1245 and §1250 properties into unit-by-unit direct cost recommendations. A review of a study should include identification of any of these disputable costs, and ensure that §1245 properties are segregated from §1250 properties.

- Review Indirect Costs.
- Examiners need to ensure that any indirect costs are properly allocated to their respective assets.
- Indirect costs generally relate to the land, certain land improvements, and/or the building or other structures. Indirect costs generally do not relate to the placement of machinery or furniture and fixtures. However, there are exceptions, such as for the design of a manufacturing line. Refer

to [Chapter 4](#), "Principal Elements of a Quality Cost Segregation Study and Report," for additional discussion of indirect costs.

- Studies often use large spreadsheets and sophisticated formulas to compute the allocation of indirect costs (generally on a pro-rata basis). The examiner should verify any formula by testing the allocations of indirect costs to ensure they do not exceed the total indirect costs.
- Identify Potential Audit Issues.
 - Site Preparation, General Grading and Land Shaping Costs
Building and facility projects often require general grading, site preparation and other costs to make the site suitable for a proposed use. These costs, along with costs for stripping existing forest and vegetation, grading and compaction to provide a level site, and construction of site access roads, are generally non-depreciable costs allocable to the basis of land. A study may exclude these costs as being outside the scope of its work. In other instances, a study may argue that no costs are allocable to non-depreciable items. Whether these types of costs are included in the study or not, the examiner should determine all land shaping costs and allocate these costs to either non-depreciable land, to the building, and/or to land improvements. Before-and-after photographs may help with this determination. Also, the examiner should inspect the taxpayer's books and records to determine how these items were treated for financial and tax purposes.
 - Section 1245 Property – Did the Study Utilize Cost Estimates or Actual Cost Records?

Review the § 1245 and § 1250 property listings and identify the most significant items. The examiner should check the contractor payment records (e.g., AIA Form G-702) to see if actual costs of these items were used in the study or whether these item costs were based on some sort of allocation or estimate.

For example, if the Form G-702 shows \$1.2 million for the "electrical" division work and the study shows or allocates \$1.8 million to specialized § 1245 electrical equipment, then there may be a problem with the study's cost determination. In this case, the examiner should request additional information to determine the source of the \$1.8 million allocation. Note that this is only a "smell check," since additional equipment or other property purchased by the taxpayer outside the construction contract may significantly affect this type of comparison.

- Potential Problems with Residual Methods.
- When a residual approach has been used, the examiner must be especially careful when reviewing § 1245 property costs. In essence, this method

estimates the § 1245 property costs and then simply assigns the remaining portion of the total cost to § 1250 property. In general, the § 1250 residual cost is neither estimated nor checked for reasonableness. All too often the result of this procedure is that the § 1245 property cost is too high and the § 1250 property cost is too low.

- Cost estimates can also be manipulated to produce unreasonably high estimates for § 1245 property. This is because there are a wide variety of cost data publications that may be used, and some of these have relatively high estimates for costs.
- Most data sources have a higher cost for installing only one unit (e.g., a single electrical outlet) as opposed to installing 10 or 100 units. "Quantity discounts" and competitive bidding may significantly reduce the actual unit cost. Accordingly, estimates for multiple units based on a single unit cost may be incorrect. The following is an example of this problem.
- Assume that 500 of the 120-volt electrical outlets in a particular building have been determined to qualify as § 1245 property. The R. S. Means DataBase, 2003 Edition, page 464, line 4015, lists a total price of \$34.50 per 120-volt duplex receptacle. Based on this data, a study may estimate that the 500 outlets have a total installed cost of \$17,250 (500 x \$34.50). However, this estimate should be reviewed or compared with the contractor's actual price in order to determine its validity. When the contractor was awarded the contract, he/she submitted a schedule of cost for each item of work, such as for plumbing, electrical, heating, and site work (Form G-702 and G-703). The examiner should review Forms G-702 and G-703 to determine the cost that the contractor assigned to the electrical work. If the Form G-703 indicates that \$120,000 was assigned to electrical receptacles and there were 5530 receptacles to install, then the actual unit cost to install each receptacle is only \$ 21.18 per outlet. The total actual cost for the 500 outlets is therefore only \$10,590 (500 x \$21.18). This compares to the estimated cost of \$17,250 [Note that both cost estimates (based on either the R. S. Means data or on the contractor's actual costs) would need to be increased by any applicable indirect costs].
- Potential Problems with "Rule of Thumb" Methods
- While the documentation of costs drawn from the use of a "rule of thumb" method is typically sketchy and inadequate, the examiner should not categorically reject a study involving the use of "rules of thumb." The documentation needs to be examined and verified on its own merits to determine if cost recovery properties are properly identified and placed into proper recovery periods.

B. Cost Analysis Of Existing Property

For used or recently-acquired properties, the adjusted basis or purchase price is allocated between § 1245 and § 1250 property. However, different considerations and audit techniques will apply depending on the records available. In addition to the steps for new construction, the following audit steps for existing properties should be considered.

- Review the Acquisition Documents to determine the assets purchased. Determine whether there was a written purchase price allocation agreed to by the buyer and seller (you may need to contact the seller). If there was an allocation between personal and real property, then the allocation is binding on the taxpayer (and therefore a taxpayer's subsequent cost segregation study is moot). Only the Service can challenge a contract allocation. See Section 1060(a); Commissioner v. Danielson, 378 F.2d 771 (3rd Cir. 1967), cert. denied, 389 U.S. 858 (1967); and North American Rayon Corp. v. Commissioner, 12 F.3d 583 (6th Cir. 1993).

If there was not a written price allocation, then the examiner should address the study and go to the next step.

- Review the Escrow Documents and Payment Records to substantiate the overall purchase price.
- Ensure that the Land has been Properly Valued.
 - Land included in the purchase price is valued first. The value of land should be determined at its "highest and best use." Properties tend to appreciate based on the value of land.
 - Land value should not be reduced for any pre-existing environmental contamination because the prior owners are often held responsible for this and/or the property is generally insured for this situation.
- Ensure that Older Properties are Adjusted for Depreciation.
 - Assets and asset groupings must be carefully reviewed and scrutinized to determine their physical and economic condition.
 - Relatively new items should be valued as new (e.g., windows, building exterior, emergency generator).
 - Older items may be physically deteriorated or functionally or economically obsolete and should be assigned a value commensurate with their condition or use. For example, a building may have been pre-wired for telephones but, if it is a "non-digital" system, it may have a low value.
- Ensure that Replacement Cost Values are Properly Adjusted for the actual condition and remaining economic useful life of the assets.

- The value of used components must be reduced from new replacement value in proportion to the observed economic obsolescence or physical depreciation as compared to similar new assets. This principle is discussed in regard to the Helipot Building in Lesser v. Commissioner, 42 T.C. 688 (1964), aff'd, 352 F.2d 789 (9th Cir. 1965), acq., 1966-2 C.B. 5, cert. denied, 384 U.S. 927 (1966).
- Review the Contract Files for information regarding the original construction and any subsequent repairs or modifications. This information should be used when viewing the existing condition of the building to verify, if possible, that the original contract work was performed.
- Review the Blueprints or Drawings. The existing structure should be compared to the "as-built" drawings to help identify subsequent repairs and modifications.
- Consider Demolition Expenses.
 - Assets scheduled to be demolished should have no basis or value assigned to them.
 - Code Section 280B provides that the demolition cost of any structure is a capital cost chargeable to the land. Any abandonment losses incurred in connection with a demolition should also be considered for capitalization to the land [See Priv. Ltr. Rul. 9131005 (Apr. 25, 1991)].

In summary, the examiner should ensure that:

1. The study methodology considers the value of all the assets in place at the time of purchase or at the time the study is prepared, whichever is appropriate.
2. The value of property items must take into account the physical wear and tear on each property item and any economic or functional obsolescence.

1. Review Sampling Techniques (If Necessary)

Preparers may utilize sampling techniques to minimize the time and costs associated with performing an analysis on all the properties (refer to the discussion in Chapter 4, Cost Segregation Methodologies). Sampling may also be utilized with cost documents. The use of sampling adds another level of difficulty in examining these studies. The examiner should take the following steps in reviewing a taxpayer's sampling technique.

- Understand the Sampling Technique.
- In situations involving large numbers of substantially identical properties, a study may utilize sampling or estimation techniques to select specific properties on which a "full" cost segregation study is performed. This approach, often referred to as "modeling", is typical for retail or food chain operations, where a "cookie-cutter" type of structure is involved.

- The taxpayer may have a limited number of "prototype" structures, such as free-standing units, locations in enclosed malls, locations in "strip" malls, full-service locations, carryout units, leased properties. The population is stratified by prototype to form groups of similar structures.
- Sampling within each prototype group is then performed with the results extrapolated over the entire population within that prototype.
- Determine/Evaluate the degree of Similarity Between Properties Within a Group.
- The determination of the similarity between properties within a prototype group is difficult and creates a potential area of dispute. The examiner should be aware that while the appearance of a particular structure may be very similar to the prototype, differences could exist.
- The rationale for stratifying properties is generally based on factors such as style of the structure (e.g., location in strip/enclosed mall as opposed to a free standing location), geographical location, total square footage, leased, or owned. A stratification that is based on the total number of windows in a structure or on the total square footage of the site is highly suspect and generally warrants further analysis.
- Geographic variations due to physical site characteristics, climate, building codes, and union versus nonunion labor, may create a wide disparity in structure costs. Therefore, stratification of otherwise similar properties across wide geographical areas may not be an accurate approach. Accordingly, the methodology should be carefully reviewed, as the "sampled" property may not be relevant to the other properties within the strata or group.
- Engineers and Computer Audit Specialists should be involved to properly analyze and evaluate the strata and groupings, as well as the sampling methodology.
- Review the Sampling Methodology.
- When conducted properly, statistical sampling is a reliable technique when the risk (sampling error) of not examining 100 percent of the properties can be accurately determined.
- The use of a modeling technique is a reliable technique, provided the standard models or templates are properly analyzed and are similar to their respective groups (i.e., appropriate stratification into similar groups).
- Judgment sampling is another technique, but is highly subjective. Therefore, it warrants greater scrutiny by the examiner.

- Potential Issues
- Improper sampling techniques (regardless of the methodology used) that do not reflect a valid estimate.
- There is a relatively small number of units in the population (less than 100) and a small sample size. However, small sample size can be overcome by the application of a proper statistical sampling methodology and the utilization of the least advantageous limit computed at a 95% one-sided confidence level.
 - Simply stated, the least advantageous limit is computed as the point estimate plus or minus the sampling error, where the result provides the least benefit to the taxpayer.
 - Many taxpayers simply use the point estimate without regard to the sampling error, thereby ignoring the risk of error inherently associated with sampling techniques.
- Missing records, substitution of missing items, missing documentation, and the use of estimated costs.
- Some cases may not be appropriate for sampling (e.g., small number of dissimilar properties).
- Inappropriate stratification of properties and faulty statistical sampling within each stratum.
- Judgmental sampling is highly subjective and thus may be of limited value.
- Request the Assistance of Engineers and Computer Audit Specialists.
- If the taxpayer has utilized any form of sampling in a study, it is imperative that a Computer Audit Specialist be consulted to review the sampling method. An engineer can also assist in the review of strata and property groups as well as with the cost allocations of property.
- The "Field Directive on the Use of Estimates from Probability Samples," issued by the Director, Field Specialists, on March 14, 2002, provides basic statistical sampling guidelines. This directive addresses the general use of statistical sampling by taxpayers and is included in [Appendix Chapter 6.5](#). Additional guidance on sampling applicable to cost segregation studies may be forthcoming and will be added to this guide when it becomes available.
- Sampling techniques may also be a useful tool for examiners when reviewing the adequacy and accuracy of a cost segregation study. Consultation and/or referral to

a statistical sampling coordinator in the Computer Audit Specialist Program is highly recommended in order to develop a reliable and supportable sample.

1. Consider IRC § 263A

The uniform capitalization (UNICAP) rules of § 263A require the capitalization of all direct costs and certain indirect costs properly allocable to real property and tangible personal property produced by the taxpayer. Self-constructed assets and property built under contract are treated as property "produced" by the taxpayer. Therefore, changes to the class life or basis of an asset may require a concurrent adjustment of UNICAP costs.

Furthermore, § 263A(f) requires the capitalization of certain interest expenses incurred in connection with the production of property. The interest capitalization rules under Treas. Reg. § 1.263A-8 contain precise definitions of designated property and include inherently permanent structures in the definition of real property. In summary, all real property and certain tangible personal property are subject to the interest capitalization rules. Therefore, changes to real and tangible personal property costs may impact the amount of capitalized interest.

Taxpayers may attempt to exclude all § 1245 property from interest capitalization by arguing that § 1245 property is tangible personal property that does not meet the classification thresholds of Treas. Reg. § 1.263A-8(b)(1). However, § 1245 property that is an inherently permanent structure is subject to interest capitalization without any restrictions.

Ideally, a taxpayer's books and records should consider and comment on UNICAP treatment when amounts are restated for prior tax years based on a cost segregation study. Refer to [Appendix Chapter 6.1](#) for a summary of the provisions of IRC § 263A. Specific questions can be referred to Jim Peschl, § 263A Technical Advisor, at 763-549-1020, x330 (or via e-mail at James.F.Peschl@irs.gov); or Barbara J. Martin, § 263A (Inventory) Technical Advisor, at 708-503-3540, x205 (or via e-mail at Barbara.J.Martin@irs.gov).

2. Consider Change In Accounting Method

In general, it is the position of the Service that a change in depreciation method, recovery period, or convention for depreciable property resulting from the reclassification of property is a change in accounting method. Such a change requires the consent of the Commissioner (i.e., the taxpayer must generally file Form 3115, Application for Change in Accounting Method) and the adjustment to income is made pursuant to IRC § 481(a). Accordingly, claims for adjustment based on a cost segregation study performed after the original return was filed should not be allowed (i.e., unless a Form 3115 has been filed).

Some of the more common issues encountered in this area include:

- Use of incorrect revenue procedure for implementing change in accounting method (i.e., use of automatic change procedures instead of non-automatic change procedures);
- Terms of revenue procedure not properly applied;
- Change is not made to a proper method;

- Form 3115 is not filed;
- Taxpayers want to add items to the original Form 3115, as filed;
- Lack of records to substantiate the § 481(a) adjustment;
- Informal claims filed in lieu of Form 3115;
- Informal claims filed prior to preparation of cost segregation study;
- Lack of detail to determine basis and recovery periods.

