Standard on Valuation of Personal Property

Approved December 2005

International Association of Assessing Officers

The assessment standards set forth herein represent a consensus in the assessing profession and have been adopted by the Executive Board of the International Association of Assessing Officers. The objective of these standards is to provide a systematic means by which concerned assessing officers can improve and standardize the operation of their offices. The standards presented herein are advisory in nature and the use of, or compliance with, such standard is purely voluntary. If any portion of these standards is found to be in conflict with state law or the Uniform Standards of Professional Appraisal Practice (USPAP), USPAP and state law shall govern.

Acknowledgments This revision of the 1996 Standard on the Valuation of Personal Property was begun in 2004 under the direction of Kenneth C. Uhrich, Gary McCabe, CAE and Scott McAlpine members of the IAAO Technical Standards Committee. The standard also benefited from the support, recommendations, and thorough reviews of Lisa A. Hobart, PPS; Neal R. Cook, MAI; Jim Todora, CAE, MAI; Joyln Stotts; Nancy Tomberlin; Val Courtright; David Savedra; Steve D. Pruitt; Bruce Woodzell, and the IAAO Personal Property Section. At the time of adoption of the standard by the IAAO Executive Board, the IAAO Technical Standards Committee was composed of Peter L. Davis, chair, Alan S. Dornfest, AAS; Gary McCabe, CAE, Scott McAlpine; Bill Marchand, and Kenneth C. Uhrich.

Published by
International Association of Assessing Officers
314 W 10th St
Kansas City, Missouri 64105-1616
816/701-8100
Fax: 816/701-8149
http:\\www.iaao.org

Library of Congress Catalog Card Number: ISBN 0-88329-158-4

Printed in the United States of America.

Contents

Standard on Valuation of Personal Property

1. Scope

This standard is intended to provide recommendations for defining, classifying, discovering, reporting, verifying, and valuing personal property for ad valorem tax purposes. It is beyond the scope of this standard to address unique valuation issues that may arise in the appraisal of personal property associated with public utilities, telecommunications, railroads, or similar properties.

2. Introduction

The purpose of this standard is to present methods and techniques that assessing officers can use to achieve uniform and equitable personal property valuations. Effective administration of a personal property assessment system depends, in part, on legislation and regulations that provide clear direction for determining the proper status of personal property for assessment and taxation. Such administration also requires an adequate budget to obtain the resources necessary to assess personal property accurately and equitably.

3. Definition of Personal Property

Property means an aggregate of things or rights to things whose possession is protected by law.

Two broad categories of property are real and personal. "Real property is the rights, interests, and benefits connected with *real estate*. Real estate is the physical parcel of land, improvements to the land (such as clearing and grading), improvements attached to the land (such as paving and buildings), and appurtenances (such as easements that cross the parcel or give access to the parcel). Personal property is defined by exception: property that is not real is personal. The salient characteristic of personal property is its movability without damage either to itself or to the real estate to which it is attached" (International Association of Assessing Officers 1990, 76).

Personal property by its nature is not permanently attached and therefore is movable. Criteria for distinguishing whether an item is real or personal property in a particular situation usually include intent of owner, means of attachment, contribution to highest and best use of the property (real estate), relevant case law including sales and use tax cases if considered relevant, and statutory, regulatory, and legal guidelines.

Personal property is divisible into two classes—tangible and intangible. Examples of tangible personal property are material items such as animals, marine vessels, aircraft, motor vehicles, furniture and fixtures, machinery and equipment, tools, dies, jigs, patterns, and stock in trade (including inventories held for resale, supplies, and materials in process). Examples of intangible personal property are representations of rights of ownership to property—cash, shares, annuities, patents, stocks, bonds, notes receivable, insurance policies, accounts receivable, licenses, contracts, franchises, money market certificates, certificates of deposit, and copyrights—as well as goodwill.

An assessment statute should explicitly define the types of personal property subject to and exempt from assessment and taxation. State and provincial agencies should provide supporting rules, regulations, and guidelines as required. Legislation should also explicitly define the situs (location for tax purposes) of personal property and should specify a common assessment date for all taxing authorities.

