BOARD OF EQUALIZATION

## PROPERTY TAX RULES

Division 1. State Board of Equalization-Property Tax
Chapter 3. Local Equalization
Article 1. Hearing by County Board

## Rule 321. Burden of Proof.

Authority: Section 15606(c), Government Code.
Reference: Sections 110, 167, 205.5, 218 and 1601 et seq., Revenue and Taxation Code; and Section 664, Evidence Code.
(a) Subject to exceptions set by law, it is presumed that the assessor has properly performed his or her duties. The effect of this presumption is to impose upon the applicant the burden of proving that the value on the assessment roll is not correct, or, where applicable, the property in question has not been otherwise correctly assessed. The law requires that the applicant present independent evidence relevant to the full value of the property or other issue presented by the application.
(b) If the applicant has presented evidence, and the assessor has also presented evidence, then the board must weigh all of the evidence to determine whether it has been established by a preponderance of the evidence that the assessor's determination is incorrect. The presumption that the assessor has properly performed his or her duties is not evidence and shall not be considered by the board in its deliberations.
(c) The assessor has the burden of establishing the basis for imposition of a penalty assessment.
(d) Exceptions to subsection (a) apply in any hearing involving the assessment of an owner-occupied single-family dwelling or an escape assessment. An owner-occupied single-family dwelling means a single-family dwelling that is the owner's principal place of residence and qualifies for a homeowners' property tax exemption pursuant to Revenue and Taxation Code section 218. "Property that qualifies for a homeowners' property tax exemption" also includes property that is the principal place of residence of its owner and qualifies for the disabled veterans' exemption provided by Revenue and Taxation Code section 205.5. In such instances, the presumption in section 167 of the Revenue and Taxation Code affecting the burden of proof in favor of the applicant who has supplied all information to the assessor as required by law imposes upon the assessor the duty of rebutting the presumption by the submission of evidence supporting the assessment.
(e) In hearings involving change in ownership, except as provided in section 110 of the Revenue and Taxation Code, the purchase price is rebuttably presumed to be the full cash value. The party seeking to rebut the presumption bears the burden of proof by a preponderance of the evidence.
(f) In weighing evidence, the board shall apply the same evidentiary standard to the testimony and documentary evidence presented by the applicant and the assessor. No greater relief may be granted than is justified by the evidence produced during the hearing.

[^0]BOARD OF EQUALIZATION

## PROPERTY TAX RULES

Division 1. State Board of Equalization-Property Tax
Chapter 3. Local Equalization
Article 1. Hearing by County Board

## Rule 324. Decision.

Authority: Section 15606, Government Code.
Reference: Article XIIIA, California Constitution; and Sections 402.1, 402.5, 1609, 1610.8 and 1611.5, Revenue and Taxation Code.
(a) DETERMINATION OF FULL VALUE, CLASSIFICATION CHANGE IN OWNERSHIP, OR OTHER ISSUES. Acting upon proper evidence before it, the board shall determine the full value of the property, including land, improvements, and personal property, that is the subject of the hearing. The determination of the full value shall be supported by a preponderance of the evidence presented during the hearing. The board shall consider evidence of value derived by the use of any of the valuation methods described in regulation 3 of subchapter 1 of this chapter. It shall determine whether the method(s) used was (were) properly applied, considering the type of property assessed, governmentally imposed land use restrictions, and any recorded conservation easements as described in Civil Code section 815.1 et seq., by examining the factual data, the presumptions, and the estimates relied upon. The board shall also determine the classification, amount, and description of the property that is the subject of the hearing, the existence of a change in ownership or new construction, or any other issue that is properly before the board, or that is necessary to determine the full value of the property. The board shall provide to the clerk such details as are necessary for the implementation of the board's decision.
(b) JURISDICTION. The board's authority to determine the full value of property or other issues, while limited by the laws of this state and the laws of the United States and usually exercised in response to an application for equalization, is not predicated on the filing of an application nor limited by the applicant's request for relief. When an application for review includes only a portion of an appraisal unit, whether real property, personal property, or both, the board may nevertheless determine the full value, classification, or other facts relating to other portions that have undergone a change in ownership, new construction or a change in value. Additionally, the board shall determine the full value of the entire appraisal unit whenever that is necessary to the determination of the full value of any portion thereof.

The board is not required to choose between the opinions of value promoted by the parties to the appeal, but shall make its own determination of value based upon the evidence properly admitted at the hearing.

An appraisal unit of property is a collection of assets that functions together, and that persons in the marketplace commonly buy and sell as a single unit or that is normally valued in the marketplace separately from other property, or that is specifically designated as such by law.
(c) VALUATION PRINCIPLES. The board, the applicant, and appraisal witnesses shall be bound by the same principles of valuation that are legally applicable to the assessor.
(d) COMPARABLE SALES. When valuing a property by a comparison with sales of other properties, the board may consider those sales that, in its judgment, involve properties similar in size, quality, age, condition, utility, amenities, site location, legally permitted use, or other physical attributes to the property being valued. When valuing property for purposes of either the regular roll or the supplemental roll, the board shall not consider a sale if it occurred more than 90 days after the date for which value is being estimated. The provisions for exclusion of any sale occurring more than 90 days after the valuation date do not apply to the sale of the subject property.

The board shall presume that zoning or other legal restrictions, of the types described in Revenue and Taxation Code section 402.1, on the use of either the property sold or the property being valued will not be removed or substantially modified in the predictable future unless sufficient grounds as set forth in that section are presented to the board to overcome that presumption.
(e) FINDINGS OF FACT. When written findings of fact are made, they shall fairly disclose the board's findings on all material points raised in the application and at the hearing. The findings shall also include a statement of the method or methods of valuation used in determining the full value of the property or its components.

History: Adopted May 11, 1967, effective June 11, 1967. Amended October 4, 1967, effective October 5, 1967. Amended May 21, 1968, effective June 26, 1968.
Amended November 20, 1968, effective November 22, 1968.
Amended May 6, 1970, effective June 6, 1970.
Amended May 5, 1971, effective June 10, 1971.
Amended April 14, 1972, effective May 14, 1972.
Amended December 17, 1975, effective January 25, 1976.
Amended July 27, 1982, effective February 10, 1983.
Amended March 6, 1990, effective May 23, 1990.
Amended November 19, 1999, effective April 22, 2000.

