
Telecommunications Property Taxation

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Introduction

Ad valorem property taxes--those imposed on the property's value--are a very significant item of expense for telecommunications carriers. In the past, these companies paid relatively little attention to property taxes because, under traditional ratemaking practices, such taxes were an operating expense includable in the cost of service and thus could be passed through to the ratepayers as part of the charge for services.

In recent years, however, dramatic changes in the landscape have been caused by factors such as the advent of new non-monopoly telecommunications services, deregulation and incentive-based regulation of old services, corporate diversification, and intensified competition. In this new cost-conscious environment, telecommunications carriers are giving significantly greater attention to property taxes. At the same time, revenue-hungry states have become more sophisticated in their assessment practices and procedures. The states have been developing new theories to deal with the changing economic and regulatory environment and to maximize tax collections. As a result of these developments, there has been a significant increase in the volume of appeals, litigation, and lobbying efforts regarding telecommunications property taxation.

This Article analyzes the principles and practices involved in property taxation of telecommunications carriers. The Article emphasizes the relationship between the manner of regulation of a carrier and the valuation of its property for property tax purposes.

The Article devotes attention to significant current valuation issues. The Article analyzes in detail three major cases that have dealt with many of these issues. These cases are *United Telephone Co. v. Department of Revenue*,[\(note 1\)](#) in the Oregon Supreme Court; *Michigan Bell Telephone Co. v. Department of Treasury*,[\(note 2\)](#) in the Michigan Tax Tribunal; and *AT&T Communications v. State Board of Equalization*[\(note 3\)](#) (*AT&T-California*) in the California Superior Court. Relevant decisions involving public utilities other than telecommunications carriers are also cited.

I. Property Tax Statutes

A property tax is an annual tax based on the value of the property as of a specific date. The amount of the tax is determined by multiplying this value, or a percentage thereof, by the applicable tax rate.

Statutes generally define "value"[\(note 4\)](#) as the price at which the property would be sold in an open market by a willing seller to a willing buyer, each of whom has full knowledge of the uses and purposes for the property and of the

enforceable restrictions on these uses and purposes.[\(note 5\)](#) The tax assessor estimates this value by making an appraisal or valuation.

In thirty-seven states, state agencies assess some or all of the property of telecommunications carriers on a centralized basis.[\(note 6\)](#) In twelve states the local assessor in each county or other taxing jurisdiction assesses the telecommunications property in the same manner as other property.[\(note 7\)](#) Wisconsin imposes a gross receipts tax on telephone companies in lieu of property taxes[\(note 8\)](#) but has enacted legislation that will extend its property tax to such companies beginning in 1997.[\(note 9\)](#)

In local assessments, the valuation of the property is ordinarily made by the summation method, under which each component of the property in the taxing jurisdiction is valued separately and then these amounts are added together.[\(note 10\)](#) In centralized assessments, the valuation ordinarily is made by the unit method, under which the total system is valued as a whole as a going concern and a portion of the total value is allocated to the property in the taxing jurisdiction.[\(note 11\)](#)

Some state statutes defining the types of telecommunications companies subject to central assessment refer only to "telephone" and "telegraph" companies, and have not been updated to include expressly the newer types of telecommunications carriers. Consequently, there may be an issue as to whether a particular company is covered by the statutory definition.

For example, in *Transponder Corp. v. Property Tax Administrator*,[\(note 12\)](#) the Colorado Supreme Court held that a company owning and operating a satellite earth station providing a portion of a private communications channel between the offices of a particular customer was not a "telephone company" because it did not provide the kind of "intercustomer communication service" ordinarily provided by telephone companies.[\(note 13\)](#) Subsequently, in *United States Transmission Systems, Inc. v. Board of Assessment Appeals*,[\(note 14\)](#) the same court held that a reseller of long distance telephone service was a telephone company because it provided "intercustomer communication service."[\(note 15\)](#) The court held that "if the company directly facilitates two-way communication between a significant number of unrelated persons or businesses, . . . that company is a telephone company."[\(note 16\)](#)

In Kansas, a company providing a one-way paging service was held not to be in the business of "transmitting . . . telephonic messages."[\(note 17\)](#) In Oregon, however, a nonprofit corporation, operating a private radio communication system for its members was held to be engaged in the "telephone communications" business.[\(note 18\)](#)

A. Assessment Procedure

A typical centralized assessment procedure begins with a company filing a property tax return. The tax assessor estimates the value of the company's total operating system by using one or more of three basic appraisal techniques, or "approaches": (1) the market approach, which bases the estimate of value on market data of sales of comparable property; (2) the income approach, which expresses value as the present worth of the anticipated future income to be derived from the property; and (3) the cost approach, which bases the estimate of value on the actual cost of the property, or the estimated cost of reproducing or replacing it, less an allowance for depreciation. The estimated value produced under each approach is called a "value indicator." The assessor then reconciles, or "correlates," the value indicators to arrive at the final estimated value.

For an interstate company, the assessor allocates by formula a portion of the total system value to the taxing state. This amount (or the entire system value of an intrastate company) is apportioned among the local taxing jurisdictions in which the property is located. This apportioned "full value" is then "equalized" (reduced) to the percentage of full value at which other property in the same jurisdiction is assessed. The local taxing jurisdiction imposes a tax on the equalized value.

At some point during this procedure, the taxpayer is given an opportunity to appeal the valuation. A valuation appeal generally consists of a battle between opposing expert witnesses, with the assessor's experts and the taxpayer's experts providing conflicting appraisals of the property's value and attacking each other's theories and methods. Because the primary element of value is the property's ability to produce income, the extent and manner of rate regulation

necessarily affects the value of a telecommunications company's property, as well as the valuation methods used by appraisers to estimate the value. Consequently, evidence as to the extent and manner of the company's rate regulation ordinarily is a necessary element of the appeal proceeding.

B. Assessment Unit

The assessment unit does not include all of the company's property. Certain property must be excluded, and the includability of intangible property may be an issue.

1. Property Included

With respect to an interstate company, the scope of the property that may be included in the assessment unit is limited by the "nexus" requirements of the Commerce Clause of the United States Constitution [\(note 19\)](#) and the Due Process Clause of the Fourteenth Amendment. [\(note 20\)](#) Validity of a tax under the Commerce Clause requires "a substantial nexus with the taxing State." [\(note 21\)](#) Nexus, in the form of "some definite link, some minimum connection, between a state and the . . . property . . . it seeks to tax," is also required under the Due Process Clause. [\(note 22\)](#) Consequently, both clauses prohibit a state from taxing property located outside its borders. [\(note 23\)](#) Although the value of taxable assets in a state may be determined by an allocation of the unit value of "the total system of which the intrastate assets are a part," [\(note 24\)](#) the nexus requirements will not permit any out-of-state property to be included in the unit value to be allocated unless such property actually is a part of the total system. [\(note 25\)](#)

The categories of property included in the unit depend upon the statutes of the particular state. The unit consists primarily of "operating property" owned by the subject taxpayer. Operating property is property used in and necessary to conduct the company's business. [\(note 26\)](#) In addition to plant in service, operating property ordinarily includes materials and supplies, [\(note 27\)](#) and may also include items such as operating property leased from others, [\(note 28\)](#) "possessory interests" in property owned by a government entity, [\(note 29\)](#) construction work in progress, [\(note 30\)](#) and property held for future use. [\(note 31\)](#) If the values of certain assets properly included in the assessment unit under state law are not captured by the normal application of a particular appraisal approach, such values must be separately estimated and added.

2. Property Excluded

Categories of property excluded from the unit are (1) property that is assessed and taxed separately from the operating system, primarily "nonoperating" property, and (2) tax-exempt property, which may include (a) certain tangible property (for example, pollution control equipment, business inventory, and property located in federal enclaves) and (b) intangible property, such as working capital and securities. If the normal application of an appraisal approach captures the value of certain assets excluded from the unit by state law, such values must be separately estimated and deducted.

In *Hatchadorian v. Lindley*, [\(note 32\)](#) the Ohio Supreme Court held that the following items of a telephone company's property were not taxable under a statute taxing property "used in business": construction work in progress; the portion of the materials and supplies account consisting of engineering and contractual services; property "retired in place" pending removal for junk value; and underground coaxial cable tubes that had not been connected to the operating system. [\(note 33\)](#)

In *Michigan Bell*, the Michigan Tax Tribunal held that property held for future use, construction work in progress, repair parts, and fuel were nontaxable under the Michigan statutes. [\(note 34\)](#)

3. Intangibles

The value of the unit, determined as a going concern under the unit method, includes the value of various intangible assets, such as franchises and licenses granted by governmental authorities, contractual rights (for example, distribution

agreements, employment contracts, supply contracts, and noncompetition covenants), assembled work force, customer base, goodwill, and going concern value. If a state's statutes generally exempt intangible property from property taxation, there may be an issue as to whether the taxable unit value may properly include the values of these intangible assets.

Some assessors have been attempting to tax the values of such intangibles.[\(note 35\)](#) They do this by valuing the company as a going concern under the unit method and then deducting from the total unit value only the values of a few specific intangible assets, such as working capital.[\(note 36\)](#) For many of the newer types of telecommunications companies, such as the cellular telephone companies, the value of the intangible assets included in such a valuation may constitute a significant portion of the total assessment. Consequently, there is an increasing amount of litigation involving this issue.[\(note 37\)](#)

The United States Supreme Court has long held that a state may, without violating the Commerce or Due Process Clauses, tax a fairly apportioned part of the value of property of an interstate company "valued as a unit . . . taking into consideration the uses to which it was put and all the elements making up aggregate value" [\(note 38\)](#) Thus, the questions involved in taxing the *intangible* elements of the unit value are questions of state law:

(1) Do state constitutional and statutory provisions generally exempting intangible property from property taxation permit the *indirect* taxation of intangible assets as part of the unit value?

(2) If yes, which intangible assets may be so taxed? The assessors, and the courts that have upheld assessments that included the value of intangible assets, answer these questions as follows:

(1) Although the intangible property may not be taxed *directly*, it may "enhance" the value of the tangible property in the unit and may be taxed *indirectly* as part of such enhanced value.[\(note 39\)](#) Authority for such taxation may be found in statutes that allow the assessor to "consider" intangibles in valuing the tangible property[\(note 40\)](#) or that authorize use of the unit method, which values property as a going concern.[\(note 41\)](#)

(2) The taxable unit value properly includes the value of all the intangibles that are part of the value of the going concern; these are inseparable from the value of the tangible property.[\(note 42\)](#)

An extremely broad application of these principles is found in *United States Transmission*.[\(note 43\)](#) In that case the Colorado Supreme Court upheld the taxation of an allocated portion of the total system value of an interstate long distance voice carrier owning *no* tangible property in the state. All of the communications circuits used by the taxpayer to provide service to its twenty business customers and two residential customers in Colorado were obtained from Mountain Bell, AT&T, and MCI on a month-to-month basis pursuant to FCC tariffs, and the taxpayer had no other property or rights to property within Colorado. The Colorado statute directed the assessor to value the "operating property and plant . . . as a unit," giving consideration to various factors, including the "tangible property comprising the unit" and the "intangibles."[\(note 44\)](#)

In upholding the tax, the court held that the taxpayer's intangible rights in the circuit leases were part of its "operating property and plant," and that the existence of such intangible rights in Colorado permitted Colorado to tax an allocated part of the total value of such operating property and plant.[\(note 45\)](#) The court found no conflict between a general statutory exemption of intangible personal property and the statutory mandate to consider intangibles when valuing public utility property as a unit.[\(note 46\)](#) Finally, the court held that the imposition of the tax did not violate the Commerce Clause because the presence of intangible property within the state provided a sufficient nexus.[\(note 47\)](#)

On the other hand, taxpayers, and the courts that have rejected assessments that included the value of intangible assets, answer the two questions posed earlier as follows:

(1) The constitutional and statutory exemption provisions prohibit *indirect*, as well as *direct*, taxation of intangible assets.[\(note 48\)](#)

(2) The taxable unit value properly includes only the enhanced value of the *tangible property* resulting from

combination of the property into an integrated operating system, not the intangible assets that can be identified and separately valued [\(note 49\)](#) and that relate to the operation of the *business enterprise*. [\(note 50\)](#)

In cases involving assessments of cable television companies' property, the Iowa Supreme Court held that (1) the comparable sales method of valuation improperly included nontaxable intangible assets (such as a franchise to operate, an established customer base, experienced personnel in place, and goodwill), the value of which related to the business enterprise, not to the taxable tangible assets, [\(note 51\)](#) and (2) a formula giving 50 percent weight to the cost approach and 50 percent weight to the income approach had the same defect because the valuation under the income approach included the value of nontaxable intangible assets. [\(note 52\)](#)

In two California cases involving assessments of cable television companies' property, the courts also held that unit method valuations improperly included the value of various intangible assets (including franchises, subscriber bases, and going concern value) that related to the business being conducted, not to the property. [\(note 53\)](#)

Clearly, the last word has not yet been spoken on this issue. Much additional litigation can be expected.

II. Market Approach

The market approach consists of the "comparable sales" method and the "stock and debt" method.

