

STATE OF CALIFORNIA



BOARD OF EQUALIZATION

Unitary Valuation Methods

**PROPERTY AND SPECIAL TAXES DEPARTMENT
VALUATION DIVISION**

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Preface

The California Constitution requires the Board of Equalization to annually assess property, except franchises, owned or used by regulated railway, telegraph, or telephone companies, car companies operating on railways in the state, and companies transmitting or selling gas or electricity. It also requires the Board to annually assess pipelines, flumes, canals, ditches, and aqueducts lying within two or more counties. The taxes are levied and collected in the same manner as for county-assessed properties. The Valuation Division of the Property Taxes Department provides the elected members with reasonable and timely estimates of the market value of property subject to the Board's state assessment jurisdiction. State-assessed property, except rail transportation property, is assessed at its fair market value or full value as of 12:01 a.m. January 1. In conformity with federal law, the assessed value for railroad operating property and nonunitary rail transportation property is limited to a percentage of the market value set by the Board.

This *Unitary Valuation Methods* book has been prepared by the Valuation Division to document the valuation models currently used by the Board's staff in the preparation of indicators of value. As part of the process of producing the original (November 1998) manual, and subsequent revisions (March 2000 and March 2003), meetings were held with interested parties. Conflicts regarding the content of the manual were identified and most were resolved. Those issues not resolved were voted on by Members of the Board of Equalization after hearing testimony from interested parties and Board Staff. The results of the Board's action are reflected in this manual.

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Historical Cost Less Depreciation (HCLD) Model

Overview

The Historical Cost Less Depreciation (HCLD) value indicator derivation includes the historical or original acquisition cost of all property less nontaxable items and property assessed elsewhere. This results in the taxable historical cost. The taxable historical cost is then reduced for the assessee's regulatory accounting depreciation of the taxable property. This results in the assessable HCLD. The value of any possessory interest and/or noncapitalized leased properties are added to arrive at the final HCLD value indicator.

HCLD is one of the more important indicators of value for closely regulated public utilities. The general practice of the California Public Utilities Commission (CPUC) and most other regulatory agencies is to use historical or original cost less depreciation (with various adjustments) as the rate base. The regulatory agencies establish a rate base and a rate of return; utilities are permitted to earn at this established rate on the rate base. Hence, it is logical that prospective buyers and sellers would see the rate base as a significant factor in formulating investment decisions. HCLD is much less important for valuing public utility properties that are not closely rate base regulated.

One of the major components in the development of the HCLD indicator is accounting depreciation. For most rate base regulated utilities, there may be several sets of accounting records that record depreciation. The set of records reflecting the depreciation (normally straight-line) allowed by the rate setting regulatory agency for rate or tariff-setting purposes is the proper depreciation figure to use for the HCLD.¹

Many utilities that are subject to central assessment are not closely regulated for economic results and therefore, do not maintain a depreciation reserve based on regulatory accounting rules. In such cases, an HCLD value indicator based on the assessee's book depreciation may be useful as a point of reference for establishing a relationship between net book value and market value. This indicator is generally not given any weight in the value reconciliation process, however as the use of HCLD is limited primarily to rate base regulated utilities.

Appraisal depreciation in the form of obsolescence may be present in utility property and deducted from HCLD. Such deductions may be proper when the utility's economic income has been impaired and the rate or tariff-setting regulators have recognized such impairment.

Since it is the practice of ratemaking agencies to deduct deferred income tax liabilities from the rate base, an adjustment for deferred income taxes is appropriate. Although a prospective purchaser would not necessarily expect to earn a return on the portion of the property represented by the deferred income tax liability, the prospective purchaser would expect to recover the cost of the investment through the depreciation allowances included in the rates. Therefore, the adjustment should measure the impairment on the utility's revenue, using the time value of money.²

¹ California Code of Regulations, Public Revenue, Title 18, Property Tax Rule 3(d)

² California State Board of Equalization, Assessor's Handbook 502, page 147

Historical Cost Less Depreciation (HCLD) Model

Line No.	<i>[a]</i> Reference	<i>[b]</i> Description	<i>[c]</i> Amount	<i>[d]</i> Amount
1	HC1	Historical Cost (all property)		\$ 20,000,000
2				
3				
4	HC2	<i>Less: Nontaxable Items</i>	\$ 2,500,000	
5	HC2	<i>Property Assessed Elsewhere</i>	<u>1,000,000</u>	
6	L4 + L5	<i>Total Nontaxable Items</i>		<u>3,500,000</u>
7				
8	L1 - L6	Total Taxable Historical Cost		\$ 16,500,000
9				
10	HC1	<i>Less: Depreciation</i>		<u>7,500,000</u>
11				
12	L8 - L10	HCLD Taxable Value		\$ 9,000,000
13				
14	HC3	<i>Plus: Possessory Interest</i>		1,101,900
15	HC3	<i>Noncapitalized Leased Property</i>		<u>1,000,000</u>
16				
17	L12+L14+L15	HCLD		\$ 11,101,900
18				
19	HC4	Adjustment for Deferred Income Taxes		<u>1,000,000</u>
20				
21	L17 - L19	Adjusted HCLD		<u><u>\$ 10,101,900</u></u>
22				
23				
24				
25				
26				
27				
28				
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30				
31				
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39				
40		Note: Appendix I addresses exempt intangibles.		

Historical Cost of Property and Depreciation

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Direct Costs		
2		Materials	\$ 5,000,000	
3		Labor	4,500,000	
4		Associated Construction Cost (permits, site improvements,		
5		freight, sales tax, installation, etc.)	<u>3,500,000</u>	
6		Total Direct Costs		\$ 13,000,000
7				
8		Indirect Costs		
9		Administrative Expenses	\$ 2,500,000	
10		Financing Cost	1,000,000	
11		Insurance and Taxes	1,000,000	
12		Marketing and Sales Expenses	<u>2,500,000</u>	
13		Total Indirect Costs		<u>7,000,000</u>
14				
15				
16	L6 + L13	Historical Cost (All Property)		<u><u>\$ 20,000,000</u></u>
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27		Depreciation (all property)		\$ 8,250,000
28				
29		<i>Less: Depreciation for Nontaxables</i>		<i>500,000</i>
30		<i> Depreciation for Property Assessed Elsewhere</i>		<u><i>250,000</i></u>
31				
32	L27 - L29 - L30	Depreciation for Taxable Property		<u><u>\$ 7,500,000</u></u>
33				
34				
35				
36				
37				
38				
39				
40				

Historical Cost (All Property) and Depreciation

Historical Cost of Property

For rate base regulated properties, the historical cost for appraisal purposes should be similar to the property cost required to be included on the utility's accounting records and reports to the regulator. Additionally, appraisal historical cost is increased for assessable property not included in the rate base and is reduced for nonassessable property included in rate base.

For non-rate base regulated properties, historical cost is the acquisition cost of the property when first acquired or constructed. Historical cost should also include all costs necessary to place the property into productive and beneficial use (i.e., direct costs and indirect costs). Abnormal costs should not be included, while normal costs for a typical owner should be included even though not incurred.^{3,4}

Depreciation

For appraisal purposes, depreciation is defined as the loss in value due to any cause, including internal and external factors.⁵ The depreciation reserve subtracted from historical cost for rate base regulated utilities is based on the depreciation rates and methods established by the appropriate rate or tariff-setting regulatory agency.⁶ The depreciation reserve for nontaxable items is removed from the total depreciation reserve.⁷

³ Western States Association of Tax Administrators, Appraisal Handbook, Section II - Cost Approach

⁴ The statement for a summarization of all reported cost is generally the Summary Control. The Summary Control shows the cost of all tangible property items, land, licensed vehicles, overhead (not spread elsewhere), and other costs.

⁵ California State Board of Equalization, Assessor's Handbook 501, Chapter 6, Approaches to Value

⁶ California Code of Regulations, Title 18, Public Revenue, Property Tax Rule 3(d)

⁷ Western States Association of Tax Administrators, Appraisal Handbook, Section II - Cost Approach

Nontaxable Items and Property Assessed Elsewhere

Line No.	<i>[a]</i> Reference	<i>[b]</i> Description	<i>[c]</i> Amount
1		Nontaxable Items	
2		License Motor Vehicles	\$ 800,000
3		Federal Enclave Property	300,000
4		Out of State Property	150,000
5		Computer Application Software	400,000
6		Business Inventory	250,000
7		Intangible Assets	300,000
8			
9		CIAC - Contribution in Aid of Construction	300,000
10			
11	<i>L2 thru L9</i>	Total Nontaxable Items	<u>\$ 2,500,000</u>
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22		Property Assessed Elsewhere	
23		Leasehold Improvements	\$ 250,000
24		Nonutility Plant	250,000
25		Nonunitary Property	500,000
26			
27	<i>L23 thru L25</i>	Total Property Assessed Elsewhere	<u>\$ 1,000,000</u>
28			
29			
30			
31			
32			
33			
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Nontaxable Items and Property Assessed Elsewhere

In arriving at the historical cost of property to be assessed by the HCLD indicator, adjustments are required to remove property included in the HCLD indicator and exempt from taxation or taxed in another manner. First, there are nontaxable items, property that is specifically exempted by provisions of the Revenue and Taxation Code. Second, there are property items (e.g., contributions in aid of construction) that would have no value to a prospective purchaser of the utility. Third, certain types of property are assessed elsewhere. Property that is not an integral part of the utility operation may be classified and assessed as nonunitary property or may be assessed by a local county assessor.

Possessory Interest and Noncapitalized Leased Property

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Possessory Interest		
2		Rent or Franchise Payment		\$ 262,450
3				
4	Note	Basic Capitalization Rate	13.280%	
5	Note	Income Tax Component	8.120%	
6	$\frac{i}{(1+i)^n - 1}$	Amount to Accumulate \$1	2.419%	
7	L4+L6+L7	Total Capitalization Rate		<u>23.819%</u>
8				
9	L2 / L8	Possessory Interest		<u><u>\$ 1,101,900</u></u>
10				
11				
12				
13				
14				
15				
16				
17				
18				
19		Noncapitalized Leased Property		
20		Historical Cost of Leased Property		\$ 1,500,000
21		Less: Estimated Depreciation <i>(Based on a 15 year life)</i>		<u>500,000</u>
22				
23	L21- L22	Noncapitalized Leased Property		<u><u>\$ 1,000,000</u></u>
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37		Note: The basic capitalization rate and income tax component used in the computations		
38		above should match those used in the calculation of the capitalized earnings ability (CEA)		
39		value indicator.		
40				

Possessory Interest and Noncapitalized Leased Property

Possessory Interest

A possessory interest is an interest in real property that exists as a result of the possession of, or a right to possess or occupy land and/or improvements unaccompanied by ownership of a fee simple or life estate in the property. A taxable possessory interest normally exists whenever a utility has exclusive right to possess tax-exempt, publicly-owned property. The utility benefits from the possession of this property right, and it is taxed for the value of the benefits it receives.⁸

A taxable possessory interest value is added to the value indicator because it is a real property right that is not generally represented on the balance sheet of the assessee's accounting records.⁹

A taxable possessory interest can be valued using any of three primary appraisal approaches: cost, income, or comparative sales. For mass appraisal, the most common approach used is the income approach because data regarding economic or market rents and franchise fee payments are readily available.

When valuing a possessory interest by the income approach, the present worth of the economic net income attributed to the property for the permitted use is discounted for the estimated term of possession. The discount rate is comprised of a basic capitalization rate, an income tax component, and the amount to accumulate \$1 (calculated at the basic capitalization rate). The formula is:

$$ER / (Y_o + ITC + AAO)$$

where ER is the economic or market rent, Y_o is the basic capitalization rate, ITC is the income tax component, and AAO is the amount to accumulate \$1.

Noncapitalized Leased Property

Noncapitalized leased property is an additive to the unitary value indicator(s) because leased properties are not recorded on the utility's accounting records except for capitalized leased properties that should be reported the same as property purchased.¹⁰

Property used by an assessee under the terms of an operating lease should be included in the unitary value indicator when the property is part of the operating unit. If the lessor has property tax payment responsibility and the property is not part of the operating unit, the assessment is delegated to the local assessor. In the HCLD indicator, the operating leased property additive is determined by estimating the Historical Cost Less Depreciation of the property.

⁸ Revenue and Taxation Code sections 107, 107.1, 107.4; Property Tax Rules 20-22, 27, 28.