The issue of whether or not changes in depreciation methods, conventions, or recovery periods constitute accounting method changes is unsettled due to conflicting court opinions. However, Treas. Reg. § 1.446-1T(e)(2)(ii)(d)(2)(i) and Example 9 of Treas. Reg. § 1.446-1T(e)(2)(iii), effective for taxable years ending on or after December 30, 2003, provide that they do constitute changes in method of accounting. Please refer to [Appendix Chapter 6.2](#) for the most current information, including a listing of revenue procedures for implementing accounting method changes and a discussion of Chief Counsel Notice CC-2004-007 (January 28, 2004), regarding Chief Counsel's Change in Litigating Position on the application of § 446(e) to changes in computing depreciation.

The examiner should either contact Bonny Dominguez or Philip Whitworth, Change in Accounting Method Technical Advisors, at 330-253-7339 or 330-253-7346 respectively, when a change in accounting method issue is encountered. The technical advisors may also be reached via e-mail at Bonny.R.Dominguez@irs.gov and Philip.J.Whitworth@irs.gov.

1. **Research The Law, The Regulations And Appropriate Rulings**

Before reaching a final conclusion on the classification of a specific asset, the examiner should have conducted all the necessary research and reviewed all the relevant court cases, rulings and regulations that relate to ITC and the challenged asset. While some assets may, at first glance, appear to be building-related, there may be revenue rulings or court cases that have concluded that these assets are instead tangible personal property (e.g., electrical wiring, HVAC, decorative millwork).

[Appendix Chapter 6.4](#) contains a summary of pertinent court cases that relate to the classification of property for ITC and depreciation purposes. The examiner should read and study these cases for guidance. An examiner must also recognize that the determination of class life for a particular asset is factually intensive and that the determination may vary with a particular industry and/or with the specific use by the taxpayer.

Industry-specific guidance is included in [Chapter 7.1](#) (Casinos) and [Chapter 7.2](#) (Restaurants). It is anticipated that specific guidance for additional industries will be developed in the near future; additional guidance will be added to Appendix Chapter 7 as it becomes available.

2. **Summarize The Findings And Discuss The Challenged Assets With The Taxpayer**

If the preliminary conclusion is that the taxpayer has misclassified certain assets, the examiner should meet with the taxpayer as soon as practical to discuss his/her findings and the reasoning behind them. This discussion may clear up any misunderstandings and

disagreements as to the facts and perhaps will provide a setting for reaching a resolution of the issue.

3. Prepare The Final Report Or The Notice Of Proposed Adjustments (if necessary)

At the conclusion of the examination, the examiner (agent and/or specialist) should prepare and issue a final report. Consider making adjustments in a contra account rather than adjusting the basis of each property item affected, especially if indirect allocations are involved. Specialists should consider having the examining agent calculate the cost recovery or amortization adjustments to ensure that all pertinent factors are included in the computation. Adjustments to the construction period interest may also be applicable.

SUMMARY AND CONCLUSIONS

Using the steps outlined in this chapter, the Service examiner can evaluate the adequacy and accuracy of a study and determine the proper classification and cost of property. The need for a specialist, such as an Engineer or Computer Audit Specialist, should also be evaluated and determined as soon as possible. Hopefully, the guidance in this ATG will facilitate the audit process and minimize burden on taxpayers, practitioners, and examiners alike.

APPENDIX

[Chapter 6.1 - Uniform Capitalization](#)

[Chapter 6.2 - Change in Accounting Method](#)

[Chapter 6.3 - Depreciation Overview](#)

[Chapter 6.4 - Relevant Court Cases](#)

[Chapter 6.5 - Statistical Sampling](#)

[Chapter 6.6 - Construction Process](#)

[Chapter 6.7 - Information Document Requests](#)

Chapter 6.1 - Uniform Capitalization

INTRODUCTION

The allocation of project costs in cost segregation studies for self-constructed assets may be impacted by the Uniform Capitalization (UNICAP) rules of IRC § 263A(a). In addition, the interest capitalization rules of IRC § 263A(f) may also apply. A brief summary of these provisions is presented below.

APPLICATION OF THE CAPITALIZATION RULES UNDER IRC § 263A

The uniform capitalization (UNICAP) rules require the capitalization of all direct costs and certain indirect costs properly allocable to real property and tangible personal property produced by the taxpayer. For purposes of the uniform capitalization rules, to "produce" means to construct, build, install, manufacture, develop, improve, create, raise or grow [§ 263A(g)(1); Treas. Reg. § 1.263A-2(a)(1)(i)]. Self-constructed assets and property built under contract are treated as property "produced" by the taxpayer and the rules under IRC § 263A(a) govern.

In addition, § 263A(f) requires the capitalization of interest expense when the taxpayer produces certain property. The interest capitalization rules under Treas. Reg. § 1.263A-8 contain precise definitions of designated property and include inherently permanent structures in the definition of real property. In summary, all real property and certain tangible personal property are subject to the interest capitalization rules. Therefore, any change in the allocation of costs between real and tangible personal property may have an impact on the amount of capitalized interest. Many taxpayers attempt to exclude all § 1245 property from interest capitalization arguing that the § 1245 property is tangible personal property that does not meet the classification thresholds of Treas. Reg. § 1.263A-8(b)(1). Most of the § 1245 property in these situations are inherently permanent structures (real property) subject to interest capitalization without any restrictions.

The following text summarizes the capitalization rules of § 263A(a) and the interest capitalization rules of § 263A(f). Further detail and updates can be obtained from Jim Peschl, § 263A Technical Advisor, at (763) 549-1020 (James.F.Peschl@irs.gov); or Barbara J. Martin, § 263A (Inventory) Technical Advisor, at (708) 503-3540 x205 (Barbara.J.Martin@irs.gov).

Capitalization of Costs under IRC § 263A(a)

How does § 263A identify the costs subject to capitalization? As a threshold requirement, one must determine whether the costs would, but for § 263A, be otherwise deductible. A cost that is not otherwise deductible may not be allocated to property produced or acquired for resale.

In addition, any cost required to be capitalized under § 263A may not be included in inventory or charged to capital accounts or basis any earlier than the taxable year during which the amount is incurred within the meaning of § 1.446-1(c)(1)(ii).

What costs are capitalized under § 263A? Except as otherwise provided, direct and indirect costs that directly benefit or are incurred by reason of the performance of production or resale activities must be capitalized to the property produced or acquired for resale. For a producer the direct costs generally include direct material and direct labor. The regulations include examples

of indirect costs [see § 1.263A-1(e)(3)(ii)]. Examples of indirect costs required to be capitalized are:

- bidding costs
- capitalizable service costs (including capitalizable mixed service costs)
- cost recovery allowances (however, remember depletion is only allocated to inventory produced and sold during the year)
- engineering and design
- employee benefit expenses
- handling costs
- indirect labor costs
- indirect material costs
- insurance
- interest (see special rules under § 263A(f))
- licensing and franchise costs
- officers' compensation
- pension and other related costs
- purchasing costs
- quality control
- rent
- repairs and maintenance
- spoilage
- storage costs
- taxes
- tools and equipment
- utilities

Producers must capitalize costs (other than interest) whether incurred before, during, or after the production period of property. Interest is only capitalized during the production period of property. Pre-production costs are subject to capitalization if the property is held for future production or if it is reasonably likely that the property will be produced at a future date. Thus, costs of storing raw materials and carrying costs of realty held for development are required to be capitalized. Some issues may arise in determining the taxpayer's intent and the taxpayer's change in intent. Production period costs are costs incurred beginning on the date on which production of the property begins and ending on the date on which the property is ready to be placed in service or is ready to be held for sale. Post-production costs are costs incurred after the actual production and may include costs of storage, warehousing, insurance, materials, and handling.

Treas. Reg. § 1.263A-1(f) sets forth various detailed or specific cost allocation methods that a taxpayer may use to allocate direct and indirect costs to property produced. Under § 1.263A-1(f) a taxpayer may use a specific identification method, burden rate method, standard cost method, or any other reasonable method to allocate costs. In addition, in lieu of these methods, producer taxpayers may use the simplified production method provided in § 1.263A-2(b).

Capitalization of Interest under IRC § 263A(f)

Treas. Reg. §§ 1.263A-8 through 1.263A-15 provides guidance with respect to the capitalization of interest under IRC § 263A(f). These regulations are effective for 1995 and after, or at taxpayer's election, 1994. For years prior to the final regulations, Notice 88-99, 1988-2 C.B. 422, and temporary regulations provide guidance with respect to the capitalization of interest.

Interest is capitalized with respect to each unit of **designated property**. Interest is capitalized during each computation period; the amount of interest that is capitalized is a function of two components:

1. the amount of accumulated production expenditures; and,
2. the amount of outstanding debt on each measurement date.

In determining the amount of outstanding debt, traced debt is considered first. The excess expenditure amount is the amount (if any) by which the accumulated production expenditures exceed the amount of traced debt. Interest on non-traced debt, up to the excess expenditure amount, must be capitalized, based upon a weighted average interest rate.

Designated property is defined in IRC § 263A(f)(1) and Treas. Reg. § 1.263A-8(b)(1). In general, §263A(f) applies to designated property. Designated property is any property that is produced and that is:

1. real property; or,
2. tangible personal property that meets any of the following **classification thresholds**:
 - Property with a class life of 20 years or more that is not inventory in the hands of the taxpayer or a related person;
 - Property with an estimated production period exceeding 2 years; or
 - Property with an estimated production period exceeding 1 year and estimated cost of production exceeding \$1,000,000.

Note: **All real property** is subject to the rules of § 263A(f); the classification thresholds **only apply to tangible personal property**.

The classification thresholds are applied individually to each unit of property.

Treas. Reg. § 1.263A-8(c)(1) defines real property. Real property includes land, unsevered natural products of land, **buildings, and inherently permanent structures**. Any interest in real property, including fee ownership, co-ownership, a leasehold, an option, or a similar interest is real property. Unsevered natural products of land include growing crops and plants (that have a preproductive period in excess of 2 years), mines, wells, and other natural deposits. Real property includes the structural components of both buildings and inherently permanent structures.

Inherently permanent structures include property that is affixed to real property and that will ordinarily remain affixed for an indefinite period of time. Examples are swimming pools, roads, bridges, tunnels, paved parking areas and other pavements, special foundations, wharves and docks, fences, inherently permanent advertising displays, inherently permanent outdoor lighting facilities, railroad tracks and signals, telephone poles, power generation and transmission facilities, permanently installed telecommunications cables, broadcasting towers, oil and gas pipelines, derricks and storage equipment, grain storage bins and silos. For purposes of this section, affixation to real property may be accomplished by weight alone. [Treas. Reg. § 1.263A-8(c)(3)]

Property may constitute an inherently permanent structure even though it is not classified as a building for purposes of former IRC § 48(a)(1)(B) and Treas. Reg. § 1.48-1. Any property not otherwise described in this paragraph (c)(3) that constitutes other tangible property under the principles of former IRC § 48(a)(1)(B) and Treas. Reg. § 1.48-1(d) is treated for the purposes of this section as an inherently permanent structure. [Treas. Reg. § 1.263A-8(c)(3)]

A structure that is property in the nature of machinery or is essentially an item of machinery or equipment is not an inherently permanent structure and is not real property. In the case, however, of a building or inherently permanent structure that includes property in the nature of machinery as a structural component, the property in the nature of machinery is real property. A structure may be an inherently permanent structure, and not property in the nature of machinery or essentially an item of machinery, even if the structure is necessary to operate or use, supports, or is otherwise associated with, machinery. [Treas. Reg. 1.263A-8(c)(4)]

The above is a brief summary of the capitalization rules of § 263A(a) and the interest capitalization rules of § 263A(f). For assistance with UNICAP issues, please contact Jim Peschl, § 263A Technical Advisor, at (763) 549-1020 (James.F.Peschl@irs.gov); or Barbara J. Martin, § 263A (Inventory) Technical Advisor, at (708) 503-3540 x205 (Barbara.J.Martin@irs.gov).

Chapter 6.2 - Change In Accounting Method

INTRODUCTION

Taxpayers may conduct a cost segregation study on used property and then recompute its depreciation deductions for prior years. Examiners need to be aware of the potential issues relating to these recomputations, including changes in accounting method. This chapter provides a brief overview of the applicable law in this area.

SERVICE POSITION

In general, it is the position of the Service that in the year an asset is placed in service, an accounting method is adopted relative to the depreciation method, recovery period, or convention for the depreciable property. In any subsequent year from the placed-in-service year, a change in depreciation method, recovery period, or convention resulting from a reclassification of such property, results in a change in method of accounting. Such a change requires the consent of the Commissioner (i.e., the taxpayer must generally file Form 3115, Application for Change in Accounting Method), and the adjustment to income is made pursuant to IRC § 481(a). If a taxpayer has adopted a method of accounting, the taxpayer may not change the method by amending its prior income tax returns. See Rev. Rul. 90-38, 1990-1 C.B. 57. Accordingly, amended returns or claims for adjustment, based on a cost segregation study performed after the original return was filed (for the placed-in-service year), should generally be disallowed on the basis that the taxpayer is attempting to make a retroactive method change.

RECENT DEVELOPMENTS

The Fifth Circuit, affirming the Tax Court, held that the reclassification of gas station properties as 15-year property for MACRS purposes was not a change in accounting method requiring the Secretary's consent [Brookshire Brothers Holding, Inc. & Subsidiaries v. Commissioner, 320 F.3d 507 (5th Cir. 2003), aff'g T.C. Memo. 2001-150, reh'g denied (March 31, 2003)].

The Circuit Court agreed with the Tax Court that the regulations were meant to allow taxpayers to make temporal changes in their depreciation schedules without the consent of the IRS. The Court also affirmed that Brookshire's change in the classification of its gas station properties from straight-line depreciation of non-residential real estate to declining balance depreciation of 15-year property was not a change in Brookshire's method of accounting under IRC § 446.