A. Comparable Sales Method

Under the market approach, the estimate of value is based on market data. In traditional appraisals, such as appraisals of real estate, the market data consists of the actual sales prices in recent sales of properties comparable to the subject property (the "comparable sales" method). [\(note 54\)](#)

Although the comparable sales method may be used in the valuation of telecommunications and other public utility property if there have been recent sales of comparable operating systems or significant portions thereof, [\(note 55\)](#) such sales generally are infrequent. However, in the cellular telephone industry there have been numerous sales of operating systems in recent years, and industry analysts often refer to these sales in terms of dollars per unit of population ("per pop") in the service area. California has used these "per pop" amounts to develop comparable sales value indicators for property tax purposes. [\(note 56\)](#) In this situation, comparability of the "per pop" amounts is an important issue.

To be truly "comparable" for this purpose, the properties sold must be similar to the subject property with respect to essential business and operating characteristics, such as the condition and technological advancement of the facilities, the current profitability and growth potential of the business, the type of customers, and the economic nature of the service area. Consequently, in a number of cases involving other industries, courts have held that the sales placed in evidence involved properties that were not "comparable" to the subject property. [\(note 57\)](#)

B. Stock and Debt Method

Because sales of comparable operating systems are relatively scarce and therefore unavailable for valuing public utilities property, the total market value of the company's stock and debt securities frequently is used as a substitute (the "stock and debt" method). The stock and debt method assumes that a company's securities represent "fractional interests" in its property, sales of which will provide the appropriate market data. [\(note 58\)](#) Applying the basic accounting balance sheet equation--assets equal liabilities plus net worth--the market value of the assets is assumed to equal the aggregate market value of the liabilities (debt) and net worth (stock).

An appraiser applying the stock and debt method reconstructs the right side of the company's balance sheet at current market value, by using the listed market prices of the company's publicly traded debt and stock issues and estimating the market values of any issues that are not publicly traded. The total value so calculated is deemed to equal the total

market value of all of the assets on the left side of the balance sheet.[\(note 59\)](#)

The value of nonassessable property (tax-exempt property and separately assessed property) is then deducted. Such value is generally estimated by allocations of the total stock and debt value among the assessable and nonassessable properties, using various types of formulas.[\(note 60\)](#) The value of property that is assessable as part of the unit but is not reflected in the stock and debt value (such as operating property leased from others) is added.[\(note 61\)](#) The amount resulting from the foregoing adjustments is the value indicator.

The stock and debt method ordinarily does not provide a reliable value indicator for telecommunications property for two reasons. First, it is questionable whether the method produces a reliable value indicator for property of *any* company. The value of a company's securities does not necessarily equal the value of its property.[\(note 62\)](#)

Second, many telecommunications carriers are not publicly held companies, but rather are subsidiaries or divisions of a larger public company operating various businesses, regulated and unregulated. To apply the stock and debt method in this situation, the appraiser must allocate to the subsidiary, using some type of arbitrary formula, a portion of the stock and debt value of the parent company.[\(note 63\)](#) The hypothetical stock and debt value of the subsidiary determined in this fashion may bear little relationship to the market value that the subsidiary's securities would have if they were actually traded. Consequently, the validity of the stock and debt method in this type of situation is dubious.

However, in *United Telephone*, the Oregon Supreme Court upheld the use of an allocated portion of the parent's stock and debt value as a value indicator for a telephone company that was a wholly owned subsidiary of United Telecommunications, Inc.[\(note 64\)](#) The court affirmed the part of the decision of the Oregon Tax Court that held that (1) because the parent's holdings were primarily telephone companies, the parent and subsidiary were sufficiently alike to permit use of the method even though the parent was unregulated, and (2) the reliability of the stock and debt value indicator, in view of the fact that the subsidiary represented only 3.3 percent of the parent's assets, could be adjusted for by assigning a lesser weight (20 percent) to the value indicator.[\(note 65\)](#)

III. Income Approach

Under the income approach, the estimated value of property is equal to the present worth of the anticipated future benefits from the property. The estimated future income stream is converted into its present worth (the amount an investor would pay today to receive the future income) by "capitalization," that is, discounting at the rate of return a prospective purchaser would want to earn on its investment (the "capitalization rate").[\(note 66\)](#) The basic formula is:

[Value = Income / Capitalization Rate]

The calculations under the income approach parallel, in reverse, the calculations made by regulatory commissions in ratemaking under the traditional "rate base" method.

Under the rate base method, which is used by the Federal Communications Commission and most state regulatory commissions, the company is allowed to charge rates designed to generate revenues sufficient to cover its "cost of service." The cost of service equals the company's total operating expenses, depreciation, taxes, and a reasonable return on its rate base.[\(note 67\)](#) The rate base consists principally of plant in service (generally valued at "original cost," that is, the actual cost of the property when it was first dedicated to use by a regulated entity),[\(note 68\)](#) plus materials and supplies, plus working capital, less accumulated depreciation and accumulated deferred income taxes.[\(note 69\)](#)

The rate of return on rate base that the company is allowed to earn (but is not guaranteed) is determined by the regulatory commission according to the company's "cost of capital," computed as a weighted average of the "cost of" (rate of return on) each component of the company's capital structure--debt, preferred stock, and common stock.[\(note 70\)](#) The cost of debt and preferred stock generally is fixed at the actual rate payable on the company's outstanding issues (the "embedded" cost).[\(note 71\)](#) The cost of common stock is the estimated rate of return necessary to attract investment in the company's common stock, considering its potential risks and rewards.[\(note 72\)](#)

Thus, the regulatory commission determines (1) the rate of return on invested capital deemed to compensate investors

adequately (rate of return) and (2) the amount of invested capital (rate base), and then multiplies the rate base by the rate of return to determine the allowable amount of income (income). Conversely, the property tax appraiser determines (1) the rate of return deemed to compensate investors adequately (the capitalization rate) and (2) the amount of estimated income (income), and then divides the income by the capitalization rate to determine the amount which, invested at the capitalization rate, will produce such income (the value).

A. Perpetuity Capitalization

The capitalization method most commonly used in valuing telecommunications and other public utility property is "perpetuity" capitalization. This is a form of "yield" (or "discounted cash flow") capitalization, in which future benefits from the property are forecasted and then discounted to their present value by using capitalization rates assumed to equal the typical investor's required yield on investment.[\(note 73\)](#) The perpetuity financial model assumes that the company's system will operate and generate income perpetually through replacement of the individual components.[\(note 74\)](#)

1. Amount Capitalized

Appraisers generally capitalize "net cash flow," which is the difference between cash received and cash paid, including current expenses and capital expenditures (or annual allowances therefor) required to develop and maintain the income stream.[\(note 75\)](#) To calculate net cash flow, appraisers begin with the "net operating income" reported under the accounting procedures of the regulatory commission, that is, operating revenue less operating expenses, depreciation, and income taxes, but before deduction of interest expense.[\(note 76\)](#) This is adjusted to reflect net cash flow by (1) adding back expenses that do not involve actual cash payments, principally depreciation, and (2) deducting the necessary capital expenditures. In practice, the deduction for capital expenditures generally is assumed to be equal to the depreciation expense, thereby in effect leaving the net operating income intact.[\(note 77\)](#)

There is an issue as to whether the "provision for deferred income taxes," an expense that does not involve a *current* cash payment, should be added back to net operating income. This expense reflects "normalization" of "timing differences" between the company's financial statements and its income tax returns, primarily the differences resulting from the use of accelerated depreciation for income tax purposes and straight line depreciation for financial accounting purposes. For financial accounting purposes, the income tax expense is the amount of income tax that would be paid on the pre-tax book income for the period, not the amount actually payable for the period. The difference between these two amounts, if it will reverse in a later period, is debited (if the normalized tax exceeds the actual tax, which is generally the case) or credited (if the actual tax exceeds the normalized tax) to "provision for deferred income taxes." There is a corresponding credit or debit to "accumulated deferred income taxes," a balance sheet account.[\(note 78\)](#) In calculating net cash flow for purposes of the income approach, some courts have rejected an add-back of the provision for deferred income taxes because the amount of any deferred tax will be paid *eventually*,[\(note 79\)](#) while other courts have approved such an add-back.[\(note 80\)](#)

Because *future* cash flow is the amount to be capitalized, the future income must be forecasted. The forecasts may be based on various measures, including (1) the previous year's income, (2) a simple average of several years' income, (3) a weighted average of several years' income, giving greater weight to income for more recent years, (4) statistical projections applied to past income, or (5) application of a "performance ratio" (the net operating income for a previous year divided by the amount of net operating plant as of a date within such year) to the net operating plant as of the assessment date.[\(note 81\)](#)

In *United Telephone*, both the assessor and the taxpayer's expert witness used performance ratios, but with different denominators.[\(note 82\)](#) The court held that the use of net operating plant at the beginning of the year as the denominator was "more persuasive" than use of the average amount of plant for the year, because the beginning of the year "corresponds to a moment that is significant for regulatory purposes."[\(note 83\)](#)

2. Capitalization Rate

The capitalization rate is a "discount" or "interest" rate, which represents the annual rate of return on investment required by investors, considering the risks of investing in the particular enterprise. [\(note 84\)](#) No provision is made in the capitalization rate for return of investment to the investor, because the investment is deemed to be perpetual and the amounts of capital recovered through annual depreciation are deemed to be reinvested in the replacement plant necessary to maintain the perpetual income stream.

The concept is similar to the "cost of capital" concept used by regulatory commissions in determining the allowable rate of return for ratemaking purposes. The capitalization rate must adequately compensate the investor for the investment risks assumed, and will increase with the degree of risk. Because the income is divided by the capitalization rate to determine the value, the value will decrease as the capitalization rate increases.

Like the "cost of capital" determined by regulatory commissions for ratemaking, the capitalization rate ordinarily is a weighted average of the returns required by holders of bonds, preferred stock, and common stock (the "band of investment" method). [\(note 85\)](#) The returns are weighted according to the relative proportions of each type of capital in the hypothetical purchaser's capital structure, which is based on the capital structure of the subject taxpayer itself or a group of companies in the taxpayer's industry comparable to the taxpayer in business activities and risk. [\(note 86\)](#)

The *cost of debt* ordinarily is the market yield rate on the bonds that a typical purchaser would issue to finance the purchase, based on the prevailing market rates for publicly traded bonds of companies comparable to the taxpayer. [\(note 87\)](#) The rate used ordinarily is the yield- to-maturity, not the current yield. [\(note 88\)](#) Although the cost of debt for ratemaking purposes generally is the "embedded" cost (that is, the rate payable on the company's actual outstanding debt), [\(note 89\)](#) property tax appraisers ordinarily use the prevailing market rate. [\(note 90\)](#) The theory is that the projected income stream must be discounted at the rate currently required by the investors who would purchase the bonds. [\(note 91\)](#)

The *cost of preferred stock* likewise is determined at the market rate, that is, by dividing the annual dividends on preferred stocks of comparable companies by the market prices of such stocks. [\(note 92\)](#)

As in ratemaking, the *cost of common stock* is the estimated rate of return necessary to attract investors to invest in the company's common stock, considering its particular risks and rewards. [\(note 93\)](#) The principal methods used to estimate this rate, which are the same methods used in ratemaking, are:

(1) the *discounted cash flow* method, which calculates the rate that would discount the expected returns from a company's stock (current dividends and growth) to a present value equal to the current market price of the stock:

[Rate = (Dividend / Price) + Growth Rate]; [\(note 94\)](#)

(2) the *risk premium* method, under which the rate is the sum of (a) a "risk-free" rate of return (usually the current U.S. Treasury bill rate or a long-term bond rate) and (b) a "risk premium" for investing in common stock, equal to the average historic spread between yields on common stocks and on the risk- free security:

[Rate = Risk-Free Rate + Risk Premium]; [\(note 95\)](#)

(3) the *capital asset pricing model* method, which is similar to the risk premium method, but makes the risk premium specific to the company by multiplying the overall market risk premium by the company's "beta," the measure of price volatility of a company's stock compared to the market in general:

[Rate = Risk-Free Rate + (Risk Premium x Beta)]; [\(note 96\)](#) and

(4) the *earnings-price ratio* method, under which the rate is the earnings per share of common stock of a comparable company divided by the current market price per share:

[Rate = Earnings Per Share / Market Price]. [\(note 97\)](#)

The capitalization rate should be consistent with the assumption as to the growth of the income being capitalized. [\(note](#)

[98](#)) In *United Telephone*, the court said that the value would be understated if the income figure, which assumed no growth, were capitalized by using a capitalization rate based on the discounted cash flow and risk premium methods, which "had the market's own expectation of growth as a built-in factor." ([note 99](#)) The court held that a "no-growth" capitalization rate should be used. It approved the use, for this purpose, of the rate of return allowed to the taxpayer by the regulatory commission. ([note 100](#)) Likewise, in *Michigan Bell*, the Michigan Tax Tribunal held that, in the income approach valuation made by the taxpayer's expert witness, there was a "failure to adequately match income and capitalization rate" because growth was not considered in the income but was a factor in the capitalization rate. ([note 101](#))

B. Limited Life Capitalization

"Limited life" capitalization is another form of yield capitalization that has been used in utility property valuation, principally by the California State Board of Equalization. ([note 102](#)) This method involves discounting the forecasted cash flow from the existing assets for the remaining duration of their lives. Unlike perpetuity capitalization, which assumes a perpetual income stream, limited life capitalization assumes a self-liquidating investment for a finite period, with each year's cash flow containing (1) the annual return *on* the invested capital and (2) a partial return *of* the invested capital to the investor (the "capital recovery" amount). The annual capital recovery amounts, together with the value of the nondepreciable assets (principally land) remaining at the end of the period, return the entire amount of the invested capital to the investor. The limited life model makes no provision for replacement assets because it deals only with the cash flow from the existing assets.