4. Discovery of Personal Property

The extent to which personal property can be assessed depends upon its discovery. Complete discovery requires adequately trained staff and supporting resources. Taxation agencies should be empowered to issue binding rules and regulations covering the discovery of personal property. Disclosure of personal property is often contingent on identifying the owner of the property. Sources that may be useful in the discovery of personal property and its owners include the following:

- previous assessment records and previous personal property statements or returns
- physical inspection (on-site review)
- personal property listing form, return, rendition, declaration, or statement
- real property field appraiser reports and the property characteristic file
- audits (desk, office, field, or correspondence)
- state, provincial, and local sales tax permits
- federal, state, provincial, municipal, and county business licenses and registrations
- building permits
- chambers of commerce membership lists
- new business listings from news media
- public records (such as trade name records, Uniform Commercial Code [UCC] forms, corporation charters, partnership articles, and assumed name notices)
- property transfer documents, including recorded bill(s) of sale

- classified advertisements
- telephone directories
- city directories
- accounting records, including financial statements
- various state and federal tax returns (usually restricted to audit records)
- Internet research on business operations and contacts
- Web sites, specifically leasing and sales
- advertisement flyers
- other resources that can be helpful include access to governmental databases—Department of Motor Vehicles (DMV) or Department of Revenue records providing lists of manufactured home owners or lists of corporate taxpayers by jurisdiction.

Once the property has been discovered and the owner identified, an appraiser should inspect the property and establish an account or record for the owner (or business). The appraiser should speak to the owner, manager, or other authorized person; explain the purpose of the visit; and obtain the necessary data. A standard form or checklist, showing the date of inspection, should be used to verify ownership, the nature of the property, and the situs as of the assessment date.

Information that should be obtained about a business includes the following:

- name of the business
- type of business (e.g., restaurant or hotel)
- type of ownership (e.g., sole proprietorship, partnership, franchise, or corporation)
- mailing address of the business
- name and address of the owner(s)
- telephone number of the business
- name/title of the person supplying the information
- name, address, and telephone number of the party keeping records for the business
- beginning date of the business within the assessment jurisdiction
- e-mail addresses
- North American Industrial Classification System codes (NAICS) (formerly known as Standard Industrial Codes [SIC] in the U.S.)

Fiscal year information that should be obtained about the personal property of the business includes the following:

- a complete listing of all tangible personal property, including machinery, equipment, furniture, fixtures, computers, and other tangible fixed assets with their location, year purchased and year manufactured, and acquisition or construction cost together with what is included in this cost amount, such as shipping, freight, sales tax, licenses, and so forth
- a complete listing, with full descriptions and costs, of all leasehold improvements, noting which items may already be assessed as real property
- a complete listing of leased equipment with the name and address of the lessor, information on the equipment (including name of manufacturer, date of manufacture, description, model number, serial number, list price, and original cost, if available), lease number, and terms of lease (if possible, a copy of the lease agreement should be obtained)
- a complete listing of loaned or consigned items including a brief description (e.g., vending machines), and the name and address of their owner(s)
- a complete listing of items in inventory, rented or leased as part of the business' normal operation

5. Reporting of Personal Property

The physical inspection and listing of individual personal property items is dictated by time, financial resources, and the availability of trained personnel. Typically, these constraints require the use of a reporting form (also called a rendition, return, schedule, or listing) completed by the taxpayer or the taxpayer's agent. All reporting forms should be subject to audit by the assessor, or the assessor's agent, to determine the accuracy and validity of the information provided in the return document. The assessor should mail reporting forms or make them available early enough to allow for their timely completion. Forms and instructions should also be available on the assessor's Web site. The assessor's mailing address and telephone number should always be included on the listing form. Web sites and all documents sent from the assessor's office should include the office's e-mail address.

The first year a taxpayer files a reporting form, the information reported should include a listing of all personal property giving a description, date acquired, and original acquisition or construction cost of each item. If an item was acquired used, the manufacture date and historic cost of the item should be determined if possible. In subsequent years, the taxpayer may be asked to report only additions and deletions to the initial listing, with appropriate details and costs. This system promotes verification and valuation accuracy. Value trending and depreciation factors can be applied to each item individually or to a group of items, such as furniture, fixtures, and equipment (FF&E), acquired in a given year.

The form should contain sufficient instructions to help the taxpayer prepare and file a complete and accurate listing of all taxable personal property. The instructions on the form should also specify the reporting method required and give specific instructions on how to report construction in progress, acquisition costs (including installation, freight, taxes of all types, and fees), and expensed and fully depreciated assets as well as leased assets. The form should contain a statement that all listings are confidential and are subject to audit.

Implementation of an electronic filing process should be considered in order to provide a high level of customer service. The American National Standards Institute (ANSI) has approved electronic data interchange standards through the Accredited Standards Committee (ASC X12 transaction data sets). This standard enables taxpayers with accounts in multiple jurisdictions to efficiently automate the annual filing of personal property returns.

6. Verification and Auditing

6.1 Authority

Statutes should contain enabling language for regulatory compliance and enforcement measures. Such laws should give assessors and their representatives authority to examine the property, books, papers, and accounts of taxpayers. Statutes should also provide appropriate penalties for those who fail to file timely returns, file inaccurate information, or deny the assessor access to property and records. Further, statutes should require property owners to file personal property statements in each jurisdiction in which the owners have personal property.