⁹ Western States Association of Tax Administrators, Appraisal Handbook, Section II - Cost Approach.

¹⁰ The appraiser should ascertain whether the recorded costs represent market value.

Deferred Income Tax Adjustment to HCLD

Line No.	[a] Reference	[b] Description						[c] Amount
1		Property Related Deferred Income Tax Liability						<u>\$ 1,000,000</u>
2								
3								
4		Example of the treatment of deferred income taxes in rate proceedings:						
5								
6		Year	1	2	3	4	5	Total
7		Beginning rate base	10,000	7,600	5,560	3,707	1,854	
8	note 1	Income before Taxes and Depr.	3,667	3,267	2,927	2,618	2,309	14,788
9	note 2	Tax Depreciation	3,000	2,100	1,633	1,633	1,634	10,000
10	L8-L9	Taxable Income	667	1,167	1,294	985	675	
11	L10*0.4	Income Tax Due	267	467	518	394	270	1,916
12	note 3	Book Depreciation	2,000	2,000	2,000	2,000	2,000	10,000
13	L8-L12	Book Income	1,667	1,267	927	618	309	
14	L13*0.4	Book Income Taxes	667	507	371	247	124	1,916
15	L9-L12	Difference in Depreciation	1,000	100	(367)	(367)	(366)	0
16	L14-L11	Difference in Tax	400	40	(147)	(147)	(146)	0
17	L7-L12-L16	Ending Rate Base	7,600	5,560	3,707	1,854	0	
18	L8-L11	Cash Flow	3,400	2,800	2,409	2,224	2,039	12,872
19	note 4	PW Factor @ 10%	0.9091	0.8264	0.7513	0.6830	0.6210	
20	L18*L19	PV of Cash Flows Yr.'s 1-5	3,091	2,314	1,810	1,519	1,266	10,000
21		PV of Cash Flows Yr.'s 2-5		2,545	1,991	1,671	1,393	7,600
22		PV of Cash Flows Yr.'s 3-5			2,190	1,838	1,532	5,560
23		PV of Cash Flows Yr.'s 4-5				2,022	1,685	3,707
24		PV of Cash Flows Yr. 5					1,854	1,854
25								
26								
27		Calculation of rate base:						
28		Historic Cost	10,000	10,000	10,000	10,000	10,000	
29		Accumulated Depreciation	2,000	4,000	6,000	8,000	10,000	
30		Deferred Income Tax Liability	400	440	293	146	0	
31	L28-L29-L30	Rate Base	<u>7,600</u>	<u>5,560</u>	<u>3,707</u>	<u>1,854</u>	<u>0</u>	
32								
33								
34								
35								
36	note 1	The pre-income tax return on rate base (net of all other expenses) required to achieve a 10% after-tax rate of return. The income tax rate is assumed to be 40%.						
37								
38	note 2	150% declining balance accelerated depreciation switching to straight-line used for illustration purposes.						
39	note 3	Straight-line depreciation with no salvage value assumed.						
40	note 4	$1/(1+i)^n$, rounded to 4 decimal places						

Deferred Income Taxes

The timing of certain expenses is not the same for financial accounting purposes and for federal and state income tax purposes. In general, income tax accounting rules allow for certain deductions, most notably depreciation, to be taken for income tax purposes prior to when the deductions are allowed for financial accounting purposes. This timing difference give rise to a balance sheet account called Deferred Income Taxes that records the amount of future income taxes due because deductions have already been taken for income tax purposes, but remain to be taken for financial accounting purposes.

The income tax expense allowed in the rate structure is the amount determined by financial accounting and not by the amount of income taxes actually paid. Regulatory agencies require that the deferred income tax liability be deducted from the HCLD in the calculation of the rate base. Therefore, a regulated company would not earn a return on property purchased with funds provided by the deferral of income taxes if this regulatory treatment of deferred taxes was prescribed. Regulatory agencies generally will not approve the sale of a utility property if the sale is disadvantageous to the ratepayers. A prospective purchaser of a utility property where deferred taxes were required to be deducted from the rate base would most likely assume that the same treatment would be required after the purchase. Therefore the HCLD indicator should be adjusted to reflect the earnings limitation imposed by the ratemaking treatment of the deferred income taxes. The amount of the adjustment should reflect the time value of money.¹¹

The example on page 9 illustrates that the rate-making treatment of deferred income taxes effectively allows a company to recover only the income taxes actually paid and that the proper adjustment to the HCLD indicator reflecting the time value of money is 100% of deferred income taxes. Deferred income tax liabilities arising from non-property related items and depreciation of non-taxable property should not be included in the adjustment to the HCLD indicator. Please note that the present value of the expected future cash flows equals the beginning rate base for each year.

¹¹ California State Board of Equalization, Assessor's Handbook 502, page 147.

Reproduction Cost Less Depreciation (ReproCLD) Model

Overview

The calculation of the Reproduction Cost Less Depreciation (ReproCLD) indicator is basically a two-step process. First, the reproduction cost new (ReproCN) is calculated by applying an index factor to the historical acquisition cost of property, segregated by year of acquisition. Second, the ReproCN is adjusted for normal depreciation by the application of a percent good factor to the ReproCN. The product of this calculation is the ReproCLD value indicator.

ReproCN is an estimate of the current cost to replace the existing property with a new property that is an *exact replica*, or virtually so, of the existing property. Data for the derivation of the ReproCN index factors can be obtained either from prices quoted by current vendors of the property or by applying an appropriate index factor to the historical or original acquisition cost of the property.¹² The use of published index factors is the preferred method when performing mass appraisals for property tax purposes.

Numerous trade publications provide index factors for the conversion of historical cost to ReproCN. The publishers of these index factors generally survey industry participants and equipment manufacturers and compare current prices to a historical cost database. The ratio of price change for a given year is the ReproCN index factor. In addition to historical cost, these factors should also include an allowance for freight-in, installation, overhead during construction, and other indirect costs of placing a piece of property into productive and beneficial use.

For appraisal purposes, depreciation is defined as the loss in value due to any cause, including internal and external factors.¹³ Although depreciation that is calculated for the HCLD indicator follows the depreciation method(s) employed by the regulating authority, this is not the case for the depreciation calculation used in the derivation of the ReproCLD indicator. For the ReproCLD indicator, depreciation is the difference in value between a new identical substitute property and the existing property. This difference is recognized as the complement to the percent good factors. The Valuation Division conducts service life studies to assist in determining the appropriate percent good factors.

The usefulness of the ReproCLD in the appraisal process depends on whether or not the market recognizes an exact replica of the subject property as having adequate utility for the operational needs of a contemporary business. If there are economical substitutes (i.e., a property of lower cost or greater utility) for the property being appraised, the ReproCLD indicator may not be a reliable method to determine the fair market value of a subject property.

¹² California Code of Regulations, Public Revenue, Title 18, Property Tax Rule 6(b) and 6(c)

¹³ California State Board of Equalization, Assessor's Handbook 501, Chapter 6, Approaches to Value

Reproduction Cost Less Depreciation (ReproCLD) Model

[a]	[b]	[c]	[d]	[e]	[f]	[g]	
Line No.	Reference	Description	Historical Cost	Repro Cost Trend Factors	Repro Cost New <small>[c * d]</small>	Percent Good Factor	ReproCLD <small>[e * f]</small>
1	ReproC1	Historical Cost of Taxable Depreciable Property in Service					
2		(by year of acquisition)	\$ 10,000,000	1.10	\$ 11,000,000	0.50	\$ 5,500,000
3							
4		<i>Plus Taxable Nondepreciable Property in Service:</i>					
5		<i>Land</i>	<i>1,000,000</i>	<i>Market Value</i>	<i>200,000</i>	<i>Market Value</i>	<i>200,000</i>
6	ReproC4	<i>Other</i>	<i>500,000</i>	1.00	<i>500,000</i>	1.00	<i>500,000</i>
7							
8	ReproC4	<i>Property Not in Service</i>	<i>250,000</i>	1.00	<i>250,000</i>	1.00	<i>250,000</i>
9							
10	ReproC5	<i>Plus: Possessory Interest</i>	-		<i>1,101,900</i>	1.00	<i>1,101,900</i>
11	ReproC5	<i>Noncapitalized Leased Property</i>	<i>800,000</i>	1.13	<i>904,000</i>	0.89	<i>804,560</i>
12							
13		Value Indicator prior to consideration of Obsolescence	\$ 12,550,000		\$ 13,955,900		\$ 8,356,460
14							
15		Additional or Extraordinary Obsolescence					<u>0</u>
16		Value Indicator adjusted for Additional or Extraordinary Obsolescence					<u><u>\$ 8,356,460</u></u>
17							
18							
19							
20							
21							
22							
23							
24							
25							
26		Note: Appendix I addresses exempt intangibles.					

Historical Cost of Taxable Depreciable Property in Service

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[a]	[b]	[c]	[d]	[e]	[f]	[g]	
Line No.	Reference	Description	Historical Cost	Repro Cost Trend Factors	Repro Cost New <i>[c * d]</i>	Percent Good Factor	ReproCLD <i>[e * f]</i>
1		Historical Cost of Taxable Depreciable Property in Service					
2		(by year of acquisition)	\$ 8,000,000	1.10	\$ 8,800,000	0.50	\$ 4,400,000
3							
4		<i>Plus Other Taxable Depreciable Property In Service:</i>					
5		<i>Capitalized Interest Costs</i>	<i>600,000</i>	1.10	<i>660,000</i>	0.40	<i>264,000</i>
6		<i>Sales Tax, Freight, Installation, etc.</i>	<i>500,000</i>	1.10	<i>550,000</i>	0.40	<i>220,000</i>
7		<i>Capital Leases</i>	<i>400,000</i>	1.00	<i>400,000</i>	0.85	<i>340,000</i>
8		<i>Leased Acquisition Costs</i>	<i>300,000</i>	1.00	<i>300,000</i>	0.45	<i>135,000</i>
9		<i>Possessory Interests - Cost Based</i>	-	1.00	-	1.00	-
10		<i>Customer Premise Equipment</i>	<i>100,000</i>	1.00	<i>100,000</i>	0.40	<i>40,000</i>
11		<i>Other Adjustments</i>	<i>100,000</i>	1.90	<i>190,000</i>	0.53	<i>100,700</i>
12							
13		<i>Total Other Taxable Depreciable Property In Service</i>	<u>2,000,000</u>		<u>2,200,000</u>		<u>1,099,700</u>
14							
15	<i>L2 + L13 [Note]</i>	Total Cost of Taxable Depreciable Property in Service	<u>\$ 10,000,000</u>	<u>1.10</u>	<u>\$ 11,000,000</u>	<u>0.50</u>	<u>\$ 5,500,000</u>

Rounded

Note: The factors on *Line 15* are composites.

28

Historical Cost of Property by Year of Acquisition

Historical cost is the original acquisition cost of the property when first acquired or constructed. Historical cost should also include all costs necessary to put the property into productive and beneficial use (e.g., direct costs and indirect costs). Abnormal costs should not be included, while normal costs for a typical owner should be included even if not incurred.^{14, 15}

This historical cost of the property in service is supplied by the assessee on the property statement, Schedule B-1. Schedule B-1 requires the reporting of historical cost by year of acquisition and by property category. Because of differences in accounting systems, it is not always possible for assesseees to report property cost by year of acquisition. In this case, the cost is reported by category and total cost only. When these costs are functionally related to the property in service, they will be valued for ReproCLD using associated trending and percent good factors.

¹⁴ California Code of Regulations, Title 18, Public Revenue, Property Tax Rule 6 (b)

¹⁵ The statement for a summarization of all reported cost generally is reported on the Summary Control. The Summary Control shall show the cost of all tangible property items, land, licensed vehicles, overhead (not spread elsewhere), and other costs.

Reproduction Cost Trend Factors

Line No.	[a] Reference	[b] Description	[c] Factor Code	[d] Year Acquired	[e] Reproduction Trend Factor
1		Sample Trend Factors (by year of acquisition)			
2		Buildings - Gas & Electric	B07	1975	2.52
3		Buildings - Local Telephone	B03	1980	1.95
4		Electric Plant Total with Generation	E19	1975	2.37
5		Gas Plant Total	G09	1975	2.67
6		Telecommunication Mechanical Equip. - Misc.	M01	1985	1.30
7		Outside Plant - Fiber Optic Cable	T19	1990	0.99
8		Central Office Equipment - Digital Switch	T02	1990	0.68
9		Telecommunication Furniture & Office Equip.	F03	1990	1.12
10					
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Reproduction Cost Trend Factors

The ReprCN factors are the bases for converting the historical or original acquisition cost of property into current market/cost amounts. These index factors measure the relative price change of property over a given period of time. Reproduction cost index factors convert historical cost into an estimate of the current cost of reproducing an *exact replica* of a property.¹⁶

In developing reproduction cost trend factors, staff relies on the following sources which publish cost indexes for various property types: C.A. Turner, Boeckh, Engineering News Record, Marshall Valuation Service- Survey of Current Business Machinery & Equipment, California Department of Transportation - Highway Construction Price Index and Whitman, Requart & Associates - Public Construction Costs.