The decision of the Fifth Circuit in Brookshire conflicts with the opinion of the Tenth Circuit in Kurzet v. Commissioner, 222 F.3d 830, 842-845 (10th Cir. 2000). In Kurzet, the taxpayer sought to change the classification of a reservoir from nonresidential real property to 15-year property under § 168, thereby resulting in a change in recovery period from 31.5 years to 15 years. The taxpayer did not change the method of depreciation for the reservoir, which was the straight-line method of depreciation. Although the Tenth Circuit found "some persuasive value to the [taxpayer's] argument that a change in recovery period under MACRS should be treated like a change in useful life," the court concluded that the Commissioner's interpretation of § 1.446-1(e)(2)(ii) as requiring a taxpayer to obtain permission for a change in recovery period is not "plainly erroneous" or "inconsistent" with § 1.446-1(e)(2)(ii).

In addition, the Tax Court in Standard Oil Co. (Indiana) v. Commissioner, 77 T.C. 349, 410-411 (1981), held that a change in depreciation method resulting from a reclassification of depreciable property from section 1250 property to section 1245 property is a change in method of accounting. In reaching its decision, the court cited to §§ 1.167(e)-1 and 1.446-1(e)(2)(ii)(a), and explained "It is unquestioned that a change in the method of computing depreciation is a change in method of accounting." Id. at 410. (But see, Green Forest Manufacturing Inc. v. Commissioner, T.C. Memo. 2003-75, which followed Brookshire by holding that a change in computing depreciation from the general depreciation system in § 168(a) (GDS) to the alternative depreciation system in § 168(g) (ADS) is not a change in method of accounting, and O'Shaughnessy v. Commissioner, 332 F.3d 1125 (8th Cir. 2003), rev'g in part 2002-1 U.S.T.C. (CCH) ¶ 50,235 (D. Minn. 2001), which also followed Brookshire by holding that a change in classification under MACRS is not a change in method of accounting.)

Clearly, this area of law is unsettled due to the conflicting court opinions. However, temporary regulations covering this issue have been promulgated. Treas. Reg. § 1.446-1T(e)(2)(ii)(d)(2)(i), effective for taxable years ending on or after December 30, 2003, provides that a change in the depreciation or amortization method, period of recovery, or convention of a depreciable or amortizable asset is a change in method of accounting. See Example 9 of Treas. Reg. § 1.446-1T(e)(2)(iii), which specifically relates to changes based on a cost segregation study. On January 28, 2004, Chief Counsel Notice CC-2004-007 was issued, setting forth Chief Counsel's Change in Litigating Position on the application of § 446(e) to changes in computing depreciation. It provides, in relevant part:

The Service's position continues to be that a change in computing depreciation under section 167, 168, 197, 1400I, 1400L(b), or 1400L(c), or ACRS generally is a change in method of accounting under section 446(e) for which the consent of the Commissioner of Internal Revenue is required. However, for depreciable or amortizable property placed in service by the taxpayer in taxable years ending before the effective date of Treas. Reg. § 1.446-1T(e)(2)(ii)(d), the Service will not assert that a change in computing depreciation under section 167, 168, 197, 1400I, 1400L(b), or 1400L(c), or ACRS for depreciable or amortizable property that is treated as a capital asset under the taxpayer's present and proposed methods of accounting is a change in method of accounting under section 446(e). Consequently, if, for example, a taxpayer completes a cost segregation study in 2004 for its MACRS property placed in service in 2001 and, as a result, reclassifies that property from nonresidential real property to 15-year property under section 168(e), the Service will not assert that the change in computing depreciation resulting from this reclassification is a change in method of accounting under section 446(e) and, accordingly, the taxpayer may file amended federal tax returns for 2001 and any affected subsequent taxable year to effect this change in computing depreciation. Alternatively, the taxpayer may treat this change in computing depreciation as a change in method of accounting and, thus, file a Form 3115 under new section 2.01 of the Appendix of Rev. Proc. 2002-9 for the current taxable year (provided the filing requirements of Rev. Proc. 2002-9 are met, and the taxpayer and the property are within the scope of Rev. Proc. 2002-9 and new section 2.01 of the Appendix of Rev. Proc. 2002-9).

Similarly, if, for example, the same cost segregation study determined that some of the taxpayer's MACRS property that is reported as being placed-in-service by the taxpayer in 2002 was actually placed-in-service by the taxpayer in 2001, the Service will not litigate whether or not the change in computing depreciation resulting from this change in placed-in-service date is a change in method of accounting under section 446(e) and, accordingly, the taxpayer may file amended federal tax returns for 2001 and any affected subsequent taxable year to effect this change in computing depreciation. Alternatively, the taxpayer may treat this change in computing depreciation as a change in method of accounting and, thus, file a Form 3115 under Rev. Proc. 97-27, 1997-1 C.B. 680, for the current taxable year (provided the filing and scope limitations of Rev. Proc. 97-27 are met). New sections 2.01, 2.02, and 2B of the Appendix of Rev. Proc. 2002-9 do not apply to a Form 3115 filed for taxable years ending on or after December 30, 2003, for a change in computing depreciation resulting from a change in placed-in-service date. This change in the Service's litigating position does not apply to an adjustment in useful life under section 167 (other than under MACRS, section 1400I, section 1400L, or ACRS) if the useful life is not specifically assigned by the Internal Revenue Code, the regulations thereunder, or other guidance published in the Internal Revenue Bulletin, to any adjustment to correct an incorrect classification or characterization of depreciable property for which depreciation is determined under Treas. Reg. § 1.167(a)-11 (CLADR property), or to a change in computing depreciation or amortization due to a posting error, a mathematical error, a change in underlying facts (other than a change in the placed-in-service date), a change in use of property in the hands of the same taxpayer, the making of a late election, or a revocation of an election. These changes in depreciation or amortization are not a change in method of accounting. Accordingly, field personnel should consult with their local Chief Counsel attorneys when a taxpayer asserts that such a change is a change in method of accounting.

Similarly, the change in the Service's litigating position does not apply to a change in the treatment of property from a non-capital asset (for example, inventory, materials and supplies) to a capital, depreciable or amortizable asset (or vice versa), or to a change from expensing the cost of depreciable or amortizable property to capitalizing and depreciating or amortizing such cost (or vice versa). These changes are a change in method of accounting under section 446(e). Accordingly, field personnel should consult with their local Chief Counsel attorneys when a taxpayer asserts that these changes are not a change in method of accounting.

Examiners should contact either of the Change in Accounting Method Technical Advisors, Bonny Dominguez or Phil Whitworth, for the most current information (contact information can be found at the end of this chapter).

LOOK-BACK STUDIES

Taxpayers may prepare cost segregation studies on existing assets and recompute depreciation for prior tax years based on the reallocated asset costs. In some cases, the taxpayer may file amended returns (claims) for the prior years and, in other cases, the taxpayer may simply deduct the additional depreciation from prior years on the first return filed after the study is complete. Neither of these actions is proper, given the Service position that changes to the recovery period

resulting from the reclassification of assets constitutes a change in accounting method. However, see Notice CC-2004-007 (January 28, 2004), quoted on page 6.2-2 of this Appendix.

The correct procedure for a taxpayer to change its accounting method is the timely filing of Form 3115, Request for Change in Accounting Method. Pursuant to Revenue Procedure 2002-9, 2002-3 I.R.B. 327, a taxpayer may request automatic consent for the change. Revenue Procedure 2004-11 modifies Rev. Proc. 2002-9 and other revenue procedures to conform with § 1.446-1T(e)(2)(ii)(d) of the temporary Income Tax Regulations. Although Form 3115 is subject to National Office review, it is generally the responsibility of the examiner to verify the accuracy of the § 481(a) adjustment at the time of the examination. A Schedule M-1 adjustment may also be an indication of the taxpayer's change in accounting method. The examiner should evaluate the need to review the study that formed the basis for the depreciation recomputations and the resultant change in accounting method.

If the years the assets were placed in service are still open under statute, taxpayers may file amended returns to correct the depreciation deductions for those years. They may also file a Form 3115 as a "protective" measure. In either case, the issue would generally warrant examination.

[Table 1](#) to this appendix provides a listing of revenue procedures that are most frequently used by taxpayers to implement accounting method changes based on cost segregation studies. Taxpayers generally argue that they are simply reclassifying property placed in service in prior years to "correct" class lives. This results in recovery period, depreciation method, and convention changes. The following is a list of the more common compliance issues involving accounting method changes.

1. Compliance issues for non-automatic method changes made using Rev. Proc. 97-27, 1997-1 C.B. 680, or

Rev. Proc. 92-20, 1992-1 C.B. 685:

- Was the accounting ruling letter properly applied?
- Was the §481(a) adjustment amount determined correctly?
- Did the taxpayer change to a proper method of accounting?
- Was a TAM obtained in a situation where an accounting ruling letter is to be modified or revoked (correcting the §481(a) adjustment amount is not a modification of the ruling letter)?

2. Compliance issues for automatic method changes made using Rev. Proc. 96-31, 1996-1 C.B. 714; Rev. Proc. 97-37, 1997-2 C.B. 455; Rev. Proc. 98-60, 1998-2 C.B. 761; Rev. Proc. 99-49, 1999-2 C.B. 725; Rev. Proc. 2002-9, 2002-1 C.B. 327; or Rev. Proc. 2004-11:

- Was the change made within the scope of the procedure?
- Was the change from an impermissible to a permissible method?
- Were all the applicable provisions properly applied?
- Was the §481(a) adjustment amount determined correctly?
- Was a change made to a proper method?

Examiners should contact either of the Change in Accounting Method Technical Advisors for assistance in determining the taxpayer's compliance with the proper procedures for changing the accounting method, as well as the computation of the adjustment pursuant to IRC § 481(a). They can also be contacted for updated information regarding the status of the Brookshire case.

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SUMMARY AND CONCLUSIONS

It is the position of the Service that a change in recovery period is a change in accounting method. Accordingly, a taxpayer is required to obtain the consent of the Commissioner by filing a timely Form 3115. However, the issue regarding a change in accounting method with respect to the recomputation of depreciation (e.g., those based on cost segregation studies) is quite complex. Examiners should consult Notice CC-2004-007 (January 28, 2004) and Treas. Reg. § 1.446-1T(e), and contact the Change in Accounting Method Technical Advisors for ongoing developments in this area.

Table 1
Revenue Procedures Relative to Cost Segregation Studies
Depreciation Method Changes
(Re-classifications among class lives)

Revenue Procedure	Year of Change	Remarks
92-20	1996 & Prior	Non-automatic; generally used when automatic change was not available
96-31	1996	Automatic; limited to not enough depreciation claimed by using an improper method of depreciation; <u>one-year</u> reporting of taxpayer favorable section 481(a)
97-27	1997-2000	Non-automatic; generally used when automatic change was not available; <u>four-year</u> reporting of taxpayer favorable or unfavorable section 481(a)
97-27 as modified by RP2002-19	2001 and subsequent	Non-automatic; generally used when automatic change was not available; <u>one-year</u> reporting of taxpayer favorable section 481(a) & four year reporting of section 481(a) when Service favorable
97-37	1997	Automatic; limited to not enough depreciation claimed by using an improper method of depreciation ; compliance with section 2 of the Appendix necessary; <u>four-year</u> reporting of taxpayer favorable or unfavorable section 481(a)
98-60	1998* * Transition rules for 1997	Automatic; Available if not enough or too much depreciation was claimed by using an improper method of depreciation; compliance with section 2 of the Appendix necessary; <u>four-year</u> reporting of taxpayer favorable or unfavorable section 481(a)
99-49	1999-2000* * Transition rules for 1998	Automatic; Available if not enough or too much depreciation was claimed by using an improper method of depreciation; compliance with section 2 of the Appendix necessary; <u>four-year</u> reporting of taxpayer favorable or unfavorable section 481(a)
2002-9* *modified by RP 2002-19 and RP 2004-11	2001 & subsequent	Automatic; available if not enough or too much depreciation was claimed by using an improper method of depreciation; compliance with section 2 of the Appendix necessary; <u>one-year</u> reporting of taxpayer favorable section 481(a) & four-year reporting of Service favorable section 481(a) adjustment

Chapter 6.3 - Depreciation Overview

INTRODUCTION

In order to compute depreciation using proper class lives and recovery periods, assets must be assigned to the proper asset classes. Cost segregation studies generally produce listings or groups of assets, based on asset classes under ACRS (Accelerated Cost Recovery System) or MACRS (Modified Accelerated Cost Recovery System). This chapter provides a summary of the applicable authorities and available guidelines for classifying property into its appropriate class.

HISTORICAL BACKGROUND - A BRIEF RECAP

1. **Pre-ACRS/ MACRS Depreciation Methods - Prior to 1981**

Prior to the enactment of ACRS in 1981, depreciation deductions were generally calculated by applying the appropriate depreciation method to the basis, useful life, and salvage value of the asset. Taxpayers were permitted to use component depreciation, whereby assets were segregated into separate components with different useful lives, which were depreciated separately. Alternatively, taxpayers could elect to use the Asset Depreciation Range (ADR) system for computing depreciation deductions. Property was generally classified as either § 1245 or § 1250 property, based on the rules governing Investment Tax Credit (ITC), pursuant to Code § 48 and the regulations thereunder.

2. **ACRS /MACRS Depreciation Methods - Post-1980**

Following the enactment of the ACRS depreciation system in 1981, component depreciation was specifically prohibited. The Service position has been that this prohibition continued under the MACRS depreciation system, enacted in 1986. Generally, ACRS is effective for property placed in use between 1981 and 1986, and MACRS is effective for property placed in use after 1986.

3. **Hospital Corporation of America, Inc. v. Commissioner, 109 T.C. 21 (1997) ("HCA")**

In HCA, the Tax Court concluded that the taxpayer was permitted to apply ITC principles to classify property as either § 1245 property or § 1250 property for purposes of determining asset classes and recovery periods under ACRS and MACRS. In effect, the HCA decision has reinstated a form of component depreciation.

4. **Action on Decision (AOD) Number CC-1999-008**

In Action on Decision (AOD) Number CC-1999-008, the Service acquiesced to the application of ITC principles in the HCA case. However, the Service did not acquiesce to the particular results in this case (i.e., the Service did not agree with the classification of specific assets as qualifying § 1245 property).

5. **Use of Cost Segregation Studies to Compute Depreciation Deductions**

Based on these developments, the use of cost segregation studies by taxpayers to accelerate depreciation deductions is expected to increase. The assignment of assets to the appropriate asset class is critical in determining the proper recovery period and, accordingly, the amount of depreciation.