# REVENUE AND TAXATION CODE Property Taxation 

PART 1. GENERAL PROVISIONS

## CHAPTER 1. CONSTRUCTION SECTION 110

110. "Full cash value." (a) Except as is otherwise provided in Section 110.1, "full cash value" or "fair market value" means the amount of cash or its equivalent that property would bring if exposed for sale in the open market under conditions in which neither buyer nor seller could take advantage of the exigencies of the other, and both the buyer and the seller have knowledge of all of the uses and purposes to which the property is adapted and for which it is capable of being used, and of the enforceable restrictions upon those uses and purposes.
(b) For purposes of determining the "full cash value" or "fair market value" of real property, other than possessory interests, being appraised upon a purchase, "full cash value" or "fair market value" is the purchase price paid in the transaction unless it is established by a preponderance of the evidence that the real property would not have transferred for that purchase price in an open market transaction. The purchase price shall, however, be rebuttably presumed to be the "full cash value" or "fair market value" if the terms of the transaction were negotiated at arms length between a knowledgeable transferor and transferee neither of which could take advantage of the exigencies of the other. "Purchase price," as used in this section, means the total consideration provided by the purchaser or on the purchaser's behalf, valued in money, whether paid in money or otherwise. There is a rebuttable presumption that the value of improvements financed by the proceeds of an assessment resulting in a lien imposed on the property by a public entity is reflected in the total consideration, exclusive of that lien amount, involved in the transaction. This presumption may be overcome if the assessor establishes by a preponderance of the evidence that all or a portion of the value of those improvements is not reflected in that consideration. If a single transaction results in a change in ownership of more than one parcel of real property, the purchase price shall be allocated among those parcels and other assets, if any, transferred based on the relative fair market value of each.
(c) For real property, other than possessory interests, the change of ownership statement required pursuant to Section 480, 480.1, or 480.2 , or the preliminary change of ownership statement required pursuant to Section 480.4, shall give any information as the board shall prescribe relative to whether the terms of the transaction were negotiated at "arms length." In the event that the transaction includes property other than real property, the change in ownership statement shall give information as the board shall prescribe disclosing the portion of the purchase price that is allocable to all
elements of the transaction. If the taxpayer fails to provide the prescribed information, the rebuttable presumption provided by subdivision (b) shall not apply.
(d) Except as provided in subdivision (e), for purposes of determining the "full cash value" or "fair market value" of any taxable property, all of the following shall apply:
(1) The value of intangible assets and rights relating to the going concern value of a business using taxable property shall not enhance or be reflected in the value of the taxable property.
(2) If the principle of unit valuation is used to value properties that are operated as a unit and the unit includes intangible assets and rights, then the fair market value of the taxable property contained within the unit shall be determined by removing from the value of the unit the fair market value of the intangible assets and rights contained within the unit.
(3) The exclusive nature of a concession, franchise, or similar agreement, whether de jure or de facto, is an intangible asset that shall not enhance the value of taxable property, including real property.
(e) Taxable property may be assessed and valued by assuming the presence of intangible assets or rights necessary to put the taxable property to beneficial or productive use.
(f) For purposes of determining the "full cash value" or "fair market value" of real property, intangible attributes of real property shall be reflected in the value of the real property. These intangible attributes of real property include zoning, location, and other attributes that relate directly to the real property involved.

History.-Added by Stats. 1971, p. 3050, in effect March 4, 1972, operative on the lien date in 1972. Stats. 1974, Ch. 311, p. 589, in effect January 1, 1975, substituted " 'fair market value' " for ", 'market value' or, 'value' ". Stats. 1978, Ch. 292, in effect June 24, 1978, added the phrase "Except as is otherwise provided in Section 110.1,". Stats. 1988, Ch. 1519, in effect January 1, 1989, added "(a)" at the beginning of the first paragraph and added subdivisions (b) and (c). Stats. 1995, Ch. 498, in effect January 1, 1996, substituted "that" for "which" after "equivalent" in subdivision (a), and added subdivisions (d), (e), and (f). Stats. 1998, Ch. 783 (SB 1997), in effect September 23, 1998, substituted "other, and both the buyer and the seller have" for "other and both with" after "exigencies of the" and added a comma after "being used" in the first sentence of subdivision (a); substituted "is" for "shall be" in the first sentence and added the fourth and fifth sentences of subdivision (b); substituted "that" for "which" in the second sentence of subdivision (c); deleted "such" after "and other" in the second sentence of subdivision (f).

Construction.-"Enforceable restrictions", defined in Revenue and Taxation Code Section 402.1, include only governmentally imposed land restrictions. Carlson v. Assessment Appeals Board No. 1, 167 Cal.App.3d 1004. Under this section, an arm's length, open market sale for a price that is not influenced by an exigency of either buyer or seller permits the assessor to presume fair market value from the purchase price, but the presumption may nevertheless be rebutted by evidence that the fair market value of the property is otherwise. Dennis v. Santa Clara County, 215 Cal.App.3d 1019.

Lien date.-The assessment of a taxpayer's plant fixtures was correct, even though the assessment appeals board failed to consider the reduction in market value of the fixtures resulting from the taxpayer's announcement of closing, and subsequent closing of the plant six months after the lien date. The effects of the plant closure were irrelevant to the appraised value of the fixtures, and the fact that there was a forced sale of property at a sacrificial price after the lien date had no bearing on the property's value on the lien date. The taxpayer's contention to the contrary was also contrary to the principle of "fair market value" as set forth in subdivision (a). Fujitsu Microelectronics, Inc. v. Assessment Appeals Board, 55 Cal.App.4th 1120.

Value.-The value of a building in the marketplace is its value to potential purchasers generally, and the normal uses to which potential purchasers could put it must be considered. In valuing property, the assessor must adhere to the statutory standard of "full cash value", and in doing so, net earnings to be capitalized are not those of the present owner of the property but those that would be anticipated by a prospective purchaser. Pacific Mutual Life Insurance

Company v. Orange County, 187 Cal.App.3d 1141. Although the cost of pollution cleanup that reduces the fair market value of property may form the basis for a reduction in that property's valuation, where the weight of the evidence supports the conclusion that as of the lien date a potential purchaser would not have been aware of the contamination, there was insufficient evidence to establish that the assessor knew or should have known that a tire manufacturing plant was contaminated on the date he valued it. Firestone Tire \& Rubber Co. v. Monterey County, 223 Cal.App.3d 382. The proper assessed valuation of a contaminated property is the price at which a willing buyer and a willing seller would consummate an open market sale of the property, considering the polluted condition of the property. As all property is to be assessed at fair market value, the dispositive question is whether, and to what extent the property's value is effected by the contamination. In the context of property known to be polluted on the lien date, its value is what it would cost on the open market, independent of what the purchaser may be able to recover from others for cleanup costs imposed by environmental law. Mola Development Corporation v. Orange County Assessment Appeals Board No. 2, 80 Cal.App.4th 309.

County assessment appeals board's use of the cost replacement method to value a cable television system's taxable, tangible property, which resulted in a value lower than the value using the comparable sales method or the income method, was not a failure to assess at full value as required by law. The values differed because the method the assessor had used captured intangibles that were not subject to taxation. Orange County v. Orange County Assessment Appeals Board No. 1, 13 Cal.App.4th 524. The assessment appeals board properly included the value of certain related intangibles, operating permits and "business enterprise" value, when determining the market value of plaintiff's landfill property. While intangibles are not subject to property tax, the presence of intangibles may enhance the value of real property, and that value may be determined by assuming their presence. American Sheds, Inc. v. Los Angeles County, 66 Cal.App.4th 384.