¹⁶ California Code of Regulations, Public Revenue, Title 18, Property Tax Rule 6 (b)

Percent Good Factors

	[a]	[b]	[c]	[d]	[e]	[f]
Line No.	Reference	Description	Factor Code	Year Acquired	Average Life	Percent Good
1		Sample Condition Percent Good <i>(by year of acquisition)</i>				
2		Buildings - Gas & Electric	B07	1975	25	37%
3		Buildings - Local Telephone	B03	1980	40	81%
4		Electric Underground Conductors	E03	1975	35	65%
5		Gas Transmission Mains	G08	1975	35	65%
6		Telecommunication Mechanical Equip. - Misc.	M01	1985	10	11%
7		Outside Plant - Fiber Optic Cable	T19	1990	19	74%
8		Central Office Equipment - Digital Switch	T02	1990	8	26%
9		Telecommunication Furniture & Office Equip.	F03	1990	10	40%
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Percent Good Factors

The percent good factors are used to determine the remaining value of a property, they are the complement of normal depreciation. The factors are the basis for adjusting the ReproCN into an indicator of fair market value. The factors used for a given property type are based on the expected economic life of that property type. The economic life of a property type or category is based on a service life study that surveys industry participants who own that type of property.¹⁷

In addition to economic life, there are four other variables that have an effect on percent good factors. These are: the rate of return, the method of calculation, the survivor curve, and the presence of an income adjustment factor. In the Valuation Division, these variables are determined as follows: rate of return annually established by Property Tax Department, single-life calculation method, R3 survivor curve and the use of an income adjustment factor reflecting a 10% decline over average life.¹⁸

Estimating loss in value to determine the fair market value of property based on the ReproCLD approach involves a mass appraisal method. The property statement is organized to facilitate the use of such a method, specifically the use of percent good factors. Service life studies (which help determine what percent good factors will be applied to a property type) can measure some, but not all, economic obsolescence.¹⁹ Examples of economic obsolescence include: increased competition, unexpected technological innovation, legal limitations on use, and environmental factors.²⁰

If an assessee properly and adequately documents additional or extraordinary obsolescence, it should be deducted from the ReproCLD value. Examples of acceptable methods to measure the amount of additional or extraordinary obsolescence include under appropriate facts, the cost to cure the obsolescence and the present value of the excess costs of operation caused by the obsolete property.

¹⁷ Valuation Division Operations Memorandum Number 12 - Conducting Service Life Studies.

¹⁸ California State Board of Equalization, Assessor's Handbook 581.

¹⁹ In addition to the percent good factor, the Valuation Division applies a *utility factor* to the ReproCLD for intercounty pipelines, pumps and boilers. The utility factor for pipelines measures obsolescence caused by usage substantially lower than the property's designed capacity. The purpose of the utility factor is to obtain an approximation of actual replacement cost based on current property usage.

²⁰ California State Board of Equalization, Assessor's Handbook 504, Pages 67-68.

Taxable Nondepreciable Property in Service and Property Not in Service

Line No.	<i>[a]</i> Reference	<i>[b]</i> Description	<i>[c]</i> Amount
1		Other Nondepreciable Property in Service - Other	
2		Other Land Rights	\$ 100,000
3		Fiber Optic Rights of Way	200,000
4		Materials & Supplies	150,000
5		Assessable Directories	-
6		Non Current Gas	-
7		Fuel Stock	50,000
8			
9	<i>L2 thru L7</i>	Total Other Nondepreciable Property in Service - Other	<u>\$ 500,000</u>
10			
11			
12			
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15			
16			
17			
18			
19			
20		Property Not in Service:	
21		Future Use - Land	\$ 25,000
22		Future Use - Other than Land	-
23		CWIP - Land	75,000
24		CWIP - Other than Land	150,000
25			
26	<i>L21 thru L24</i>	Total Property Not in Service	<u>\$ 250,000</u>
27			
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Taxable Nondepreciable Property in Service and Property Not in Service

Other Nondepreciable Property in Service - Property types can vary greatly given the industry groups being appraised.

Trend factors for this group of properties are generally set at one. Current market value should be used where it can be determined.

Property Not in Service - This property typically consists of Future Use Property and Construction Work in Process (CWIP).

Trend factors for this group of properties are generally set at one. Because these properties have suffered little depreciation or price change due to their recent acquisition, there is no adjustment required to the original purchase price. Preliminary engineering costs for a construction project should be included in the amount reported for CWIP in proportion to the percentage of project completion as of the lien date.

Rights of Way

Rights of Way Value - Rights of way can be defined as the right to use corridors of land between two or more points. These rights of way are used for railroad, highway, pipeline, or utility transmission line purposes. Telecommunications companies often acquire rights of way in easements owned by railroads (and others) to install fiber optic line conduits.

Easements represent a portion of the fee simple value of a real property parcel. An easement is an interest in real property that conveys use of a portion of an owner's property.²¹ Easements, rights of way, and private and public restrictions affect property value.²²

Rights of way generally are included in the unitary value of a public utility property, except pipeline ROWs that are locally-assessed. ROW values are an additive to the land value because ROWs are property rights that are generally not represented on the balance sheet of assessee's accounting records.²³

If rights of way are available to a utility at no cost for the use of said right (e.g., public streets), then market value is considered to be zero. Therefore, staff only values the private ROW owned or used by public utility companies.

Calculation

Example - A state assessee reports to the Board the rights of way miles owned or used. In 1994, the Board determined the market value of fiber optic rights of way was \$16,000 per mile.

ROW total market value = total private ROW miles x \$16,000 per mile.

²¹ Appraisal Institute, *The Appraisal of Real Estate*, 11th edition, 146.

²² Appraisal Institute, *The Appraisal of Real Estate*, 227.

²³ There may be rights that the assessee identifies as ROW, but in actuality are taxable possessory interests (e.g., fiber optic ROW located on the California aqueduct).

Possessory Interest and Noncapitalized Leased Property

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Possessory Interest		
2		Rent or Franchise Payment		\$ 262,450
3				
4	Note	Basic Capitalization Rate	13.280%	
5	Note	Income Tax Component	8.120%	
6	$\frac{i}{(1+i)^n - 1}$	Amount to Accumulate \$1	2.419%	
7	L4 thru L7	Total Capitalization Rate		23.819%
8				
9	L2 / L8	Possessory Interest		\$ 1,101,900
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20		Unitary Noncapitalized Leased Property		
21		Cost of Leased Property		\$ 800,000
22		Trend Factor		1.13
23	L21 * L22	Reproduction Cost		\$ 904,000
24		Percent Good		0.89
25	L23 * L24	Reproduction Cost Less Depreciation		\$ 804,560
26				
27				
28				
29				
30				
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32				
33				
34				
35				
36				
37				
38		Note: The basic capitalization rate and income tax component used in the computations		
39		above should match those used in the calculation of the capitalized earnings ability (CEA)		
40		value indicator.		

Possessory Interest and Noncapitalized Leased Property

Possessory Interest

A possessory interest is an interest in real property that exists as a result of the possession of, or a right to possess or occupy land and/or improvements unaccompanied by ownership of a fee simple or life estate in the property. A taxable possessory interest normally exists whenever a utility has exclusive right to possess tax-exempt, publicly-owned property. The utility benefits from the possession of this property right, and it is taxed for the value of the benefits it receives.²⁴

A taxable possessory interest value is added to the value indicator because it is a real property right that is not generally represented on the balance sheet of the assessee's accounting records.²⁵

A taxable possessory interest can be valued using any of three primary appraisal approaches: cost, income, or comparative sales. For mass appraisal, the most common approach used is the income approach because data regarding economic or market rents and franchise fee payments are readily available.

When valuing a possessory interest by the income approach, the present worth of the economic net income attributed to the property for the permitted use is discounted for the estimated term of possession. The discount rate is comprised of a basic capitalization rate, an income tax component, and the amount to accumulate \$1 (calculated at the basic capitalization rate). The formula is:

$$ER / (Y_o + ITC + AAO)$$

where ER is the economic or market rent, Y_o is the basic capitalization rate, ITC is the income tax component, and AAO is the amount to accumulate \$1.

Noncapitalized Leased Property

Noncapitalized leased property is an additive to the unitary value indicator(s) because leased properties are not recorded on the utility's accounting records except for capitalized leased properties that should be reported the same as property purchased.²⁶

Property used by an assessee under the terms of an operating lease should be included in the unitary value indicator when the property is part of the operating unit. If the lessor has property tax payment responsibility and the property is not part of the operating unit, the assessment is delegated to the local assessor. In the ReproCLD indicator, the value of operating leased property is determined by the Reproduction Cost Less Depreciation of the property if the information is available. If the reproduction cost of the leased property cannot be determined from the information reported by the assessee, the appraiser may capitalize an economic lease payment over the remaining life of the leased property to estimate the leased property additive.

²⁴ Revenue and Taxation Code sections 107, 107.1, 107.4; Property Tax Rules 20-22, 27, 28.

²⁵ Western States Association of Tax Administrators, Appraisal Handbook, Section II - Cost Approach.

²⁶ The appraiser should ascertain whether the recorded costs represent market value.

Replacement Cost Less Depreciation (ReplCLD) Model

Overview

The calculation of the Replacement Cost Less Depreciation (ReplCLD) indicator is basically a two-step process. First, the replacement cost new (ReplCN) is calculated by applying an index factor to the historical acquisition cost of the property, segregated by year of acquisition. Second, the ReplCN is adjusted for depreciation by the application of a percent good factor to the ReplCN. The product of this calculation is the ReplCLD value indicator.

ReplCN is an estimate of the current cost to replace a property with a new property of *equivalent utility*, of the existing property. The cost to replace a property should include all economic costs necessary to prepare the property for productive and beneficial use. The Valuation Division currently obtains information for the derivation of ReplCN index factors from two sources: (1) Studies provided by industry participants and (2), studies performed by the Policy, Planning, and Standards Division (PPSD) of the Property Taxes Department. The studies performed by PPSD are limited at present to general purpose computer equipment and peripherals. The use of index factors applied to historical cost data is the preferred method of calculating ReplCN for mass appraisal purposes. The historical cost of property is adjusted (in the aggregate or by groups) for replacement cost level changes by multiplying the cost incurred in a given year by the appropriate replacement cost index factor.

ReplCN should reflect the current cost a knowledgeable person or company would pay if it were to be necessary to replace the subject property with a new property of equivalent utility. ReplCN is an excellent starting point for estimating the value of newer property not under rate of return regulation. This is because the property owner has the freedom, with competitive constraints, to adjust revenues to current costs based on market factors. Problems with the model include: (1) the difficulty in obtaining accurate replacement cost data, and (2) the subjectivity in selecting replacement property. These problems are minimized when the property to be appraised is relatively new.

While depreciation used for the HCLD indicator is the depreciation method(s) employed by the regulatory authority, this is not the case in the depreciation calculation for the ReplCLD indicator. For the ReplCLD indicator, depreciation is the difference in value between a new substitute property of equivalent utility and the existing property. This difference is recognized as the complement to the percent good factors. The Valuation Division conducts service life studies to assist in determining the appropriate percent good factors.

The usefulness of the ReplCLD depends on, whether accurate data can be collected in order to determine a mathematical relationship between the cost of an older property and the cost of newer property. This relationship, expressed as a mathematical ratio, is the ReplCN index factor. If this information is not available, or there is no consensus in the marketplace as to what constitutes equivalent utility, the ReplCLD indicator may not be a preferred method to determine the fair market value of a subject property.

If an assessee properly and adequately documents additional or extraordinary obsolescence, it should be deducted from the ReplCLD value. Examples of acceptable methods to measure the amount of additional or extraordinary obsolescence include, under appropriate facts, the cost to cure the obsolescence and the present value of the excess costs of operation caused by the obsolete property.