GUIDELINES FOR THE CLASSIFICATION OF ASSETS - MACRS

1. MACRS Rules - IRC § 168

Code § 168(e) specifies the classification of property for purposes of computing the cost recovery allowance provided by MACRS. Property is classified according to class life as determined in Revenue Procedure 87-56, 1987-2 C.B. 674, unless statutorily classified otherwise in § 168. There are no other exceptions. (Refer to the more detailed discussion of Rev. Proc. 87-56 on page 6.3-3, Item 4).

2. Asset Guideline Class

Code § 168(i)(1) establishes the class life for assets, as defined in Code § 167(m) which, in turn, refers to Regulations § 1.167(a)-11 for rules regarding the classification of property under the class life system. Reg. § 1.167(a)-11(b)(4)(iii)(b) states that the selection of the appropriate asset guideline class is based on the business activity in which the asset is primarily used.

3. General Depreciation System (GDS) and Alternative Depreciation System (ADS)

Under MACRS, taxpayers must generally use the General Depreciation System (GDS), unless specifically required by law to use the Alternative Depreciation System (ADS), or unless the taxpayer elects to use ADS. (Refer to IRC §§ 167 and 168, as well as IRS Publication 946, How to Depreciate Property, for additional details and explanations.)

A. GDS (General Depreciation System)

The GDS system contains nine property classes, based on the recovery period of an asset (3, 5, 7, 10, 15, 20, 25, 27.5, or 39 years). The taxpayer may generally utilize the 200% declining balance method, 150% declining balance method, or straight-line method for computing depreciation for most GDS property. However, 27.5-year property (residential rental property) and 39-year property (non-residential real property) must be depreciated using straight-line depreciation.

A. ADS (Alternative Depreciation System)

The ADS system must be used for the following property:

- Listed property used 50 % or less for business;
- Tangible property used predominantly outside the U.S. during the year;
- Tax-Exempt use property;
- Tax-Exempt bond financed property; and
- Property used predominantly in a farming business and placed in service in any tax year during which an election has been made not to apply the uniform capitalization rules to certain farming costs.

The use of ADS may also be elected for any property eligible for depreciation under GDS. The recovery periods under ADS are generally longer than the recovery periods under GDS, and straight-line methods must be used.

1. Revenue Procedure 87-56, 1987-2 C.B. 674

Revenue Procedure 87-56 contains the "Table Of Class Lives And Recovery Periods," which is reproduced as "Table B" in IRS Publication 946, "How to Depreciate Property."

This table provides guidance as to the classification of assets and for the determination of the proper recovery period.

2. **IRS Publication 946, "How to Depreciate Property"**

Publication 946 explains how to compute depreciation deductions. Appendix B in the publication reproduces the "Table Of Class Lives And Recovery Periods" from Rev. Proc. 87-56, which provides guidance for classifying an asset according to the business activity in which the asset is primarily used.

The publication divides the table into two sections (Tables B-1 and B-2). Both tables must be consulted in determining the correct recovery period for specific assets. Table B-1, Specific Depreciable Assets Used In All Business Activities, Except As Noted, generally lists assets used in all business activities. Table B-2, Depreciable Assets Used In The Following Activities, lists assets used in certain activities, as described therein.

3. **How to Use Table B (Publication 946)**

In general, if the property is described in Table B-1, the recovery period shown in that table is the recovery period for the asset. However, if the property is specifically listed in Table B-2 under the type of activity in which the asset is used, the recovery period listed under the activity in Table B-2 should be used. Further direction on the use of these tables is explained below.

a. **Table B-1, Specific Depreciable Assets Used In All Business Activities, Except As Noted**

First, check Table B-1 to see if it contains a description of the asset in question. If the subject asset is described in Table B-1, then check Table B-2 to find the activity to which the property relates or in which it is being used. If the activity is described in Table B-2, read the text (if any) under the title to determine if the property is specifically included in the asset class listed in Table B-2. If it is, then use the recovery period shown in the appropriate column of Table B-2 following the description of that activity. If the activity to which the property relates is not described in Table B-2, then use the recovery period shown in the appropriate column following the description of the property in Table B-1. Also, if the activity is described in Table B-2, but the property either is not specifically included in or is specifically excluded from that asset class, then use the recovery period shown in the appropriate column following the description of the property in Table B-1.

b. **Table B-2, Depreciable Assets Used in the Following Activities**

If the asset is not listed in Table B-1, then check Table B-2 to find the activity to which the property relates or in which the property is primarily being used, and use the recovery period shown in the appropriate column following the asset description.

c. Property not in either table

If the property is not listed in Table B-1 and the activity to which it relates is not included in Table B-2, then check the end of Table B-2 to find "Certain Property for which Recovery periods Assigned (Personal Property/Section 1245 Real Property With No Class Life)." Property in this category generally has a recovery period of 7 years for GDS or 12 years for ADS. For residential rental property, and nonresidential real property, see Appendix A in Publication 946.

1. Examples (from Publication 946, Appendix B)

The following examples appear in Appendix B of Publication 946, and illustrate the use of these tables for determining the proper asset recovery period.

a. **Example 1**

Richard Green is a paper manufacturer. During the year, he made substantial improvements to the land on which his paper plant is located. He checks Table B-1 and finds land improvements under Asset Class 00.3. He then checks Table B-2 and finds his activity, paper manufacturing, under Asset Class 26.1, Manufacturer of Pulp and Paper.

If Richard had looked only at Table B-1, he would have incorrectly selected Asset Class 00.3, Land Improvements, and incorrectly used a recovery period of 15 years for GDS or 20 years for ADS. However, Richard uses the recovery period under Asset Class 26.1, because it specifically includes land improvements. The land improvements have a 13-year class life and a 7-year recovery period for GDS. If he elects to use ADS, the recovery period is 13 years.

[Note: It is presumed in this example that the subject land improvements are associated with the factory site or production process, in the likeness of effluent ponds and canals. Other land improvements, such as general parking lots, would fall into Asset Class 00.3 and have a 15-year recovery period under GDS.]

b. **Example 2**

Sam Plower produces rubber products. During the year, he made substantial improvements to the land on which his rubber plants are located. He checks Table B-1 and finds land improvements under Asset Class 00.3. He then checks Table B-2 and finds his activity, producing rubber products, under Asset Class 30.1, Manufacture of Rubber Products. Reading the headlines and descriptions under Asset Class 30.1, Sam finds that it does not include land improvements. Therefore, Sam uses the recovery period under Asset Class 00.3. The land improvements have a 20-year class life and a 15-year recovery period for GDS. If he elects to use ADS, the recovery period is 20 years.

c. **Example 3**

Pam Martin owns a retail-clothing store. During the year, she purchased a desk and a cash register for use in her business. She checks Table B-1 and finds office furniture under Asset Class 00.11. Cash registers are not specifically listed in any of the asset

classes in Table B-1. She then checks Table B-2 and finds her activity, retail store, under Asset Class 57.0, Distributive Trades, and which includes assets used in wholesale and retail trade. This description for this asset class does not specifically list office furniture or a cash register.

She looks back at Table B-1 and uses Asset Class 00.11 for the desk, since it constitutes office furniture. The desk has a 10-year class life and a 7- year recovery period for GDS. If she elects to use ADS, the recovery period is 10 years. For the cash register, Pam uses Asset Class 57.0, because cash registers are not specifically listed in Table B-1 but are assets used in retail business. Accordingly, the cash register has a 9-year class life and a 5-year recovery period for GDS. If she elects to use the ADS method, the recovery period is 9 years.

1. **General Rules for Classifying Assets**

In most cases, a single industry asset guideline class will cover all the production machinery and equipment that is typically used in that particular industry. Asset Guideline Classes 1.1 through 80.0 (Table B-2) list depreciable assets used in specific, primary business activities (the "activity" category).

Specific depreciable assets used in and common to all business activities (the "asset" category) cross all industry lines and are covered by Asset Guideline Classes 00.11 through 00.4 (Table B-1). For most taxpayers, three or four asset class guidelines will encompass all of their depreciable assets, such as autos, computers, and furniture & fixtures. The rule is that these classes (from Table B-1) must be applied first to determine the asset classification before applying and determining the primary business asset class (the "activity" category).

The exception to this rule is that certain activity categories, such as those described in Asset Classes 48.11 and 57.1, specify the assets that are section 1245 or section 1250 property. Other activity classes, such as Asset Class 28.0, include all land improvements, which takes priority over the asset category, such as Asset Class 00.3. [Note: As in Example 1 on page 6.3-5, only those land improvements associated with the plant site or production process, such as effluent ponds and canals, should be included in Asset Class 28.0. General land improvements, such as parking lots, should be included in Asset Class 00.3.]

9. Application of Asset Classification Rules

Asset classification pursuant to the rules in Rev. Proc. 87-56 is not always a straightforward determination, particularly where the taxpayer is involved in a number of related business activities. The proper steps to follow in assigning assets to the appropriate asset or activity or class may be summarized as follows:

1. Ascertain and fully understand the primary business activity of the taxpayer.
2. Determine the specific function and use of the assets in the taxpayer's business.
3. Apply the clear and plain language contained in the asset guideline classes of Rev. Proc. 87-56 with respect to the assets in question.

The application of these steps may be illustrated by the analysis used in a sampling of court cases, private letter rulings, and revenue rulings, which are summarized below. The analysis in each citation is based on a strict reading of Rev. Proc. 87-56, including historical reference to original asset and activity class descriptions from which later classes have been derived. Note that, for those instances in which a taxpayer was permitted to use an asset class that was different from its primary business activity, the taxpayer was able to demonstrate that it did, in fact, have a separate trade or business for that property item.

Revenue Ruling 77-476, 1977-2 C.B. 5

Conclusion: The primary business activity of the taxpayer determines the appropriate activity class.

Analysis: An oil pipeline owned by an electric utility company and used to transport oil between the company's dock and its inland generating facility is "public utility property" (Asset Guideline Class 49.13, Electric Utility Steam Production Plant). Since the taxpayer is not in the trade or business of transporting oil by pipeline, the pipeline should not be classified as "pipeline transportation property" (Asset Guideline Class 46.0, Pipeline Transportation).

Revenue Ruling 80-127, 1980-1 C.B. 53

Conclusion: Assets specifically excluded from a certain activity class must be classified in the appropriate asset class.

Analysis: The taxpayer leases shipping containers to a shipping company. The containers are designed to transport cargo over the road on trailers and by water on cargo ships and should be classified in Asset Guideline Class 00.27, which includes "trailer-mounted containers." Activity Guideline Class 44.0, Water Transportation, which describes assets used in the commercial and contract carrying of freight by water, specifically excludes assets included in classes with a 00.2 prefix. (Note: the result would be the same if the shipping company owned the containers.)

Private Letter Ruling 9101003 (Sept. 25, 1990)

Conclusion: Property is classified according to the primary business activity of the taxpayer, even though the activity in which such property is primarily used is insubstantial in relation to all the taxpayer's activities. In determining the primary business activity included in a current activity class, it is helpful and appropriate to analyze the historic business activities included in the classes from which it is derived.

Analysis: The taxpayer's business activities include the acquisition, processing, and sale of various types of scrap materials. Asset Guideline Class 57.0, Distributive Trades and Services, includes assets used in wholesale and retail trade. The description for this class includes no further detail. However, the predecessor to Asset Guideline Class 57.0 included Asset Guideline Class 50.0, Wholesale and Retail Trade, which included assets used in the acquisition and processing of goods at both the wholesale and retail level. The description for Asset Guideline Class 50.0 also specifically referenced the brokerage of scrap metal and various pre-sale processing activities.

Private Letter Rulings 9502001, 9502002, and 9502003 (June 30, 1994)

Conclusion: Property is included in the asset class in which the property is primarily used, even if it is used in more than one activity or the activity is not specifically defined.

Analysis: The taxpayer uses a factory trawler to harvest and process various species of fish. There is no specific Asset Guideline Class for the fishing industry. Asset Guideline Class 20.4 covers the Manufacture of Other Food and Kindred Products, but does not specifically list water vessels. However, Asset Guideline Class 00.28 includes Vessels, Barges, Tugs, and Similar Water Transportation. Accordingly, the trawler is a specific asset described in Asset Guideline Class 00.28, which includes all water vessels without regard to the business activity.

Private Letter Ruling 9548003 (July 31, 1995)

Conclusion: Assets engaged in more than one activity must be classified to the activity in which they are primarily used.

Analysis: The taxpayer is a public utility company supplying electric and gas utility service. Through a number of subsidiaries, the taxpayer also owns and operates several natural gas gathering systems, processing plants, and pipeline systems. Most of the pipelines are not connected to the taxpayer's processing plants; thus, the taxpayer is engaged in two separate business activities. The gathering pipelines are appropriately included in Asset Class 46.0 (Pipeline Transportation), while the processing plants are included in Asset Class 49.23 (Natural Gas Production Plant).

Duke Energy Natural Gas Corporation v. Commissioner, 109 T.C. 416 (1997), rev'd, 172 F.3d 1255 (10th Cir. 1999), nonacq., 1999-2 C.B. xvi.

Conclusion: The class life of an asset is based on the asset's primary use in relationship to the classes in question.

Analysis: The taxpayer was a natural gas corporation. At issue was the classification of its natural gas gathering systems as either assets used in the production of gas or assets used in the transportation of gas. It was determined that the plain language of the asset descriptions supported the contention that the gathering systems constituted assets used in the taxpayer's production of natural gas.

Saginaw Bay Pipeline Co., et al v. United States, 124 F. Supp. 2d 465 (E.D. Mich. 2001), rev'd and rem'd, 2003 FED App. 0259P (6th Cir.) (No. 01-2599)

Conclusion: The proper asset class is determined by the use of the property rather than the activity of the owner of the property.

Analysis: The 6th Circuit held that, because the taxpayer's underground natural gas pipelines were used primarily by natural gas producers and functioned as gathering pipelines in the natural gas production process, the taxpayer's underground natural gas pipelines are includible in Asset Class 13.2. The 6th Circuit reached this result, even though the taxpayer was not a producer of natural gas (that is, not engaged in the activity described in Asset Class 13.2).

Clajon Gas Co. LP, et al v. Commissioner, 119 T.C. 197 (2002), rev'd, 2004 U.S. App. LEXIS 284 (8th Cir. Mo. Jan. 12, 2004)

Conclusion: Classification of property as to the proper asset class is based on the use of the property in a manner as described in an asset class.