In the calculations, the annual depreciation expense is added back to net operating income to compute cash flow. A capital recovery component is included in the capitalization rate in order to reflect the additional rate of return on investment necessary to provide for the return of capital. The estimated value of the land at the end of the economic life of the depreciable property (the "land reversion") is discounted to its present worth (terminal or residual value) and added to the present worth of the annual income stream to produce the value indicator. ([note 103](#))

There are three methods for determining the capital recovery rate: (1) the *straight line* method, under which the annual capital recovery amounts are equal and no reinvestment of such amounts is assumed; (2) the *sinking fund* method, under which the annual capital recovery amounts are assumed to be reinvested at a "safe rate" (for example, the interest rate on U.S. Treasury Bills); and (3) the *annuity* method, under which the annual capital recovery amounts are assumed to be reinvested at the discount rate. The annuity method produces the highest estimate of value, the sinking fund method produces the second highest estimate, and the straight line method produces the lowest estimate. ([note 104](#))

In *AT&T-California*, ([note 105](#)) the court held that the "composite limited life model" used by the California State Board of Equalization was improper for valuing AT&T's property. This model assumed a declining stream of revenue over the lives of the depreciable assets but averaged the revenues attributable to the various assets in order to produce a level income for the "composite" lifetime of the assets. The amount capitalized was derived by adding back taxes and depreciation to net operating income. The capitalization rate included a "basic" rate for return on investment, a tax component, and a sinking fund capital recovery factor. The court held that, as applied to AT&T, the model was erroneous in a number of respects, including the following:

(1) The assumption that the amount capitalized was a "level annuity equivalent" of an actual declining income stream from AT&T's existing assets was erroneous; the model forced more of such income into the early years, thereby inflating the present value. ([note 106](#))

(2) The assumption that such income stream could be maintained for the composite life period without capital replacements was erroneous. The failure to deduct an amount for necessary capital expenditures violated the Board's own rule stating that "capital expenditures . . . required to develop and maintain the estimated income" must be deducted in computing the "net cash flow" to be capitalized. ([note 107](#))

(3) The systematic, annual recapture of investment, liquidating the utility, assumed by the model could not actually happen. In view of AT&T's legal obligation to provide adequate service, there would necessarily be regulatory

intervention if AT&T actually began to liquidate in this manner.[\(note 108\)](#)

(4) The concept of a "composite life," into which the lives of all of AT&T's diverse assets could be averaged, was a "meaningless mathematical manipulation" with "no relation to reality"; without replacements, the interdependent telecommunications system would cease to function before the end of the composite life when essential short-lived plant dropped out of service.[\(note 109\)](#)

(5) The use of a sinking fund capital recovery factor was arbitrary, in view of the Board's use of a straight line factor for certain railroads. Although "[t]he composite limited-life model is wrong, whether a sinking fund or a straight line factor is used in the capitalization rate," the use of a straight line factor "mitigates the error . . . and at a minimum should have been used," consistent with the straight line depreciation actually used by AT&T for financial accounting.[\(note 110\)](#)

The court made its own determination of value under the income approach, which it held to be the proper value. The court computed "net cash flow" by adding back to net operating income the book depreciation expense, and then deducting an amount for capital expenditures equal to the depreciation. Thus, net cash flow was equal to net operating income. This amount was capitalized at the allowed regulatory rate of return, which the court determined to be a reasonable estimate of the market cost of capital.[\(note 111\)](#) Consequently, the value so computed was equal to AT&T's rate base.

In a subsequent case, the Board's limited life model was held to be invalid as applied to a railroad.[\(note 112\)](#)

C. Direct Capitalization

"Direct" capitalization operates on a premise different from that of yield capitalization. It does not project and discount future cash flows, but rather converts the income for a single year directly into an estimate of value. The income is divided by a capitalization rate that reflects the relationship between the income from comparable properties and their values (sales prices), as observed in the market.[\(note 113\)](#) For example, if comparable properties are selling in the market for sales prices equal to ten times annual income, the capitalization rate is $(1 / 10)$, or .10. This "market-derived" rate is assumed to embody the typical investor's expectations as to all future monetary benefits. The sales from which the rate is derived must involve properties comparable to the subject property with respect to the essential elements influencing sales prices.[\(note 114\)](#)

In valuing property of telecommunications carriers and other public utilities, the income capitalized generally is net operating income.[\(note 115\)](#) Due to the scarcity of evidence of comparable property sales, the capitalization rate is calculated by the band of investment method, with the equity portion of the rate derived from the earnings-price ratios of publicly traded stocks of companies comparable to the subject company.[\(note 116\)](#) The stock prices are deemed to represent the sales prices of comparable properties. Because a "market-derived" rate is only as reliable as the market data from which it was derived, there often is an issue as to whether the companies from whose stock prices the equity rate was derived are sufficiently "comparable" to the subject taxpayer with respect to the factors that can affect stock prices, such as risk elements, growth potential, manner of regulation, nature of income, and dividend policy.[\(note 117\)](#)

In *Michigan Bell*, the Michigan Tax Tribunal held that "either method, direct or yield capitalization, if correctly applied, will produce an adequate estimation of the true cash value";[\(note 118\)](#) that "earnings- to-price ratios, again if correctly calculated, [are] a viable indicator of the equity component";[\(note 119\)](#) and that "the test of comparability is that of reasonable approximation."[\(note 120\)](#) Consequently, it upheld the state appraiser's use of direct capitalization. However, the tribunal held that, for the tax years 1985 and 1986, Bell regional holding companies should be used as the "comparables" in deriving the equity rate because they were more comparable to the taxpayer (a Bell Operating Company) than were the independent telephone companies that the state's appraiser had used.[\(note 121\)](#) It held that the independents could be used for 1984 because, as of January 1, 1984, the effective date of the AT&T divestiture, earnings-price ratios for the Bell holding companies could not be reliably estimated.[\(note 122\)](#)

D. Adjustments

Whichever capitalization method is used, the estimated value of all the income-producing property, as determined under such method, is adjusted. The value of income-producing property that is not assessable as part of the unit (tax-exempt property and separately assessed property) is deducted. The value of property that is assessable as part of the unit under state law but is not income-producing is separately estimated and added. Such property may include: (1) certain construction work in progress (CWIP); [\(note 123\)](#) (2) operating property leased from others under noncapitalized leases; [\(note 124\)](#) and (3) property held for future use. [\(note 125\)](#) The amount resulting from the foregoing adjustments is the value indicator.

IV. Cost Approach

Under the cost approach, property is valued at its cost, less an allowance for depreciation. This approach requires a selection among the various types of costs, determination of the cost, and computation of the depreciation.

A. Types of Cost

There are three types of cost. *Historical* cost is the actual cost of the property when first placed in service, that is, the book cost. [\(note 126\)](#) *Reproduction* cost is the cost of duplicating the subject property at current prices. [\(note 127\)](#) *Replacement* cost is the cost of acquiring a modern, functional equivalent of the subject property. [\(note 128\)](#)

The use of reproduction or replacement cost less depreciation (RCLD) as a value indicator is based on the principle of "substitution," which states that an informed purchaser would pay no more for a property than the cost of acquiring or constructing a substitute property having the same usefulness. [\(note 129\)](#) The cost of the substitute property establishes the subject property's upper limit value. [\(note 130\)](#) RCLD may be an appropriate value indicator for property of businesses that are not subject to strict rate regulation, [\(note 131\)](#) including telecommunications carriers in this category, if reproduction cost or replacement cost were accurately estimated and if depreciation from all causes were properly reflected.

Historical cost less depreciation (HCLD), or net book value, which approximates the rate base, is an appropriate value indicator for property of rate base-regulated utilities in telecommunications [\(note 132\)](#) and in other industries. [\(note 133\)](#) Use of HCLD as a value indicator is based on another application of the "substitution" principle, that is, that an informed investor would pay no more for an investment than the cost of acquiring an alternative investment producing an equivalent return with equivalent risk. [\(note 134\)](#)

The rate base is the maximum amount upon which the hypothetical investor's anticipated rate of return may be earned because regulatory commissions ordinarily limit a purchaser of regulated property to the same rate base as the seller. If the purchaser pays a price higher than the seller's rate base, the excess cost is recorded in a "plant adjustment" account, [\(note 135\)](#) which ordinarily is excluded from the rate base and is amortized "below the line," that is, not as part of the cost of service. [\(note 136\)](#)

In both *United Telephone* and *Michigan Bell*, HCLD was recognized to be an appropriate value indicator because of its relationship to rate base, although it ultimately was given only 40 percent weight in *United Telephone* and no weight in *Michigan Bell*. [\(note 137\)](#) In *AT&T-California*, the court went further, holding that *rate base* (HCLD less accumulated deferred income taxes) was the proper cost approach value indicator. The court said:

Rate base is relevant in estimating the fair market value of the property because the fair market value should reflect the earning capability of the property. The regulatory process makes rate base the maximum amount upon which the regulated company, or a purchaser, will be permitted to earn a fair rate of return. . . . Since the purchaser of utility property must be presumed to have other investment opportunities available to him, it would not be logical to assume that a purchaser would accept a lower return by buying utility property at a price higher than rate base when higher returns would be available elsewhere. [\(note 138\)](#)

The three valuation approaches converge in the use of rate base as a value indicator. In addition to being the cost approach indicator, rate base may be viewed as a *market* approach indicator, a surrogate for comparable sales. Sales of rate base-regulated companies usually are made at a price approximating the rate base;[\(note 139\)](#) a purchaser ordinarily will not pay a higher price because it would not be able to include the excess in its rate base.

Rate base may also be viewed as an *income* approach indicator. As discussed earlier, the income approach calculation parallels, but in reverse, the ratemaking calculation. Consequently, if an income figure equal to the income allowable by the regulatory commission is capitalized by using a capitalization rate equal to the allowable regulatory rate of return, the mathematical result will always be a value equal to the rate base.[\(note 140\)](#) This concept was demonstrated in *AT&T-California*, in which, as discussed earlier, the court determined value under the income approach, but arrived at a value equal to the rate base by "capitalizing the cash flow that could be realized on rate base at the allowed regulatory rate of return."[\(note 141\)](#)

Although the general rule is that the rate base is not, as a matter of law, the market value (or a ceiling on market value) of property of a rate base-regulated company,[\(note 142\)](#) some courts have held that evidence of rate base value shifts to the assessor the burden of showing "special circumstances" that might induce a purchaser to pay a higher price.[\(note 143\)](#) Likewise, in *AT&T-California* the court said:

Fair market value may be higher or lower than rate base for a given company at a given point in time; the Court does not mean to imply that rate base is [a] ceiling on value. The Court finds, however, that rate base is the focal point of value and the value of a public utility that is totally regulated, as plaintiffs are, will not exceed rate base in the absence of unusual circumstances, which do not exist in this case.[\(note 144\)](#)

B. Determination of Cost

The *historical cost* figures used in valuation ordinarily are those shown in the company's accounting records and reports prepared in accordance with the procedures prescribed by the regulatory commission.[\(note 145\)](#) In addition to the costs of plant in service, the cost figures also include the costs of other taxable property in the unit, such as materials and supplies,[\(note 146\)](#) operating property leased from others,[\(note 147\)](#) and construction work in progress (CWIP).[\(note 148\)](#) If the CWIP is included in the company's rate base, it is treated the same as other rate base property. If the CWIP is not included in the rate base, its cost may be discounted to reflect the fact that the CWIP will not produce income until placed in service.[\(note 149\)](#)

Plant *reproduction cost* commonly is estimated by using "trended original cost," that is, original cost adjusted to current price levels by use of price indexes.[\(note 150\)](#) *Replacement cost* may be estimated by the "cost per unit" method, that is, by multiplying the cost per unit of the property (such as per square foot or cubic foot of a structure, or per mile of cable) by the number of units involved.[\(note 151\)](#)

C. Depreciation

Depreciation is loss in value resulting from three elements, each of which should be reflected in the deduction from cost. *Physical deterioration* is loss in value resulting from wear and tear and the normal aging process, including action of the natural elements.[\(note 152\)](#) *Functional obsolescence* is loss in value resulting from functional inadequacies within the property, including those caused by improvements in technology.[\(note 153\)](#) *Economic obsolescence* is loss in value resulting from economic factors outside the property, such as decreased demand, governmental restrictions, and social changes.[\(note 154\)](#)

The allowance for depreciation deducted from *historical cost* ordinarily is derived from the company's accounting records and reports, calculated according to the accounting procedures prescribed by the regulatory commission, generally the straight line method.[\(note 155\)](#) However, some states modify the book depreciation.[\(note 156\)](#)

The allowance for depreciation deducted from *reproduction* or *replacement* cost may be measured by (1) the

observation method, under which a detailed inspection of the physical condition of the property is made by trained personnel and the various elements of deterioration are measured; (2) the *age life* method, which employs estimates of remaining life based on experience data; or (3) the *straight line* method or other accounting methods. [\(note 157\)](#)

Deductions from cost reflecting functional and economic obsolescence are necessary under proper appraisal theory [\(note 158\)](#) and are expressly provided for in the regulations of some states. [\(note 159\)](#) However, because assessors often fail to make such deductions, obsolescence is an issue in many litigated cases.