Replacement Cost Less Depreciation (ReplCLD) Model

[a] Line No.	[b] Reference	[c] Description	[d] Historical Cost	[e] Repl Cost Trend Factors	[f] Repl Cost New	[g] Percent Good Factor	[h] ReplCLD
			Reference ----->		[e * d]		
			ReplC2		ReplC3		
1	ReplC1	Historical Cost of Taxable Depreciable Property in Service					
2		(by year of acquisition)	\$ 10,000,000	0.75	\$ 7,500,000	0.50	\$ 3,750,000
3							
4		<i>Plus Taxable Nondepreciable Property in Service:</i>					
5		<i>Land</i>	100,000	<i>Market Value</i>	200,000	<i>Market Value</i>	200,000
6	ReplC4	<i>Other</i>	500,000	1.00	500,000	1.00	500,000
7							
8	ReplC4	<i>Property Not in Service</i>	250,000	1.00	250,000	1.00	250,000
9							
10	ReplC5	<i>Plus: Possessory Interest</i>			1,101,900	1.00	1,101,900
11	ReplC5	<i>Noncapitalized Leased Property</i>	800,000	1.11	888,000	0.89	790,320
12							
13		Value Indicator prior to consideration of Obsolescence	\$ 11,650,000		\$ 10,439,900		\$ 6,592,220
14							
15		Additional or Extraordinary Obsolescence					0
16		Value Indicator adjusted for Additional or Extraordinary Obsolescence					<u><u>\$ 6,592,220</u></u>
17							
18							
19							
20							
21							
22							

Note: Appendix I addresses exempt intangibles.

Historical Cost of Property by Year of Acquisition

Unitary Valuation Methods

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March 2003

[a] Line No.	[b] Reference	[c] Description	[c] Historical Cost	[d] Repl Cost Trend Factors	[e] Repl Cost New [c * d]	[f] Percent Good Factor	[g] ReplCLD [e * f]
1		Historical Cost of Property in Service					
2		(by year of acquisition)	\$ 8,000,000	0.75	\$ 6,000,000	0.50	\$ 3,000,000
3							
4		<i>Plus Other Taxable Depreciable Property In Service:</i>					
5		<i>Capitalized Interest Costs</i>	<i>600,000</i>	<i>0.75</i>	<i>450,000</i>	<i>0.39</i>	<i>175,500</i>
6		<i>Sales Tax, Freight, Installation, etc.</i>	<i>500,000</i>	<i>0.75</i>	<i>375,000</i>	<i>0.39</i>	<i>146,250</i>
7		<i>Capital Leases</i>	<i>400,000</i>	<i>0.75</i>	<i>300,000</i>	<i>0.85</i>	<i>255,000</i>
8		<i>Leased Acquisition Costs</i>	<i>300,000</i>	<i>0.75</i>	<i>225,000</i>	<i>0.40</i>	<i>90,000</i>
9		<i>Possessory Interests - Cost Based</i>	<i>50,000</i>	<i>1.00</i>	<i>50,000</i>	<i>0.80</i>	<i>40,000</i>
10		<i>Customer Premise Equipment</i>	<i>50,000</i>	<i>1.00</i>	<i>50,000</i>	<i>0.45</i>	<i>22,500</i>
11		<i>Other Adjustments</i>	<i>100,000</i>	<i>0.50</i>	<i>50,000</i>	<i>0.35</i>	<i>17,500</i>
12							
13		<i>Total Other Taxable Depreciable Property In Service</i>	<u><i>2,000,000</i></u>		<u><i>1,500,000</i></u>		<u><i>746,750</i></u>
14							
15	<i>L2 + L13 [Note]</i>	Total Cost of Taxable Depreciable Property in Service	<u><u>\$ 10,000,000</u></u>	<u><u>0.75</u></u>	<u><u>\$ 7,500,000</u></u>	<u><u>0.5</u></u>	<u><u>\$ 3,750,000</u></u>
16							Rounded
17							
18							
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23							
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25							

Note: The factors on *Line 15* are composites.

Historical Cost of Property by Year of Acquisition

Historical cost is the original acquisition cost of the property when first acquired or constructed. Historical cost should also include all costs necessary to put the property into productive and beneficial use (e.g., direct costs and indirect costs). Abnormal costs should not be included, while normal costs for a typical owner should be included even if not incurred.^{27, 28}

The historical cost of the property in service is reported by the assessee on the property statement, Schedule B-1. Schedule B-1 requires the reporting of historical cost by year of acquisition and by property category. Because of differences in accounting systems, it is not always possible for assesseees to report property cost by year of acquisition. In this case, the cost is reported by category and total cost only. When these costs are functionally related to the property in service, they will be valued for ReplCLD using associated trending and percent good factors.

²⁷ California Code of Regulations, Title 18, Public Revenue, Property Tax Rule 6 (b)

²⁸ The statement for a summarization of all reported cost is generally reported on the Summary Control. The Summary Control shall show the cost of all tangible property items, land, licensed vehicles, overhead (not spread elsewhere), and other costs.

Replacement Cost Trend Factors

Line No.	[a] Reference	[b] Description	[c] Factor Code	[d] Year Acquired	[e] Replacement Trend Factor
1		Sample Trend Factors (<i>by year of acquisition</i>)			
2		Buildings - Gas & Electric	B07	1975	Not Available
3		Buildings - Local Telephone	B03	1980	Not Available
4		Electric Plant Total with Generation	E19	1975	Not Available
5		Gas Plant Total	G09	1975	Not Available
6		Telecommunication Mechanical Equip. - Misc.	M01	1985	1.30
7		Outside Plant - Fiber Optic Cable	Study	1990	0.79
8		Central Office Equipment - Digital Switch	Study	1990	0.43
9		General Purpose Computers	Study	1995	0.30
10		Telecommunication Furniture & Office Equip.	F03	1990	1.12
11					
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Replacement Cost Trend Factors

The ReplCN trend factors are the bases for converting the historical cost of property into current replacement cost levels. These factors measure the current cost of replacing the existing property with a substitute property having *equivalent utility*.

In developing replacement cost index factors, staff currently relies on two sources: (1) studies submitted by industry participants and (2) studies performed by the Policy Planning and Standards Division (PPSD) of the Property Taxes Department. The PPSD studies at present pertain only to general purpose computer equipment and peripherals.

Percent Good Factors

	[a]	[b]	[c]	[d]	[e]	[f]
Line No.	Reference	Description	Factor Code	Year Acquired	Average Life	Percent Good
1		Sample Percent Good Factors (<i>by year of acquisition</i>)				
2		Buildings - Gas & Electric	B07	1975	25	37%
3		Buildings - Local Telephone	B03	1980	40	81%
4		Electric Underground Conductors	E03	1975	35	65%
5		Gas Transmission Mains	G08	1975	35	65%
6		Telecommunication Mechanical Equip. - Misc.	M01	1985	10	11%
7		Outside Plant - Fiber Optic Cable	Study	1990	19	74%
8		Central Office Equipment - Digital Switch	Study	1990	8	26%
9	Note	General Purpose Computers	Study	1995	5	
10		Telecommunication Furniture & Office Equip.	F03	1990	10	40%
11						
12						
13						
14						
15						
16						
17						
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33						
34						
35						
36						
37						
38						
39		Note: The general purpose computer replacement trend factor on schedule ReplC2 takes into consideration				
40		the condition percent good. Accordingly, no separate percent good adjustment is required.				

Percent Good Factors

The percent good factors are used to determine the remaining value of a property, they are complements of physical deterioration and functional obsolescence. The factors are the basis for adjusting the ReplCN into an indicator of fair market value. The factors used for a given property type are based on the expected economic life of that property type. The economic life of a property type or category is based on a service life study that surveys industry participants who own that type of property.²⁹

In addition to economic life, there are four other variables that have an effect on percent good factors. These are: the rate of return, the method of calculation, the survivor curve, and the presence of an income adjustment factor. In the Valuation Division these variables are determined as follows: rate of return annually established by Property Tax Department, single-life calculation method, R3 survivor curve and the use of an income adjustment factor reflecting a 10% decline over average life.³⁰

Estimating loss in value to determine the fair market value of property based on the ReproCLD approach involves a mass appraisal method. The property statement is organized to facilitate the use of such a method, specifically the use of percent good factors. Service life studies (which help determine what percent good factors will be applied to a property type) can measure some, but not all, economic obsolescence.³¹ Examples of economic obsolescence include: increased competition, unexpected technological innovation, legal limitations on use, and environmental factors.³²

If an assessee properly and adequately documents additional or extraordinary obsolescence, it should be deducted from the ReplCLD value. Examples of acceptable methods to measure the amount of additional or extraordinary obsolescence include, under appropriate facts, the cost to cure the obsolescence and the present value of the excess costs of operation caused by the obsolete property.

²⁹ Valuation Division Operations Memorandum Number 12 - Conducting Service Life Studies

³⁰ California State Board of Equalization, Assessor's Handbook 581.

³¹ In addition to the percent good factor, the Valuation Division applies a *utility factor* to the ReproCLD for intercounty pipelines, pumps and boilers. The utility factor for pipelines measures obsolescence caused by usage substantially lower than the property's designed capacity. The purpose of the utility factor is to obtain an approximation of actual replacement cost based on current property usage.

³² California State Board of Equalization, Assessor's Handbook 504, Pages 67-68.

Other Non-Depreciable Property in Service and Property Not in Service

Line No.	<i>[a]</i> Reference	<i>[b]</i> Description	<i>[c]</i> Amount
1		Other Nondepreciable Property in Service:	
2		Other Land Rights	\$ 100,000
3		Fiber Optic Rights-of-Way	200,000
4		Materials & Supplies	150,000
5		Assessable Directories	-
6		Non Current Gas	-
7		Fuel Stock	50,000
8			
9	L2 thru L7	Total Other Non-Depreciable Property in Service	<u>\$ 500,000</u>
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20		Property Not in Service:	
21		Future Use - Land	\$ 25,000
22		Future Use - Other than Land	-
23		CWIP - Land	75,000
24		CWIP - Other than Land	150,000
25			
26	L21 thru L24	Total Property Not in Service	<u>\$ 250,000</u>
27			
28			
29			
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Taxable Nondepreciable Property in Service and Property Not in Service

Other Nondepreciable Property in Service - Property types can vary greatly given the industry groups being appraised.

Trend factors for this group of properties are generally set at one. Current market value should be used where it can be determined.

Property Not in Service - This property typically consists of Future Use Property and Construction Work in Process (CWIP).

Trend factors for this group of properties are generally set at one. Because these properties have suffered little depreciation or price change due to their recent acquisition, there is no adjustment required to the original purchase price. Preliminary engineering costs for a construction project should be included in the amount reported for CWIP in proportion to the percentage of project completion as of the lien date.

Rights of way

Rights of way Value - Rights of way can be defined as the right to use corridors of land between two or more points. These rights of way are used for railroad, highway, pipeline, or utility transmission line purposes. Telecommunications companies often acquire rights of way in easements owned by railroads (and others) to install fiber optic line conduits.

Easements represent a portion of the fee simple value of a real property parcel. An easement is an interest in real property that conveys use of a portion of an owner's property.³³ Easements, rights of way, and private and public restrictions affect property value.³⁴

Rights of way generally are included in the unitary value of a public utility property, except pipeline ROWs that are locally-assessed. ROW values are an additive to the land value because ROWs are property rights that are generally not represented on the balance sheet of assessee's accounting records.³⁵

If rights of way are statutorily available to utilities at no cost for the use of said right (e.g., public streets), then market value is considered to be zero. Therefore, staff only values the private ROW's owned or used by public utility companies.

Calculation

Example - A state assessee reports to the Board the rights of way miles owned or used. In 1994, the Board determined the market value of fiber optic rights of way was \$16,000 per mile.

ROW total market value = total private ROW miles times \$16,000 per mile.

³³ Appraisal Institute, *The Appraisal of Real Estate*, 11th edition, 146.

³⁴ Appraisal Institute, *The Appraisal of Real Estate*, 227.

³⁵ There may be rights that the assessee identifies as ROW, but in actuality are taxable possessory interest (e.g., fiber optic ROW located on the California aqueduct).