Analysis: The taxpayer was not a natural gas producer and the taxpayer used the gathering lines to transport gas. At issue was the classification of taxpayer's gathering lines as either assets includible in Asset Class 13.2 (Exploration for and Production of Petroleum and Natural Gas Deposits), which has a MACRS recovery period of 7 years, or Asset Class 46.0 (Pipeline Transportation), which has a MACRS recovery period of 15 years. The 8th Circuit determined that Clajon primarily used the gathering system in a manner consistent with the description of Asset Class 13.2 (i.e., as gathering pipelines). The descriptive language of the asset class does not require that the producer be the owner of the gathering system assets. The result is that there is no distinction between the gathering system assets of producers and nonproducers, for purposes of depreciation deductions.

Chapter 6.4 - Relevant Court Cases

INTRODUCTION

This chapter is intended to assist examiners in determining whether certain assets constitute § 1245 or § 1250 property. In addition to the legal framework presented in [Chapter 2](#), the court cases listed below provide further guidance. Although the issue in many of the cited cases below relates to ITC, these cases remain important in determining whether property constitutes § 1245 property for purposes of ACRS and constitutes tangible personal property for purposes of MACRS. Hospital Corporation of America and Subsidiaries v. Commissioner, 109 T.C. 21, 54-55 (1997), acq. on this issue and nonacq. on other issues, 1999-2 C.B. xvi.

Unfortunately, there are no bright-line tests for distinguishing § 1245 property from § 1250 property. All of the cases are factually intensive and quite often the opinions of the courts conflict. Therefore, the examiner's ultimate determination generally cannot be based merely upon reading one case. In addition to reading all the cases on point, the Service's position must be reviewed and followed; as well, the examiner must also consider whether the Service has acquiesced to a particular position or case.

ARRANGEMENT OF INFORMATION

This chapter contains three attachments to assist examiners in locating pertinent cases that address specific assets:

[CLICK](#) - Case Citations for the Relevant Court Cases;

[CLICK](#) - Table by Case Name (Asset Descriptions by §§ 1245/1250 determinations); and

[CLICK](#) - Table by CSI Master Format Division (Case Name & Asset Description by §§ 1245/1250 determinations)

CASE CITATIONS

1. AC Monk

A.C. Monk & Co. v. United States, No. 78-126-CIV-4, 1981 U.S. Dist. LEXIS 17764 (E.D.N.C. Mar. 30, 1981), aff'd in part, rev'd in part, vacated and rem'd, 686 F.2d 1058 (4th Cir. 1982), on remand, 577 F. Supp. 4 (E.D.N.C. 1983).

2. Albertson's

Albertson's v. Commissioner, 94-1 U.S. Tax Cas. (CCH) P50,016; 73 A.F.T.R.2nd (RIA) 558 (9th Cir. 1993); rev'g. 95 T.C. 415 (1990).

3. Bod-Nol

Boddie-Noelle Enters. v. United States, 96-2 USTC ¶ 50,627 (Fed. Cl. 1996), aff'd without published opinion, 132 F. 3d 54 (Fed. Cir. 1997).

4. Centr Citrus

Central Citrus Co. v. Commissioner, 58 T.C. 365 (1972).

5. Circle K

Circle K Corp. v. Commissioner, T.C. Memo. 1982-298.

6. Cons Freight

Consolidated Freightways, Inc. v. Commissioner, 74 T. C. 768 (1980), aff'd in part and rev'd in part, 708 F.2d 1385 (9th Cir. 1983).

Consolidated Freightways, Inc. v. United States, 79-2 USTC ¶ 9440 (Ct. Cl. 1979).

Consolidated Freightways, Inc. v. United States, 620 F.2d 862 (Ct. Cl. 1980).

7. Dixie Man

Dixie Manor, Inc. v. United States, 79-2 USTC ¶ 9469 (W.D. Ky. 1979), aff'd, 81-1 USTC 9332 (6th Cir. 1981).

8. Duaine

Duaine v. Commissioner, T.C. Memo. 1985-39.

9. Grinalds

Grinalds v. Commissioner, T.C. Memo. 1993-66.

10. HCA

Hospital Corp. of Am. & Subs. v. Commissioner, 109 T. C. 21 (1997), acq. in part and nonacq. in part, 1999-2 C.B. xvi.

11. Ill Cereal

Illinois Cereal Mills, Inc. v. Commissioner, T.C. Memo. 1983-469, aff'd, 789 F.2d 1234 (7th Cir. 1986), cert. denied, 479 U.S. 995 (1986).

12. King Radio

King Radio Corp. v. United States, 486 F.2d 1091 (10th Cir. 1973), aff'g D.C. No. KC-3320).

13. La Petite

La Petite Academy v. United States, 95-1 USTC ¶ 50,193 (W.D. Mo. 1995), aff'd in unpublished opinion, 72 F.3d 133 (8th Cir. 1995).

14. LL Bean

L.L. Bean, Inc. v. Commissioner, T.C. Memo. 1997-175, aff'd, 145 F.3d 53 (1st Cir. 1998).

15. Mallinckrodt

Mallinckrodt, Inc. v. Commissioner, T.C. Memo. 1984-532, aff'd, 778 F.2d 402 (8th Cir. 1985).

16. McManus

McManus v. United States, 700 F. Supp. 994 (W.D. Wis. 1987), aff'd, 863 F.2d 491 (7th Cir. 1988).

17. Metro

Metro Nat'l Corp. v. Commissioner, T.C. Memo. 1987-38.

18. Minot Fed

Minot Fed. Sav. & Loan Ass'n v. United States, 313 F. Supp. 294 (D.N.D. 1970), aff'd, 435 F.2d 1368 (8th Cir. 1970).

19. Morrison

Morrison, Inc. v. Commissioner, T.C. Memo. 1986-129, aff'd, 891 F.2d 857 (11th Cir. 1990).

20. Munford

Munford, Inc. v. Commissioner, 87 T.C. 463 (1986), aff'd, 849 F.2d 1398 (11th Cir. 1988).

21. Piggly Wiggly

Piggly Wiggly Southern, Inc. v. Commissioner, 84 T.C. 739 (1985), aff'd, 803 F.2d 1572 (11th Cir. 1986), nonacq., 1988-2 C.B. 1.

22. Publix

Publix Supermarkets, Inc. v. United States, 92-1 USTC ¶ 50,240 (Cl. Ct. 1992).

23. Schrum

Schrum v. Commissioner, T.C. Memo. 1993-124, aff'd in part and vacated in part, rem'd, 33 F.3d 426 (4th Cir. 1994), on remand, T.C. Memo. 1995-103, aff'd in part and vacated in part without published opinion, 114 F.3d 1177 (4th Cir. 1997).

24. Scott Paper

Scott Paper Co. v. Commissioner, 74 T.C. 137 (1980).

25. Shoney's

Shoney's South, Inc. v. Commissioner, T.C. Memo. 1984-413, action on dec., 1986-048 (September 19, 1986).

26. TI

Texas Instruments Inc. v. Commissioner, T.C. Memo. 1992-306.

27. Walgreen

Walgreen Co. & Subs. v. Commissioner, 103 T.C. 582 (1994), rev'd, rem'd, 68 F.3d 1006 (7th Cir. 1995), supplemental op., T.C. Memo. 1996-374.

28. Westroads

Westroads, Inc. v. Commissioner, 69 T.C. 682 (1978), acq., 1979-2 C.B. 2.

29. Whiteco

Whiteco Industries, Inc. v. Commissioner, 65 T.C. 664 (1975), acq., 1980-2 C.B. 2.

TABLE BY CASE NAME

Case Name	Master Format Division	Asset Description	1245	1250
AC Monk	15700	Louvered Wall to Boiler	X	
	03000	Truck Apron	X	
	10800	Lavatory Furnishings		X
	15300	Fire Hose Stations		X
	13120	Special Rooms	X	
	13120	Storage Sheds	X	
	16400	Elec. Dist. to lights & machines		X
	03000	Concrete RR dock		X
	13030	Green storage room		X
Albertson's	15700	HVAC system		X
	05100	Raised roof		X
Bod-Nol	09500	Suspended Ceilings		X
	06170	Ext. Mansard-Marlite roof panels		X
	16400	Electrical to equipment		X
	15400	Plumbing to equipment		X
	15700	Kitchen HVAC		X
	08830	Decorative Mirror		X
	08582	Carousel drive-up window unit		X
Centr Citrus	15700	Blowers	X	
	15700	Coolers	X	
	16400	Elec. dead front panel		X
	16300	Elec. Transformer to facilities		X
	16400	Elec. Gutter plus ends & cutting	X	
	16400	Elec. Dist: adapters/relays/fuse	X	
	16140	30 amp. Switch	X	
	16300	Elec. Transformer for sweet rm	X	
	16140	Elec. Outlets	X	X
	16510	Fluorescent fixtures	X	X
	16510	Spotlight and flood lamps	X	X
	16510	Moisture-proof lamps	X	
	16300	Elec. Transformer for damper	X	
	16510	Ballast lights	X	
Circle K	13030	Cold storage rm.		X
	15700	Air conditioning units (roof)		X
Cons Freight	03000	Raised concrete loading dock		X
	08330	Overhead doors		X

	16510	Light fixtures - mercury vapor		X
	02825	Dock fence	X	
Dixie Man	15700	Air conditioning/Heating (roof)		X
	09250	Rm partition (drywall/wood stud)		X
Duaine	03100	Concrete slab behind counter		X
	09300	Floor tile		X
	09300	Wall tile		X
	15100	Water lines to cooking table,etc	X	
	15100	Gas lines to cooking elements	X	
	15100	Connecting fixtures to appliance	X	
	15100	Copper drain lines from refrig.	X	
	16510	Ornamental light fixtures		X
	16140	Elec. Outlets to equip.	X	
Grinalds	15700	Air conditioning units		X
	09250	Partitions (cubical type)		X
	09250	Walls (interior)		X
	10800	Walls (restroom)		X
	15400	Plumbing - restroom		X
	16200	Elec. Conduit & Recep. - Restrm		X
HCA	16300	Primary & secondary elec. dist.	X	X
	16400	Branch elec. dist.	X	X
	16200	Branch elec. - TV equip.	X	
	16700	Telephone wiring, jacks	X	
	16200	Elec. Wiring - inter-com equip.	X	
	09680	Carpeting	X	
	09720	Vinyl wall covering	X	
	09600	Vinyl wall covering	X	
	15400	Kitchen water pipe, grease trap	X	
	15400	Plumbing for x-ray	X	
	15850	Kitchen hood & exhaust sys.	X	
	05720	Patient corridor handrails	X	
	16510	Over-bed recessed lights		X
	10650	Accordion doors/partitions	X	
	10800	Bathroom acces., plastic mirrors		X
	09510	Acoustical ceiling tile		X
	15510	Steam boilers & acces.		X
Ill Cereal	16400	Elec. Distribution system (95%)	X	
King Radio	10630	Partitions (ceiling height)	X	
	10630	Glazed partitions	X	
	10630	Movable partition sys.	X	

LL Bean	13140	Storage rack sys. (supp. roof)		X
	03000	Super-flat concrete slab		X
	13140	Roofing & wall panels		X
	16400	Electrical system		X
	15300	Sprinkler system		X
	15764	Heating/ventilation system		X
	13138	Mezzanine system		X
La Petite	09250	Wall panels-porc.enamel/gyp.bd)		X
	06170	Mansard roof		X
	02825	Playground fence		X
	16520	Exterior façade lighting sys.		X
	15300	Fire protection sys.		X
	15300	Heat & smoke detectors		X
	16530	Emergency lights		X
	10426	Illum. Exterior signs		X
	10800	Child's restrm./handicap cabinet		X
	11442	Grease trap to counter		X
	16200	Elec. Service to counter		X
	02825	Dumpster encl: fence & concrete		X
	15780	Thermal recov. Sys.-water heater		X
	08300	Doors(kitchen, by-pass, Dutch)		X
Mallinckrodt	09250	Partitions (gyp. drywall)		X
McManus	13120	Ten unit hangar bldg.		X
	08344	Hangar doors		X
	08970	Glass/door storefront partitions	X	
	10800	Toilet partitions		X
	09510	False ceilings & grids		X
	16510	Lay-in lighting facilities		X
	16520	Exterior security lighting	X	
	16510	Grow lights	X	
	16510	Accent decor lighting (exterior)	X	
	06400	Cabinets (plastics & hardware)	X	
	02810	Sprinkler heads		X
Minot Fed	10630	Pre-manuf. Wall partitions	X	
	08100	Door units (in partitions)	X	
Morrison	16530	Emergency lighting	X	
	16440	Kitchen panel boards	X	
	15400	Kitchen hand sinks		X
	15400	Kitchen water piping	X	
	08380	Eliason doors	X	

	10800	Restroom accessories		X
	16500	Décor window treatment	X	
	06440	Lattice millwork	X	
	06400	Vanity cabinets & counters		X
	09250	Customer line screen	X	
	03000	Serving line concrete curb		X
	15780	Kitchen heat recovery unit	X	
	03000	Floors:cooler/freezer/garbage rm		X
	13030	Garbage room		X
	09300	Kit. sanitary wall & floor tile		X
	15850	Kitchen air makeup unit	X	
	15400	Kitchen drainage	X	
	15412	Electric water coolers		X
	16510	Chandeliers, décor wall lights	X	
	15400	Kitchen hot water heater	X	
	16400	Primary elec. Dist. sys.	X	X
Munford	03000	Truck loading platform		X
	03000	Rail loading platform		X
	13030	Refrig. area (struct. elements)		X
Piggly Wiggly	15700	HVAC units	X	
Publix	15700	HVAC system		X
Schrum	13122	Car wash facility		X
	15400	Plumbing system	X	
	16200	Electrical system	X	
Scott Paper	16400	Primary elec. Dist. Sys.	X	X
	16400	Secondary (general) elec.		X
Shoney's	16510	Chandeliers	X	
	16510	Hanging lanterns	X	

Case Name	Master Format Division	Asset Description	1245	1250
TI	03000	Waste treatment facilities	X	
	09250	Drywall partitions		X
	13122	Misc. structures & related equip		X
	03000	Concrete floor & supp. columns	X	
	03000	Concrete ground fl. & wood deck		X
	08970	Window walls		X
	09500	Ceilings		X
	15700	Air conditioning for tele. room	X	
	15400	Plumbing servicing equip.	X	