1. Functional Obsolescence

One type of functional obsolescence is *excess capital cost*, which may be measured as the difference between reproduction cost new and replacement cost new. This reflects the fact that a company ordinarily would not reproduce the identical property, but rather would replace it with a substitute reflecting the current state of the art. Thus, if the cost figure used is replacement cost, rather than reproduction cost, this type of functional obsolescence will automatically be reflected. [\(note 160\)](#)

Another form of functional obsolescence is *excess operating cost*. This may be measured by comparing the operating costs of the subject plant with the operating costs of a modern, functionally similar plant lacking the deficiencies of the subject plant. [\(note 161\)](#)

2. Economic Obsolescence

In *Thorntown Telephone Co. v. State Board of Tax Commissioners*, the court held that the State Board's decision not to apply to telephone property an economic obsolescence adjustment formula used for railroad property was neither arbitrary nor unconstitutional in view of differences between the two industries. [\(note 162\)](#) However, the court remanded the case to the State Board to consider whether *some* allowance for economic obsolescence was necessary in valuing the property of the subject telephone companies. [\(note 163\)](#)

Some taxpayers have argued that an economic obsolescence deduction may be taken to reflect the company's inability to earn a reasonable market rate of return on HCLD, either because it cannot earn the *allowed* rate of return or because the allowed rate of return is less than a reasonable market rate. In *United Telephone*, the taxpayer's expert witness subtracted from HCLD an amount computed by capitalizing an "earnings shortfall," equal to the difference between (1) the hypothetical amount that would be earned on HCLD at the discount rate and (2) the projected actual earnings. [\(note 164\)](#) The amount remaining after this deduction was exactly equal to his income approach value indicator. The court rejected the deduction on the grounds that (1) the calculation essentially converted the cost approach into an income approach, thereby effectively eliminating one approach from consideration, and (2) the failure to earn a market rate of interest on HCLD is not an indication of obsolescence because "regulated utilities are viewed as bearing less risk than other companies and therefore can obtain investor capital at less cost. Hence, it is to be expected that their earnings would be less than companies which bear a greater risk." [\(note 165\)](#)

In *Michigan Bell*, the same expert witness also made such a deduction in his appraisal. [\(note 166\)](#) The Michigan Tax Tribunal, quoting the language of the lower court's opinion in *United Telephone*, likewise rejected the deduction. [\(note 167\)](#) Similar deductions have been rejected in other cases. [\(note 168\)](#)

In *AT&T-California*, in finding that the value was equal to the rate base, the court rejected AT&T's argument that "value should be less than rate base because of the likely inability to achieve the allowed rate of return and the obsolescence imposed by regulation through the allowance of only the embedded or historic cost of debt." [\(note 169\)](#) The court said that these factors were offset by AT&T's "potential for earning above the allowed rate of return by the margin permitted by regulation." [\(note 170\)](#)

A significant issue in recent litigation is whether the "accumulated deferred income taxes" balance sheet account should be deducted from historical cost as economic obsolescence, in order to make HCLD more equivalent to the rate base. This account reflects the deferred taxes already shown as an expense because of normalization of book/tax timing differences. The rate base ordinarily is reduced by the amount of such account so that a return may not be earned on

it.[\(note 171\)](#) Taxpayers argue that economic obsolescence (a reduction in value resulting from regulation) exists in an amount equal to the accumulated deferred income taxes, because a purchaser ordinarily would not pay a price higher than the rate base when it would not be able to earn a return on the excess. Some courts have accepted this argument, while others have not.[\(note 172\)](#)

In *AT&T-California*, the court said that the State Board of Equalization's use of HCLD (without deduction of the accumulated deferred income taxes) as the cost approach value indicator was based on the assumption that the regulatory authority would permit a prospective purchaser to increase the rate base by eliminating the accumulated deferred income taxes account.[\(note 173\)](#) Because the evidence was to the contrary, the court held that this assumption was erroneous and that the accumulated deferred income taxes deducted to arrive at the rate base "must also be deducted to compute any valid cost indicator."[\(note 174\)](#) In other words, this failure to deduct the accumulated deferred income taxes resulted in the property being overvalued according to the court.

The decision in *AT&T-California*, which, as discussed earlier, also held that the composite limited life model could not be applied to AT&T's property, had a far-reaching impact. Other rate base-regulated utilities (local exchange telephone companies, electric companies, and gas companies) had filed claims for refund for a number of years' taxes. Some had also filed lawsuits. The California counties feared that if the decision were affirmed on appeal, as the counties believed likely, they would be forced to pay large property tax refunds to the utilities and that their future tax revenues would be drastically reduced. Consequently, extensive settlement negotiations ensued, which led to a settlement agreement among all California counties, the State Board of Equalization, and twenty-seven utilities, whose properties represented 85 percent of the value of all state-assessed property in California. Under the agreement, the utilities agreed to waive their claims for refund of past property taxes (estimated at \$700 million to \$1 billion) in exchange for valuation of their property for the next eight years at an amount equal to HCLD less 25 percent of the deferred income tax reserve, phased in over a three-year period. The settlement was subject to a favorable decision in a "validation action," which was brought to confirm the enforceability of the settlement agreement. AT&T's litigation was settled by a separate agreement.[\(note 175\)](#)

V. Correlation

"Correlation" (or "reconciliation") is the process of arriving at a final estimate of value from among the various value indicators.[\(note 176\)](#) Statutes ordinarily give the assessor broad discretion in this regard. The methods of correlation, which vary from state to state, are:

- (1) *simple averaging* of the value indicators;[\(note 177\)](#)
- (2) *weighted averaging* of the value indicators, with the weights either predetermined for each industry[\(note 178\)](#) or determined on a case-by-case basis;[\(note 179\)](#)
- (3) use of the *single value indicator* that is the most appropriate in the specific case;[\(note 180\)](#) and
- (4) an *appraisal judgment*, with no express weighting of the value indicators, based upon the appraiser's analysis of the relative applicability and reliability of the value indicators in the specific case.[\(note 181\)](#)

Use of an averaging formula gives an appearance of mathematical precision to an inherently imprecise process, and may result in arbitrary valuations. In *Heritage Cablevision v. Board of Review*,[\(note 182\)](#) the Iowa Supreme Court stated:

The advantage of using multiple appraisal techniques lies primarily in those instances where the differing techniques lead to similar conclusions concerning market value and therefore tend to support each other. When the varying techniques produce divergent valuations, it does not necessarily follow that market value is accurately divined by averaging the divergent results or in applying the divergent results under arbitrarily weighted formulas. A trier of fact . . . may be better served in such situations by accepting that evidence which it finds to be most reliable and rejecting that which is determined to be unreliable.[\(note 183\)](#)

The court also stated that, absent an explanation of why the specific percentages were chosen, "a weighted application of the various results produced by different appraisal methods is meaningless to a reviewing court." [\(note 184\)](#)

On the other hand, the appraisal judgment method avoids the arbitrariness of a formula, but creates the potential for a different type of arbitrary action--the arbitrary exercise of the assessor's discretion. Furthermore, the method gives the taxpayer or a reviewing court little, if any, understanding of the assessor's rationale. [\(note 185\)](#)

VI. Allocation and Apportionment

If the company operates in more than one state, a portion of the total unit value is attributed to the taxing state through an "allocation" formula. [\(note 186\)](#)

Under the Commerce and Due Process Clauses of the United States Constitution, a state may tax its "fair share" of the value of an interstate enterprise. [\(note 187\)](#) The Supreme Court has held that an allocation formula need not produce a precise evaluation of the property located within the taxing state, [\(note 188\)](#) but "must bear a rational relationship, both on its face and in its application, to property values connected with the taxing State." [\(note 189\)](#) Otherwise, the tax is deemed to be imposed on property having no nexus with the taxing state, in violation of the Commerce and Due Process Clauses. [\(note 190\)](#) The Court has held that the taxing state's "fair share" includes a portion of the intangible "going concern" value of the enterprise. [\(note 191\)](#) Permissible allocation formulas may involve "a determination of the percentage of a taxpayer's tangible assets situated in the taxing State and the application of this percentage to a figure representing the total going-concern value of the enterprise." [\(note 192\)](#)

Allocation formulas used by states for telecommunications property are based on (1) *quantity* factors, which reflect the relative proportion of property in the state, and include plant cost [\(note 193\)](#) and line mileage; [\(note 194\)](#) and (2) *productivity* (or *use*) factors, which reflect the relative business volume attributable to the state, and include gross operating revenue [\(note 195\)](#) and net operating income. [\(note 196\)](#)

The total system value in the state (determined by an allocation if the company is an interstate company) is "apportioned" (or "distributed") among the local taxing jurisdictions in which the company operates, to be taxed in those jurisdictions. [\(note 197\)](#) Because statistics of the type used for interstate allocation factors based on *productivity* ordinarily are not available for local taxing districts, apportionment formulas generally are based on *quantity* factors. [\(note 198\)](#) In some states, all or part of the value of certain expensive "situs property" is excluded from the apportionment and is assigned directly to the taxing district in which the property is located. [\(note 199\)](#)

VII. Equalization

The "assessed value" of property is the amount to which the tax rate is applied in order to compute the tax. By law (*de jure*) or in practice (*de facto*) the assessed value often is only a percentage of the full value. This percentage is called the "assessment ratio." Adjustment of assessment levels of various categories of property to a uniform percentage of full value is called "equalization."

De jure inequality is created by state constitutions or statutes prescribing a "classification" system, under which different classes of property (for example, residential, commercial, and utility) are assessed at different percentages of "full value." Telecommunications property is often assessed at a higher percentage of full value than many other types of property.

The United States Supreme Court has held that a *de jure* classification system, if reasonable, does not violate the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. [\(note 200\)](#) However, in *Idaho Telephone Co. v. Baird*, [\(note 201\)](#) the Idaho Supreme Court held that such a system violated a provision of the state constitution requiring that taxation of all property be uniform throughout the state. [\(note 202\)](#)

An issue in recent litigation is whether, through the Equal Protection Clause and the state constitutional uniformity

provisions, telecommunications carriers and other industries can take advantage of federal statutes prohibiting discriminatory assessment of railroads, airlines, and motor carriers.[\(note 203\)](#) In Nebraska, the federal courts, acting under the federal railroad statute, had enjoined the state from taxing centrally assessed railroad personal property because other business personal property was largely exempt from tax. The Nebraska Supreme Court held that pipelines, which were not protected by the federal statute, were entitled to the same treatment under the uniformity provision of the state constitution and the Equal Protection Clause.[\(note 204\)](#) In similar situations, however, the courts of Alabama and Tennessee held to the contrary.[\(note 205\)](#)

De facto inequality arises when different properties are assessed at different percentages of their actual value despite mandates to the contrary in state constitutions and statutes. This may be caused by intentional discrimination against a class of taxpayers or merely by inadequate assessment practices. De facto inequality may exist within a de jure classification system if, for example, the "full value," against which the statutory assessment percentage is applied, is actually a higher percentage of the true market value for one class of property than for another class.

De facto inequality of assessment, if intentional and systematic, violates the Equal Protection Clause.[\(note 206\)](#) Many courts have invalidated inequality in assessment levels between "centrally assessed" and "locally assessed" property under the Equal Protection Clause, state constitutions, or both.[\(note 207\)](#) However, de facto inequality may be difficult to prove, and taxpayers sometimes have been unsuccessful in this type of litigation. In *Lincoln Telephone & Telegraph Co. v. County Board of Equalization*, the Nebraska Supreme Court held that the taxpayer had failed to prove discrimination.[\(note 208\)](#) In *McLoud Telephone Co. v. State Board of Equalization*, the Oklahoma Supreme Court held that property of public service companies was recognized at least "implicitly" as a distinct class for taxation purposes.[\(note 209\)](#)

Conclusion

As long as telecommunications carriers are subject to ad valorem property taxation--and there is no indication that this will change in the near future--both the companies and the state tax administrators must continue to wrestle with the difficult and contentious problems inherent in such taxation. These include:

- (1) determining the market value of properties that ordinarily are not traded in the market;
- (2) making such determinations with due regard for rapid advances in technology and for a constantly changing regulatory scheme that makes many of the normal appraisal techniques inappropriate;
- (3) valuing and assessing, as a unit, an aggregate of individual assets, tangible and intangible, some of which would not be taxable if valued and assessed separately;
- (4) fairly allocating to states and to local taxing jurisdictions portions of the value of a system that is valued as a whole, precisely because its components are deemed to be inseparable from the whole;
- (5) maintaining "uniformity" of taxation between utility property "centrally assessed" under the unit method and commercial and residential property "locally assessed" under the summation method; and
- (6) accomplishing the above within the framework of fifty states with different laws, divergent economic interests, and varying degrees of resources and expertise in tax administration.

These problems present constant challenges, with high stakes involved, for both the telecommunications companies and the states. With further competition in the industry, the level of interest and attention devoted to these problems can only be expected to increase. Both the companies and the states could be relieved of much effort and expense if a uniform system of valuation and taxation were adopted.