In valuing geothermal power plants for property tax purposes, the county assessor properly capitalized the plants' income from fixed-price contracts under which the plants sold electricity to a power company at rates far above market price. Although the contracts were no longer available, the full value of the property included projected income at the contract rates rather than market rates, since a prospective buyer would be willing to pay more for the plants with the existing contracts. Also, the contracts were the means by which the property was put to beneficial use and thus, had to be considered for purposes of assessing the property's full value. Freeport-McMoran Resource Partners v. Lake County, 12 Cal.App.4th 634.

Methods.-The market data and income methods of assessing the fair market value of real property are traditional and well accepted. Norby Lumber Company, Inc. v. Madera County, 202 Cal.App.3d 1352; Dennis v. Santa Clara County, 215 Cal.App.3d 1019. The income method is one of three basic methods for determining full cash value, the others being the comparative sales approach and the reproduction and replacement cost approach. The income method assumes that in an open market a willing buyer of the property would pay a willing seller an amount approximately equal to the present value of the future income to be derived from the property. Since a property's full value must be determined by reference to the price it would bring on an open market, the net earnings to be capitalized are not those of the present owner of the property, but those that would be anticipated by a prospective purchaser. Freeport-McMoran Resource Partners v. Lake County, 12 Cal.App.4th 634. Where taxpayers failed to carry their burden of proving that the assessor arbitrarily used the band-of-investment method for deriving the applicable capitalization rate, the use of this method was proper. Mission Housing Development Company v. City and County of San Francisco, Cal. 59 Cal.App.4th 55. When valuing low-income housing developed and operated under section 15 of the National Housing Act of 1949, which housing is subject to various restrictions, including a maximum return on equity; the financing for which is federally subsidized; and for which the government provides credits that result in a 1 percent effective mortgage interest rate, the assessor properly calculated the band-of-investment capitalization rate for the income method as required by Property Tax Rule 8 using the effective 1 percent rate resulting from government credits for such property, as it represented the only applicable market rate for the property. Maples v. Kern County Assessment Appeals Board, 96 Cal.App.4th 1007; Bontrager v. Siskiyou County Assessment Appeals Board, 97 Cal.App.4th 325.

Cash or its equivalent.—The assessment of property at fair market value requires a calculation of value in terms of cash, and property tax rule 4, providing that an assessor shall convert debts to their cash equivalents, is mandatory and expresses the policy of the Legislature that property be assessed locally in a uniform manner. Thus, in failing to discount to its cash equivalent a loan the purchaser had assumed from the seller at a below market rate, the assessor incorrectly determined the property's value, thereby resulting in an excessive assessment. Prudential Insurance Co. v. City and County of San Francisco, 191 Cal.App.3d 1142. Property tax rule 4 is mandatory and must be strictly followed in order to provide the assessment appeals board with an evidentiary foundation for its assessment. Merely
giving the assessment appeals board raw sales data and stating that the assessor's opinion was within the "range of values" shown by the data does not comport with the rule and requires reversal of the board's decision, since the fair market value of the properties as determined by the board is based on evidence that is legally incompetent. Main \& Von Karman Associates v. Orange County, 23 Cal.App.4th 337. The assessor's valuation of residential property based on the comparable sales method was not supported by legally competent evidence and invalid where the assessor failed to make adjustments to reflect the differences between the comparable sales and the subject property as required by Property Tax Rule 4. Mitchell v. Los Angeles County, 60 Cal.App.4th 497.

An assessor's appraisals met legal standards where ratios used by his experts in appraising oil-producing property to quantify several types of risk factors associated with each projected net cash flow were not the sole basis for assessment. The appraisers made separate adjustments to each of the comparable sales, as required by Property Tax Rule 4, for which purpose the ratios were developed. Nor did the appraisers violate Rule 4 in failing to separately consider certain factors associated with each sale, such as capital costs, operating costs, and geology. Variations in these types of factors were already accounted for in the projected cash flows. Texaco Producing, Inc. v. Kern County, 66 Cal.App.4th 1029.

Highest and best use.-A county board did not impermissibly assess real property owned by an airplane manufacturer and located next to an airport in relation to the unique value of the property to the manufacturer instead of its general value in the market place. The board did find that the restrictions and regulations affecting the use of the property constituted an enhancement and benefit to the nature of the manufacturer's operation at the airport as a peculiarly suitable location in that the manufacturer was operating under those conditions for years and would continue to do so for years. However, the board was making that finding in conjunction with its conclusion that the highest and best use at the time of purchase of the property (the manufacturer had recently purchased it after previously renting it) was for aviation industrial purposes. Under this section, the board was entitled to consider the prior and current use of the property in making its determination of the highest and best use of the property. Los Angeles County v. McDonnell Douglas Corp., 219 Cal.App.3d 715. The assessor did not improperly assess an independent power plant developed and operated under an above-market price, government-facilitated power purchase agreement by using the actual income stream resulting from the agreement. The highest and best use of the property as of the lien date was as a qualifying facility, selling its power to a public utility pursuant to the agreement. That assured the taxpayer a guaranteed purchaser for its entire output and provided for sale of that power at an above-market price. Thus, the assessor's use of the actual applicable terms of the agreement to capitalize the property's income was an appropriate exercise of discretion. Watson Cogeneration Co. v. Los Angeles County, 98 Cal.App.4th 1066.

Improvement bonds.-The 1998 amendment to this section, which created a rebuttable presumption that the amount of an improvement bond is included in the purchase price, was intended to clarify the existing method of real property assessments to exclude improvement bond liens from the calculation of a property's fair market value and thus, applied to a taxpayer's claim/refund action which was pending as of the date of the amendment. Huson v. Ventura County, 80 Cal.App.4th 1131.

Investment tax credit.-An assessor does not have to take the availability of investment tax credit into account in determining value. May Department Stores Co. v. Los Angeles County, 196 Cal.App.3d 755.

Use of purchase price.-Persons who purchased real property after March 1975, and whose property was appraised as of the date of purchase were not denied equal protection of the law where both before and after the adoption of Article XIII A of the Constitution, assessment procedures were consistent with the section and the "regression analysis procedure" used in reaching the computer calculated value for the property as of the date of purchase was the same as was used before the adoption of Article XIII A. The only difference in appraisal procedures was that the purchase price of the property rather than a hypothetical figure was used for fair market value, and increased accuracy does not amount to a denial of equal protection. Schoderbek v. Carlson, 152 Cal.App.3d 1027. The purchase price paid by the buyer of real property, which had been used by the federal government as a petroleum reserve, established a presumptive fair market value of the property for assessment purposes, pursuant to subdivision (b). The term "negotiated" means simply "arranged" or "concluded". Maples v. Assessment Appeals Board, 103 Cal.App. 4th 172. While a recent, open market, arm's length sale of a particular type of property may be a very important factor in determining its fair market value, the sale, by itself, does not provide sufficient, reliable data to enable the assessor to make an accurate valuation of that property; it is only a starting point in appraising the property. Even an arm's length transaction may involve factors that skew the purchase price and make it an unreliable indicator of the fair market value. In this instance, at the time of purchase, the purchasers had an ownership interest in the corporate tenant
leasing the property and the lease generated rent below market value. Market value, therefore, is generally established by numerous sales of the same or comparable property and, although the price paid for property may be admissible to prove its market value, that fact alone is not conclusive. Thus, the assessor properly applied the valuation method by determining that comparable commercial properties had recently been sold at greater dollar amounts per square foot. Dennis v. Santa Clara County, 215 Cal.App.3d 1019. The purchase by a property owner of transferable development rights allowing the owner, in developing its property, to exceed the maximum floor area ratio otherwise allowed under a city redevelopment plan, was a taxable event within the framework of Article XIII A of the Constitution, permitting reappraisal upon a change of ownership. In the absence of substantial and convincing evidence to the contrary, the assessor was entitled, under this section, to rely upon the purchase price paid for the rights for purposes of determining their full cash value. Mitsui Fudosan (U.S.A.), Inc. v. Los Angeles County , 219 Cal.App.3d 525.