	08100	Emergency doors		X
	15300	Fire protection sys. - duct work	X	
	15300	Fire protection system		X
	02825	Security fencing	X	
	02930	Interior landscaping	X	
	02930	Exterior landscaping		X
	16360	Cat. 1 - high voltage main		X
	16400	Cat. 2 - breaker/feeder sys		X
	16400	Cat. 3 - spare brkers, transf.		X
	16400	Cat. 4 - carries load to equip	X	
Walgreen	09250	Partitions (drywall, glass)		X
	10800	Restroom partition(metal)		X
	06400	Millwork, metal work, trim		X
	08100	Doors		X
	09500	Ceilings (drywall, acoustical)		X
	09680	Floor coverings (carpet, tile)	X	
	16500	Elec. light fixtures, wire, etc.		X
	10536	Décor: canopy, signs, concrete	X	
Westroads	16220	Elec. power generating equip.	X	
Whiteco	10426	Advertising signs (billboards)	X	

TABLE OF CASES BY CSI

CSI MasterFormat Division		Asset Description	Property Type:	
Case Name			1245	1250

Division 02 – Sitework				
Metro	02810	Sprinkler heads		X
TI	02825	Security fencing	X	
La Petite	02825	Dumpster Encl. (fence & concrete)		X
La Petite	02825	Playground fence		X
Cons Freight	02825	Dock fence	X	
TI	02930	Interior landscaping	X	
TI	02930	Exterior landscaping		X
Division 03 – Concrete				
TI	03000	Concrete floor & supp. columns	X	
TI	03000	Concrete ground fl. & wood deck		X
AC Monk	03000	Concrete RR dock		X

AC Monk	03000	Truck apron	X	
Morrison	03000	Floors: cooler/freezer/garbage rm		X
Cons Freight	03000	Raised concrete loading dock		X
Morrison	03000	Serving line concrete curb		X
LL Bean	03000	Super-flat concrete slab		X
Munford	03000	Truck loading platform		X
TI	03000	Waste treatment facilities	X	
Munford	03000	Rail loading platform		X
Duaine	03100	Concrete slab behind counter		X
Division 04 - Masonry				
Division 05 - Metals				
AC Monk	05100	Raised roof		X
McManus	05300	Metal partitions		X
HCA	05720	Patient corridor handrails	X	
Division 06 - Wood & Plastics				
Bod-Nol	06170	Exterior Mansard-Marlite roof panels		X
La Petite	06170	Mansard Roof		X
Metro	06400	Cabinets (plastics & hardware)	X	
Walgreen	06400	Millwork, metal work, trim		X
Morrison	06400	Vanity cabinets & counters		X
Morrison	06440	Lattice millwork	X	

CSI Master Format Division		Asset Description	Property Type:	
Case Name			1245	1250

Division 08 - Doors & Windows				
TI	08100	Emergency Doors		X
Walgreen	08100	Doors		X
Centr Citrus	08100	Sweet room doors	X	
Minot Fed	08100	Door units (in partitions)	X	
La Petite	08300	Doors (kitchen, bypass and Dutch)		X
Cons Freight	08330	Overhead doors		X
McManus	08344	Hangar doors		X

Morrison	08380	Eliason doors	X	
Bod-Nol	08582	Carousel drive-up window unit		X
Bod-Nol	08830	Decorative mirror		X
TI	08970	Window walls		X
Metro	08970	Glass/door storefront partitions	X	X
Division 09 - Finishes				
La Petite	09250	Wall panels (porc. enameled/gyp.bd)		X
Morrison	09250	Customer line screen	X	
TI	09250	Drywall partitions		X
Mallinckrodt	09250	Partitions (gyp. drywall)		X
Metro	09250	Partitions (gyp. drywall)	X	
Walgreen	09250	Partitions (drywall, glass)		X
Grinalds	09250	Partitions (cubical type)		X
Dixie Man	09250	Rm. Partitions (drywall/wood stud)		X
Grinalds	09250	Walls (interior)		X
Duaine	09300	Floor Tile		X
Morrison	09300	Kitchen sanitary wall & floor tile		X
Duaine	09300	Wall Tile		X
TI	09500	Ceilings		X
Walgreen	09500	Ceilings (drywall & acoustical)		X
Bod-Nol	09500	Suspended Ceilings		X
HCA	09510	Acoustical ceiling tile		X
Metro	09510	False ceilings and grids		X
Walgreen	09680	Floor coverings (carpet, tile)	X	
HCA	09680	Carpeting	X	
HCA	09720	Vinyl Wall Covering	X	
Division 10 - Specialties				
Whiteco	10426	Advertising signs (billboards)	X	
La Petite	10426	Illum. Exterior Signs		X
Walgreen	10536	Décor: canopy, signs, concrete	X	
King Radio	10630	Glazed partitions	X	
King Radio	10630	Movable Partition System	X	
King Radio	10630	Partitions (ceiling height)	X	
Minot Fed	10630	Pre-Manufactured Wall Partitions	X	
HCA	10650	Accordion doors/partitions	X	
AC Monk	10800	Lavatory Furnishings		X
HCA	10800	Bathroom acces., plastic mirrors		X
Walgreen	10800	Restroom partition (metal)		X

Morrison	10800	Restroom accessories		X
Metro	10800	Toilet partitions		X
La Petite	10800	Child's Restroom/Handicap Cabinet		X
Grinalds	10800	Walls (restroom)		X

CSI Master Format Division		Asset Description	Property Type:	
Case Name			1245	1250
Division 11 - Equipment				
La Petite	11442	Grease trap to counter		X
Division 12 - Furnishings				
Division 13 - Special Construction				
Morrison	13030	Garbage room		X
AC Monk	13030	Green storage room		X
Circle K	13030	Cold storage room		X
Munford	13030	Refrig. Area (structural elements)		X
AC Monk	13120	Special rooms	X	
AC Monk	13120	Storage sheds	X	
McManus	13120	Ten unit hangar bldg.		X
TI	13122	Misc. structures & related equip.		X
Schrum	13122	Car wash facility		X
LL Bean	13138	Mezzanine system		X
LL Bean	13140	Storage rack system (supp. roof)		X
LL Bean	13140	Roofing and wall panels		X
Division 15 - Mechanical				
Plumbing - Pipes and Fittings				
Duaine	15100	Connecting fixtures to appliance	X	
Duaine	15100	Copper drain lines from refrigerator	X	
Duaine	15100	Gas lines from refrigerator	X	
Duaine	15100	Water lines to cooking table, etc.	X	
Fire Protection Systems				
AC Monk	15300	Fire hose stations		X
La Petite	15300	Heat and smoke detectors		X

TI	15300	Fire protection system		X
TI	15300	Fire protection system - duct work	X	
LL Bean	15300	Sprinkler system		X
La Petite	15300	Fire protection system		X

CSI Master Format Division		Asset Description	Property Type:	
Case Name			1245	1250

Plumbing - Fixtures				
TI	15400	Plumbing servicing equip.	X	
Morrison	15400	Kitchen drainage	X	
Morrison	15400	Kitchen hand sinks		X
Morrison	15400	Kitchen hot water heater	X	
Morrison	15400	Kitchen water piping	X	
HCA	15400	Kitchen water pipe, grease trap	X	
Bod-Nol	15400	Plumbing to equip.		X
HCA	15400	Plumbing to x-ray	X	
Grinalds	15400	Plumbing - restroom		X
Schrum	15400	Plumbing system	X	
Morrison	15412	Electric water coolers		X
HVAC				
HCA	15510	Steam boilers & acces.		X
AC Monk	15700	Louvered wall to boiler	X	
TI	15700	Air conditioning for telephone room	X	
Dixie Man	15700	Air conditioning/heating (roof)		X
Centr Citrus	15700	Blowers	X	
Centr Citrus	15700	Coolers	X	
Grinalds	15700	Air conditioning units		X
Piggly Wiggly	15700	HVAC units	X	
Albertson's	15700	HVAC system		X
Publix	15700	HVAC system		X
Circle K	15700	Air conditioning units (roof)		X
Bod-Nol	15700	Kitchen HVAC		X
LL Bean	15764	Heating/ventilation system		X
Morrison	15780	Kitchen heat recovery unit	X	
La Petite	15780	Thermal recovery system - water heater		X
Morrison	15850	Kitchen air makeup unit	X	
HCA	15850	Kitchen hood & exhaust system	X	

Division 16 - Electrical				
Wire, Conduit, J-boxes to End Use Fixture				
Centr Citrus	16140	30-amp. Switch	X	
Duaine	16140	Electrical outlets to equip.	X	
Centr Citrus	16140	Elec. Outlets	X	X
Grinalds	16200	Elec. Conduit & recep. - restroom		X
HCA	16200	Elec. Wiring - inter-com equip	X	
HCA	16200	Branch elec. - TV equip	X	
La Petite	16200	Electrical service to counter		X
Schrum	16200	Electrical system	X	
Generating Equipment				
Westroads	16220	Electrical power generating equip.	X	

CSI Master Format Division		Asset Description	Property Type:	
Case Name			1245	1250

Power Transmission				
Centr Citrus	16300	Elec. Transformer to facilities		X
Centr Citrus	16300	Elec. Transformer for dumpster	X	
Centr Citrus	16300	Elec. Transformer for Sweet rooms	X	
TI	16360	Category 1 - high voltage (main)		X
Service and Distribution				
HCA	16400	Primary & secondary elec. Distrib.	X	X
HCA	16400	Branch elec. dist. System	X	X
TI	16400	Category 2 - breaker/feeder system		X
TI	16400	Category 3 - spare breakers & transformers		X
TI	16400	Category 4 - carries load to equip.	X	
Scott Paper	16400	Primary electrical distribution system	X	X
Scott Paper	16400	Secondary (general) electrical services		X
Bod-Nol	16400	Electrical to equip.		X
Ill Cereal	16400	Electrical distribution system (95%)	X	
AC Monk	16400	Elec. dist. to lights & machines		X
LL Bean	16400	Electrical system		X

Centr Citrus	16400	Elec. - dead front panel		X
Centr Citrus	16400	Elec. dist: adaptors, relays, fuses, switches	X	
Centr Citrus	16400	Elec. gutter plus ends & cuttings	X	
Morrison	16400	Primary electrical dist. System	X	X
Morrison	16400	Kitchen panel boards	X	
Lighting				
Morrison	16500	Décor window treatment	X	
Walgreen	16500	Elec. light fixtures, wire, etc.		X
Metro	16510	Accent decorative lighting (exterior)	X	
Centr Citrus	16510	Ballast lights	X	
Shoney's	16510	Chandeliers	X	
Morrison	16510	Chandeliers, décor wall lights	X	
Centr Citrus	16510	Fluorescent fixtures	X	X
Metro	16510	Grow lights	X	
Shoney's	16510	Hanging lanterns	X	
Metro	16510	Lay-in lighting		X
Cons Freight	16510	Light fixtures - mercury vapor		X
Centr Citrus	16510	Moisture-proof lamps	X	
Duaine	16510	Ornamental light fixtures		X
HCA	16510	Over-bed recessed lights		X
Centr Citrus	16510	Spotlight & flood lamp	X	X
La Petite	16520	Exterior façade lighting system		X
Metro	16520	Exterior security lighting	X	
Morrison	16530	Emergency lighting	X	
La Petite	16530	Emergency lighting		X
Communications				
HCA	16700	Telephone wiring, conduit jacks, etc.	X	

Chapter 6.5 - Statistical Sampling

A memorandum on March 14, 2002 (which follows) was issued to provide field guidance on statistical sampling. Examiners can also contact their local Computer Audit Specialist (CAS) for assistance. Note that Attachment A contains complex formulas and is not reproducible in Word format. Click on the following link to view the attachment: http://www.irs.gov/pub/irs-utl/dir_use_prob_sampling.pdf

However, it is available on the Capitalization Technical Advisor's Web Site. Please use the following link to view Attachment A.

March 14, 2002

MEMORANDUM FOR INDUSTRY DIRECTORS, LMSB
DIRECTOR, PRE-FILING & TECHNICAL GUIDANCE, LMSB
FROM: Keith M. Jones
Director, Field Specialists

SUBJECT: Field Directive on the Use of Estimates from Probability Samples

The purpose of this memorandum is to establish guidelines for the Internal Revenue Service in evaluating samples and sampling estimates by taxpayers. These guidelines are intended to promote efficiency and consistency of the probability samples performed and examined by the IRS. They are not intended to be a technical position but to provide audit issue direction to effectively utilize our resources. Further, as more fully described below, they are not intended to replace or supersede specific statutory or regulatory requirements for substantiation or record keeping.

Examiners should perform a two-step inquiry in evaluating a taxpayer's probability sample. First, they should determine whether the taxpayer has appropriately used a probability sample to support or be the primary evidence of tax amounts. Second, they should determine whether the final answer represents a valid estimate.

The appropriateness of using a probability sample is a facts and circumstances determination. Some of the factors to be used in determining whether a probability sample is appropriate include the time required to analyze large volumes of data, the cost of analyzing data, and other books and records that may independently exist or have greater probative value.

Probability samples generally should be considered appropriate if there is a compelling reason for their use and taxpayers cannot reasonably obtain more accurate information. However, probability samples generally should not be considered appropriate if evidence is readily available from another source that can be demonstrated to be a more accurate answer, or if the use of sampling does not conform to Generally Accepted Accounting Principles (GAAP).

Once examiners determine that the use of a probability sample is appropriate, they should determine the validity of the final estimate. In general, an estimate from a

taxpayer's sample should be considered valid (without regard to adjustment(s) based on audit issues) if all of the following conditions are met.

1. The taxpayer has maintained all of the proper documentation to support the statistical application, sample unit findings and all aspects of the sample plan. This will generally include all of the information contained in Attachment A to these guidelines. The documentation requirement helps insure that the sample was conducted in a manner to support all the necessary elements of a probability sample.
2. The estimate is based on a probability (i.e., statistical) sample, where each sampling unit has a known (non-zero) chance of selection, using either a simple random sampling method or stratified random sampling method.
3. The estimate is computed at the least advantageous 95% one-sided confidence limit. The "least advantageous" confidence limit is either the upper or lower limit that results in the least benefit to the taxpayer. Recognizing that many methods exist to estimate population values from the sample data, only the following estimators will be considered for acceptance. Variable estimators permitted include the Mean (also known as the direct projection method), Difference (using "paired variables"), (combined) Ratio (using a variable of interest and a "correlated" variable), and (combined) Regression (using a variable of interest and a "correlated" variable).¹ Since the latter two variable methods are statistically biased, it must be demonstrated that such bias is negligible before they will be considered acceptable. The formulas for these estimators are in the Technical Appendix to these guidelines and assume sampling without replacement. Attribute estimators permitted include (combined) proportion or total count.

a. Variable Sampling Plans.