6.2 Audit Program

The assessor should establish an audit program designed to facilitate the full and proper listing of all taxable personal property in the assessment jurisdiction. In general, emphasis should be placed on the audit of new accounts, major accounts, accounts with significant changes from the previous year, and accounts that are suspected of being inaccurately reported based on objective analysis.

Statistically valid sampling techniques should be employed to ensure that the audit program is equitable. The purpose of an audit is to verify that all taxable personal property items have been reported and that the information given is accurate. A physical inspection may help to verify the completeness of reports.

To ensure fair and equitable treatment, the scope of an audit program must be clearly defined before the process begins. For example, in establishing audit criteria, it may be useful to identify particular industry segments for examination to maximize resources in a given year or assessment cycle. Audit programs may include one or more of the following activities:

- Review listing changes from one year to the next with taxpayer contact if there are questions.
- Review correctness of data before making changes; contact taxpayers requesting additional information as necessary.
- Request that government revenue agency depreciation schedules be submitted with all listings.
- Obtain copies of government revenue agency depreciation schedules for (specify percentage) of total filings.
- Obtain actual copies of ledger listings from (specify percentage) of total filings.
- For mail audits, request specific documentation from selected accounts or business types.
- Physically inspect and audit records of specifically targeted accounts or business types.
- Physically inspect and audit (specify percentage) of all personal property accounts each year

When conducting a detailed audit with inspection, the appraiser examines a detailed plant fixed-asset ledger or similar record, if available, that provides information on each item such as asset description, serial number, manufacturer, date of purchase, date of installation, location, acquisition cost, depreciation charges, and retirement provisions. The appraiser verifies that assessable items have been completely and accurately reported. Assessable costs may include charges for installation, freight, taxes, and fees (if applicable), unless specifically excluded by law.

Attention should be directed to standby equipment, permanently idled equipment, retired or fully depreciated equipment, and uninstalled equipment. Regardless of book value, such equipment and inventory should be listed and valued unless specifically exempted. Idle, retired, abandoned, or fully depreciated property may not have a value-in-use and may be reported on the company's books as having $0.00 value, but the property may have a value-in-exchange. The amount of value-in-exchange should be determined based on market research of used machinery and equipment of similar use and condition. The status of personal property as of the assessment date is critical to determining an item's assessability or taxability (ratability).

The appraiser should compare total reported costs with those shown in the general ledger or balance sheet in order to verify that all property has been reported. The appraiser should be familiar with the nature of the cost being reported (original, acquisition [new or used], replacement, impaired) and the nature of the cost found on the general ledger (book, net book, market). Recent changes in reporting requirements by the United States Federal Accounting Standards Board attempt to tie depreciation life to market evidence such as leases.

The appraiser should verify that leased items, for which the business is either the lessor or lessee, have been properly reported and assigned to the correct party. If leasehold improvements exist, the appraiser should ensure that they are being assessed on either the real property roll or the personal property roll.

Simultaneous review of real and personal property records can also help to ensure complete assessment of property.

Time and cost considerations sometimes dictate that the appraiser will not be able to verify the proper reporting of each item of personal property at each site or business being audited. Often, verifying a sampling of major items listed in the detailed plant ledger, a walk-through inspection, and an examination of the general ledger, balance sheet, or other appropriate records will suffice. It may also be helpful to check a sample of recent invoices to see if the taxable assets have been accurately reported. The overall objective of the audit and verification process is to promote proper reporting.

State and provincial agencies may establish audit programs as part of their oversight or equalization and assessment responsibilities. Assessment jurisdictions may complete taxpayer audits or may be allowed to employ private auditing firms to complete the reviews. Larger jurisdictions will sometimes offer audit services to smaller jurisdictions for a fee or jurisdictions may combine audit resources in other ways.

6.3 Quality Assurance

Quality assurance methods and techniques used for personal property are similar to those used for real property. Verification of reported data against independent sources is a good way to check the accuracy of the reported costs and inventory of items listed.

Section 10 of the IAAO *Standard on Ratio Studies* (1999) provides comprehensive guidance for assessors planning to conduct a quality assurance program for personal property.

7. Valuation

7.1 Trade Level

All approaches to personal property valuation should consider trade level, which refers to the production and distribution stages of a product. The appraiser should recognize three distinct basic levels of trade: the manufacturing level, the wholesale level, and the retail level. Incremental costs (such as freight, overhead, handling, installation, and sales taxes paid on installed costs) are added to a product as it advances from one level of trade to the next, thereby increasing its value as a final, in-service product. Thus the value of goods will differ, depending on their level of trade. The appraiser should value personal property at its current level of trade, theoretically to a buyer within that same trade level. Such considerations are particularly important in inventory valuation.