Possessory Interest and Noncapitalized Leased Property

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Possessory Interest		
2		Rent or Franchise Payment		\$ 262,450
3				
4	<i>Note</i>	Basic Capitalization Rate	13.280%	
5	<i>Note</i>	Income Tax Component	8.120%	
6	$\frac{i}{(1+i)^n - 1}$	Amount to Accumulate \$1	2.419%	
7	<i>L4 thru L7</i>	Total Capitalization Rate		<u>23.819%</u>
8				
9	<i>L2 / L8</i>	Possessory Interest		<u>\$ 1,101,900</u>
10				
11				
12				
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18				
19				
20		Unitary Noncapitalized Leased Property		
21		Cost of Leased Property		\$ 800,000
22		Trend Factor		<u>1.11</u>
23	<i>L21 * L22</i>	Replacement Cost		\$ 888,000
24		Percent Good		<u>0.89</u>
25	<i>L23 * L24</i>	Replacement Cost Less Depreciation		<u>\$ 790,320</u>
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38		Note: The basic capitalization rate and income tax component used in the computations		
39		above should match those used in the calculation of the capitalized earnings ability (CEA)		
40		value indicator.		

Possessory Interest and Noncapitalized Leased Property

Possessory Interest

A possessory interest is an interest in real property that exists as a result of the possession of, or a right to possess or occupy land and/or improvements unaccompanied by ownership of a fee simple or life estate in the property. A taxable possessory interest normally exists whenever a utility has exclusive right to possess tax-exempt, publicly-owned property. The utility benefits from the possession of this property right, and it is taxed for the value of the benefits it receives.³⁶

A taxable possessory interest value is added to the value indicator because it is a real property right that is not generally represented on the balance sheet of the assessee's accounting records.³⁷

A taxable possessory interest can be valued using any of three primary appraisal approaches: cost, income, or comparative sales. For mass appraisal, the most common approach used is the income approach because data regarding economic or market rents and franchise fee payments are readily available.

When valuing a possessory interest by the income approach, the present worth of the economic net income attributed to the property for the permitted use is discounted for the estimated term of possession. The discount rate is comprised of a basic capitalization rate, an income tax component, and the amount to accumulate \$1 (calculated at the basic capitalization rate). The formula is:

$$ER / (Y_o + ITC + AAO)$$

where ER is the economic or market rent, Y_o is the basic capitalization rate, ITC is the income tax component, and AAO is the amount to accumulate \$1.

Noncapitalized Leased Property

Noncapitalized leased property is an additive to the unitary value indicator(s) because leased properties are not recorded on the utility's accounting records except for capitalized leased properties that should be reported the same as property purchased.³⁸

Property used by an assessee under the terms of an operating lease should be included in the unitary value indicator when the property is part of the operating unit. If the lessor has property tax payment responsibility and the property is not part of the operating unit, the assessment is delegated to the local assessor. In the ReplCLD indicator, the value of operating lease property is determined by the Replacement Cost Less Depreciation of the property if the information is available. If the replacement cost of the leased property cannot be determined from the information reported by the assessee, the appraiser may capitalize the lease payments (if economic) over the remaining life of the leased property to estimate the leased property additive.

³⁶ Revenue and Taxation Code sections 107, 107.1, 107.4; Property Tax Rules 20-22, 27, 28.

³⁷ Western States Association of Tax Administrators, Appraisal Handbook, Section II - Cost Approach.

³⁸ The appraiser should ascertain whether the recorded costs represent market value.

Capitalized Earning Ability (CEA) Models

Overview

The capitalized earning ability or income approach to value is used when the property under appraisal is typically purchased in anticipation of a money income and either has an established income stream or can be attributed a real or hypothetical income stream by comparison with other properties. It is the preferred approach for the appraisal of properties when reliable sales data are not available and the cost approaches are unreliable because the reproducible property has suffered considerable physical depreciation, functional obsolescence or economic obsolescence, is a substantial over- or underimprovement, is misplaced or is subject to governmental restrictions on income that are unrelated to cost.³⁹

The income approach to value may be generally described as any method that converts future anticipated income into present value. The conversion process is commonly known as income capitalization. The income approach is premised on the assumptions that investors will buy and sell property based on the income it is expected to yield and that investors will discount expected income at its attendant risk rate over its anticipated duration.⁴⁰

Application of the income approach requires estimating future annual income for a period of time and converting income into a value estimate by means of a capitalization rate or present worth factor. The critical ingredients of the approach are the amount of anticipated future income, duration of income, capitalization rate, and method of capitalization.

The Valuation Division uses two basic CEA models. The primary model used by the staff assumes that individual assets are replaced as they are retired. Under the perpetual life concept, the capital investment necessary to maintain a perpetual income flow is deducted from expected revenues. With the necessary capital investment, the income stream is sustained into perpetuity.

In certain factual situations where it is determined that replacements to the property will not be made, a limited life model is used. The estimate of the remaining life should be based on physical factors. For example, the expected remaining life of a depleting oil field served by a pipeline would establish the estimate of remaining economic life for that pipeline. The limited life model involves forecasting an income stream for a finite period of time and discounting the periodic cash flows at an appropriate rate to arrive at the present value. Any remaining benefits at the end of the finite life are discounted to present value and added to the capitalized income. The limited life CEA is further divided into two premises based on the shape of the income stream: the level-annuity capital recovery premise and the straight-line decline capital recovery premise. The level-annuity capital recovery is identical to a mortgage annuity payment, where the capital recovery begins at the lowest level at the beginning of the asset's life and grows as it ages. The straight-line decline capital recovery is similar to a straight-line depreciation, where the asset's recovery is the result of dividing its value equally over its estimated useful life. Care should be exercised by the appraiser in the selection of proper income stream premise. The level annuity capital recovery premise is not appropriate unless the prospective purchaser can reasonably expect that the level of revenue and expense anticipated will remain constant over the remaining life of the property.

The level of income capitalized in the level-annuity and the straight-line decline capital recovery models is the same. The capitalization rates are different to reflect the appropriate capital recovery premise.

In addition to the CEA models discussed above, staff calculates a Net Liquidation Value (NLV) indicator for certain state assesses where the degree of economic obsolescence is such that the

³⁹ California Code of Regulations, Public Revenue, Title 18- Property Tax Rule 8

⁴⁰ Assessor's Handbook 501, Chapter 6, pages 93-94.

highest and best use of the assets would be to sell the assets for liquidation value rather than operate the company as a going concern. Historically, staff has calculated NLV for many of the “short line” railroad state assessees. This value indicator becomes meaningful when it is greater than the capitalized value of the projected earnings from the property under its current use. Staff views the NLV as the minimum value indicator for a state assessee.

The NLV value indicator assumes that the subject of the appraisal is not a viable business operation and that the most prudent economic course of action is to cease operations and dispose of the assets. The result of the NLV calculation is the present worth of the anticipated proceeds to be derived by breaking up the appraisal unit and selling off the land, improvements and personal property over time. The estimated selling price of each category of property is discounted to present value based on the estimated time required to sell or liquidate the property. The amounts for each category are then added to arrive at the NLV indicator.

Perpetual Life Model

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1	CEA1	Anticipated Operating Revenue		\$ 50,000,000
2	CEA2	<i>Less Anticipated Operating Expenses</i>		<i>30,000,000</i>
3	CEA3	<i>Less Estimated Capital Replacement Expenditures</i>		<i>5,000,000</i>
4				
5	L1 - L2 -L3	Anticipated Net Income		\$ 15,000,000
6	CEA4	<i>Less Working Cash Allowance</i>		<i>321,000</i>
7	CEA5	<i>Less Income Attributed to Intangibles</i>		<i>963,000</i>
8				
9	L5 - L6 - L7	Appraisal Income		\$ 13,716,000
10	CEA6	Total Capitalization Rate		22.45%
11				
12	L9 / L10	Capitalized Earning Ability (CEA)		\$ 61,095,768
13	CEA7	<i>Less Average Business Inventory</i>		<i>60,000</i>
14				
15	L12 - L13	Taxable CEA after Inventory Adjustment		\$ 59,605,032
16	CEA7	Taxable Percentage		97.56%
17				
18	L15 * L16	Taxable CEA		\$ 58,150,669
19				
20		Plus Taxable Property Additions		
21	CEA8	<i>Possessory Interest</i>	\$ 1,101,900	
22	CEA10, L7	<i>Construction Work In Progress Additive</i>	500,000	
23	CEA10, L21	<i>Future Use Property - Not in Rate Base</i>	100,000	
25	L21 thru L23	Total Taxable Property Additions	<u>1,701,900</u>	<u>1,701,900</u>
26				
27	L18 + L25	Total CEA Value Indicator		<u><u>\$ 59,852,569</u></u>
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42		Note: Appendix I addresses exempt intangibles		

Straight Line Capital Recovery Premise Model

Line No	[a] Reference	[b] Description	[c] Amount	[d] Amount
1	CEA1	Anticipated Operating Revenue		\$ 50,000,000
2	CEA2	<i>Less Anticipated Operating Expenses</i>		<u>30,000,000</u>
3				
4	L1 - L2	Net Anticipated Income		\$ 20,000,000
5	CEA4	<i>Less Working Cash Allowance</i>		321,000
6	CEA5	<i>Less Income Attributed to Intangibles</i>		<u>963,000</u>
7				
8				
9	L4 - L5 - L6	Appraisal Income		\$ 18,716,000
10	CEA6	Total Capitalization Rate		<u>28.93%</u>
11				
12	L9 / L10	Capitalized Earning Ability (CEA)		\$ 64,694,089
13	CEA7	<i>Less Average Business Inventory</i>		<u>60,000</u>
14				
15	L12 - L13	Taxable CEA after Inventory Adjustment		\$ 64,634,089
16	CEA7	Taxable Percentage		<u>97.56%</u>
17				
18	L15 * L16	Taxable CEA		\$ 63,057,017
19				
20		Plus Taxable Property Additions		
21	CEA8	<i>Possessory Interest</i>	\$ 1,101,900	
22	CEA9	<i>Present Worth of Land Reversion</i>	67,100	
23	CEA10, L7	<i>Construction Work In Progress Additive</i>	500,000	
24	CEA10, L21	<i>Future Use Property - Not in Rate Base</i>	<u>100,000</u>	
25	L21 thru L24	Total Taxable Property Additions		<u>1,769,000</u>
26				
27				
28	L18 + L25	Total CEA Value Indicator		<u><u>\$ 64,826,017</u></u>
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42		Note: Appendix I addresses exempt intangibles		

Level Annuity Capital Recovery Premise Model

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1	CEA1	Anticipated Operating Revenue		\$ 50,000,000
2	CEA2	<i>Less Anticipated Operating Expenses</i>		<u>30,000,000</u>
3				
4	L1 - L2	Net Anticipated Income		\$ 20,000,000
5	CEA4	<i>Less Working Cash Allowance</i>		321,000
6	CEA5	<i>Less Income Attributed to Intangibles</i>		<u>963,000</u>
7				
8				
9	L4 - L5 - L6	Appraisal Income		\$ 18,716,000
10	CEA6	Total Capitalization Rate		<u>21.43%</u>
11				
12	L9 / L10	Capitalized Earning Ability (CEA)		\$ 87,335,511
13	CEA7	<i>Less Average Business Inventory</i>		<u>60,000</u>
14				
15	L12 - L13	Taxable CEA before Inventory Adjustment		\$ 87,275,511
16	CEA7	Taxable Percentage		<u>97.56%</u>
17				
18	L15 * L16	Taxable CEA		\$ 85,145,988
19				
20		Plus Taxable Property Additions		
21	CEA8	<i>Possessory Interest</i>	\$ 1,101,900	
22	CEA9	<i>Present Worth of Land Reversion</i>	67,100	
23	CEA10, L7	<i>Construction Work In Progress Additive</i>	500,000	
24	CEA10, L21	<i>Future Use Property - Not in Rate Base</i>	<u>100,000</u>	
25	L21 thru L24	Total Taxable Property Additions		<u>1,769,000</u>
26				
27				
28	L18 + L25	Total CEA Value Indicator		<u><u>\$ 86,914,988</u></u>
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42		Note: Appendix I addresses exempt intangibles		

Anticipated Operating Revenue

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Operating Revenue		
2		Operating Utility Revenue	\$ 47,000,000	
3		Miscellaneous Operating Revenue	<u>1,000,000</u>	
4	L2 + L3	Total Operating Revenue		\$ 48,000,000
5				
6		<i>Less: Uncollectible Revenue-Debit</i>		<u>500,000</u>
7	L4 - L6	Net Operating Revenue		\$ 47,500,000
8				
9		<i>Plus: Rate Authorization Increase</i>		<u>3,500,000</u>
10	L7+L9	Adjusted Operating Revenue		\$ 51,000,000
11				
12		<i>Less Disallowed Revenue:</i>		
13		<i>Nonrecurring Revenue</i>	\$ 200,000	
14		<i>Nonutility Revenue</i>	<u>800,000</u>	
15	L13+L14	Total Disallowed Revenue		<u>1,000,000</u>
16				
17	L10 - L15	Anticipated Operating Revenue		<u><u>\$ 50,000,000</u></u>
18				
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Anticipated Operating Revenue

Estimates of anticipated revenue begin with an analysis of current annual gross revenues. Current financial statements, data included in property statement declarations, and a review of historical data are necessary for developing revenue estimates. Analysis of historical data is relevant only to assist in determining a reasonable estimate of future anticipated operating revenue that a prospective investor would expect.