1. Of all the final estimates determined as qualifying, the estimate with the smallest overall standard error, as an absolute value, must be used (i.e., the size of the estimate is irrelevant in the determination of the value to be reported).
2. Confidence limits are calculated by adding and subtracting the precision of the estimate from the point estimate where precision is determined by multiplying the standard error by (i) the 95% one-sided confidence coefficient based on the Student's t-distribution with the appropriate degrees of freedom, or (ii) 1.645 (i.e., the normal distribution), assuming the sample size is at least 100 in each non-100% stratum..
3. For either the (combined) Ratio or Regression methods, to demonstrate little statistical bias exists, the following applies after excluding all strata tested on a 100% basis (i.e., the entire population of a stratum is selected for evaluation).

- i. The total sample size of all strata must be at least 100 units.
- ii. Each stratum for which a population estimate is made should contain at least 30 sample units.
- iii. The coefficient of variation of the paired variable² must be 15% or less.
- iv. The coefficient of variation of the primary variable of interest, represented by either the corrected value³ or the difference between the reported and corrected values⁴ in common accounting situations, must be 15% or less.
- v. For only the (combined) Ratio method the reported values of the units must be of the same sign.

a. Attribute Sampling Plans:

- 1. When using simple random samples, the confidence limits will be determined using the Hypergeometric, Poisson, or Binomial distribution. If the proportion being estimated is between 30% and 70%, then the normal distribution approximation may be used in lieu of one of the above distributions.
- 2. For stratified random samples, when at least two strata are sampled (i.e., not 100% samples), the confidence limits must be determined using the normal distribution approximation. Otherwise, item one above applies.
- 3. For the normal distribution approximation, the precision is calculated by multiplying the standard error by (i) the 95% one-sided confidence coefficient based on the Student's t-distribution with the appropriate degrees of freedom, or (ii) 1.645 (i.e., the normal distribution), assuming the sample size is at least 100 in each non-100% stratum.

The allowance of a taxpayer's estimate does not correspondingly require acceptance of the taxpayer's use of such estimate for the determination of associated adjustments, allocation, or subdivision of the findings for other purposes unless statistically determined according to these guidelines and applied on a basis appropriate for the circumstances. These guidelines address only the statistical requirements that must be met for a probability sample to meet preliminary acceptance and are not intended to further require acceptance of individual sample unit determinations. Valuation or attribute determinations remain subject to independent verification along with other non-statistical issues such as missing sampling items. Likewise, the statistical procedures followed may be examined and adjusted when discovered in error. Corrections to statistical methodology are permitted where possible to place the method in compliance

with these guidelines. Any fatal error in statistical methodology which renders the probability sample invalid will preclude the use of any statistical estimate based on the sample and will only allow for consideration of the sample findings on an actual basis. Where a probability sample is determined to be not appropriate and raised as an issue, the examining agent may pursue a more accurate determination or allow the findings of units examined on an actual basis. However, the computational validity of the estimator should still be considered and addressed along with other alternative issues in unagreed cases.

This memorandum is not intended to supersede formal regulations, rulings, or procedures that address the specific application of statistical principles. It is recognized that existing industry practices and specific taxpayers may be using techniques that are not covered by this directive or other published documents. If a taxpayer has employed a probability sample or method not covered, the estimate will be referred to a Statistical Sampling Coordinator for resolution or issue development.

These guidelines do not relieve taxpayers of their responsibility to maintain any documentation required by section 6001 of the Internal Revenue Code, other sections, or subsections, which have specific documentation requirements for the entire population. Issues regarding documentation or support may be raised as appropriate.

This Field Directive is not an official pronouncement of the law or the Service's position and cannot be used, cited, or relied upon as such.

Attachment

cc: Commissioner and Deputy Commissioner, LMSB
Director, Compliance, SBSE

Director, Employee Plans, TEGE

Director, Exempt Organizations, TEGE

Footnotes:

1. The first variable used for the difference, ratio and regression estimators must be the variable used in the mean estimator. The second variable used for the difference, ratio and regression estimators must be a variable that can be paired with the first variable and should be related to the first variable. For example, in a typical audit-sampling situation, the first variable would be the audited value of a transaction and the second variable would be the originally reported value of the same transaction.
2. $[\text{Standard Error of the Total "y" Variables}] / [\text{Point Estimate of the Total "y" Variables}]$. Where the "y" variables are commonly the reported values in accounting situations.
3. $[\text{Standard Error of the Total "x" Variables}] / [\text{Point Estimate of the Total "x" Variables}]$. Where the "x" variables are commonly the corrected values in accounting situations.
4. $[\text{Standard Error of the Total "y-x" or Total "d" Variables}] / [(\text{Total Population Value Represented by "Y"}) - (\text{Point Estimate of the Total "y-x" or Total "d" Variables})]$. Where the "y-x" variables are commonly represented by the difference ("d") between the reported ("y") and corrected ("x") values in accounting situations.

Chapter 6.6 - Construction Process

In order to better understand how a cost segregation study is conducted, it is helpful to understand the construction process (i.e., how a building is constructed). The following discussion provides a general overview of this process, from the conceptual stage through the bidding, construction, payment, and completion stage of a project. Although there may be certain facts and circumstances in specific geographic locales that vary from what is presented here, the basic construction concepts are similar in all locales. For purposes of this discussion, it is assumed that a fee contractor, rather than an in-house labor force, performs the construction. For additional information and a glossary of construction terms, refer to the MSSP Guide for Construction Industry, which can be downloaded using the following link: <http://www.irs.gov/pub/irs-mssp/build.pdf>

STAGES IN THE CONSTRUCTION PROCESS

The Construction Process is composed of six distinct stages, which are:

- [Concept](#)
- [Contracts and Bid Documents](#)
- [Bidding](#)
- [Construction](#)
- [Construction Payments](#)
- [Completion](#)

Each of these stages is discussed below in more detail.

1. Concept

All construction projects begin with planning and design, also referred to as "architectural programming." Numerous overlapping steps occur during this conceptual or design phase, prior to actual construction of the project.

An **architect** is the primary designer of a building or project and controls the overall design, specifications, finished materials (e.g., brick, paint, carpet, wall covering, etc.), and other architectural features of the building. In addition, the architect supervises the engineers responsible for the structural, mechanical, electrical, lighting and plumbing design of the building. Engineers must always conform to the design requirements of the architect. Each member of the design team must also be licensed with the proper state licensing authorities where the facility is located.

- [Planning & Architectural Programming](#)

During the initial stages of the design process, the architect(s) and engineer(s) have a number of client meetings in order to determine the purpose and objective of the proposed construction. The primary activities, for which the project is being constructed, as well as the relationships between spaces, are reviewed. Consideration is also given to how well the completed project relates to adjacent buildings (if any) and its surroundings. The preliminary programming produces a list of solutions, alternatives, feasibility studies and costs estimates. After a review of the programming statement, schematic plans are prepared.

- Schematic Plans

Schematic plans are the first plans of a facility and show the interrelationship between spaces and activities. All of the parties (architects, engineers, and the client) review the schematic plans and make recommendations, as necessary. Any changes are then incorporated into the final schematic plans. Revised schematic plans are also known as "preliminary plans," and provide a graphic view of the project, the refined details of how the project will look, and the relationship of all spaces.

Once the preliminary planning phase is complete, the project then enters a stage involving the preparation of contract bid documents and working drawings.

2. Contracts and Bid Documents

In order to solicit construction bids, the builder must provide potential bidders with working drawings and plans for the proposed structure, as well as project specifications, the terms of which are spelled out in contracts.

- Contract/Working Drawings/Plans

All projects, whether they involve new construction or expansion of an existing structure, require the preparation of contract documents. The contract working drawings and plans provide a pictorial representation of the construction work, and specify or lay out the designer's intentions for the facility. The drawings illustrate, among other things, the appearance, layout, equipment, and amenities of the project. These drawings show the architect's plan/design for the building's overall appearance, such as finish materials, floor plans, sizes, and use of each building area. Engineers design the building's structural, mechanical, electrical, plumbing and communication systems.

The architect also begins to gather project data to deal with problems or situations that are expected to arise during the construction process, such as local zoning requirements, local infrastructure, traffic, environmental and population impact, acoustic, energy, lighting, and aesthetic considerations. Various consulting engineers may also be utilized to solve specific project problems.

Numerous drawing plans are involved in a construction project, including the following.

- Architectural Plans

The architectural plans indicate the layout of the project, such as floor plans, elevations, and details of the construction and architectural finishes. These plans are typically numbered sequentially with the prefix "A" for "architectural." "Plan view," the most common type of an architectural plan, is an overhead view of the spaces on a specific floor. These plans also indicate the length, width and various heights of the structure and floor elevations. Plans may show notes of specific construction information and may also contain details on a specific portion of work.

Exterior elevations show the exterior and the exterior finishes, and are similar to photographs of the exterior. Architectural schedules on the plans indicate the door types, windows, hardware, plumbing, and light fixtures in each room.

In preparing the plans, the architect utilizes graphic symbols, instead of words, to indicate various facility conditions. These symbols indicate the various types of material, sizes, and room finishes to be used. Symbols may be shown on the plans themselves or in the legends of the plans. [A list of general symbols is shown in the Appendix of Plan Reading and Material Takeoff, by Wayne J. DelPico, published by R. S. Means Company.]

A civil engineer is responsible for the proper drainage of a site, as well as the design of land improvements, such as paving, curb and gutter design, retaining walls, and drainage culverts. Site plans prepared by the civil engineer indicate the existing and proposed grades of the land and the specific location of the facility on the land.

- Structural Plans

The structural plans are prepared by structural engineers and show the structural design of a building. These plans incorporate foundation planning with considerations for rain, snow, wind, earthquakes, and other natural phenomena. Structural engineers design the facility for both "live" and "dead" loads of the building. Live loads consist of the people, furniture, and other items that are not part of the building, but are supported by the building. Dead load is simply the weight of the building or structure itself.

- Mechanical Plans

Mechanical plans are prepared by a mechanical engineer to show the design of the various mechanical systems in the building. These systems must be designed to incorporate the proper air conditioning, heating, and ventilation equipment, as well as adequate plumbing, to meet the needs for all of the building's designated activities. Like the structural engineer, the mechanical engineer must design the mechanical building systems to meet building "loads." For example, office work produces a certain level of heat load, whereas cooking in a commercial kitchen may produce greater heat loads. The energy use of the air conditioning, heating, pumps, and other building equipment are monitored by the mechanical engineer and are considered when specifying building equipment for an efficiently designed building system. Mechanical plans are numbered with the prefixes "P" for "plumbing" and "H" for "heating, ventilating, and air conditioning."

- Electrical Plans

Electrical plans are prepared by an electrical engineer, and show the electrical distribution system for the efficient distribution of power in a building. The plan design includes the distribution of electrical power from the utility company and the distribution to power-specific equipment. Engineering design factors for the overall electrical "load" of a building must also be considered (e.g., proper sizing and arrangement of transformers, panel boards, circuits, wires, conduits and power to the various machines, equipment and activities in the building). Electrical engineers may also handle the lighting design requirements of the building, as well as specialty areas such as a central security monitoring system, a computerized control system, and fire

and smoke management systems. Electrical plans are numbered with the prefix "E" for "electrical."

- Contract Specifications

The second part of the contracts and bid documents stage is the preparation of project specifications, also known as "specs." Specs instruct the contractor how to build the project, and consist of contract documents, the technical specifications of the materials and the quality of the materials to be installed, and the workmanship for installation of the materials. Given the amount of information that is required to be included, specs have to be organized in a coherent manner. The most widely accepted system for arranging construction specifications is called the CSI Master Format. The CSI format, developed by the Construction Specification Institute, requires four categories of information: bidding requirements, contract forms, contract conditions, and technical specifications.

- Bidding requirements

Bidding requirements describe the conditions of the bid to the owner, and encompass the Invitation to Bid, the Instructions to Bidders, the Information Available to Bidders, the Bid Forms and Attachments, and the Bid Security Forms. The type of contract between an owner and a contractor dictates the form of the bidding conditions.

- Contract Form

Contract forms are divided into sections, including the Agreement, the Performance and Payment Bonds, and the Certificates.

- Contract Conditions

The contract conditions include the General Conditions and Supplementary Conditions.

- Technical Specifications

The technical specs are generally prepared for each specific project in the CSI Master Format and these include hundreds, perhaps thousands of individual items that will be installed in the project.

The CSI Format consists of 16 "Divisions of the Work", which are:

- Division 1 - General Requirements
 - Division 2 - Site Work
 - Division 3 - Concrete
 - Division 4 - Masonry
 - Division 5 - Metals
 - Division 6 - Wood & Plastics
 - Division 7 - Thermal & Moisture
 - Division 8 - Doors & Windows
 - Division 9 - Finishes
 - Division 10 - Specialties

- Division 11 - Equipment
- Division 12 - Furnishings
- Division 13 - Special Construction
- Division 14 - Conveying Systems
- Division 15 - Mechanical
- Division 16 – Electrical

Each CSI Division is further sub-divided into three additional parts, called General, Products, and Execution (Installation).

- The General Section explains the scope or the limits of work for a particular CSI Division and makes a correlation between the technical specifications and the general and supplementary conditions of the contract. The administrative portion for any trade (e.g., shop drawings) would be found in this section, as well.
 - The Product Section lists the materials to be used, by name and model number, and explains the quality of materials and the basis for any substitution.
 - The Execution Section explains the method of material installation, techniques to be used, and workmanship quality.
- AIA Document A201, General Conditions of the Contract for Construction
The American Institute of Architects (AIA) is a nationally recognized, professional organization of architects. Over the years, the AIA has developed a document entitled "AIA Document A201 - General Conditions of the Contract for Construction ("Document A201"). The Document A201 is universally accepted in the construction industry and provides the legal basis and description of the following contract items:

1. General Provisions
2. Owner
3. Contractor
4. Administration of the Contract
5. Subcontractors
6. Construction by the Owner or by separate Contractors
7. Changes in the Work
8. Time
9. Payments and Completion
10. Protection of Persons and Property
11. Insurance and Bonds
12. Uncovering and Correction of Work
13. Miscellaneous Provisions
14. Termination and Suspension of the Contract

Document A201 provides legal definitions of the elements in the construction process and the items that will be provided by the contractor. Document A201 also details how to prepare material submittals, shop drawings, and interim payment requests.