Presumptive fair market value-Oil and gas interests.-A taxpayer, in challenging the valuation of oil and gas mineral property interests for the purpose of determining ad valorem taxes, had the burden of proving a fair market value different from the purchase price by a preponderance of the evidence. However, the only evidence the taxpayer presented was that no evidence of proved oil and gas reserves had been established at the time of acquisition. In other words, reserves had not been proved or disproved. Rather, the reserves were probable or possible. This absence of evidence was not equivalent to affirmative evidence of the property's fair market value. Proved reserves are not the only value component of an oil and gas mineral interest. Moreover, knowledgeable and informed persons testified that the purchase price was the fair market value, which was contrary to the taxpayer's claim that the value of the oil and gas mineral interest was zero. Accordingly, the court of appeals held that the assessor correctly determined the base year value of the property interest to be its purchase price and that the taxpayer did not rebut this section's purchase price presumption. California Minerals v. County of Kern, 152 Cal.App.4th 1016.

## Decisions Under Former Section 110, "Full cash value".

Full cash value.-"Full cash value" is the price that property would bring to its owner if it were offered for sale on an open market under conditions in which neither buyer nor seller could take advantage of the exigencies of the other; it is synonymous with market value. A. F. Gilmore Co. v. Los Angeles County, 186 Cal.App.2d 471.

A single, recent, open market and arm's-length sale of a particular property, per se, does not provide sufficient, reliable data for the assessor to make an accurate valuation of that property. Market value becomes an important standard of measurement in the valuation of property only after there have been numerous sales or exchanges of similar property, but if the property is of a kind seldom exchanged, then recourse must be had to other means of ascertaining value. Guild Wineries \& Distilleries v. Fresno County, 51 Cal.App.3d 182.

Factors to be considered.-In arriving at the value of land it is proper to consider every use to which the land is naturally adapted and which would enhance its value in the estimation of persons generally purchasing in the open market. Wild Goose Country Club v. Butte County, 60 Cal.App. 339, holding that a hunting preserve need not be assessed solely with reference to its value as grazing land.

The court approved the valuation of a water company where the appraisal method, based on the capitalization of income, utilized an income study of rates charged by four other water companies in the general area. Maywood Mutual Water Co. v. Los Angeles County, 12 Cal.App.3d 957.

The assessor correctly considered the full economic rental value of real property subject to a lease even though the actual rental income was below the economic rental. Clayton v. Los Angeles County, 26 Cal.App.3d 390.

Interdivisional transfers of manufactured goods with an accompanying markup in value, for purposes of delivery or to facilitate marketing, result in a trade level increase and corresponding increase in value in accord with Property Tax Rule No. 10. Beckman Instruments, Inc. v. Orange County, 53 Cal.App.3d 767.

Under the market value concept, where price is the basis of value, the sales tax and freight charges are elements of value. Xerox Corp. v. Orange County, 66 Cal.App.3d 746. Under the trade level theory of assessment, if the owner of property at the consumer level is subject to application of a sales tax element in the valuation of the property, the lessor of the same kind of property at the consumer level is subject to the same sales tax element. San Diego County v. Assessment Appeals Board No. 2, 140 Cal.App.3d 52. Since California sales tax is unconstitutional as to leases of tangible personal property to the United States because the legal incidence of the tax falls on the United States,

United States v. California State Board of Equalization, 650 F.2d 1127, aff'd 456 U.S. 901, the value of equipment leased to the federal government should not include sales tax.

General rules may be followed.-It is proper for the assessor to promulgate certain general rules and formulas of percentages of depreciation, construction costs, square foot area charges and other factors in order to secure uniformity in valuations as required by law. Eastern-Columbia, Inc. v. Los Angeles County, 61 Cal.App.2d 734, 742.

Possessory interest.-In valuing a leasehold interest in exempt lands and improvements by the capitalization of income method it is improper, in computing the anticipated net income to be capitalized, to deduct from anticipated gross income the lessee's charges for rent, amortization of his investment, or payments of principal and interest on his mortgage debt. The proper method of valuing a possessory interest in a housing project at a permanent military installation is to deduct from annual anticipated gross income the operating and maintenance expenses and the amount required by the lease to be deposited to a replacement reserve, and to capitalize the difference for the remaining years of the lease at a rate which will allow for risk, interest, and taxes. De Luz Homes, Inc. v. San Diego County, 45 Cal.2d 546; Fairfield Gardens, Inc. v. Solano County, 45 Cal.2d 575; Victor Valley Housing Corp. v. San Bernardino County, 45 Cal.2d 580; El Toro Development Co., Inc. v. Orange County, 45 Cal.2d 586.

The "full cash value" of a possessory interest is the present value of its use for the unexpired term of the lease, not lessened by the amount of rent reserved. The rent is not an interest in land that must be deducted to determine the lessee's interest, but is merely the consideration for the use of the land. The Texas Co. v. Los Angeles County, 52 Cal.2d 55.

A reasonably anticipated term of possession may not be imputed to a possessory interest when the assessee has no taxable interest in the property at the expiration of the leased term. American Airlines, Inc., v. Los Angeles County, 65 Cal.App.3d 325.

Assessment of motion picture negatives.-"Market value" for assessment purposes is the value of property when put to beneficial use; it is not merely whatever residual value may remain should the property be reduced to its constituent elements. In the event the beneficial use of the property would not pass to a willing buyer on an open market, the assessor must treat the property as having no actual market for valuation purposes and use such pertinent factors as replacement costs and income analysis for determining valuation. Michael Todd Co. v. Los Angeles County, 57 Cal.2d 684.

Water rights of a city.-A county, in assessing taxable water rights owned by a city, may use as a basis for capitalization of income, a price for water taken from Bureau of Reclamation contracts, and a price for electricity agreed to be paid by a gas and electric company in a contract with the city, rather than the water and power prices actually charged in the city's nonprofit operation. Tuolumne County v. State Board of Equalization, 206 Cal.App.2d 352.

Lease of grazing land.-In assessing the possessory interest of a lessee of tax-exempt land leased for grazing purposes, it is proper to capitalize the rent for the total number of years of the lease and renewal options. El Tejon Cattle Co. v. San Diego County, 64 Cal.2d 428.