Financial statements may disclose that recorded revenues should be modified to accurately reflect future expected revenues. For example, recent rate authorizations for revenue changes in the future will not be fully reflected in current operating statements and will require adjustments to reflect anticipated future operating revenue. Likewise, nonrecurring or nonutility revenues should be adjusted or deleted to reflect anticipated future operating revenue.

For stable properties, such as railroads, where little change in the physical operating unit occurs from year to year, an average of the previous five years of operating revenue may be an appropriate method to estimate future cash flows. For such properties, this averaging process smoothes the peaks and low points of the business cycle.

Anticipated Operating Expenses

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Operating Expenses:		
2		Maintenance and Repair Expense		\$ 3,000,000
3		Rental Expense		500,000
4		Operators Wages		3,200,000
5		Contracted Operator Service Expense		1,300,000
6		Connecting Telephone Company Charges		1,000,000
7		Office Salaries		5,500,000
8		Sales and Advertising Expenses		2,500,000
9		Management Salaries		6,000,000
10		Office Supplies and Expense		1,000,000
11		Insurance Expense		1,800,000
12		Accounting, Legal and Other Services		1,000,000
13		Vehicle Expense		1,300,000
14		Noncapitalized Lease Rentals		300,000
15		Depreciation & Amortization Expenses		5,000,000
16		Taxes		2,200,000
17		Other Expenses		<u>3,000,000</u>
18				
19	L2 thru L17	Operating Expenses		\$ 38,600,000
20				
21		<i>Less Disallowed Expenses:</i>		
22		<i>Nonrecurring Expenses</i>	\$ 900,000	
23		<i>Expenses from Nonoperating Income</i>	200,000	
24		<i>Depreciation and Amortization Expenses</i>	5,000,000	
25		<i>Noncapitalized Lease Rentals</i>	300,000	
26		<i>Federal Income Tax</i>	1,200,000	
27		<i>Ad Valorem (Property) Tax</i>	600,000	
28		<i>State Income Tax</i>	<u>400,000</u>	
29				
30	L22 thru L28	<i>Total Non-Allowed Expenses</i>		<u>8,600,000</u>
31				
32				
33	L19 - L30	Anticipated Operating Expenses		<u><u>\$ 30,000,000</u></u>
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Anticipated Operating Expenses

Estimates of anticipated operating expenses begin with an analysis of current annual operating expenses. Current financial statements along with data in property statement declarations are necessary for developing expense estimates, along with a review of historical data. Analysis of historical data is relevant only to assist in determining a reasonable estimate of future anticipated operating expenses that a prospective investor would expect.

The gross outgo should include current expenses and capital expenditures required to develop and maintain the estimated income.⁴¹ Nonrecurring and nonoperating expenses should be adjusted or deleted to eliminate revenue distortions and to reflect anticipated future operating expenses. The proper level of income to capitalize is net income prior to any deductions for dividends, debt interest, corporate income taxes, ad valorem taxes, and depreciation.⁴²

The amount of capital replacement required to perpetuate the income stream is allowed as an expense in the perpetual life model. For rate base regulated utilities, the appropriate level of capital replacement expenditures is book depreciation. The appropriate level of replacement expenditures for nonratebase regulated utilities can be estimated from a life study and the replacement cost of the assets. Because such studies do not exist for railroads, book depreciation expense is used as a surrogate for capital replacement expenditures unless more detailed information is available. Properly documented company specific replacement expenditure estimates may be used when they are determined to be more accurate than the mass appraisal estimates discussed above.

For stable properties, such as railroads, where little change in the physical operating unit occurs from year to year, an average of the previous five years operating expenses may be an appropriate method to estimate future cash flows. For such properties, this averaging process smoothes out the peaks and low points of the business cycle.

⁴¹ California Code of Regulations, Public Revenue, Title 18 - Property Tax Rule 8.

⁴² Western States Association of Tax Administrators Appraisal Handbook - Valuation of Utility and Railroad property page 41.

Estimated Capital Replacement Expenditures

Line No.	[a] Reference	[b] Description	[c] Amount
1		For Rate Base Regulated Companies:	
2			
3		Book Depreciation	\$ 5,000,000
4			
5			
6			
7			
8			
9			
10		For Non-Rate Base Regulated Companies:	
11			
12	CEA3a	Replacement Cost	150,030,580
13			
14	CEA3a	Weighted Average Life New	<u>18.9</u>
15			
16	L 12 / L 14	Estimate of Annual Capital Expenditures	<u>\$ 7,938,126</u>
17			
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Replacement Capital Expenditures

The use of a perpetual life model requires that an appraiser allow as gross outgo an allowance for capital replacement expenditures necessary to develop and maintain the projected cash flows to perpetuity. The basis for the estimate of a capital replacement allowance varies depending on the type of regulation that a company is subject to. For a company that is rate base regulated, the amount of capital replacement expenditures that will allow the income stream to be maintained is based on book depreciation because the rates are established using book depreciation. If a reliable life study is available, an estimate of replacement cost expenditures for companies that are not rate base regulated can be developed by dividing the replacement cost (or reproduction cost, if replacement cost is not available) by the weighted average life new of the existing assets. Care must be taken by the appraiser to confine the estimate to only the replacement of existing assets and not include capital expenditures for growth. For this reason actual capital expenditures are often an inappropriate surrogate for the annual allowance of capital replacements.

Estimate of Remaining Economic Life

Line No.	Reference	[a] Description	[b] RCN	[c] Average Life	[d] Weighted RCN	[e] R3 Curve RCNLD	[f] REL * RCN
1		Fiber Optic Cable	\$ 16,500,000	20	\$ 330,000,000	\$ 13,603,111	\$ 313,500,000
2	CEA3b	Fixed Station Equipment	34,300,000	8	274,400,000	25,394,180	148,329,860
3		Furniture & Office Equipment	34,930,580	14	489,028,120	31,343,299	454,097,540
4		Buildings	<u>64,300,000</u>	27	<u>1,736,100,000</u>	<u>8,780,430</u>	<u>1,337,440,000</u>
5							
6		TOTALS	<u>\$ 150,030,580</u>		<u>\$2,829,528,120</u>	<u>\$ 79,121,020</u>	<u>\$2,253,367,400</u>
7							
8							
9							
10							
11							
12	L6[d]	Age Weighted RCN - New					\$2,829,528,120
13							
14	L6[b]	Replacement Cost New					<u>150,030,580</u>
15							
16	L12 / L14	Average Weighted Life New					18.9
17							
18	L14 / L16	Estimate of Required Capital Replacement Expenditures					<u>\$ 7,938,126</u>
19							
20							
21							
22	L6[f]	RCN Weighted REL					\$2,253,367,400
23							
24	L6[b]	Replacement Cost New					<u>150,030,580</u>
25							
26	L22 / L24	Weighted Average REL					<u>15.0</u>
27							
28							
29							
30							

Estimate of Average Economic Life New and Remaining Economic Life

Each account's cost, by year of acquisition, is trended to RCN and the appropriate condition percent is applied to determine RCNLD. The age-weighted RCN is calculated by multiplying each year's RCN by the age as of the lien date. The weighted average life new can then be calculated by dividing the summation of the RCN times the average life new by the RCN.

The single life estimate of remaining economic life for each age class is determined by reference to the percentage good table. The remaining life for each age class is then multiplied by the RCN to weight each asset (or class of assets) appropriately. The weighted average Remaining Economic Life for the unit is then calculated by dividing the summation of the RCN-weighted remaining economic life by the RCN. Schedule 3b shows the calculation detail for the fixed station equipment account.

Fixed Station Equipment

Detailed Life and RCN Information

Line No.	[a] Year	[b] Cost	[c] T-6 Factor	[d] RCN	[e] Weighted RCN by Age	[f] Percent Good 8 yr life	[g] RCNLD	[h] REL	[i] REL X RCN
1	1997	8,750,000	1.00	8,750,000	8,750,000	89%	7,787,500	7	54,512,500
2	1996	14,700,000	1.02	14,994,000	29,988,000	78%	11,695,320	6	70,171,920
3	1995	0	1.03	0	-	67%	0	5	0
4	1994	<u>10,150,000</u>	1.04	<u>10,556,000</u>	<u>42,224,000</u>	56%	<u>5,911,360</u>	<u>4</u>	<u>23,645,440</u>
5									
6	Total	<u><u>33,600,000</u></u>		<u><u>34,300,000</u></u>	<u><u>80,962,000</u></u>		<u><u>25,394,180</u></u>		<u><u>148,329,860</u></u>
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Working Cash Allowance

Line No.	<i>[a]</i> Reference	<i>[b]</i> Description	<i>[c]</i> Amount
1		Anticipated Operating Expenses	\$ 30,000,000
2			
3		18 Days or Approximately 5 Percent	<u>5%</u>
4			
5	<i>L1 * L3</i>	Projected Working Cash Requirement	\$ 1,500,000
6			
7		Basic Capitalization Rate	13.28%
8			
9	<i>CEA 6a</i>	Income Tax Component	<u>8.12%</u>
10			
11	<i>L7 + L9</i>	Basic Rate plus Income Tax Component	<u>21.40%</u>
12			
13	<i>L5 * L11</i>	Working Cash Allowance	<u><u>\$ 321,000</u></u>
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Working Cash Allowance

The return on working cash as measured by the basic capitalization rate is deducted from the income stream to remove nontaxable working cash from the CEA. This complies with the direction of Board Rule 8 (e) to exclude sufficient income from the amount to be capitalized to provide a return on working capital.

A working cash allowance is required to provide the owner with a return on funds provided to the business for the purpose of paying operating expenses in advance of receipt of offsetting revenues from its customers. Cash held for construction, purchases of stock, payment of dividends and interest on funded debt, income and ad valorem taxes, and non-cash expenses such as depreciation, do not qualify for inclusion in cash working capital. The utility's working cash requirement is predicated upon having sufficient cash balances to enable the company to make timely payments for purchase of goods, services and materials.

State assesses report to the Board the amount of working cash as determined by a lead-lag study in their latest request for a rate change to the appropriate regulatory commissions. If such information is not available, the assessee should report an estimate of its average working cash requirement. If no estimate is available, an estimate of the working cash allowance is calculated by the appraiser using the following calculation:

$$\text{Exp} * 5\% * (Y_o + \text{ITC})$$

where Exp is the anticipated operating expenses, 5% equates to an 18 day working cash requirement, Y_o is the basic capitalization rate, and ITC is the income tax component.

Income Attributed to Intangibles

Line No.	<i>[a]</i> Reference	<i>[b]</i> Description	<i>[c]</i> Amount
1		Customer Base	\$ 3,000,000
2			
3		Patents and Copyrights	<u>1,500,000</u>
4			
5	<i>L1 + L3</i>	Total Intangibles	\$ 4,500,000
6			
7		Basic Capitalization Rate	13.28%
8			
9	<i>CEA 6a</i>	Income Tax Component	<u>8.12%</u>
10			
11	<i>L7 + L9</i>	Basic Rate plus Income Tax Component	<u>21.40%</u>
12			
13	<i>L5 * L11</i>	Income Attributed to Intangibles	<u><u>\$ 963,000</u></u>
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42		Note: Appendix I addresses exempt intangibles	

Income Attributed to Intangibles

When income to be capitalized is derived from operating a property, sufficient income shall be excluded to provide a return on any nontaxable operating assets such as intangible items.^{43,44}

After the value of the intangible items is determined, the amount of income to be excluded is calculated in the same manner as the allowance for working cash. The intangible value is determined by multiplying the value of the intangible items by the basic capitalization rate plus a component for income taxes.