3. Bidding

The third stage of the construction process is bidding. Once an owner determines that a project is feasible and that construction financing is available, the owner will solicit bids or proposals from general contractors and/or specialty contractors. Owners generally use trade publications and newspapers in order to invite contractors to bid on a construction job. A copy of "The Notice to Contractors" will be shown in the project's specifications, providing contractors with the bidding procedures.

The following is the sequence of events to prepare a contract bid:

1. The contractor obtains a copy of the plans and specifications from the owner in order to prepare a formal estimate of the construction cost or bid (experienced construction personnel prepare the bids).
2. The contractor reviews the contract plans and specifications to determine how to build the project and to consider all the limitations or conditions the owner requires for the project.
3. The contractor solicits bids from subcontractors, estimates their direct material and labor costs, and evaluates the ultimate profit potential of the contract. The amount of the bid covers the estimated costs and a profit for the construction project.
4. The owner evaluates all of the submitted bids and then awards the contract.
5. The contract document and specs contain the project start and completion dates, the progress billing procedures, the insurance requirements, and other pertinent information.

The preparation of a bid is the first step in the cost control system of a construction project. The agreed-upon bid price then becomes the budget by which the actual expenditures are measured and drawn against. The object of a cost control system is to provide the general contractor and/or owner with information regarding actual project costs versus the anticipated or budgeted costs. These cost comparisons become essential for internal control purposes.

Standard cost manuals, such as the "R. S. Means Building Construction Cost Data," are used by a general contractor to compute a bid. These guides contain a compilation of cost data for each phase of construction. There are also construction cost data guides for both union and non-union wage rates. If the Service examiner needs to estimate construction costs as part of the analysis of a study, it is important to use the proper wage rates.

Subcontractors bid jobs in much the same way that a general contractor does. A subcontractor may also solicit bids from sub-subcontractors for specialty construction.

Working drawings and specifications provide information to allow general contractors to estimate the project's construction costs. Along with using their own estimators, a contractor usually has the subcontractor's and the material supplier's information readily available. If necessary, a general contractor can perform the preliminary details and/or shop drawings (see discussion on Appendix page 6.6-10) in order to estimate the proper costs to construct various parts of a building. The general contractor gathers all the information from his estimators and subcontractors and then adds in an amount for overhead and profit. This final cost estimate is used in the competitive bidding for the construction of a project.

The cost estimate of a building or project is broken down and organized by the construction divisions shown in the specifications. The cost estimate is further detailed by trade and by item. The general contractor may also have a bank of information in order to estimate labor and material costs. Otherwise, the contractor will rely on any of several cost estimating manuals [e.g., R. S. Means Building Construction Cost Data (highly detailed), Marshall Valuation Services, etc.]

4. Construction (Field Work)

The fourth stage of the construction process, called fieldwork, is the actual construction of the project. Fieldwork is broken down into building permits, subcontractors, scheduling subcontractors, shop drawings, project submissions, and change orders.

- **Building Permits**

Before construction can begin, the appropriate municipality must issue a building permit. Specifications and blueprints must be provided to the municipality's building department, along with the application for a permit. The period of time for a permit to be approved can be lengthy, especially in the case of new construction. The general contractor or owner may also be required to submit results of soil testing, environmental impact studies, and any other necessary testing or studies. Sometimes, a public hearing is mandated, if there is opposition to the project. In most cases, a permit is issued within a few months. The cost of the permit and any related studies may be the responsibility of either the owner or the general contractor.

Construction projects must also follow the standards of the applicable building code. A building inspector will be involved at various construction stages in order to verify that the project is being constructed according to municipal code.

- **Subcontractors**

Subcontractors range from a one-man operation to nationwide, publicly traded corporations, or divisions of larger corporations. Subcontractors are distinguished from general contractors by their limited scope of work, which usually involves a special skill, knowledge, or ability. Subcontractors, which include plumbers, electricians, framers, and concrete workers, generally enter into contracts with the general contractor and may

provide the raw materials used in their specialty areas. The general contractor, not the owner of the property, pays the subcontractors. Materials purchased by the subcontractors are generally delivered directly to the job site. The subcontractors' work may either be completed in stages, or it may be continuous.

- Scheduling of Subcontractors

The general contractor schedules the subcontractor's work so that the construction runs smoothly and is completed on schedule. The general contractor is also responsible for scheduling the subcontractor in such a way that one subcontractor does not hold up another. This order on subcontractor sequencing is known as the "critical path."

An example of the sequence in scheduling subcontractors for a small project is as follows:

1. Clear the land (which may include demolition of existing structures)
2. Excavate the land (which may include digging holes and leveling)
3. Pour the foundation
4. Frame steel and/or concrete
5. Rough framing
6. Rough electrical
7. Concrete flooring
8. Roofing
9. Heating and air conditioning
10. Ductwork for heating and air conditioning
11. Elevators and/or escalators
12. Sprinklers and other safety equipment
13. Install electrical fixtures
14. Insulate and weatherstrip
15. Frame windows and door sashes
16. Install tile and marble
17. Install suspended acoustical ceilings
18. Install toilets, sinks and other plumbing fixtures
19. Paint walls (inside and out)

- Shop Drawings

Working drawings only include enough detail to show the general contractor the overall layout of the building. The individual specialty trades and suppliers use working drawings to produce shop drawings for items such as granite finishing, cabinets and countertops, structural steel, etc. Shop drawings detail the specific building components and are usually produced after the final design phase but before the beginning of the construction phase. Drawings are prepared in accordance with the instructions on Document A201. The architect/engineer will also check each shop drawing for precise measurements and for compliance with the intended building design.

- Project Submissions

Project submissions are an important part of the construction process. Each installed building item must receive the architect's approval to ensure that the item or product is in conformance with technical specifications. Project submissions illustrate each item's intended use, function, method of attachment or installation requirements, and placed-in-service date. When the project is started, the architect and /or engineer monitors the contractor's progress and often approves the progress payments made to the contractors. The architect/engineer may also make modifications to the building plans as needed.

- Change Orders

Change orders are the written contract revisions that increase or decrease the total contract price. Change order documents contain the change order number, change order date, a description of the change, and the amount of the change order. Contractors, based on the terms of the contract, may also issue orders.

5. Construction Payments

The fifth stage of the construction process is the construction payments stage. All construction contracts extend over a period of time. The order of any business operation is to collect money as soon as work is complete. When a contractor completes a prescribed amount of work, the owner pays the contractor for the completed work.

- Specifications for Payment

The specifications for contract payments are shown in Document A201, under the "General Conditions for Construction Contracts." Document A201 contains AIA Forms G701 and G702. Form G702 requires that the contractor break down the bid into various parts of work. The project designer (architect or engineer) critically reviews the G702 schedule of values that are prepared by the contractor and either accepts or rejects them. The close scrutiny of this form is due to the future release of funds that will be used to pay for the progress (and ultimately the completion) of construction. This form also provides the first basis for the construction cost control on a project. The architect and/or engineer have a legal and fiduciary responsibility for the accuracy of the cost allocations. The architect and the owner also want an adequate and timely distribution of funds to ensure smooth progress payments and to ensure that there will be the necessary funds to pay for the completion of the last portion of the project.

It is also to the contractor's benefit that items of construction be broken into as many parts as possible. The more individual items of work that the contractor can identify and complete, the more items of work he/she will be entitled to bill and for which he/she will be timely paid. Typical schedules of values in the G 702 may be 15 to 20 pages long and may contain hundreds, if not thousands, of individual cost items.

The contractor submits the G702 to request payment on a regular basis. The contractor completes the G702 by listing the total construction cost for each item of work completed to date. The amount previously paid for the work and the amount accomplished in this billing period are subtracted from the total amount to arrive at the amount of money remaining, minus a retainage for the completion of the work.

It is extremely important for the Service examiner to analyze the G702. This document provides a breakdown and analysis of the construction costs and, since it is prepared by 3rd parties, it provides an element of objectivity.

- Change Orders

The architect/engineer may make modifications or change orders to the construction plans as needed. Change orders should be reviewed for any agreed changes to the payment schedule.

6. Completion

The final phase of the construction process is known as the completion stage, and it readies the building for occupancy.

- As Built Plans

After a facility or project is completed, the architect and contractor prepare a set of plans known as the "as built plans." These plans represent exactly how the facility was constructed and they also incorporate all the changes to the original construction plan. It is very important that the Service examiner utilize the "As-Built Plans" when reviewing a cost segregation study because these represent the actual construction of the project.

- Notice of Partial Completion

In some instances, the owner may desire to occupy a portion of the completed building. In that case, local building officials conduct an inspection to determine if that portion of the facility meets all building codes and is safe to be occupied. If approval is granted, a "Certificate/Notice of Partial Occupancy" is issued.

- Notice of Substantial Completion

Local building officials issue this notice when 95 % of the construction is complete.

- Notice of Completion/Certificate of Occupancy

A "Notice of Completion" is requested by the contractor/owner when the building is 100% complete. The project must pass a final inspection by local building officials in order for the "Notice of Completion" and the "Certificate of Occupancy" to be issued. These documents are recorded at the office of the local recorder and the property will be then appraised for property tax purposes.

SUMMARY AND CONCLUSIONS

This chapter provides an overview of the construction process and should assist Service examiners in understanding terminology used in the construction industry. In turn, this will assist in the review of cost segregation studies.

Chapter 6.7 - Information Document Requests

INTRODUCTION

Appropriate documentation is needed to support the conclusions in a cost segregation study. Once an examination has revealed the use of cost segregation techniques, the examiner needs to review the supporting documentation to determine whether an examination is warranted and, if so, the scope of the examination.

The use of appropriate Information Document Requests ["IDR's"] will facilitate the identification of available records for review and the solicitation of records from the taxpayer. The sample IDR language is intended as a suggestion for obtaining records. One or more IDR's may need to be issued and examiners should "tailor" the language to each specific case.

6.7.1 Purpose - To identify the participants and their respective roles in the preparation of a cost segregation study/analysis.

Taxpayer, Inc., made changes to cost recovery deductions for its properties based upon recommendations from its consultant through Cost Segregation reports. A review of these recommendations is necessary.

The Engagement Letter/Letter of Understanding between Consultant and Taxpayer, Inc., is requested to show the extent of the Cost Segregation engagement, the steps taken to gather information, and the way in which the work was to be reported.

Additionally, a conference is requested with a representative from Consultant to describe the Cost Segregation process and to answer questions concerning the style and general cost computations. It is expected that a telephone conference will be suitable, provided the Engagement Letter/Letter of Understanding has been furnished.

2. Purpose - To identify the specific properties subject to cost segregation study/analysis

3.

Please provide the names and locations of properties visited and inspected by Consultant for use in its Cost Segregation analysis. By reviewing the same properties visited by Consultant, a better understanding of the Cost Segregation Report is achieved.

4. Purpose - To locate the source of property blueprints and drawings

Please provide access to the construction drawings and specifications used by Consultant to perform its Cost Segregation Study. It is not necessary to duplicate the drawings; all that is requested is access to perform an adequate review in a location where the drawings may be unrolled and reviewed easily.

5. Purpose - To obtain a copy of the cost segregation study

Please provide a copy of the complete Cost Segregation Study, to include all schedules, spreadsheets, and attachments referred to in the Study.

Please locate the related workpapers for the Cost Segregation Study and hold available for review.

6. Purpose - To secure a copy of the study computations and formulae

The Cost Segregation Study is described as containing numerous spreadsheets and schedules used in arriving at the summary recommendations. Please provide a machine sensible copy of the data files used in preparing and printing the spreadsheets and schedules.

Please include a description of the software used in preparing the spreadsheets and schedules.

Please provide an index to the machine sensible files, (or other description of the file titles and how the files are identified). If the machine sensible copy is a visual copy, or value only copy, then an additional description and presentation of the mathematical formulae used to perform the computations is also requested.

7. Purpose - To ask specific questions about segregated properties

The blueprint review is complete. Specific questions about the study remain.

With regard to the "Quantity Take Off" schedules prepared by Consultant for the properties, there are certain unidentified assets that would fit into more than one MACRS class, depending upon location and use in the taxpayer's business. Please provide a copy of the detailed listing of the Consultant's selected assets, showing use and location for:

Receptacles in Kitchen
Junction Boxes in Kitchen
Disconnect Switches in the Kitchen
Receptacles in Offices
Junction Boxes in Offices
Circuit Breakers in Offices
Receptacles in Lab areas
Junction Boxes in Lab areas
Floor Drains in Kitchen
Sinks in Kitchen
3" pipe in Lab areas
1" pipe in Lab areas

These assets were opined to have shorter lives than the building lives.

8. Purpose - Request for specific items and amounts in question.

1. Please provide copies of all construction contracts, addenda, purchase orders, change orders (including the Contract Bid breakdowns) for each item listed below. Note: The Property Unit numbers and Descriptions were obtained from the formal Cost Segregation Analysis.

Category	Description	Amount
A	Exterior Façades - sec. 1245	\$1,203,xxx
B	Interior Decorations - sec 1245	\$3,069,xxx
C	Interior Decor - 1245	\$1,458,xxx
D	Interior Columns - 1245	\$180,xxx
E	Wallpaper	\$1,039,xxx
D	Signage	\$1,967,xxx
F	Property Utilities	\$1,902,xxx
G	Room Locking Systems	\$772,xxx
H	Backup Generator	\$814,xxx
I	Equipment Connects - Rooms	\$1,338,xxx
J	Ceiling Decorations	\$390,xxx
K	Equipment Connects - Kitchen	\$422,xxx
L	Equipment Connects - Mech. Room	\$1,338,xxx
M	Equipment Connects - Jacuzzi	\$62,xxx
N	Kitchen Exhaust	\$114,xxx
O	Equipment - Display Room	\$830,xxx
P	Sound Room - Display Room	\$189,xxx
Q	Millwork and Trim	\$2,811,xxx
R	Interior Decorative Lighting	\$334,xxx
S	Interior Dec. Lighting - Connects	\$861,xxx

Note: Include all progress payment requests along with the architect's or construction manager's certification of the percentage completion (i.e., Application and Certificate for Payment – AIA Form G-702).

PLEASE RESPOND BY: {date}