Income method-oil lands.-In capitalizing anticipated future oil recoveries on public lands, no deduction is proper for royalty payments due the government under a standard oil and gas lease. Under a "unit contract", however, the government's "working interest" is exempt real property requiring an allocation of potential oil recoveries. Atlantic Oil Co. v. Los Angeles County, 69 Cal.2d 585.

Assessment of title plant.-"Market value" for assessment purposes is the value of property when put to beneficial use. In the absence of any actual market for a title insurance company's "title plant" of the history of real property parcels in a county, an assessor's use of the cost approach method for determining valuation of the plant is not arbitrary and does not violate any standards prescribed by the Legislature. Western Title Guaranty Co. v. Stanislaus County, 41 Cal.App.3d 733.

Note.-For additional cases relating to value, see annotations to Section 401 of the code and to Section 1, Article XIII of the Constitution.

## BOARD OF EQUALIZATION

## PROPERTY TAX RULES

Division 1. State Board of Equalization-Property Tax
Chapter 1. Valuation Principles and Procedures

## Rule 2. The Value Concept.

| Authority: | Section 15606, Government Code. |
| :--- | :--- |
| Reference: | Sections 110, 110.1, 401, Revenue and Taxation Code; Carlson v. Assessment Appeals Board No. 1 (1985) |
|  | 167 Cal.App.3d 1004; Dennis v. County of Santa Clara (1989) 215 Cal.App.3d 1019. |

(a) In addition to the meaning ascribed to them in the Revenue and Taxation Code, the words "full value", "full cash value", "cash value", "actual value", and "fair market value" mean the price at which a property, if exposed for sale in the open market with a reasonable time for the seller to find a purchaser, would transfer for cash or its equivalent under prevailing market conditions between parties who have knowledge of the uses to which the property may be put, both seeking to maximize their gains and neither being in a position to take advantage of the exigencies of the other.

When applied to real property, the words "full value", "full cash value", "cash value", "actual value" and "fair market value" mean the price at which the unencumbered or unrestricted fee simple interest in the real property (subject to any legally enforceable governmental restrictions) would transfer for cash or its equivalent under the conditions set forth in the preceding sentence.
(b) When valuing real property (as described in paragraph (a)) as the result of a change in ownership (as defined in Revenue and Taxation Code, Section 60, et seq.) for consideration, it shall be rebuttably presumed that the consideration valued in money, whether paid in money or otherwise, is the full cash value of the property. The presumption shall shift the burden of proving value by a preponderance of the evidence to the party seeking to overcome the presumption. The presumption may be rebutted by evidence that the full cash value of the property is significantly more or less than the total cash equivalent of the consideration paid for the property. A significant deviation means a deviation of more than $5 \%$ of the total consideration.
(c) The presumption provided in this section shall not apply to:
(1) The transfer of any taxable possessory interest.
(2) The transfer of real property when the consideration is in whole, or in part, in the form of ownership interests in a legal entity (e.g., shares of stock) or the change in ownership occurs as the result of the acquisition of ownership interests in a legal entity.
(3) The transfer of real property when the information prescribed in the change in ownership statement is not timely provided.
(d) If a single transaction results in a change in ownership of more than one parcel of real property, the purchase price shall be allocated among those parcels and other assets, if any, transferred based on the relative fair market value of each.

## History: Adopted June 21, 1967, effective July 23, 1967.

Amended December 17, 1975, effective January 25, 1976.
Amended October 9, 1984, effective September 20, 1985.
Amended July 24, 1991, effective September 25, 1991.

BOARD OF EQUALIZATION

## PROPERTY TAX RULES

Division 1. State Board of Equalization-Property Tax
Chapter 1. Valuation Principles and Procedures

## Rule 3. Value Approaches.

Authority: Section 15606, Government Code.
Reference: Article 2, Chapter 3, Part 2, Division 1, Revenue and Taxation Code. Sections 110, 401, Revenue and Taxation Code.

In estimating value as defined in section 2, the assessor shall consider one or more of the following, as may be appropriate for the property being appraised:
(a) The price or prices at which the property and comparable properties have recently sold (the comparative sales approach).
(b) The prices at which fractional interests in the property or comparable properties have recently sold, and the extent to which such prices would have been increased had there been no prior claims on the assets (the stock and debt approach).
(c) The cost of replacing reproducible property with new property of similar utility, or of reproducing the property at its present site and at present price levels, less the extent to which the value has been reduced by depreciation, including both physical deterioration and obsolescence (the replacement or reproduction cost approach).
(d) If the income from the property is regulated by law and the regulatory agency uses historical cost or historical cost less depreciation as a rate base, the amount invested in the property or the amount invested less depreciation computed by the method employed by the regulatory agency (the historical cost approach).
(e) The amount that investors would be willing to pay for the right to receive the income that the property would be expected to yield, with the risks attendant upon its receipt (the income approach).

History: Adopted June 21, 1967, effective July 23, 1967.

BOARD OF EQUALIZATION

## PROPERTY TAX RULES

Division 1. State Board of Equalization-Property Tax
Chapter 1. Valuation Principles and Procedures

## Rule 4. The Comparative Sales Approach to Value.

| Authority: | Section 15606, Government Code. |
| :--- | :--- |
| Reference: | Sections 110, 110.1, 110.5 and 401, Revenue and Taxation Code; and Article XIII A, Sections 1 and 2, California <br> Constitution. |

When reliable market data are available with respect to a given real property, the preferred method of valuation is by reference to sales prices. In using sales prices of the appraisal subject or of comparable properties to value a property, the assessor shall:
(a) Convert a noncash sale price to its cash equivalent by estimating the value in cash of any tangible or intangible property other than cash which the seller accepted in full or partial payment for the subject property and adding it to the cash portion of the sale price and by deducting from the nominal sale price any amount which the seller paid in lieu of interest to a lender who supplied the grantee with part or all of the purchase money.
(b) When appraising an unencumbered-fee interest, (1) convert the sale price of a property encumbered with a debt to which the property remained subject to its unencumbered-fee price equivalent by adding to the sale price of the seller's equity the price for which it is estimated that such debt could have been sold under value-indicative conditions at the time the sale price was negotiated and (2) convert the sale price of a property encumbered with a lease to which the property remained subject to its unencumbered-fee price equivalent by deducting from the sale price of the seller's equity the amount by which it is estimated that the lease enhanced that price or adding to the price of the seller's equity the amount by which it is estimated that the lease depressed that price.
(c) Convert a sale to the valuation date of the subject property by adjusting it for any change in price level of this type of property that has occurred between the time the sale price was negotiated and the valuation date of the subject property.
(d) Make such allowances as he deems appropriate for differences between a comparable property at the time of sale and the subject property on the valuation date, in physical attributes of the properties, location of the properties, legally enforceable restrictions on the properties' use, and the income and amenities which the properties are expected to produce. When the appraisal subject is land and the comparable property is land of smaller dimensions, and it is assumed that the subject property would be divided into comparable smaller parcels by a purchaser, the assessor shall allow for the cost of subdivision, for the area required for streets and alleys, for selling expenses, for normal profit, and for interest charges during the period over which it is anticipated that the smaller properties will be marketed.

History: Adopted June 21, 1967, effective July 23, 1967.
Amended July 27, 1982, effective December 30, 1982.