7.2 Valuation Techniques

The cost, sales comparison, and income approaches should be considered in the appraisal of personal property as long as the market within the trade level is in equilibrium. If demand exceeds supply or supply exceeds demand, i.e., unbalanced markets, one or more of the three approaches may produce distorted results. The degree of dependence on any one approach could also change with the availability of reliable data. Units of comparison, such as value of personal property per square foot, for comparable properties can be used to check the value estimates derived from the standard appraisal approaches. Such units of comparison can also be used when the data required for other approaches are unavailable. Examples include cost/value per square foot of FF&E in an office building or cost/value per square foot of inventory for a retail business.

The valuation method and techniques employed should be based on the appraiser/assessor's value standards. In most jurisdictions, market value is defined by value-in-exchange, that is, the value to the next buyer as of the lien date, and highest and best use principles. The highest and best use of an asset will likely be as fully installed and operational to its maximum productivity.

7.2.1 Cost Approach

Costs used in the cost approach can be original construction cost, new or used acquisition cost, replacement, or reproduction costs. Allocated cost can be used if items are purchased in bulk, although often only original or acquisition costs are readily available for personal property assessment purposes. The cost approach provides an estimate of value based on the depreciated cost of the property. In applying the cost approach to personal property, the appraiser must identify make and model number, year acquired, and total acquisition costs, including installation, freight, taxes, and fees. The acquisition costs should then be trended and depreciated as appropriate to reflect current market values. Acquisition costs of equipment obtained pursuant to a lease-purchase agreement should include the total payments, not just the final payment. If financing costs are factored into the lease payments, an adjustment to the "selling price" may be required.

The assessor should recognize that appraisal and accounting practices for depreciating personal property may differ. Accounting practices provide for recovery of the cost of an asset (the return of the asset), whereas appraisal practices strive to estimate a value related to the current market and should consider both return of the asset and return on the asset. A productive asset may continue to have value at the end of its scheduled life or conversely, an asset may lose its value prior to the end of its scheduled life. Appraisal practice must consider accrued depreciation in the forms of physical deterioration, functional obsolescence, and external (economic) obsolescence. The appraiser/auditor should also be familiar with the purchase accounting methods used by businesses in their jurisdiction. A company's depreciation schedule should provide life tables for various asset categories.

The restoration or modification of machinery or equipment may be treated differently for assessment and accounting purposes. For accounting purposes, the restoration/modification cost may be entered as a different asset, whereas the appraiser/assessor would add the cost to the original item and adjust the effective age of the asset.

Useful guidelines in the form of depreciation schedules or tables are available from state or provincial assessing authorities, professional valuation companies, and appraisal publishing firms. Because the personalty of a business normally is acquired throughout the year, acceptable depreciation schedules will permit the full year's depreciation or will consider the average age of six months (half-year convention). Generally, these guides are sufficiently accurate for use in mass appraisal of property. If guides do not exist for specific types of personal property, it is recommended that they be developed. Depreciation schedules can be developed from a study of asset lives and resale prices. The schedules can be asset specific or for general categories such as personal computers or furniture and fixtures. Most schedules base annual depreciation on a percentage of original cost or replacement cost.

However, there can be particular types of property where standard depreciation schedules may not apply and an accurate depreciation estimate can only be made by using an alternate method. One such method is the capitalization of income (rent) loss due to the inefficiency of the property. It is similar to the practice in real estate valuation of calculating the depreciation due to rent loss caused by internal or external forces. An example would be if an existing machine can only run eight hours per day, but a modern replacement can run ten hours per day, the loss in revenue from the two hours of non-production could be capitalized and the amount subtracted from the replacement cost. Whether the obsolescence was functional or economic would depend on whether the forces reducing the production hours were internal or external. The appraiser/assessor's experience and judgment should inform their decision of whether to use a standard schedule, develop a new schedule, or apply an alternate method of calculating depreciation.

7.2.2 Sales Comparison Approach

The sales comparison approach may have limited application for appraising machinery and equipment used in business because sales of used items are generally few and are often liquidation sales, which typically are not at market value, or are bulk asset purchases. In such circumstances, list prices including delivery costs and sales taxes, when supported by the marketplace, can be good indicators of value. Used assets acquired in bulk purchases may have been sold in an arm's-length transaction so market data may be evident. The value of an individual item to the entire sale price (purchase price allocation) may be available in the buyer's records.

Care must be taken to assure that the property is valued at the proper level of trade. Trade and cash discounts should be subtracted from the list prices, particularly if the equipment sold is still at the wholesale level of trade. If reliable sales data are available, the adjustment process can be applied in the same manner as for real property. If an adjustment for time of sale is made, the adjustment may be negative due to additional accrued depreciation of the property or positive due to inflation.