Notes

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1. *United Tel.*, 770 P.2d 43 (Or. 1989). [Return to text](#)
2. *Michigan Bell*, No. 90533, 1990 Mich. Tax LEXIS 24 (Tax Trib. Mar. 13, 1990). [Return to text](#)
3. *AT&T Comm.*, Nos. 500802 & 500803 (Cal. Super. Ct. Sacramento County Feb. 1, 1991). [Return to text](#)
4. Statutory terms equivalent to "value" include: "actual value," "true value," "full cash value," "full value," and "fair market value." *See, e.g.*, Ark. Code Ann. sec. 26-26-1605 (Michie 1987); N.C. Gen. Stat. sec. 105-283 (1992); Wash. Rev. Code Ann. sec. 84.12.350 (West 1991). [Return to text](#)
5. *See, e.g.*, Cal. Code Regs. tit. 18, sec. 2 (1993); Wash. Admin. Code sec. 458-50-080(1) (1984); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 4(a) (1990). [Return to text](#)
6. *See* 1 Advisory Comm'n on Intergovernmental Relations, M-176, Significant Features of Fiscal Federalism 163 (1991) [hereinafter ACIR]. The thirty- seven states are Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Virginia, Washington, West Virginia, and Wyoming. *Id.* [Return to text](#)
7. These states are Alaska, Delaware, Florida, Hawaii, Illinois, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Texas, and Vermont. *Id.* [Return to text](#)
8. Wis. Stat. Ann. sec. 76.38(8) (West 1989). In *Wisconsin Telephone Co. v. City of Milwaukee*, 271 N.W.2d 362 (Wis. 1978), the Wisconsin Supreme Court held that the property tax exemption of telephone companies extended to property that the telephone company had leased from a nonexempt lessor, *id.* at 368. [Return to text](#)
9. Wis. Stat. Ann. sec. 76.001 (West Supp. 1992). [Return to text](#)
10. *See* National Ass'n of Tax Adm'rs, Appraisal of Railroad and Other Public Utility Property for Ad Valorem Tax Purposes 2, 14 (1954) [hereinafter NATA Report]. [Return to text](#)
11. *See* *Norfolk & W. Ry. v. Missouri State Tax Comm'n*, 390 U.S. 317 (1968); *ITT World Comm., Inc. v. City & County of S.F.*, 693 P.2d 811, 816 (Cal. 1985); Ariz. Comp. Admin. R. & Regs. R15-4-502(28) (1989); Iowa Admin. Code r. 701-77.1(2) (1986); Mont. Admin. R. 42.22.101(21) (1988); N.M. Prop. Tax Div. Regs. 36-30:5 (1985); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 4(h) (1990). [Return to text](#)
12. *Transponder Corp.*, 681 P.2d 499 (Colo. 1984). [Return to text](#)
13. *Id.* at 503-04. [Return to text](#)
14. *United States Transmission*, 715 P.2d 1249 (Colo. 1986). [Return to text](#)
15. *Id.* at 1253. [Return to text](#)
16. *Id.* at 1254. [Return to text](#)
17. *First Page, Inc. v. Cunningham*, 847 P.2d 1238, 1246 (Kan. 1993). [Return to text](#)
18. *Emerald Loggers Radio Ass'n v. State Tax Comm'n*, 2 Or. Tax 77 (1965). [Return to text](#)
19. U.S. Const. art. I, sec. 8, cl. 3. [Return to text](#)
20. U.S. Const. amend. XIV, sec. 1. [Return to text](#)
21. *Japan Line v. County of L.A.*, 441 U.S. 434, 444-45 (1978) (holding California ad valorem property tax unconstitutional under Commerce Clause as multiple taxation of instrumentalities of foreign trade) (quoting *Complete Auto Transit v. Brady*, 430 U.S. 274, 279 (1977)). [Return to text](#)
22. *Miller Bros. v. Maryland*, 347 U.S. 340, 344-45 (1954). [Return to text](#)
23. *Norfolk & W. Ry. v. Missouri State Tax Comm'n*, 390 U.S. 317, 324-25 (1968). [Return to text](#)
24. *Id.* at 324. [Return to text](#)
25. *Wallace v. Hines*, 253 U.S. 66 (1920); *Fargo v. Hart*, 193 U.S. 490 (1904). [Return to text](#)
26. Iowa Admin. Code r. 701-77.1(3) (1986); Mont. Admin. R. 42.22.101(13) (1988). [Return to text](#)
27. Ariz. Comp. Admin. R. & Regs. R15-4-505(A) (1989); Ind. Admin. Code tit. 50, r. 5-4-3(f) (1992); N.M. Prop. Tax Div. Regs. 36-30:5(C)(1)-(2) (1985); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(e) (1990). *But see* Mich. Comp. Laws Ann. sec. 207.5a (West 1986) (materials and supplies exempt). [Return to text](#)
28. Ariz. Comp. Admin. R. & Regs. R15-4-503(F), -508(C) (1989); Ind. Admin. Code tit. 50, r. 5-4-2(a) (1992); Iowa Admin. Code r. 701-77.1(3) (1986); Or. Admin. R. 150-308.205-(B)(2)(a), (6)(a) to (c) (1991). [Return to text](#)
29. Cal. Rev. & Tax. Code sec. 104 (West 1987); *Cox Cable San Diego v. County of San Diego*, 229 Cal. Rptr. 839

- (Ct. App. 1986) (holding that cable television operator's right to locate parts of its system on public rights-of-way is a taxable possessory interest). [Return to text](#)
30. Ariz. Comp. Admin. R. & Regs. R15-4-508(A) to (B) (1989); N.M. Prop. Tax Div. Regs. 36-30:4 (1985); Or. Admin. R. 150-308.205-(B)(6)(a) to (c) (1991); Utah Admin. R. R884-24-20P(E)(2) (1991); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(e) (1990); *see also* 47 C.F.R. secs. 32.2003-.2004 (1992) (calling this account "[t]elecommunications plant under construction"). [Return to text](#)
 31. *Pacific Northwest Bell Tel. Co. v. Department of Revenue*, No. 33629, 1988 Wash. Tax LEXIS 422 (B.T.A. Aug. 17, 1988); Or. Admin. R. 150-308.205-(B)(1)(c), (6)(a) to (c) (1991); *see also* 47 C.F.R. sec. 32.2002 (1991) (concerning property held for future telecommunications use). [Return to text](#)
 32. *Hatchadorian*, 488 N.E.2d 145 (Ohio 1986). [Return to text](#)
 33. *Id.* at 147. [Return to text](#)
 34. *Michigan Bell Tel. Co. v. Department of Treasury*, No. 90533, 1990 Mich. Tax LEXIS 24, at *45-*46 (Tax Trib. Mar. 13, 1990). [Return to text](#)
 35. *California Taxpayers' Ass'n, Proposed Rule 11 and the Taxation of Intangible Assets*, 3 J. Cal. Tax. 28, 28 (1992). [Return to text](#)
 36. *Id.* at 32. [Return to text](#)
 37. *See generally id.*; Michael E. Green & Terrence J. Benshoof, *Exclusion of Intangibles from the Unit Value*, 1 State Tax Notes 547 (1991). [Return to text](#)
 38. *Adams Express Co. v. Ohio State Auditor*, 165 U.S. 194, 220 (1897). [Return to text](#)
 39. *See, e.g., Los Angeles SMSA Ltd. Partnership v. State Bd. of Equalization*, 14 Cal. Rptr. 2d 522 (Ct. App. 1992) (allowing inclusion of value of FCC license); *ITT World Comm., Inc. v. County of Santa Clara*, 162 Cal. Rptr. 186 (Ct. App. 1980); *Michigan Bell Tel. Co. v. Department of Treasury*, No. 90553, 1990 Mich. Tax LEXIS 24 (Tax Trib. Mar. 13, 1990). [Return to text](#)
 40. *United States Transmission Sys. v. Board of Assessment Appeals*, 715 P.2d 1249, 1256 (Colo. 1986); *Michigan Bell*, 1990 Mich. Tax LEXIS 24, at *5. [Return to text](#)
 41. *Los Angeles SMSA*, 14 Cal. Rptr. 2d at 523; *see also United States Transmission*, 715 P.2d at 1257. [Return to text](#)
 42. *Los Angeles SMSA*, 14 Cal. Rptr. 2d at 527; *Michigan Bell*, 1990 Mich. Tax LEXIS 24, at *5. [Return to text](#)
 43. *See United States Transmission*, 715 P.2d at 1261-62. [Return to text](#)
 44. *Id.* at 1256 (citing Colo. Rev. Stat. sec. 39-4-102(1) (1982)). [Return to text](#)
 45. *Id.* at 1258. [Return to text](#)
 46. *Id.* [Return to text](#)
 47. *Id.* at 1258-59. [Return to text](#)
 48. The NATA Report, which is regarded as a "bible" for public utility property tax assessment states, "If intangibles are employed in the public service, their value is merged into and is inseparable from the unit. Unless some deduction is made from the allocated segment of the unit in such a state, the statutory classification or exemption will have been nullified." NATA Report, *supra* note 10, at 17. [Return to text](#)
 49. For federal income tax purposes, the capitalized costs of various purchased intangible assets are ratably amortized over a 15-year period under the new Internal Revenue Code, sec. 197, enacted as part of the Omnibus Reconciliation Act of 1993. Pub. L. No. 103-66, sec. 197, 102 Stat. 312. Under previous law, an intangible asset was a separate depreciable asset if it had (1) an ascertainable value and (2) a limited useful life. *See Newark Morning Ledger Co. v. United States*, 113 S. Ct. 1670 (1993); *Houston Chronicle Publishing Co. v. United States*, 481 F.2d 1240 (5th Cir. 1973), *cert. denied*, 414 U.S. 1129 (1974); *Citizens & S. Corp. v. Commissioner*, 91 T.C. 463 (1988), *aff'd per curiam*, 919 F.2d 1492 (11th Cir. 1990). [Return to text](#)
 50. *See Shubat v. Sutter County Assessment Appeals Bd. No. 1*, 17 Cal. Rptr. 2d 1 (Ct. App. 1993) ("intangibles such as going concern or franchise rights relate to the business being conducted"); *County of Orange v. Orange County Assessment Appeals Bd. No. 1*, 16 Cal. Rptr. 2d 695, 700 (Ct. App. 1993) ("additional value must have been attributable to intangibles which enhanced the value of the *business*, not the property") (emphasis in original); *Post-Newsweek Cable v. Board of Review*, 497 N.W.2d 810, 816 (Iowa 1993) ("income approach . . . measures the value of a business entity" and "necessarily values intangibles" that are not taxable); *Heritage Cablevision v. Board of Review*, 457 N.W.2d 594, 598 (Iowa 1990) (comparable sales figures "failed to exclude the substantial value which the buyers were receiving from the business enterprise"); *see also California Taxpayers' Ass'n, supra* note 35, at 32-33; Green & Benshoof, *supra* note 37, at 553. [Return to text](#)
 51. *Heritage Cablevision*, 457 N.W.2d at 596. [Return to text](#)