BOARD OF EQUALIZATION

## PROPERTY TAX RULES

Division 1. State Board of Equalization-Property Tax
Chapter 1. Valuation Principles and Procedures

## Rule 6. The Reproduction and Replacement Cost Approaches to Value.

Authority: Section 15606, Government Code.<br>Reference: Sections 110, 401, Revenue and Taxation Code

(a) The reproduction or replacement cost approach to value is used in conjunction with other value approaches and is preferred when neither reliable sales data (including sales of fractional interests) nor reliable income data are available and when the income from the property is not so regulated as to make such cost irrelevant. It is particularly appropriate for construction work in progress and for other property that has experienced relatively little physical deterioration, is not misplaced, is neither over- nor underimproved, and is not affected by other forms of depreciation or obsolescence.
(b) The reproduction cost of a reproducible property may be estimated either by (1) adjusting the property's original cost for price level changes and for abnormalities, if any, or (2) applying current prices to the property's labor and material components, with appropriate additions for entrepreneurial services, interest on borrowed or owner-supplied funds, and other costs typically incurred in bringing the property to a finished state (or to a lesser state if unfinished on the lien date). Estimates made under (2) above may be made by using square-foot, cubic-foot, or other unit costs; a summation of the in-place costs of all components; a quantity survey of all material, labor, and other cost elements; or a combination of these methods.
(c) The original cost of reproducible property shall be adjusted, in the aggregate or by groups, for price level changes since original construction by multiplying the cost incurred in a given year by an appropriate price index factor. When detailed investment records are unavailable for earlier years or when only a small percentage of the total investment is involved, the investments in such years may be lumped and factored to present price levels by means of an index number that represents the assessor's best judgment of the weighted average price change. If the property was not new when acquired by its present owner and its original cost is unknown, its acquisition cost may be substituted for original cost in the foregoing calculations.
(d) The replacement cost of a reproducible property may be estimated as indicated in (b) (2) of this section by applying current prices to the labor and material components of a substitute property capable of yielding the same services and amenities, with appropriate additions as specified in subsection (b) (2).
(e) Reproduction or replacement cost shall be reduced by the amount that such cost is estimated to exceed the current value of the reproducible property by reason of physical deterioration, misplacement, over- or underimprovement, and other forms of depreciation or obsolescence. The percentage that the remainder represents of the reproduction or replacement cost is the property's percent good.
(f) When the allowance made pursuant to paragraph (e) exceeds the amount included in the depreciation tables used by the assessor, the reasons therefor shall be noted in the appraisal record for the property and the amount thereof shall be ascertainable from the record.

History: Adopted September 1, 1967, effective October 7, 1967.
Amended February 16, 1970, effective March 26, 1970.
Amended February 18, 1971, effective March 24, 1971.
Amended February 16, 1977, effective February 18, 1977.
Amended December 19, 1997, effective January 18, 1998.

## Assessors' Handbook Section 501

## BASIC APPRAISAL

JANUARY 2002

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Market demand and market supply interact in a competitive market to determine the price and quantity of the good traded. When the quantity demanded and the quantity supplied are equal, there is a state of balance known as equilibrium. From an equilibrium position, if market demand increases while market supply remains constant, price tends to increase. On the other hand, if market supply increases while market demand remains constant, price tends to decrease.

A change in just one of the many variables affecting supply or demand is likely to create a price and/or quantity movement in the market. The relative strength of the market forces underlying demand and supply determines whether price increases or decreases, and whether quantities demanded and supplied increase or decrease.

Thus, neither demand nor supply alone determines value. British economist Alfred Marshall illustrated this by asking the rhetorical question: Which blade of the scissors cuts the cloth? The answer, obviously, is that both blades cut it. Similarly, in a competitive market both demand and supply interact to determine value. A change in one of the variables affecting either supply or demand is likely to create a price movement in the market.

The essence of market value is that it is market derived. In a market subject to the interaction of supply and demand, value is determined by the actions of buyers and sellers bidding, and seeking bids, in competition with each other. The market value concept presupposes that: (1) there is competition for the acquisition of similar properties; (2) market participants have alternative choices; and (3) prospective purchasers make rational decisions. The ideal market reflects conditions of perfect competition.

A perfectly competitive market requires: (1) many buyers and sellers, none of whom can affect market price through their own singular efforts; (2) a standardized product; (3) no artificial restrictions; (4) easy entry and exit into the market by buyers and sellers; (5) complete knowledge and information regarding bids and offers; and (6) the mobility to take immediate action. The stock market and some agricultural markets may be the closest approximations of perfectly competitive markets, but few other markets meet these ideal standards. The real estate market, for example, trades in a non-standardized product with buyers and sellers frequently lacking complete information. ${ }^{5}$ In addition, many markets are subject to governmental interventions or restrictions that disrupt the natural market determination of price and quantity traded.

## Economic Concept Of Use Value

It is important to distinguish between the concept of market value and another value concept known as use value or value in use. The concept of use value is concerned with the value of property based on its utilization by a particular owner or group of owners. The Appraisal of Real Estate defines and describes use value as follows:

[^1]> Use value is the value a specific property has for a specific use. In estimating use value, the appraiser focuses on the value the real estate contributes to the enterprise of which it is a part, without regard to the property's highest and best use or the monetary amount that might be realized upon its sale. ${ }^{6}$

As already discussed, market value, as opposed to use value, presupposes a value determined by relevant market forces, such as supply and demand, scarcity, and utility, in a competitive market in which the participants act prudently, rationally, knowledgeably, and for self-interest. These market forces and the interactions of buyers and sellers ensure that market value will be the value of the property when put to its most profitable or "highest and best" use. ${ }^{7}$

Property tax appraisers in California, with certain exceptions set forth in the next chapter, are required by the California Constitution, statutes, and regulations to appraise property at market value. This requirement means that appraisals of both real and personal property must be based on the most productive, or highest and best use of the property. A section in the following chapter will discuss the issue of market value as opposed to use value in the context of appraising limited-market properties.

## Other Value Concepts

## Price, Cost, and Value

Appraisers should not confuse the concepts of price, cost, and value.
Price is the amount actually paid for a property in a particular transaction. Price is a historical fact; it is not a prospective concept. The price paid is the amount a particular buyer has agreed to pay and a particular seller has agreed to accept under the conditions surrounding their transaction.

Cost refers to production, not exchange. It is the expenditure required to produce property, such as the cost of constructing a building. Cost can be a historical amount, a current amount, or a prospective amount. Appraisers also distinguish among direct costs, indirect costs, and development cost.

Direct costs are the expenditures for labor and materials, sometimes called hard costs, or brick and mortar costs. Direct costs include the general contractor's overhead and profit, as well as payments to subcontractors.

Indirect costs are expenditures for items other than labor and materials. Indirect costs include administrative costs related to a project, professional fees (e.g., payments for architectural, engineering, or legal services), construction financing costs, property taxes and insurance during

[^2]jobs are bid low in order to keep crews together, minimize fixed costs, and utilize on-hand inventories. The converse may occur during an economic boom because of demand far in excess of supply. Because these temporary imbalances eventually yield to a more normal long-range situation, the appraiser should ensure that such short-run costs are used only if they are typical and if construction activity is actually occurring.