7.2.3 Income Approach

The income approach produces an estimate of the present worth of income to be received in the future. To apply this approach, the appraiser must estimate the income stream over the remaining economic life of the subject property. This is an important concept; the future income-generating capacity of personal property is typically short-lived compared to real estate. The direct capitalization technique (Income divided by Rate equals Value [I/R=V]) can be used if the single-year income applied is indicative of the annual income for the remaining life of the asset and the capitalization rate reflects the recapture period of the asset. Personal property can also be valued using a yield capitalization technique, which values the changing productivity (income) of the asset over its projected remaining life more accurately than I/R=V. Many industries use gross income multipliers (GIM) or gross rent multipliers (GRM) to value personal property that has typical and similar operating expenses. When applying the income approach to value personal property, it is important to capitalize income from the rental of an asset not the income of the business that owns the asset.

Typical gross incomes may differ under various leasing arrangements; lessors may be able to supply average gross revenues for each type and model. The historical pattern of net income streams, together with an analysis of current leasing patterns, will suggest the likely shape of future income streams. The capitalization technique chosen should be consistent with the anticipated income stream.

When reliable lease data on equipment leases are available, the income approach can provide good value estimates. Lessors should be required to document operating expenses to be deducted from the gross income. These expenses include management expenses directly associated with the production of lease revenue, equipment maintenance expenses, and the like.

Developing an appropriate capitalization rate is a critical step in the capitalization process. Capitalization rates contain provisions for return on the investment (discount rate) and capital recovery (return of the investment), as discussed in the cost approach. In addition, property taxes may be accounted for as a component of the capitalization rate. (See *Standard on Mass Appraisal of Real Property* [IAAO 2002].)

Data on the economic lives of various types of personal property can be obtained from a number of sources. Lessors are perhaps the best source, although typical economic lives should be documented with dates of acquisition and disposal of actual items. U.S. federal tax guidelines for modified accelerated cost recovery systems (MACRS) can be helpful as a starting point. Economic life data can also be used to estimate recapture rates. When the income approach is applied, consideration should be given to the salvage or scrap value, if any, when the property has reached the end of its normal life expectancy (remaining economic life equals 0). An analysis of resale values of used equipment can be helpful in determining salvage value.

In cases where property is both sold and leased, gross income multipliers (GIM) should be developed. Gross income multipliers can provide reliable value estimates for personal property items that have similar operating expenses, discount rates, and remaining economic lives.

7.3 Valuation Guidelines for Tangible Personal Property

As discussed in section 7.2, the cost, sales comparison, and income approaches should be considered in the appraisal of tangible personal property. However, certain types of personal property do not readily lend themselves to development of all three generally accepted approaches. If sufficient sales data are available to support use of the sales comparison approach, it should receive primary consideration. In many instances, however, sufficient sales data are not available, and in these instances, more reliance should be placed on the cost approach or the income approach. The assessor must always consider the quality and quantity of the available market data.

The following are procedures typically used in the valuation of common types of tangible personal property.

7.3.1 Machinery and Equipment

Machinery and equipment (M&E) are items of personal property used in the normal conduct of business that are not permanently attached to the real estate and, unlike inventory, are not intended to be sold. Utility and ability to produce income are factors that influence the economic life of machinery and equipment. The market value of machinery and equipment typically follows a declining path once the assets are acquired and put into operation due to normal wear and tear and technological changes. Salvage or scrap value should be considered at the end of economic life.

The most common approach for the valuation of machinery and equipment is the cost approach, although the sales comparison approach should receive primary consideration when adequate data are available. In particular, small equipment, for which there is often an active resale market, may lend itself to valuation by the sales comparison approach.

Machinery and equipment can be classified as short-lived (computer) or long-lived (drill press), so not all M&E can be grouped together for depreciation purposes.

7.3.2 Furniture and Fixtures

The procedures described for the appraisal of machinery and equipment are generally used in the appraisal of furniture and fixtures (F&F). Because F&F generally have similar lives, they are often grouped into one item for depreciation purposes.

7.3.3 Leased Equipment

Valuation of leased equipment is complicated by such factors as the wide variety of leased equipment, the variety of leasing arrangements, rapidly changing technologies, and changing market conditions. These factors can cause the quality and quantity of available market data to vary.

The income approach is often used in valuing leased equipment because data on sales and rental rates are usually available. When sales data are available, emphasis should be given to income multipliers derived from market data.

The cost approach may be used cautiously in the valuation of leased equipment because markups of cost to list prices vary from one company to another on the same type of equipment and also vary with the level of trade. If manufactured cost is the only information that is reported, the appraiser should obtain more data from the lessor or compare the equipment in question with similar equipment of known cost.