52. *Post-Newsweek Cable*, 497 N.W.2d at 813. [Return to text](#)
53. *Shubat*, 17 Cal. Rptr. 2d at 6 n.5 (subscriber list, right to do business, and going concern value); *County of Orange*, 16 Cal. Rptr. 2d at 705 ("existing franchises or licenses to construct, a subscriber base, marketing and programming contracts, management and operating systems, an in- place work force, going concern value and goodwill"). [Return to text](#)
54. See Cal. Code Regs. tit. 18, sec. 4 (1993); American Inst. of Real Estate Appraisers, The Appraisal of Real Estate 311-42 (9th ed. 1987) [hereinafter AIREA]. [Return to text](#)
55. Ariz. Comp. Admin. R. & Regs. R15-4-504(H), -507(E) (1989); Iowa Admin. Code r. 701-77.1(5), -77.3 (1986); Or. Admin. R. 150-308.205- (B)(6)(a)(D), (b)(D), (c)(D) (1991); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(a) (1990). [Return to text](#)
56. See Robert W. Lambert, *Cellular Telephone Companies: Property Tax Litigation in California*, J. Prop. Tax Mgmt., Spring 1991, at 15. [Return to text](#)
57. See *Michigan Wis. Pipe Line Co. v. Iowa State Bd. of Tax Review*, 368 N.W.2d 187, 192 (Iowa 1985) (common characteristic of Federal Energy Regulatory Commission regulation did not demonstrate comparability among pipelines); *Transcontinental Gas Pipe Line Corp. v. Bernards Township*, 545 A.2d 746, 751-52 (N.J. 1988) (pipelines are "special purpose property" for which "selling price on the open market is an inappropriate measure of value"); *Polk County v. Tenneco, Inc.*, 554 S.W.2d 918, 921 (Tex. 1977) (market for pipelines "generally cannot be determined by comparing the prices brought by sales of similar properties"). [Return to text](#)
58. Cal. Code Regs. tit. 18, sec. 28-005(b) (1993); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(b) (1990). [Return to text](#)
59. See generally *Pacific Northwest Bell Tel. Co. v. Department of Revenue*, No. 33629, 1988 Wash. Tax LEXIS 422 (B.T.A. Aug. 17, 1988); Ariz. Comp. Admin. R. & Regs. R15-4-504 (1989); Iowa Admin. Code r. 701-77.1(7), -77.4 (1986); Mont. Admin. R. 42.22.113 (1988); N.M. Prop. Tax Div. Regs. 36-30:5(B) (1985); Wash. Admin. Code sec. 458-50-080(2)(C) (1984); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(b) (1990); Institute of Property Taxation, Property Taxation 11.38-.50 (1987) [hereinafter IPT]. [Return to text](#)
60. See Ark. Code Ann. sec. 26-26-1607(b)(4) (Michie 1987) (deduct values of nonassessable assets); Ariz. Comp. Admin. R. & Regs. R15-4-504(F) (1989) (allocate according to average of ratios of (1) operating assets to total assets and (2) operating earnings to total earnings); Iowa Admin. Code r. 701-77.4(2) to (4) (1986) (values of debt and preferred stock allocated according to book values of property; value of common stock associated with operating property determined by capitalizing income from operating property); Mont. Admin. R. 42.22.113(1) (1988) (deduct values of nonassessable assets); N.M. Prop. Tax Div. Regs. 36-30:5(B)(3) (1985) (subtract value of nonassessable assets); Wash. Admin. Code sec. 458-50-080(2)(C) (1984) ("appropriate deductions shall be made for nonoperating property"); IPT, *supra* note 59, at 11.44- .46. [Return to text](#)
61. Iowa Admin. Code r. 701-77.4(5) (1986) (value determined by discounting future lease payments); N.M. Prop. Tax Div. Regs. 36-30:5(B)(3) (1985). [Return to text](#)
62. See *Pleasant v. Missouri-Kan.-Tex. R.R.*, 66 F.2d 842, 847 (10th Cir. 1933) (stock market reflects "the hopes or fears of a speculating public more accurately than the taxable value of roadbed and equipment"); *Chicago & Nw. Ry. v. Department of Revenue*, 128 N.E.2d 722, 727 (Ill. 1955) ("many factors, unrelated to the values of particular property, may play a part in determining the price of securities"), *cert. denied*, 351 U.S. 950 (1956); IPT, *supra* note 59, at 11.39-.41. [Return to text](#)
63. See generally *Pacific Northwest Bell Tel. Co. v. Department of Revenue*, No. 35667, 1989 Wash. Tax LEXIS 289 (B.T.A. July 28, 1989) (average of income and asset ratios); *AT&T Comm. v. Department of Revenue*, No. 33619, 1988 Wash. Tax LEXIS 499 (B.T.A. Aug. 5, 1988) (asset ratio); Ariz. Comp. Admin. R. & Regs. R15-4-504(B)(2) (1989) (average of ratios of subsidiary/parent (1) book values of common equity and (2) pre-tax net income available to common stock or, if the latter is "negative or atypical," of gross revenues); IPT, *supra* note 59, at 11.39. [Return to text](#)
64. *United Tel. Co. v. Department of Revenue*, 770 P.2d 43, 45 (Or. 1989), *modifying and remanding* 10 Or. Tax 333 (1986). [Return to text](#)
65. *Id.* at 51. [Return to text](#)
66. See generally Cal. Code Regs. tit. 18, sec. 8(b) (1993); Iowa Admin. Code r. 701-77.1(6) (1986); Wash. Admin. Code sec. 458-50-080(2)(B) (1984); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(g) (1990). [Return to text](#)
67. See Robert L. Hahne & Gregory E. Aliff, Accounting for Public Utilities 3-3 (1993). [Return to text](#)
68. See 47 C.F.R. secs. 32.2001, 32.9000 (1992); Hahne & Aliff, supra note 67, at 4-2. [Return to text](#)

69. See Hahne & Aliff, *supra* note 67, at 4-6 to 4-47, 5-1 to 5-26. [Return to text](#)
70. *Id.* at 9-10 to 9-12. [Return to text](#)
71. *Id.* at 9-12 to 9-14. [Return to text](#)
72. *Id.* at 9-14 to 9-16. [Return to text](#)
73. Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(g) (1990). [Return to text](#)
74. See Western States Ass'n of Tax Adm'rs, Valuation of Utility and Railroad Property 45-46, 64 (1989) [hereinafter WSATA]. [Return to text](#)
75. Cal. Code Regs. tit. 18, sec. 8(c) (1993); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(i) (1990); IPT, *supra* note 59, at 11.35-.36; WSATA, *supra* note 74, at 40-41, 64-65. [Return to text](#)
76. N.M. Prop. Tax Div. Regs. 36-30:5(A) (1985). [Return to text](#)
77. See United Tel. Co. v. Department of Revenue, 770 P.2d 43, 46 (Or. 1989); WSATA, *supra* note 74, at 46 (stating that "[t]his practice is questionable since book depreciation, for the most part, will fall far short of the current cost of replacement assets"). [Return to text](#)
78. 47 C.F.R. secs. 32.22, 32.750 (1992); Hahne & Aliff, *supra* note 67, at 17-5 to 17-14. [Return to text](#)
79. See, e.g., In re Southern Ry., 328 S.E.2d 235, 245-47 (N.C. 1985); Pacific Power & Light v. Department of Revenue, 596 P.2d 912 (Or. 1979); see also IPT, *supra* note 59, at 11.32-.33, .37. [Return to text](#)
80. See, e.g., Burlington N. R.R. v. Bair, 648 F. Supp. 91, 95-96 (S.D. Iowa 1986) (for growing capital-intensive company, deferred taxes "will never be paid back"); Union Pac. R.R. v. Department of Revenue, 843 P.2d 864, 876 (Or. 1992) (approving add-back of portion of deferred income taxes that appeared to be "permanently sheltered by the ever-increasing asset base"); Southern Pac. Transp. Co. v. Department of Revenue, 11 Or. Tax 138 (1989) (add-back reflects value of use of money until future time when deferred taxes are paid); see also WSATA, *supra* note 74, at 50 (annual deferral should be capitalized as part of income stream until time of payment). [Return to text](#)
81. See IPT, *supra* note 59, at 11.34-.35; WSATA, *supra* note 74, at 43-45. [Return to text](#)
82. United Tel. Co. v. Department of Revenue, 770 P.2d 43, 46 (Or. 1989). [Return to text](#)
83. *Id.* [Return to text](#)
84. See Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 4(g) (1990). [Return to text](#)
85. Cal. Code Regs. tit. 18, sec. 8(g)(2) (1993); Iowa Admin. Code r. 701-77.5(2) (1986); N.M. Prop. Tax Div. Regs. 36-30:5(A) (1985); Or. Admin. R. 150-308.205-(C)(2) (1991); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 4(f)(iii) (1990); WSATA, *supra* note 74, at 48-49. [Return to text](#)
86. See Or. Admin. R. 150-308.205-(C) (1991); IPT, *supra* note 59, at 11.33-.34; WSATA, *supra* note 74, at 49-50. [Return to text](#)
87. See Or. Admin. R. 150-308.205-(C)(2)(b) (1991); IPT, *supra* note 59, at 11.31; WSATA, *supra* note 74, at 50-51. [Return to text](#)
88. See Union Pac. R.R. v. State Tax Comm'n, 716 F. Supp. 543, 557 (D. Utah 1988); IPT, *supra* note 59, at 11.31; WSATA, *supra* note 74, at 51. [Return to text](#)
89. See *supra* note 71 and accompanying text. [Return to text](#)
90. Or. Admin. R. 150-308.205-(C)(2)(b) (1991); see also IPT, *supra* note 59, at 11.30-.31; WSATA, *supra* note 74, at 51. [Return to text](#)
91. See IPT, *supra* note 59, at 11.30-.31; WSATA, *supra* note 74, at 51. [Return to text](#)
92. See Or. Admin. R. 150-308.205-(C)(2)(d) (1991); IPT, *supra* note 59, at 11.23-.29; WSATA, *supra* note 74, at 52-53. [Return to text](#)
93. See IPT, *supra* note 59, at 11.23; WSATA, *supra* note 74, at 52. [Return to text](#)
94. See Pacific Northwest Bell Tel. Co. v. Department of Revenue, No. 31789, 1987 Wash. Tax LEXIS 263 (B.T.A. Aug. 12, 1987); Or. Admin. R. 150-308.205-(C)(2)(d)(A) (1991); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 4(f)(iii) (1990); IPT, *supra* note 59, at 11.23-.25; WSATA, *supra* note 74, at 54-55; cf. Hahne & Aliff, *supra* note 67, at 9-19 to 9-23 (ratemaking application). [Return to text](#)
95. United Tel. Co. v. Department of Revenue, 770 P.2d 43, 47-48 (Or. 1989); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 4(f)(iii) (1990); IPT, *supra* note 59, at 11.25-.26; WSATA, *supra* note 74, at 57-58; cf. Hahne & Aliff, *supra* note 67, at 9-30 to 9-33 (applying formula to ratemaking application). [Return to text](#)
96. Or. Admin. R. 150-308.205-(C)(2)(d)(B) (1991); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 4(f)(iii) (1990); IPT, *supra* note 59, at 11.26-.28; WSATA, *supra* note 74, at 56-57; cf. Hahne & Aliff, *supra* note 67, at 9-23 to 9-30 (ratemaking application). [Return to text](#)
97. See IPT, *supra* note 59, at 11.28-.29; WSATA, *supra* note 74, at 53-54; Hahne & Aliff, *supra* note 67, at 9-16

- to 9-18 (using earnings-price ratio in ratemaking application). [Return to text](#)
98. See *WSATA*, *supra* note 74, at 59. [Return to text](#)
99. *United Tel. Co. v. Department of Revenue*, 770 P.2d 43, 49-50 (Or. 1989). [Return to text](#)
100. *Id.* at 53. [Return to text](#)
101. *Michigan Bell Tel. Co. v. Department of Treasury*, No. 90533, 1990 Mich. Tax LEXIS 24, at *21 (Tax Trib. Mar. 13, 1990). [Return to text](#)
102. See Cal. Code Regs. tit. 18, sec. 8(b)(1) (1993); *cf.* Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(g)(iii) (1990) (permitting use of limited life model only if it meets certain tests of corroboration). Although Washington used limited life capitalization in the past, *see, e.g.*, *Pacific Northwest Bell Tel. Co. v. Department of Revenue*, No. 31789, 1987 Wash. Tax LEXIS 263 (B.T.A. Aug. 12, 1987), the state appears to have discontinued such use in favor of direct capitalization, *see* *GTE Northwest, Inc. v. Department of Revenue*, No. 35668, 1989 Wash. Tax LEXIS 487 (B.T.A. Dec. 29, 1989); *Pacific Northwest Bell Tel. Co. v. Department of Revenue*, No. 33629, 1988 Wash. Tax LEXIS 422 (B.T.A. Aug. 17, 1988); *AT&T Comm. v. Department of Revenue*, No. 33619, 1988 Wash. Tax LEXIS 499 (B.T.A. Aug. 5, 1988). [Return to text](#)
103. See *Pacific Northwest Bell*, 1987 Wash. Tax LEXIS 263, at *3-*4; *WSATA*, *supra* note 74, at 61-64. [Return to text](#)
104. See William N. Kinnard, Jr., Income Property Valuation 204-05 (1971). [Return to text](#)
105. *AT&T Comm. v. State Bd. of Equalization*, Nos. 500802 & 500803 (Cal. Super. Ct. Sacramento County Feb. 1, 1991). [Return to text](#)
106. *Id.* slip op. at 20. [Return to text](#)
107. *Id.* [Return to text](#)
108. *Id.* slip op. at 28. [Return to text](#)
109. *Id.* slip op. at 22. [Return to text](#)
110. *Id.* slip op. at 25. [Return to text](#)
111. *Id.* slip op. at 10. [Return to text](#)
112. *Union Pac. R.R. v. State Bd. of Equalization*, 282 Cal. Rptr. 745 (Ct. App. 1991). The court's holding was based on the fact that the model did not deduct from the income stream the cost of replacing the existing assets, but rather assumed that the management had discretion as to replacement of the assets and would not do so unless the replacement assets would earn their cost of capital. The court held that this assumption was incorrect, because (1) railroad lines cannot be abandoned or neglected without the approval of regulatory agencies, and (2) in an integrated railroad system it is difficult or impossible to determine whether a replacement asset would earn its cost of capital. *Id.* at 753-54.