In general, the newer the property, the more reliable the cost approach will be as an indicator of value. When a property is a new and proper improvement, replacement, historical, and reproduction costs will usually coincide. Depreciation in most new or almost new properties will be minimal, and this decreases the significance of the most subjective portion of the cost estimate. In such cases, the appraiser can attach a greater weight to the cost approach in the value conclusion. However, the same may not be true for machinery and equipment that is subject to rapid technological advancement. In this case, even relatively new items may be subject to functional obsolescence.

## COMPARATIVE SALES APPROACH

## INTRODUCTION

The comparative sales approach may be defined as an approach that uses direct evidence of the market's opinion of the value of a property. In this approach, the appraiser estimates the market value of the subject property by comparing it to similar properties that have recently sold. In addition to actual sales, the appraiser may consider listings, offers, options, and the opinions of owners, real estate agents, and other appraisers as to the selling prices that comparable properties might command. The comparative sales approach is based on the premise that the fair market value of a property is closely and directly related to the sales prices (under the conditions of fair market value) of comparable, competitive properties.

The comparative sales approach is not the only approach that utilizes market data. Construction costs and income information are also market data. However, significant differences exist in the nature of the market data in the cost and income approaches in contrast to the comparative sales approach. Neither costs nor incomes are direct evidence of market value. Rational people would consider cost and future income when buying or selling property in order to form their opinions of market value. However, in the comparative sales approach, an indicated value is direct evidence of the market's opinion of value, which gives this approach a certain preeminence.

Rule 4 states, in part:
When reliable market data are available with respect to a given real property, the preferred method of valuation is by reference to sales prices.

The comparative sales approach is based upon the principle of substitution and presumes that the market value of a property will approximate the sales prices, listings, offers, and appraisals of competitive substitutes. With a perfect degree of substitution and purely competitive market conditions, properties would have exactly the same value. No two real properties are ever

## Assessors' Handbook Section 502

## AdVanced Appraisal

## DECEMBER 1998

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## Restricted Value Concept

As previously mentioned, there are certain exceptions to the fair market value standard. These exceptions fall under the "restricted value" concept. Rule 460(b)(3) defines "restricted value" to mean "a value standard other than full cash value prescribed by the Constitution or by statute authorized by the Constitution."

For properties subject to a restricted value standard, the law sets aside the general concept of fair market value based on highest and best use in favor of specific value limitations. In some cases, the statutory appraisal formula is compensation for the owner's agreement to limit the future use of the property; that is, the property value is premised on the restricted use rather than the most profitable or productive use. ${ }^{13}$

## Market Value, Use Value, and Limited Market or Special Purpose Properties

It is important to distinguish between the concept of market value and another value concept known as "use value" or "value in use." ${ }^{14}$ The concept of use value is concerned with the value of property based on its utilization by a particular owner or group of owners. As defined in a current appraisal text:

Use value is the value a specific property has for a specific use. In estimating use value, the appraiser focuses on the value the real estate contributes to the enterprise of which it is a part, without regard to the property's highest and best use or the monetary amount that might be realized upon its sale. ${ }^{15}$ [Emphasis retained.]

It is clear that the standard of value for property tax purposes is market value and not value in use. However, questions concerning market value in relation to use value sometimes arise when appraising limited market or special use properties. A widely used appraisal text provides the following definition of a limited market property:

A limited-market property is a property that has relatively few potential buyers at a particular time. It may be a limited-market property because of unique design features or changing market conditions. Large manufacturing plants, railroad sidings, and research and development properties are examples of limited-market properties that typically appeal to relatively few potential purchasers. ${ }^{16}$

[^3]replacement cost of a newly constructed improvement is easier to estimate and more relevant to the basic principle of substitution, because it relies on the cost of comparable improvements rather than the historical costs of the property being appraised. Common sources of replacement cost data include Marshall Valuation Service, published by Marshall and Swift; AH 531, Residential Building Costs, and AH 534, Rural Building Costs, published by the California State Board of Equalization.

One means of estimating reproduction cost uses the historical, or original, costs incurred by the property owner during the construction of a structure or fixture. When using reproduction cost to appraise new construction, appraisers should distinguish between "uniquely useful" properties and "special-purpose" designs for which there might be a market. Historical, or original, costs for owner-occupied properties may reflect specialized designs, building materials, expedited construction schedules, or other items that would not be currently recognized by the market for such properties. Under certain conditions, these abnormal costs may reflect value in use, rather than value in exchange.

## Costs of Construction May or May Not Equal Value

Appraisers should use caution when applying the cost approach, since construction costs may be highly divergent between different projects. Especially in the cases of over- or underimprovements, the actual market value of new construction may vary widely from the cost to construct those improvements. To compensate for these potential differences, the values derived with the cost approach should be checked against values derived from the other approaches to value whenever possible.

## EXAMPLE 6-2: Cost May Not Equal Value

Owners of a single family residence construct a new, average quality, in-ground swimming pool on their property. The owners reported actual costs of construction at $\$ 35,000$. An analysis of relevant market data, however, shows that adding a swimming pool increases that property's value by only $\$ 20,000$. In this case, the addition of the swimming pool should be assessed at its market value of $\$ 20,000$, rather than the actual cost of $\$ 35,000$.

## Income Approach

When new construction involves income-producing properties, the appraiser may estimate the value of new construction using the income approach. Using current market-derived rates, the appraiser may capitalize the difference in the subject property's economic rent with and without the new construction to yield an estimate of value for the new construction. As with the comparative sales approach, application of the income approach requires income data and capitalization rates from highly comparable properties. In certain circumstances, the income approach may capture value attributable to more than just the qualifying new construction.

# ASSESSMENT OF Personal Property and Fixtures 

October 2002

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property being valued is not so regulated as to make current replacement costs irrelevant to value.

Rule 6 allows and prescribes more than one type of cost approach that an appraiser may use. The three variations of the cost approach provided are reproduction cost, replacement cost, and historical cost. Although an appraiser may not utilize each variation, general knowledge of the terms and concepts associated with each is important to a thorough understanding of value in the context of property tax appraisal. Each variation is briefly described below.

## Reproduction Cost Approach

The reproduction cost approach, as a variation of the cost approach, has limited usefulness because it uses reproduction cost (the cost to replace an existing property with an identical property, a replica) as a basis for estimating value. It is frequently not possible or desirable to duplicate an existing property, due either to the lack of certain materials or trade skills or the functional obsolescence of a property.

The difficulty of using reproduction cost increases as a property ages. When a property would not be exactly duplicated, as is often the case, reproduction cost loses validity as an indicator of market. This lack of validity can be overcome if depreciation is accurately estimated, but this can be somewhat difficult to determine for an exact replica.

## Replacement Cost Approach

Replacement cost is the cost to replace an existing property with a property of equivalent utility ${ }^{111}$ as of a particular date. The replacement cost concept is the most meaningful as far as the principle of substitution is concerned.