7.3.4 Inventories

The term inventories includes specific categories of goods held for resale in the course of business, goods in the process of production (termed goods in process), and raw materials.

Whether certain types of goods are classified as inventories or as something else will change depending on the trade level at which the appraisal is being made. Machinery and other equipment that remain classified as inventories at the manufacturing, wholesale, and retail levels become machinery and equipment upon reaching the end user.

Inventory valuation, both for goods in process and for finished goods, should include the value of labor, materials, and overhead expended during production.

There are many methods for estimating the value of inventories. Some of the more common ones are:

- last in, first out (LIFO)
- first in, first out (FIFO)
- weighted average
- lower of cost or market

The most commonly used method for ad valorem purposes is lower of cost or market. First in, first out (FIFO) is also an acceptable measure of inventory replacement costs. Taxpayers often use last in, first out (LIFO) for income tax purposes, but it does not reflect inventory value for property tax purposes. The weighted average method provides for distribution of inventory costs throughout the year.

Caution should be exercised when inventory values are estimated from the owner's accounting records because most accounting systems use an original acquisition cost basis for pricing inventory and this does not necessarily reflect market value as extracted from the marketplace, which may be more or less than original cost.

7.3.5 Supplies

Supplies are stocks of goods that are intended to be consumed during the production process, but are not part of the raw materials inventory that is processed into the finished product. Examples of supplies include chemicals, clothing, pallets, paper, shipping materials, fuels, and repair parts. Unlike inventory, supplies are not held for resale. Supplies should be valued at their acquisition cost.

7.3.6 Consigned Goods

Consigned goods are personal property in the possession of an agent, held for sale by that agent. They should be valued, at the appropriate level of trade, as part of the consignor's inventory.

7.3.7 Imports and Exports

Assessors should be aware of the legal status of import and export merchandise in order to determine its taxable status. If there is no exemption provided by statute, then the techniques for estimating the value of inventories should be used for valuing imports and exports.

7.4 Valuation Guidelines for Intangible Personal Property

The discovery, reporting, verification, and proper valuation of intangible personal property is difficult and can be expensive. The methods for discovering, reporting, verifying, and auditing intangibles are the same as for tangible personal property. Pertinent information includes type of asset, name of issuer, date of acquisition, legal life, expected useful life, face value or par value, market value, and dividends or other income. Individual research can lead to sources that provide information on the selling prices of intangible personal property.

Statutes should provide concise guidance on the assessment of intangible personal property. The benefit/cost ratio of intangible personal property taxation is such that many states have exempted intangible personal property from taxation. For a listing of state and provincial treatment of intangible property, see *Property Tax Policies and Administrative Practices in Canada and the United States* (IAAO 2000).

Those states that continue to assess intangible property primarily do so for public utilities by using a unit valuation method. When centrally assessed property is not held by a public utility, the separation of tangible from intangible value may be required. Recent letter rulings and case law should be researched to provide guidance in this area. Careful review should underscore the purpose, use, and how necessary and integral the identified intangible personal property is to the taxable tangible personal property. This review could entail the examination of the taxpayer's books, records, and filings with regulatory agencies

7.5 Compliance with USPAP

IAAO requires that all appraisal work performed by its members in the United States and Canada be compliant with the *Uniform Standards of Professional Appraisal Practice* (USPAP) of the Appraisal Foundation (2005 [updated annually]) and the *IAAO Code of Ethics and Standards of Professional Conduct* (2005). USPAP Standards relevant to the valuation of personal property are Standard 6: Mass Appraisal, Development and Reporting; Standard 7: Personal Property Appraisal, Development; and Standard 8: Personal Property Appraisal, Reporting. Standard 6 defines the appropriate form for developing mass appraisal methods and the structure for reporting the results. Standards 7 and 8 provide guidance on the proper process to follow so that the results are based on sound conclusions and are well documented. USPAP contains adequate jurisdictional exceptions to accommodate the various provisions of state, county, and municipal laws.

Selected References

American Society of Appraisers (ASA). 1989. *Appraising machinery and equipment.* New York: McGraw-Hill, 209.

This text is a detailed compilation of information on the appraisal of machinery and equipment. All forms of depreciation are described and their application to personal property illustrated.

Appraisal Foundation, Appraisal Standards Board. 2005 [updated annually]. *Uniform standards of professional appraisal practice.* Washington, DC: The Appraisal Foundation, Appraisal Standards Board.

Two of these mandatory standards refer to personal property—Standard 7: Personal Property Appraisal, Development, and Standard 8: Personal Property Appraisal, Reporting.