For other decisions invalidating limited life models, see *Burlington N., Inc. v. Department of Revenue*, 635 P.2d 347 (Or. 1981); *Soo Line R.R. v. Wisconsin Dep't of Revenue*, 278 N.W.2d 487 (Wis. Ct. App. 1979), *aff'd per curiam*, 292 N.W.2d 869 (Wis. 1980). [Return to text](#)

113. *GTE Northwest, Inc. v. Department of Revenue*, No. 35668, 1989 Wash. Tax LEXIS 487 (B.T.A. Dec. 29, 1989); *Pacific Northwest Bell Tel. Co. v. Department of Revenue*, No. 33629, 1988 Wash. Tax LEXIS 422 (B.T.A. Aug. 17, 1988); *AT&T Comm. v. Department of Revenue*, No. 33619, 1988 Wash. Tax LEXIS 499 (B.T.A. Aug. 5, 1988); Ariz. Comp. Admin. R. & Regs. R15-4-502(10) to (11) (1989); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(g) (1990); *WSATA*, *supra* note 74, at 60-61. [Return to text](#)
114. *AIREA*, *supra* note 54, at 472-74; *WSATA*, *supra* note 74, at 61. [Return to text](#)
115. See *GTE Northwest*, 1989 Wash. Tax LEXIS 487, at *12; Ariz. Comp. Admin. R. & Regs. R15-4-503(A) to (C) (1989). [Return to text](#)
116. See *Michigan Bell Tel. Co. v. Department of Treasury*, No. 90533, 1990 Mich. Tax LEXIS 24, at *29 (Tax Trib. Mar. 13, 1990); *GTE Northwest*, 1989 Wash. Tax LEXIS 487. [Return to text](#)
117. See *GTE Northwest*, 1989 Wash. Tax LEXIS 487, at *9-*10; *Pacific Northwest Bell*, 1988 Wash. Tax LEXIS 422, at *12; *AT&T Comm.*, 1988 Wash. Tax LEXIS 499, at *5; *WSATA*, *supra* note 74, at 66. [Return to text](#)
118. *Michigan Bell*, 1990 Mich. Tax LEXIS 24, at *31. [Return to text](#)
119. *Id.* [Return to text](#)
120. *Id.* [Return to text](#)
121. *Id.* at *53-*55. [Return to text](#)
122. *Id.* at *53-*54. [Return to text](#)

123. CWIP in this category ordinarily consists of CWIP that is not included in the rate base and that will expand the capacity of the system. No addition is necessary for the value of (1) CWIP that will replace existing plant and merely maintain the income at the existing level, *see* United Tel. Co. v. Department of Revenue, No. 19005, 1980 WL 20592, at *5 (Wash. B.T.A. July 2, 1980); or (2) CWIP that is included in the rate base and hence already is reflected because the income capitalized includes a return on the CWIP, Utah Admin. R. R884-24-20P(E)(1) (1991).

The value of the CWIP to be added may be estimated by (1) capitalizing the estimated future income from the CWIP when it goes into service, Pacific Power & Light v. Department of Revenue, 10 Or. Tax 417 (1987), *modified on other issues*, 775 P.2d 303 (Or. 1989); N.M. Prop. Tax Div. Regs. 36-30:5(A) (1985); WSATA, *supra* note 74, at 72-73; or (2) using the cost approach, Ariz. Comp. Admin. R. & Regs. R15-4-503(F), R15-4-508(A) to (B) (1989) (added to value after reconciliation of value indicators; valued at book value unless "extraordinary circumstances" warrant discount); Utah Admin. R. R884-24-20P(E)(2)(a) (1991) (valued at cost discounted to reflect present value). [Return to text](#)

124. Ariz. Comp. Admin. R. & Regs. R15-4-502(22), -503(F), -508(A) (1989) (added to value after reconciliation of value indicators); Or. Admin. R. 150-308.205-(B)(6)(a)(B), (b)(B), (c)(B) (1991). Such value may also be estimated by (1) discounting the rental payments at an appropriate capitalization rate, Ariz. Comp. Admin. R. & Regs. R15-4-508(C) (1989); (2) omitting the rental payments from the expenses deducted in determining the income or cash flow to be capitalized, WSATA, *supra* note 74, at 71; or (3) using the cost approach, *id.* at 72. [Return to text](#)
125. Or. Admin. R. 150-308.205-(B)(6)(a)(B), (b)(B), (c)(B) (1991); WSATA, *supra* note 74, at 74. [Return to text](#)
126. Wash. Admin. Code sec. 458-50-080(2)(A)(i) (1984); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(e) (1990). [Return to text](#)
127. Cal. Code Regs. tit. 18, sec. 3(c) (1993); Wash. Admin. Code sec. 458-50-080(2)(A)(iii) (1984); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(d) (1990). [Return to text](#)
128. Cal. Code Regs. tit. 18, sec. 3(c) (1993); Wash. Admin. Code sec. 458-50-080(2)(A)(iv) (1984); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(c) (1990). [Return to text](#)
129. *See* AIREA, *supra* note 54, at 35-36; Kinnard, *supra* note 104, at 40. [Return to text](#)
130. Parklin Operating Corp. v. Miller, 38 N.E.2d 465, 467 (N.Y. 1941); *see* Consumers Power Co. v. Big Prairie Township, 265 N.W.2d 182, 186 (Mich. Ct. App. 1978); Public Serv. Co. v. Town of Ashland, 377 A.2d 124, 126 (N.H. 1977). However, a California court rejected the argument that reproduction cost is a ceiling on value as a matter of law. ITT World Comm. v. County of Santa Clara, 162 Cal. Rptr. 186, 192 (Ct. App. 1980). [Return to text](#)
131. Cal. Code Regs. tit. 18, sec. 6(a) (1993). [Return to text](#)
132. United Tel. Co. v. Department of Revenue, No. 30521, 1986 Wash. Tax LEXIS 170, at *2 (B.T.A. July 14, 1986) (giving 55% weight to HCLD); Ariz. Comp. Admin. R. & Regs. R15-4-505 (1989); Cal. Code Regs. tit. 18, sec. 3(d) (1993); Iowa Admin. Code r. 701-77.6 (1986); N.M. Prop. Tax Div. Regs. 36-30:5(C) (1985); Or. Admin. R. 150-308.205-(B)(6)(a)(A) (1991); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(e) (1990). [Return to text](#)
133. Commonwealth Edison Co. v. Property Tax Appeal Bd., 463 N.E.2d 1331, 1334 (Ill. App. Ct. 1984); Montaup Elec. Co. v. Board of Assessors, 460 N.E.2d 583, 585-86 (Mass. 1984); Tenneco, Inc. v. Commissioner of Revenue, No. 120153, 1988 Mass. Tax LEXIS 4, *19 (App. Tax Bd. Feb. 18, 1988); Banquette Indep. Sch. Dist. v. Tenneco, Inc., 618 S.W.2d 824, 828 (Tex. Civ. App. 1981); Texas E. Transmission v. Sealy Indep. Sch. Dist., 580 S.W.2d 596, 598 (Tex. Civ. App. 1979); Wisconsin River Power Co. v. Board of Review, 370 N.W.2d 580, 582 (Wis. Ct. App. 1985). *Contra* Northern Natural Gas Co. v. Dwyer, 492 P.2d 147, 162-63 (Kan. 1971), *cert. denied*, 406 U.S. 967 (1972); Consumers Power Co., 265 N.W.2d at 189-90; *In re Public Serv. Co.*, 471 A.2d 1182, 1186 (N.H. 1984); Transcontinental Gas Pipe Line Co. v. Bernards Township, 545 A.2d 746, 756 (N.J. 1988); Brooklyn Union Gas Co. v. Chambers, 164 N.Y.S.2d 768, 771 (Sup. Ct. Spec. Term 1952). [Return to text](#)
134. AIREA, *supra* note 54, at 36. [Return to text](#)
135. *See* 47 C.F.R. secs. 32.2000(b)(iv), 32.2005 (1992); Hahne & Aliff, *supra* note 67, at 4-10. [Return to text](#)
136. *See, e.g., In re American TV Relay, Inc., Decision and Order*, 63 F.C.C.2d 911, paras. 19-23 (1977); *In re American Tel. & Tel. Co. Charges, Classifications, Regs. and Practices for and in Connection with Private Line Servs. and Channels, Final Decision*, 34 F.C.C. 217, paras. 52-54 (1963); *see also* Hahne & Aliff, *supra* note 67,

- at 4-11. [Return to text](#)
137. *United Tel. Co. v. Department of Revenue*, 770 P.2d 43, 50 (Or. 1989) (expert witnesses agreeing that HCLD "properly establishes the cost indicator of value for a closely regulated utility like United" because it "is the basis upon which United is allowed to earn a return"); *Michigan Bell Tel. Co. v. Department of Treasury*, No. 90533, 1990 Mich. Tax LEXIS 24, at *69 (Tax Trib. Mar. 13, 1990) ("HCLD is an appropriate and convenient indicator" because it "is essentially the method used to derive the `rate base.>"). [Return to text](#)
138. *AT&T Comm. v. State Bd. of Equalization*, Nos. 500802 & 500803, slip op. at 10 (Cal. Super. Ct. Sacramento County Feb. 1, 1991). [Return to text](#)
139. *See General Tel. Co. v. Department of Revenue*, No. 31825, 1987 Wash. Tax LEXIS 223, at *27 (B.T.A. Sept. 8, 1987) ("[U]tilities generally sell for net book values."). [Return to text](#)
140. *See Transcontinental Gas Pipe Line Corp. v. Bernards Township*, 545 A.2d 746, 754-55 (N.J. 1988) (pointing out this "circularity"). [Return to text](#)
141. *AT&T Comm.*, Nos. 500802 & 500803, slip op. at 15. [Return to text](#)
142. *See, e.g., New Haven Water Co. v. Board of Tax Review*, 348 A.2d 641, 643-44 (Conn. 1974); *Maine Consol. Power Co. v. Inhabitants of Farmington*, 219 A.2d 748, 751 (Me. 1966); *Consumers Power Co. v. Port Sheldon Township*, 283 N.W.2d 680, 684 (Mich. Ct. App. 1979). [Return to text](#)
143. *Montaup Elec. Co. v. Board of Assessors*, 460 N.E.2d 583, 587 (Mass. 1984); *Boston Edison Co. v. Board of Assessors*, 439 N.E.2d 763, 769 (Mass. 1982); *Wisconsin River Power Co. v. Board of Review*, 370 N.W.2d 580, 584 (Wis. Ct. App. 1985). [Return to text](#)
144. *AT&T Comm.*, Nos. 500802 & 500803, slip op. at 10. [Return to text](#)
145. *See United Tel. Co. v. Department of Revenue*, 770 P.2d 43, 46 n.6 (Or. 1989); *AT&T Comm. v. Department of Revenue*, No. 33619, 1988 Wash. Tax LEXIS 499, at *6-*7 (B.T.A. Aug. 5, 1988); Ariz. Comp. Admin. R. & Regs. R15-4-505(A) (1989); N.M. Prop. Tax Div. Regs. 36-30:5(C)(1) (1985). [Return to text](#)
146. *Pacific Northwest Bell Tel. Co. v. Department of Revenue*, No. 33629, 1988 Wash. Tax LEXIS 422, at *5 (B.T.A. Aug. 17, 1988); Ariz. Comp. Admin. R. & Regs. R15-4-505(A) (1989); N.M. Prop. Tax Div. Regs. 36-30:5(C)(2) (1985). [Return to text](#)
147. Ind. Admin. Code tit. 50, r. 5-4-3(g) (1992) (generally valued at acquisition cost; depreciated over the federal income tax life); Or. Admin. R. 150-308.205- (B)(6)(a)(A), (b)(A), (c)(A) (1991). [Return to text](#)
148. N.M. Prop. Tax Div. Regs. 36-30:5(C)(4) (1985); Or. Admin. R. 150-308.205-(B)(6)(a)(A), (b)(A), (c)(A) (1991); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(e) (1990); *cf. Ariz. Comp. Admin. R. & Regs. R15-4-505(A), -508(A)* (1989) (adding CWIP to value after reconciliation of value indicators). [Return to text](#)
149. N.M. Prop. Tax Div. Regs. 36-30:5(C)(4) (1985) (discounting CWIP costs by 50%); Utah Admin. R. R884-24-20P(E)(2)(a) (1991) (discounting CWIP costs for period until expected "functional completion" at rate equaling market discount rate). [Return to text](#)
150. *See Cal. Code Regs. tit. 18, sec. 6(c)* (1993); AIREA, *supra* note 54, at 361-62. [Return to text](#)
151. Cal. Code Regs. tit. 18, sec. 6(d) (1993); AIREA, *supra* note 54, at 363-68. [Return to text](#)
152. AIREA, *supra* note 54, at 378; Kinnard, supra note 104, at 355. [Return to text](#)
153. Ariz. Comp. Admin. R. & Regs. R15-4-502(15) (1989); N.M. Prop. Tax Div. Regs. 36-30:5(C)(5) (1985). [Return to text](#)
154. *Thorntown Tel. Co. v. State Bd. of Tax Comm'rs*, 588 N.E.2d 613, 617 (Ind. T.C. 1992); Ariz. Comp. Admin. R. & Regs. R15-4-502(14) (1989); N.M. Prop. Tax Div. Regs. 36-30:5(C)(6) (1985). [Return to text](#)
155. *AT&T Comm. v. Department of Revenue*, No. 33619, 1988 Wash. Tax LEXIS 499, at *6 (B.T.A. Aug. 5, 1988); Cal. Code Regs. tit. 18, sec. 3(d) (1993); Iowa Admin. Code r. 701-77.6 (1986); N.M. Prop. Tax Div. Regs. 36-30:5(C)(1) (1985). [Return to text](#)
156. *See Ohio Rev. Code Ann. sec. 5727.11(B), (F)* (Anderson 1991) (allowance for depreciation and obsolescence is 50% of original cost for property of telephone companies with fewer than 15,000 access lines; allowance is prescribed by commissioner for other companies); R.I. Gen. Laws sec. 44-13-13(e) (Supp. 1993) (depreciation cannot exceed 75% of original cost); Ind. Admin. Code tit. 50, r. 5-4-3 (1992) (using federal income tax depreciation, but limiting extent to which depreciation can devalue property). [Return to text](#)
157. *See AIREA, supra* note 54, at 379-89; NATA Report, supra note 10, at 8, 58, 79. [Return to text](#)
158. *See AIREA, supra* note 54, at 377-79; Kinnard, supra note 104, at 354. [Return to text](#)
159. Ariz. Comp. Admin. R. & Regs. R15-4-502(9), -505(C) (1989); Cal. Code Regs. tit. 18, sec. 6(e) (1993); N.M. Prop. Tax Div. Regs. 36-30:5(C)(4) to (7) (1985); Wash. Admin. Code sec. 458-50-080(2)(A) (1990); Wyo.