In the replacement cost approach, elements of a property that would clearly not be included in a substitute of equal utility are excluded from the estimated replacement cost. For example, a buyer may not look for an identical new property to replace an older property. The buyer would look instead for the best way to perform the same function(s). The best way may be to use the latest state-of-the-art technology and materials, or may be another used piece of equipment able to perform to specifications of equivalent utility. In making this decision, a buyer would look at various aspects of available properties. These considerations include, but are not limited to, the cost to acquire each property, the age of the properties, the remaining expected lives of the properties, and the expected cost to operate each in comparison to the property being replaced and to each other.

## Historical Cost Approach

Historical cost reflects the level of cost at the time of a property's original construction or acquisition, and is discussed in Rules 3 and 6 in two contexts: (1) as a method of estimating

[^4]
## Types of Depreciation Defined

A property may suffer from one or more forms of depreciation. That is, a single piece of equipment may contain elements of physical deterioration as well as both functional and external obsolescence. In some cases, calculation methodologies may be used to separately estimate the amount of depreciation attributable to each cause. In many situations, however, it may be impossible to categorize the amount of depreciation attributable to each cause. Regardless of whether total depreciation is calculated as a whole or as a sum of parts, recognizing and identifying the types of depreciation applicable to a property may aid in estimating total depreciation to arrive at value.

## Physical Deterioration

Physical deterioration is the loss in value which may be the result of wear and tear either from use or exposure to various elements. This type of depreciation is expected on most equipment. Virtually all properties deteriorate as they age, and it is not abnormal unless equipment is put to excessive use or misused. Good maintenance will slow the process, while lack of maintenance and overuse will increase physical deterioration.

Most physical deterioration can be corrected. However, the relationship between the costs involved and the economic benefit derived determines whether it is economically feasible to correct or repair physical deterioration. An element of physical deterioration is considered curable when the cost to correct the deficiency is less than the economic benefit resulting therefrom. When the cost to correct the deficiency is greater than the resulting economic benefit, the element of physical deterioration is considered incurable.

## Functional Obsolescence

Functional obsolescence is the loss of value in a property caused by the design of the property itself. When the capacity of a property to perform the function for which it was intended declines, functional obsolescence is present. Functional obsolescence may include such things as changes in taste in the marketplace, changes in equipment design, materials, or process, or poor initial design.

Changing technology commonly creates functional obsolescence for machinery and equipment, and some functional obsolescence can be or should be considered normal to varying degrees (depending upon the industry and equipment type). Older machines and sometimes newer machines or entire lines of equipment, even though still in use, may be made obsolete by new technologies and manufacturing processes and the market value may be reduced because of functional obsolescence.

Functional obsolescence may be less tangible or visible than physical deterioration, but it may be more significant. However, it may be curable. An element of functional obsolescence is considered curable when the cost to correct the deficiency is less than the resulting economic benefit. When the cost to correct the deficiency is greater than the resulting economic benefit, the element of functional obsolescence is considered incurable.

## External Obsolescence

External obsolescence, also known as economic obsolescence, is a loss in value resulting from adverse factors external to the property that decrease the desirability of the property. This type of depreciation may include the loss of value due to: inflation, high interest rates, legislation, environmental factors, reduced demand for the product, increased competition, changes in raw material supplies, and increasing costs of raw material, labor or utilities without a corresponding price increase of the product.

Loss in value attributable to external obsolescence is usually beyond the owner's control and is mostly atypical depreciation. It can, however, be normal in industries where markets have shown long-term, sustained, and predictable shifts, such as the market for semiconductor and other high-technology equipment. It can be identified by studying the overall market conditions for a property. For example, if the output of a machine is superseded in the marketplace by output of a different material (i.e., fiberglass for metal or plastic for wood), and the market no longer absorbs the superseded output, then the machinery has suffered external obsolescence.

## Methods of Estimating Depreciation and Value

There are several methods of estimating depreciation and value for appraisal and assessment purposes. Appraisers may need to use one or more of these methods while determining depreciation from all causes. Again, the appraiser's methods are not the same as the accountant's methods because an accountant uses depreciation to recover cost over a preselected useful life of the property as determined by GAAP and/or federal and state income tax laws while an appraiser uses depreciation to estimate market value. ${ }^{143}$

## Market Method

The Market Method of calculating value factors (and/or developing depreciation tables) relies on market data, with adjustments made for relevant property characteristics incorporated (see Appendix H). It is a method of estimating a property's total depreciation directly without utilizing indirect engineering economics calculations. The market method is the preferred method when reliable data ${ }^{144}$ are available because it captures all forms of depreciation, including both external and functional obsolescence.

Using a variation of this methodology, an analyst and/or appraiser may gather market data for identical or similar property to compare the used price of an asset to the original new price of that same asset. The difference is the analyst and/or appraiser's estimate of percent good (used price / new price $=$ percent good factor or value factor) ${ }^{145}$ at the age it was at the time of

[^5]
[^0]:    History: Adopted May 11, 1967, effective June 11, 1967. Amended October 4, 1967, effective October 5, 1967.
    Amended November 20, 1968, effective November 22, 1968.
    Amended April 14, 1972, effective May 14, 1972.
    Amended November 4, 1976, effective January 1, 1977.
    Amended July 27, 1982, effective February 10, 1983
    Amended January 5, 2000, effective April 22, 2000
    Amended August 21, 2012, effective November 22, 2012.

[^1]:    ${ }^{5}$ The real estate market is discussed further in Chapter 4.

[^2]:    ${ }^{6}$ Appraisal Institute, The Appraisal of Real Estate, 24.
    ${ }^{7}$ The principle of highest and best use is discussed further in Chapter 4. Briefly, highest and best use is the legally permissible, physically possible, financially feasible or probable, and maximally productive use that produces the highest residual land value. It is the use that produces the greatest long term net return to the owner.

[^3]:    ${ }^{13}$ Several types of restricted value properties are discussed in Chapter 2 of AH 501, Basic Appraisal.
    ${ }^{14}$ This concept is also sometimes referred to "value to an owner."
    ${ }_{15}^{15}$ Appraisal Institute, The Appraisal of Real Estate, 11th ed. (Chicago: Appraisal Institute, 1996), 24.
    ${ }^{16}$ Appraisal Institute, The Appraisal of Real Estate, 25.

[^4]:    ${ }^{111}$ Rule $6(\mathrm{~d})$ provides that the "replacement cost of a reproducible property may be estimated . . . by applying current prices to the labor and material components of a substitute property capable of yielding the same services and amenities, with appropriate additions . . ' '.

[^5]:    ${ }^{143}$ Assessors tend to utilize equipment index factors and percent good factors published by the Board for the majority of appraisals concerning machinery and equipment, and fixtures. However, different methods of estimating depreciation and value may be appropriate.
    ${ }^{144}$ See AH 501, Basic Appraisal, Chapter 6, under the discussion of the cost approach for information regarding data collection and analysis.
    ${ }^{145}$ Using the market method, a combined factor may be estimated similar to the result of multiplying the index factor and the percent good factor used from AH 581 tables discussed in this chapter.