California State Board of Equalization, Assessment Standards Division. 2003. The appraisal of equipment, inventory and supplies. Assessors handbook 571. Sacramento: California State Board of Equalization, Assessment Standards Division.

This handbook contains an excellent discussion of valuation methods. Although written to conform with California law, much of the discussion is of general interest. The board also publishes General audit guidelines (Assessors handbook 504) and Management of the business property program (Assessors handbook 503). Comprehensive personal property manuals are also issued by other states or assessing jurisdictions and can be accessed via Internet on government Web sites.

Gossett, J.F. 1984. Assessment law notes: Problems in intangibles taxation. *Property Tax Journal* 3(4):277–88.

This article reviews case law dealing with many aspects of intangible personal property assessment and valuation, for example, who should pay, situs, valuation, exemptions, and discrimination.

International Association of Assessing Officers (IAAO). Various dates. Bibliographic service. Kansas City, MO: IAAO.

Bibliographic computer databases are available through the IAAO library on various aspects of personal property assessment. The databases can be searched to provide customized listings. Databases relevant to personal property valuation are as follows:

Assessment manuals in the United States. 196 citations.

Provincial assessment manuals in Canada. 69 citations.

Price guides for personal property. 255 citations.

Leases, lease interests, leased equipment, and possessory interests. 199 citations.

Issues in intangibles valuation. 101 citations.

In addition to the computerized databases, a printed bibliography, *Tangible personal property: Valuation, assessment, and taxation*, Section 1: Assessment methods and practices and tax policies, is available.

International Association of Assessing Officers (IAAO). 1990. *Property appraisal and assessment administration.* Chicago: IAAO.

This comprehensive text on assessment administration discusses personal property briefly.

International Association of Assessing Officers (IAAO). 1996. *Property assessment valuation.* 2nd ed. Chicago: IAAO.

This introductory textbook contains a substantial chapter on personal property assessment.

International Association of Assessing Officers (IAAO). 1999. *Standard on ratio studies.* Chicago: IAAO.

International Association of Assessing Officers (IAAO). 2000. *Property tax policies and administrative practices in Canada and the United States* (Taxonomy Study). Chicago: IAAO.

International Association of Assessing Officers (IAAO). 2002. *Standard on mass appraisal of real property.* Chicago: IAAO.

International Association of Assessing Officers (IAAO). 2005. *IAAO code of ethics and standards of professional conduct.* http:\\www.iaao.org\publications\code_of_

ethics.asp.

International Association of Assessing Officers (IAAO). Various dates. Course and workshop manuals. Kansas City, MO: IAAO.

Course 500: Assessment of personal property.

Workshop 552: Basic personal property auditing.

Workshop 553: Advanced personal property auditing.

Workshop 550: Basics of fixed asset valuation.

Workshop 551: Valuation of machinery and equipment—Advanced concepts.

O'Keefe, K.M. 1983. The classification issue and the law of fixtures: A chattel by any other name. *Journal of State Taxation* 2(1):37–57.

A survey of case law on the law of fixtures, focusing on the attachment doctrine, the institutional doctrine, the integrated industrial plan doctrine, and the material injury test. Illinois, New Jersey, and California are featured. See also the article following O'Keefe's—Hyman, M.A. Commercial property assessments: Criteria for classifying personal property as real estate. 59–66.

Skaff, M.S. 1974. Computerized personal property valuation models. *International Property Assessment Administration* 7:194–201.

A paper that examines the use of computers in the administrative function (computation of assessed values, bills, and rolls) and in the analysis of the valuation function (including determination of property life).

U.S. Department of the Treasury. 2004. *Publication 946: How to depreciate property.* Washington, DC: U.S. Department of the Treasury, Internal Revenue Service.

Glossary of Terms

Acquisition cost. The cost used in accounting to represent the purchase price of an asset. If installation and other associated costs are included, this cost should be referred to as total acquisition cost.

Chattel. An item of tangible movable or immovable property except real estate, freehold, and things (such as buildings) connected with real property.

Consigned goods. A type of inventory in the possession of a selling agent but owned by another party. The seller has no equity, no control of price or sale, and receives none of the profit (as such) from sale of the property (but may receive a sales commission).

Construction in progress. Property that is in a process of change from one state to another, such as the conversion of personal property from inventory to fixed asset by installation or the conversion of personalty to realty by becoming a fixture.

Discovery. The process whereby the assessor identifies all taxable property in the jurisdiction and ensures that it is included on the assessment roll.

Economic life. The period of time over which an asset's operation is economically feasible. The economic life may or may not be equivalent to the physical life of the asset.

External (economic) obsolescence. The loss in appraisal value (relative to the cost of replacing a property with property of equal utility) resulting from causes outside the property that suffers the loss. Usually locational in nature in the depreciation of real estate, it is more commonly marketwide in personal property and is generally considered to be economically unfeasible to cure.