⁴³ California Code of Regulations, Public Revenue, Title 18 - Property Tax Rule 8(e)

⁴⁴ California State Board of Equalization, Assessor's Handbook 502, at page 150 for a discussion of intangible assets

Total Capitalization Rate Calculation

Line No.	Reference	Description	[c]	[d]	[e]
			Perpetual Life	Limited Life	
				Straight line Decline	Level Annuity
1		Basic Capitalization Rate	13.28%	13.28%	13.28%
2					
3		<i>No recapture component for Perpetual Life</i>	0.00%		
4		<i>Recapture:</i>			
5		<i>1/REL for Straight line Decline</i>		6.67%	
6		<i>Sinking Fund Factor for Level Annuity</i>			2.22%
7					
8		<i>Property Tax Component</i>	1.05%	1.05%	1.05%
9					
10	CEA6a, L27	<i>Income Tax Component</i>	8.12%	7.93%	4.88%
11					
12	L1 thru L10	Total Capitalization Rate	<u>22.45%</u>	<u>28.93%</u>	<u>21.43%</u>
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Total Capitalization Rate Calculation

The income approach estimates future annual income and converts this income into a value estimate by means of a capitalization rate. Property Tax Rule 8 excludes property taxes, income taxes, and capital recovery from the definition of gross outgo in the computation of capitalized earnings values. These types of cash outflows are not included in gross outgo because the amount of the cash flow is dependent on the value of the property. The tax and depreciation expenses of the current owner of the property would not be appropriate estimates of a new owner's expenses. A component for these items is added to the capitalization rate to reflect the purchaser's amount of property taxes, income taxes, and recovery of the original investment.

The calculation of the total capitalization rate consists of four basic components: a basic capitalization (or yield) rate component, a recapture component, an ad valorem property tax component, and an income tax component.

The basic capitalization rate is derived by applying a weighted average of the yield rates for debt and for equity capital calculated by the band-of-investment method. The rates of debt and equity capital are weighted by the respective amounts of capital deemed most likely to be employed by prospective purchasers. The Valuation Division develops basic capitalization rates for all state assessees in the Board's annual Capitalization Rate Study.

The recapture component provides for a periodic recovery of invested capital in a wasting asset over a period of time. The level annuity capital recovery premise uses a sinking fund factor from compound interest tables. The straight line capital recovery premise uses a recapture component calculated by dividing one by the remaining economic life. The perpetual life model requires no component for recapture, because estimated capital replacement expenditures are allowed as operating expenses and the property value is presumed stable.

The property tax component consists of the cash outlay for property taxes that a prospective purchaser would anticipate. An average property tax rate is calculated for each state assessee.

The income tax component approximates the cash outlay for income taxes that a prospective purchaser would anticipate. The income tax component allows for both state and federal income taxes. This adjustment is required to convert the after-income tax yield rate developed in the capitalization rate study to a pre-income tax level.

Income Tax Component Calculation

Line No.	Reference	[a] Description	[b]	[c]	[d]	[e]
				Perpetual Life	Limited Life Straight Line Level	
1		Basic Capitalization Rate		13.28%	13.28%	13.28%
2		<i>Add: Recapture Rate</i>		<u>0.00%</u>	<u>6.67%</u>	<u>2.22%</u>
3						
4	<i>L1 + L2</i>	Capitalization Rate before Income Tax Adjustment		<u>13.28%</u>	<u>19.95%</u>	<u>15.50%</u>
5						
6						
7		Depreciation Rate (1/ REL)		0.00%	6.67%	6.67%
8	<i>CEA4b</i>	J Factor		<u>0.00</u>	<u>1.04</u>	<u>1.04</u>
9						
10	<i>L7 * L8</i>	Adjusted Depreciation Rate		<u>0.00%</u>	<u>6.94%</u>	<u>6.94%</u>
11						
12						
13	<i>L4 - L10</i>	Capitalization Rate - Adjusted		<u>13.28%</u>	<u>13.01%</u>	<u>8.56%</u>
14						
15						
16		<i>Debt Ratio</i>		20.00%	20.00%	20.00%
17		<i>Debt Rate</i>		<u>7.42%</u>	<u>7.42%</u>	<u>7.42%</u>
18						
19	<i>L16*L17</i>	<i>Interest per \$ of Value</i>		<u>1.48%</u>	<u>1.48%</u>	<u>1.48%</u>
20						
21						
22	<i>L4-L10-L19</i>	Profit (after Corporate Income Tax) per \$ of Value		11.80%	11.53%	7.08%
23		One minus Effective Income Tax Rate		<u>59.25%</u>	<u>59.25%</u>	<u>59.25%</u>
24						
25	<i>L22/L23</i>	Pre-Corporate Income Tax Profit per \$ of Value		<u>19.92%</u>	<u>19.46%</u>	<u>11.96%</u>
26						
27	<i>L25 - L22</i>	Corporate Income Tax per \$ of Value		<u>8.12%</u>	<u>7.93%</u>	<u>4.88%</u>
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Income Tax Component

The basic capitalization rates developed in the annual Capitalization Rate Study are the prospective purchasers' required rates of return after payment of corporate income taxes. Taxes measured by income, such as the federal corporate income tax and the California corporate franchise tax, are excluded from the definition of gross outgo pursuant to Property Tax Rule 8 (c). Instead of allowing a deduction for income tax expenses in the cash flows, a component that provides for the income taxes of a prospective purchaser is added to the basic rate along with the components for recapture and property taxes. The income tax formula allows for the tax shield that interest payments and depreciation enjoy under the Internal Revenue Code.

The recapture component or capital recovery rate is added to the basic capitalization rate (which is an after income tax rate) to compute the total rate before income tax adjustment. The recapture rate used should be consistent with the underlying premise in the capitalization model used in the appraisal. If the appraiser projects a level terminal income stream the sinking fund factor, at the applicable basic rate and remaining economic life (REL), should be used. If a straight line declining income stream is projected, the recovery rate should be $1/REL$. For a perpetual income model, no capital recovery rate should be added because the income stream already includes a cash outflow for capital replacements.

If material, the adjustment for the tax deductibility of depreciation is then accounted for by adjusting straight line or financial depreciation to reflect the benefits of accelerated depreciation as allowed by modified accelerated cost recovery system (MACRS). This is accomplished by multiplying the straight line depreciation rate by the J factor. Because the tax lives of used properties are generally not materially different from the remaining economic life of those properties, the 'J' factor is only calculated for a unit comprised entirely of new assets. The tax deductibility of interest paid on debt is computed by multiplying the ratio of debt in the capital structure by the interest rate.

The after corporate income tax profit per dollar of value is computed by deducting the depreciation and interest adjustments from the total capitalization rate before income tax adjustment. This is adjusted to a pre-tax value by dividing it by 1 less the effective tax rate.

The difference between the pre-tax and after tax profit represents the amount of projected income taxes expressed as a percentage of value. This represents the income tax additive to the basic capitalization rate.

J Factor Calculation

Line No.	[a] Reference	[b] Description	[c] Year 1	[d] Year 2	[e] Year 3	[f] Year 4	[g] Year 5	[h] Year 6	[i] Year 7	[j] Year 8	[k] Total
1		<i>Remaining Economic Life of 6.8 years for Demonstration Purposes</i>									
2											
3		MACRS %	14.29%	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%	4.46%	100.00%
4	<i>L3*6.8</i>	Tax Depreciation	0.9717	1.6653	1.1893	0.8493	0.6072	0.6066	0.6072	0.3033	6.8000
5											
6		Financial Depreciation (straight line)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.8000		6.8000
7											
8											
9											
10	<i>PW of L4</i>	Net Present Value of MACRS Deductions									4.4676
11											
12	<i>PW of L6</i>	Net Present Value of Financial Depreciation									4.3008
13											
14	<i>L10/ L12</i>	J Factor									1.04
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J Factor

The “J factor” represents an adjustment to financial depreciation rate used in the computation of the income tax component to adjust for the recognized benefits of using income tax depreciation (MACRS) rather than financial depreciation for the computation of income tax liabilities. The total depreciation deduction is the same irrespective of the method of depreciation, however the timing of the deduction gives rise to a difference between tax and book accounting. The calculation compares the present worth of the tax deductions using the prescribed MACRS tables to the present worth of the tax deductions using straight line depreciation.

For ease of explanation, all the assets in the demonstration are assumed to have a MACRS life of seven years, which is the most common MACRS class of depreciable property. The applicable MACRS depreciation percentage is applied to the amount of depreciable assets to calculate the tax depreciation expense for each year. The financial depreciation expenses are assumed to be on the straight line basis. The present worth of the depreciation deduction is calculated for each method and the ratio of the present values of tax to book is the amount of the adjustment. It is possible for the adjustment to be less than one, which would occur if the remaining life of the assets were much shorter than the lives prescribed by the Internal Revenue Code.

The 'J' factor calculation is not used in the perpetual life CEA calculation if the unit consists primarily of used assets. If the unit consists primarily of used assets, the adjustment would not be material.

Taxable Percent and Average Business Inventory

Line No.	[a] Reference	[b] Description	[c] Amount
1		Historical Cost of Property in Service	\$ 200,000,000
2		Plus Historical Cost of Nontaxable Property	\$ 5,000,000
3			
4	<i>L1 + L2</i>	Total Taxable and Nontaxable Property	<u>\$ 205,000,000</u>
5			
6	<i>L1 / L4</i>	Taxable Percent	<u><u>97.56%</u></u>
7			
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16			
17		Beginning Year Business Inventory	\$ 55,000
18			
19		Year End Business Inventory	<u>65,000</u>
20			
21	<i>L17 + L19</i>	Total Beginning and Year End Inventory	<u>\$ 120,000</u>
22			
23	<i>L21 / 2</i>	Average Business Inventory	<u><u>\$ 60,000</u></u>
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Average Business Inventory and Taxable Percent

Taxable Percent

The value of nontaxable assets (primarily licensed vehicles) is removed from the income approaches through the use of a taxable percent.

The taxable percent will be identical for all three models, but will be applied to the specific model's capitalized earning value. This taxable percent is calculated by dividing the historical cost of taxable property by the total of both taxable and non-taxable property. The taxable percent is then multiplied by the Capitalized Earning Ability (CEA) to extract the non-taxable value from the CEA approach. The result is an estimated CEA, which excludes the value of nontaxable property.

$(\text{Taxable Property at cost} / \text{Total Property at cost}) = \text{taxable percent}$

where Taxable Property includes only taxable property, Total Property includes taxable and non-taxable property.

Average Business Inventory

Business inventories are eligible for exemption from taxation under Section 129 of the Revenue and Taxation Code. The amount of business inventory reflected in the CEA is the average inventory during the year at book cost. Therefore, the amount deducted from the CEA is the average inventory amount, rather than the balance at the lien date.

The property statements request the average quantity and amount of inventory, at book costs, and on hand during the calendar year. These figures may be calculated by averaging the twelve month-end balances or the average may be calculated by averaging the beginning and ending year balances.

Possessory Interest

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Possessory Interest		\$ 262,450
2		Rent or Franchise Payment		
3				
4	Note	Basic Capitalization Rate	13.280%	
5	Note	Income Tax Component	8.120%	
6	$\frac{i}{(1+i)^n - 1}$	Amount to Accumulate \$1	<u>2.419%</u>	
7				
8	L4 thru L7	Total Capitalization Rate		<u>23.819%</u>
9				
10	L2 / L9	Possessory Interest		<u>\$ 1,101,900</u>
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38		Note: The basic capitalization rate and income tax component used in the computations		
39		above should match those used in the calculation of the capitalized earnings ability (CEA)		
40		value indicators.		

Possessory Interest

Possessory Interest

A possessory interest is an interest in real property that exists as a result of the possession of, or a right to possess or occupy land and/or improvements unaccompanied by ownership of a fee simple or life estate in the property. A taxable possessory interest normally exists whenever a utility has exclusive right to possess tax-exempt, publicly-owned property. The utility benefits from the possession of this property right, and it is taxed for the value of the benefits it receives.⁴⁵

A taxable possessory interest value is added to the value indicator because it is a real property right that is not generally represented on the balance sheet of the assessee's accounting records.⁴⁶

A taxable possessory interest can be valued using any of three primary appraisal approaches: cost, income, or comparative sales. For mass appraisal, the most common approach used is the income approach because data regarding economic or market rents and franchise fee payments are readily available.