- State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 6(e) (1990). [Return to text](#)
160. See AIREA, *supra* note 54, at 404; NATA Report, *supra* note 10, at 54. [Return to text](#)
161. Reynolds Metals Co. v. Department of Revenue, 477 P.2d 888 (Or. 1970). [Return to text](#)
162. *Thorntown Tel. Co.*, 588 N.E.2d 613, 617 (Ind. T.C. 1992). [Return to text](#)
163. *Id.* at 618. [Return to text](#)
164. United Tel. Co. v. Department of Revenue, 770 P.2d 43, 50-52 (Or. 1989). [Return to text](#)
165. *Id.* at 51. [Return to text](#)
166. Michigan Bell Tel. Co. v. Department of Treasury, No. 90533, 1990 Mich. Tax LEXIS 24, at *22 (Tax Trib. Mar. 13, 1990). [Return to text](#)
167. *Id.* at *25 (quoting *United Tel.*, Nos. 2037 & 2209, 1986 Ore. Tax LEXIS 32, at *16 (T.C. Dec. 5, 1986)). [Return to text](#)
168. See, e.g., *Commonwealth Edison Co. v. Property Tax Appeal Bd.*, 463 N.E.2d 1331, 1335 (Ill. App. Ct. 1984); *Tenneco, Inc. v. Commissioner of Revenue*, No. 120153 1988 Mass. Tax LEXIS 4 (App. Tax Bd. Feb. 18, 1988); *In re Colonial Pipeline Co.*, 347 S.E.2d 382, 387-88 (N.C. 1986); *AT&T Comm. v. Department of Revenue*, No. 33619, 1988 Wash. Tax LEXIS 499, at *5 (B.T.A. Aug. 5, 1988); *United Tel. Co. v. Department of Revenue*, No. 30521, 1986 Wash. Tax LEXIS 170, at *15 (B.T.A. July 14, 1986). [Return to text](#)
169. *AT&T Comm.*, Nos. 500802 & 500803, slip op. at 13 (Cal. Super. Ct. Sacramento County Feb. 1, 1991). [Return to text](#)
170. *Id.* slip op. at 14. [Return to text](#)
171. See Hahne & Aliff, *supra* note 67, at 17-14. [Return to text](#)
172. For a case in which deduction of the accumulated deferred income taxes account was held to be proper, see *In re Amoco Pipeline Co.*, Nos. A-86-29 to A-86-31 (Wyo. St. Bd. of Equalization Apr. 22, 1988). For cases disapproving such a deduction, see *Pacific Power & Light Co. v. Department of Revenue*, 775 P.2d 303 (Or. 1989), and *GTE Northwest, Inc. v. Department of Revenue*, No. 35668, 1989 Wash. Tax LEXIS 487, at *7-*8 (B.T.A. Dec. 29, 1989). [Return to text](#)
173. *AT&T Comm.*, Nos. 500802 & 500803, slip op. at 27. [Return to text](#)
174. *Id.* slip op. at 33. [Return to text](#)
175. See *Bills Signed*, Daily Tax Rep. (BNA) No. 124, at H-2 (June 26, 1992); Cal. State Bd. of Equalization, Board Sets Values of Privately Held Public Utilities (June 4, 1992) (on file with the *Federal Communications Law Journal*); Cal. State Ass'n of Counties, Counties Negotiate \$2 Billion Settlement with Utilities (May 12, 1992) (on file with the *Federal Communications Law Journal*); see also Jennefer Pittman, *Utility Tax Talks Come to a Close*, S.F. Daily J., June 19, 1992, at 2. The California Legislature enacted legislation expressly authorizing the State Board of Equalization to enter into such a settlement agreement. 1992 Cal. Stat. 93, 603. [Return to text](#)
176. Ariz. Comp. Admin. R. & Regs. R15-4-507 (1989); Iowa Admin. Code r. 701-77.7 (1986); Mont. Admin. R. 42.22.101(7) (1988); N.M. Prop. Tax Div. Regs. 36-30:5(D)(2) (1985); Wyo. State Tax Comm'n, State Bd. of Equalization, ch. XXII, sec. 7 (1990). [Return to text](#)
177. See, e.g., *St. Louis-S.F. Ry. v. Arkansas Pub. Serv. Comm'n*, 304 S.W.2d 297 (Ark. 1957); *MidLouisiana Rail v. Louisiana Tax Comm'n*, 588 So.2d 1163 (La. Ct. App. 1991). [Return to text](#)
178. See, e.g., *Department of Revenue v. Soo Lines*, 560 P.2d 512 (Mont. 1977); *United Tel. Co. v. Department of Revenue*, No. 30521, 1986 Wash. Tax LEXIS 170 (B.T.A. July 14, 1986). [Return to text](#)
179. See, e.g., *United Tel. Co. v. Department of Revenue*, 770 P.2d 43 (Or. 1989); Ariz. Comp. Admin. R. & Regs. R15-4-507 (1989); N.M. Prop. Tax Div. Regs. 36-30:5(D)(1), 36-31:2(C)(6) (1985). [Return to text](#)
180. See, e.g., *Michigan Bell Tel. Co. v. Department of Treasury*, No. 90533, 1990 Mich. Tax LEXIS 24 (Tax Trib. Mar. 13, 1990). [Return to text](#)
181. See, e.g., *GTE Northwest, Inc. v. Department of Revenue*, No. 35668, 1989 Wash. Tax LEXIS 487 (B.T.A. Dec. 29, 1989); Mont. Admin. R. 42.22.101(7), 42.22.111(2) (1988). [Return to text](#)
182. *Heritage Cablevision*, 457 N.W.2d 594 (Iowa 1990). [Return to text](#)
183. *Id.* at 598. [Return to text](#)
184. *Id.* n.2. [Return to text](#)
185. See *Southern Pac. Transp. Co. v. State Bd. of Equalization*, 237 Cal. Rptr. 191 (Ct. App. 1987) (assessment made by appraisal judgment method failed to give the taxpayer fair notice of the method of assessment sufficient to permit challenge to assessment). [Return to text](#)
186. See Colo. Rev. Stat. Ann. sec. 39-4-106(3)(b) (West 1990); Ariz. Comp. Admin. R. & Regs. R15-4-501(D), -502(1) to (2) (1989); Mo. Code Regs. tit. 12, sec. 30-1.016 (1987); Mont. Admin. R. 42.22.101(2) (1988); IPT,

- supra* note 59, at 11.51-.55. [Return to text](#)
187. *Norfolk & W. Ry. v. Missouri State Tax Comm'n*, 390 U.S. 317, 323 (1968). [Return to text](#)
188. *Id.* at 324. [Return to text](#)
189. *Id.* at 325. [Return to text](#)
190. *Id.* at 329-30; *see also* *Wallace v. Hines*, 253 U.S. 66, 69-70 (1920); *Union Tank Line Co. v. Wright*, 249 U.S. 275, 283 (1919); *Fargo v. Hart*, 193 U.S. 490, 499-503 (1904). [Return to text](#)
191. *Norfolk & W. Ry.*, 390 U.S. at 323-24. [Return to text](#)
192. *Id.* at 324. [Return to text](#)
193. Wis. Stat. Ann. sec. 76.07(4g)(e) (West Supp. 1992); Iowa Admin. Code r. 701-77.8(1) (1986); Mo. Code Regs. tit. 12, sec. 30-1.016(1)(G) to (H) (1987); Mont. Admin. R. 42.22.121(3)(f)(i), (g)(i), (h)(i) (1988); N.M. Prop. Tax Div. Regs. 36-30:5(E) (1985). [Return to text](#)
194. N.M. Prop. Tax Div. Regs. 36-30:5(E) (1985) (wire miles, number of access lines). [Return to text](#)
195. Wis. Stat. Ann. sec. 76.07(4g)(e) (West Supp. 1992); Iowa Admin. Code r. 701-77.8(1) (1986); Mo. Code Regs. tit. 12, sec. 30-1.016(1)(G) to (H) (1987); Mont. Admin. R. 42.22.121(3)(f)(ii), (g)(ii), (h)(ii) (1988); N.M. Prop. Tax Div. Regs. 36-30:5(E) (1985). [Return to text](#)
196. Mo. Code Regs. tit. 12, sec. 30-1.016(1)(G) to (H) (1987). [Return to text](#)
197. *See* Ariz. Rev. Stat. Ann. sec. 42-794 (West 1991); Colo. Rev. Stat. Ann. sec. 39-4-106(3)(a) (West 1990); Mont. Admin. R. 42.22.101(3), 42.22.122 (1988); N.M. Prop. Tax Div. Regs. 36-30:6 (1985); IPT, *supra* note 59, at 11.55. [Return to text](#)
198. *See* Mont. Admin. R. 42.22.122(2)(a)(iv), (vii)-(viii) (1988) (wire miles, situs of equipment); N.M. Prop. Tax Div. Regs. 36-30:6(B) (1985) (wire miles, number of access lines); IPT, *supra* note 59, at 11.55. [Return to text](#)
199. Ind. Code sec. 6-1.1-8-5 (West 1989); Mont. Admin. R. 42.22.101(18), 42.22.122(1), (3) (1988); N.M. Prop. Tax Div. Regs. 36-30:6(A) (1985). [Return to text](#)
200. *Nashville, C. & St. L. Ry. v. Browning*, 310 U.S. 362, 369-70 (1940). [Return to text](#)
201. *Idaho Tel. Co.*, 423 P.2d 337 (Idaho 1967). [Return to text](#)
202. *Id.* at 346; *see also* *Amax Magnesium Corp. v. Utah State Tax Comm'n*, 796 P.2d 1256, 1260 (Utah 1990); *AT&T Comm. v. State Bd. of Equalization*, 768 P.2d 580, 581 (Wyo. 1989); *Rocky Mountain Oil & Gas Ass'n v. State Bd. of Equalization*, 749 P.2d 221, 235-39 (Wyo. 1987). *Contra* *Apache County v. Atchison, T. & S.F. Ry.*, 476 P.2d 657, 660-61 (Ariz. 1970), *appeal dismissed*, 401 U.S. 1005 (1971). [Return to text](#)
203. 49 U.S.C. secs. 1513(d), 11503, 11503a (1988) (airlines, railroads, motor carriers, respectively). [Return to text](#)
204. *Northern Natural Gas Co. v. State Bd. of Equalization & Assessment*, 443 N.W.2d 249 (Neb. 1989), *cert. denied*, 493 U.S. 1078 (1990). The State Board of Equalization and Assessment subsequently held that the requests made by various companies, including telecommunications companies, for "equalization" with railroad assessments were applications for exemption that the Board had no authority to consider. The Nebraska Supreme Court held such conclusion to be erroneous and remanded the cases to the Board for further proceedings. *Natural Gas Pipeline Co. v. State Bd. of Equalization & Assessment*, 466 N.W.2d 461, 464-65, 471 (Neb. 1991); *see also* *MCI Telecomm. v. State Bd. of Equalization & Assessment*, 466 N.W.2d 80 (Neb. 1991); *Arapahoe Tel. Co. v. State Bd. of Equalization & Assessment*, 466 N.W.2d 81 (Neb. 1991); *TelaMarketing Inv. Ltd. v. State Bd. of Equalization & Assessment*, 466 N.W.2d 82 (Neb. 1991). [Return to text](#)
205. *State v. Colonial Pipeline Co.*, 471 So.2d 408 (Ala. Civ. App. 1984), *writ quashed sub nom. Ex parte Colonial Pipeline Co.*, 471 So.2d 413 (Ala.), *appeal dismissed*, 474 U.S. 936 (1985); *Federal Express Corp. v. Tennessee State Bd. of Equalization*, 717 S.W.2d 873 (Tenn. 1986). [Return to text](#)
206. *Township of Hillsborough v. Cromwell*, 326 U.S. 620, 623 (1946); *Sioux City Bridge Co. v. Dakota County*, 260 U.S. 441, 445 (1923); *see also* *Allegheny Pittsburgh Coal Co. v. County Comm'n*, 488 U.S. 336, 338-40 (1989). [Return to text](#)
207. *See, e.g., Louisville & N. R.R. v. Public Serv. Comm'n*, 249 F. Supp. 894, 902 (M.D. Tenn. 1966), *aff'd*, 389 F.2d 247 (6th Cir. 1968); *Southern Pac. Co. v. Cochise County*, 377 P.2d 770, 772 (Ariz. 1963); *Undercofler v. Seaboard Air Line R.R.*, 152 S.E.2d 878, 881 (Ga. 1966); *Kansas City S. Ry. v. Board of County Comm'rs*, 331 P.2d 899, 902 (Kan. 1958); *Lockett v. Tennessee Gas Transmission Co.*, 331 S.W.2d 879, 882 (Ky. 1960). [Return to text](#)
208. *Lincoln Tel.*, 308 N.W.2d 515, 518-20 (Neb. 1981). [Return to text](#)
209. *McLoud*, 655 P.2d 1037, 1039 (Okla. 1982). [Return to text](#)