Effective age. An age assigned to an asset based on a combination of its actual age and condition.

Finished goods. Inventory at the end stage of a manufacturing process. Finished goods are the result of combining raw materials with labor, capital, machine time, and other components of production.

First in, first out (FIFO). An inventory cost-accounting procedure whereby unsold inventory, including inventory carried over from prior years, is valued at the price most recently paid for inventory purchases.

Fixed assets. Personal property that has been brought to the point of highest and best use, that is, it is fully installed and used to produce income in an economically feasible manner. In a business: permanent assets required for the normal conduct of a business.

Fixture. Generally, an asset that has become part of real estate through attachment in such a manner that its removal would result in a loss in value to either the asset or the real estate to which the asset is affixed.

Goods held for sale or resale. Any inventory held for sale by a wholesaler, distributor, or retailer after having passed through one or more other levels of trade.

Goods in process. Inventory, formerly raw materials, that has begun to undergo the manufacturing process that will result in finished goods.

Historical cost. The cost new to the first owner of personal property.

Intangible property. That class of personal property in which value is based on evidence of ownership rather than physical or tangible characteristics, for example, notes, bonds, insurance, patents, and accounts receivable.

Inventory. The group of personal property items whose value is exhibited by value-in-exchange, that is, ownership is solely for the purpose of sale rather than use.

In-transit goods. Personal property that is in movement from one jurisdiction to another. In-transit goods are not assessable because they lack situs.

Last in, first out (LIFO). An inventory cost-accounting procedure whereby unsold inventory, including inventory carried over from the prior year, is valued at the prices paid for the earliest inventory purchases.

Leasehold improvements. Items of personal property, such as furniture and fixtures associated with a lessee (the tenant), that have been affixed to the real property owned by a lessor.

Lower of cost or market. An inventory accounting concept which states that the present value of inventory is based on the lower of either historic cost or current selling price (example: obsolete inventory items).

Original cost. The cost as recorded on the books of the current owner.

Remaining economic life (REL). The number of years in the future during which the operation of an asset is anticipated to be economically feasible, often expressed as a percentage of the total economic life (REL %).

Situs. The taxable location of an asset. For personal property, situs may be the physical location of the property or, in the instance of highly mobile property, the more-or-less permanent location of the property owner.

Supplies. A type of personal property, usually treated as inventory, that is consumed as part of the process of bringing other assets to a saleable condition.

Tangible property. Property whose value is measured in accordance with its actual physical presence.

Trade level. Refers to the production and distribution stages of a product. Appraisers recognize three distinct levels of trade: the manufacturing level, the wholesale level, and the retail level. Personal property should be assessed at the trade level at which it is found. The valuation of the inventory of one owner should be based on the price for which it would be exchanged with a similar business at the same trade level, for example, from one manufacturer to another. Value-in-exchange increases as a property moves from manufacturing through to retail levels of trade.

Trending factor. A figure representing the increase in selling price over a period of time. Trending accounts for the relative difference in the value of a dollar between two periods.

Unit cost. A valuation guideline expressing the relationship between cost or value of inventory or fixed assets and some unit of measure, for example, cost per square foot or per employee.

Value-in-exchange. The amount an informed purchaser would offer for personal property under given market conditions.

Value-in-use. The value applied to furniture, fixtures, and equipment as installed and in-use for generation of income or performing its function.

Weighted average. A method of inventory cost accounting whereby inventory is valued according to the unit price of all units owned throughout the year. It is calculated by dividing total acquisition cost of all inventory by the number of units owned.

Assessment Standards of the International Association of Assessing Officers

DECEMBER 2005
Standard on Valuation of Personal Property

AUGUST 2004
Guide to Assessment Administration Standards

AUGUST 2004
Standard on Manual Cadastral Maps and Parcel Identifiers

AUGUST 2004
Standard on Property Tax Policy

SEPTEMBER 2003
Standard on Automated Valuation Models

JULY 2003
Standard on Administration of Monitoring and Compliance Responsibilities

JULY 2003
Standard on Digital Cadastral Maps and Parcel Identifiers

JANUARY 2003
Standard on Facilities, Computers, Equipment, and Supplies

FEBRUARY 2002
Standard on Contracting for Assessment Services

FEBRUARY 2002
Standard on Mass Appraisal of Real Property

JULY 2001
Standard on Assessment Appeal

JULY 2001
Standard on Public Relations

JULY 2001
Standard on Valuation of Property Affected by Environmental Contamination

DECEMBER 2000
Standard on Professional Development

JULY 1999
Standard on Ratio Studies

To order any standards listed above or to check current availability and pricing, go to: http://www.iaao.org/publications/standards.html