When valuing a possessory interest by the income approach, the present worth of the economic net income attributed to the property for the permitted use is discounted for the estimated term of possession. The discount rate is comprised of a basic capitalization rate, an income tax component, and the amount to accumulate \$1 (calculated at the basic capitalization rate). The formula is:

$$ER / (Y_o + ITC + AAO)$$

where ER is the economic or market rent, Y_o is the basic capitalization rate, ITC is the income tax component, and AAO is the amount to accumulate \$1.

Some companies, such as gas or electric transmission and distribution utilities that are rate base regulated, are allowed to recover the property taxes paid on possessory interests as a component of the rates charged to customers. When calculating the CEA for properties subject to rate base regulation, the property taxes on the possessory interest should be removed from anticipated operating revenue to avoid including the recovery of the possessory interest property taxes as an element of value in the CEA.

⁴⁵ Revenue and Taxation Code sections 107, 107.1, 107.4; Property Tax Rules 20-22, 27, 28.

⁴⁶ Western States Association of Tax Administrators, Appraisal Handbook, Section II - Cost Approach.

Present Worth of Land Reversion

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Future California Land Value		\$ 500,000
2				
3		<i>Basic Capitalization Rate</i>	13.28%	
4		<i>Ad Valorem Tax Rate</i>	1.05%	
5			<hr/>	
6	<i>L3 + L4</i>	Total Rate	<u>14.33%</u>	
7				
8	<i>L20</i>	Present Worth of 1, 14.33%, REL: 15 Years		<u>0.1342</u>
9				
10	<i>L1 * L8</i>	Present Worth of Land Reversion		<u>\$ 67,100</u>
11				
12				
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19				
20		$1/(1+Y)^{REL} = 1/(1+.1433)^{15} = 0.1342$		
21				
22		The present worth of a reversion where Y is the basic capitalization rate plus a		
23		property tax component and REL is the remaining economic life.		
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Present Worth of Land Reversion

The land reversion is assumed to be a single lump-sum benefit that a utility receives at the termination of the composite remaining economic life (REL). At the end of the income projection period or composite REL for limited life models, land value exists and is referred to as the Land Reversion. The value of the reversion is added to the capitalized income. The Perpetual Model assumes a continuous income into perpetuity. Therefore, no land reversion is required.

To value the single lump-sum payment, the expected payment is multiplied by the compound interest factor for the present value of \$1 at the selected discount rate. A component for ad valorem property taxes is added to the discount rate. Thus:

$$PV = \text{Land Value times PW\$1 (@ } Y_o + \text{ ETR)}$$

where PV is the present value of the payment; PW\$1 is the present worth (or value) of \$1; Y_o is the basic capitalization rate; and ETR is the effective ad valorem tax rate.⁴⁷

⁴⁷ Assessor's Handbook 502, Chapter 4, page 102.

Construction Work in Progress Additive and Future Use Property

Line No.	[a] Reference	[b] Description	[c] Amount
1		Reproduction Cost New (RCN) of Depreciable Plant in Service	\$ 100,000,000
2			
3		Total Construction Work in Progress (CWIP)	2,000,000
4			
5	<i>L1 * 1.5%</i>	<i>Less Estimate of Replacement CWIP</i>	<u>1,500,000</u>
6			
7	<i>L3 - L5 [Note]</i>	Construction Work in Progress Additive	<u>\$ 500,000</u>
8			
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10			
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17			
18		Total Future Use Property	\$ 200,000
19		Amount in Rate Base	<u>100,000</u>
20			
21	<i>L18 - L 19</i>	Future Use Property	<u>\$ 100,000</u>
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39		Note: Reported new CWIP should be used as the additive. If this is not available, the calculation	
40		above should be used to estimate new CWIP	

Construction Work In Progress Additive and Future Use Property

Construction Work In Progress Additive

The CEA of a company normally reflects the construction work in progress (CWIP) required to maintain replacement of the existing facilities. However, CWIP for new plant is normally not reflected in the income stream, because the new CWIP has not had the opportunity to contribute to the earnings. An additive to the CEA is therefore required.

A state assessee reports to the Board the amount of new CWIP. If such information is not available, the assessee should report an estimate of its new CWIP. If this is not available an estimate of the new CWIP is calculated by the appraiser. This additive is calculated as follows:

Total CWIP - (RCN * 1.5%)

where Total CWIP is the total CWIP including replacement CWIP and new CWIP recorded as of the lien date, and RCN is the replacement or reproduction cost new of depreciable plant in service prior to depreciation.

Future Use Property

Future Use Property consists of property that is owned and held for future use in service by a utility. Future Use Property includes assets acquired but never used by a utility or assets previously held by the utility in service, but retired from such service and held pending its reuse in the future.⁴⁸ If this property is included in the rate base and the earning ability of this property is reflected in the revenue, no additive is necessary. Future Use Property not included in the rate base should be added to the CEA.

⁴⁸ Federal Energy Regulatory Commission Statutes & Regulations - Accounting and Reporting Requirements for Natural Gas Companies, pages 13,070-13,071.

Net Liquidation Value (NLV) Model

Net Liquidation Value (NLV) does not project the income of an operating unit. This CEA Model projects the net cash flow that could be expected by breaking apart the operating unit and selling the individual assets. This is an appropriate value indicator to use when the subject property has either functional or economic obsolescence to such a degree that it is more profitable to liquidate the assets than to operate the property. Of the properties subject to central assessment, the railroad industry is the only industry group for which a NLV is computed. The NLV is appropriate for those railroad properties that either have no income or such a low income that a purchaser would expect to achieve a higher return by breaking the property up and selling the component parts than by operating the unit as a railroad.

The NLV calculation begins by estimating the net proceeds from the sale of the assets. The amount of the proceeds are then discounted from the anticipated date of sale to the lien date by a discount factor that includes components for the property taxes due during the holding period and the income taxes that would be due upon the sale of the assets.

The proceeds for rolling stock and other personal property are estimated by using the reproduction cost less depreciation of these assets. No discount is allowed because little time is needed to sell these items.

A one year average time period is usually allowed for the dismantling and disposal of the track and track structure. The amount of the proceeds from the sale of the track and track structure is net of the costs required to dismantle and ship the assets and to the location of the sale.

A two-year average time period is usually allowed for the sale of land and structures. This time period would allow for the track to be removed and the land to be exposed to the real estate market. The value of land included in this estimate should be based on sales of adjacent parcels adjusted for the irregular shapes and sizes usually encountered in railroad right-of-way parcels.

Net Liquidation Value Model

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Estimated Proceeds from Sale of Rolling		
2		Stock and Equipment		\$ 500,000
3				
4		Estimated Proceeds from Sale of Track		
5		and Track Structure	\$ 1,500,000	
6				
7	CEA11, L4	Discount factor - one year	<u>0.7869</u>	
8				
9	L5 * L7	Present Value of Track and Track Structure		1,180,350
10				
11		Estimated Proceeds from Sale of Land	\$ 4,000,000	
12				
13	CEA11, L4	Discount factor - two years	<u>0.6308</u>	
14				
15	L11 * L13	Present Value of Land		<u>2,523,200</u>
16				
17	L2+L9+L15	Total Net Liquidation Value		<u><u>\$ 4,203,550</u></u>
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Discount Factors

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
		Year	1	2
1				
2		Proof:		
3		Sales Price	\$ 10,000,000	\$ 10,000,000
4		Discount Factor	0.7869	0.6308
5				
6	<i>L3 * L4</i>	Present Worth	\$ 7,868,639	\$ 6,308,313
7				
8	<i>L3 - L6</i>	Gain On Sale	\$ 2,131,361	\$ 3,691,687
9				
10	<i>L8 * L25</i>	Income Taxes	\$ 868,444	\$ 1,504,215
11				
12	<i>L3 - L10</i>	Proceeds After Tax	\$ 9,131,556	\$ 8,495,785
13	<i>L27</i>	Present Worth of \$ 1 @ Capitalization Rate + Ad Valorem Rate	0.8617	0.7425
14				
15	<i>L12*L13</i>	Present Value	\$ 7,868,639	\$ 6,308,313
16				
17	<i>L6 - L15</i>	Difference	<u>0</u>	<u>0</u>
18				
19				
20				
21				
22		Property Tax Rate	1.05%	1.05%
23		Maximum Federal Tax Rate	35.00%	35.00%
24		State Income Tax Rate	8.84%	8.84%
25	<i>L23+L24-(L23*L24)</i>	Combined Income Tax Rate	40.75%	40.75%
26		Capitalization Rate	15.00%	15.00%
27	<i>1/(1+.15+.0105)^n</i>	Present Worth of \$ 1 @ Capitalization Rate + Ad Valorem Rate	0.8617	0.7425
28				
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Discount Factors

The calculation of the discount factors in the net liquidation value reflects the proper discount that a prospective purchaser would apply to the cash flows generated by liquidating the assets. These factors compute the discount a purchaser would apply to each annual cash flow that would allow the purchaser to achieve the required rate of return after paying the property taxes due during the holding period and the income taxes due upon the sale. Each factor is obtained by using a computer program that generates the factor using an iterative process to solve an equation. The proof shows that the factor calculated for the one year period and the two year period will provide the required rate of return to a purchaser of the assets on an after tax basis.

The capitalization rate used is higher than the rates recommended in operating railroad valuations to reflect more risk because of intermittent cash flows. No debt component to the capitalization rate is used because of the difficulty in obtaining financing for a salvage venture.

A projected sales price of \$10,000,000 is used to demonstrate the factor calculation. This sales price is the sales price at some future point of time. The iterative process generates a factor to solve the equation for the present value of the future cash flow.

Income taxes due on the sale of the assets are then estimated by multiplying the gain on the sale by the corporate tax rate. The after-tax proceeds are then discounted by the present worth of a single payment at a rate that includes a component for property taxes to arrive at the present value of the cash flow.

Subtracting the discounted value of the cash flow after income taxes from the present worth generated by the use of the calculated factor demonstrates that the factors used provide for the income taxes a purchaser would incur on a sale and provide the required after-tax return on the original investment.

Sales Model

Overview

The sales model is a variation of the traditional comparative sales model. It differs from the latter because it uses the sales price of the subject directly, usually without comparing it to the sales of other comparable properties.

The comparative sales model is based on the principle of substitution.⁴⁹ It assumes that the market value of a property will approximate the sales price of competitive substitutes. It is the preferred method of valuation when reliable market data are available.⁵⁰

In the case of the sale of a utility, it is frequently difficult to apply the traditional comparative sales approach. There are several reasons contributing to the difficulty in using the traditional comparative sales approach:

- The uniqueness of each utility company.
- The size and the monopolistic/ oligopolistic nature of utility companies making them less subject to sales.⁵¹
- The difficulty of obtaining information from different utility companies to make comparison feasible.

Even though there is weakness in a sales model utilizing few or no comparable sales, the model is a valid indicator of market value. The sale of a utility company is usually an arms-length transaction between a knowledgeable buyer and a knowledgeable seller. Extensive analyses generally are made by both parties with counsel from the best financial experts. Use of the Sales Model in this manner is consistent with the Revenues and Taxation Code Section 110(b) and the Board of Equalization Rule 2(b).

⁴⁹ Principle of Substitution: A reasonable purchaser will not pay more for a property than the cost of a substitution that can provide similar utility.

⁵⁰ California Code of Regulations, Public Revenue, Title 18 - Property Tax Rule 4, the Comparative Sales Approach to Value.

⁵¹ Sales are more frequent with resellers in the telecommunications industry. In 1997, electric deregulation in California prompted the sale of many electric generation plants. It may be possible to apply the comparative sales approach to such sales.

Sales Model

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1	S1	Sales Price		\$ 25,130,000,000
2				
3		<i>Less Market Value of Deductible Assets:</i>		
4	S2	<i>Deductible Assets</i>	\$ 860,000,000	
5	S3	<i>Nonutility Operations</i>	3,769,500,000	
6	S4	<i>Intangible Assets</i>	<u>450,000,000</u>	
7		<i>Total Market Value of Deductible Assets</i>		<u>5,079,500,000</u>
8				
9	L1-L7	Sales Price of Utility Operations Net of Deductible Assets		\$ 20,050,500,000
10	S5	California Utility Allocation Factor		<u>0.9412</u>
11	L9*L10	California Utility Value Net of Deductible Assets		\$ 18,871,058,824
12	S5	Unitary Allocation Factor		<u>0.9500</u>
13				
14	L11*L12	Taxable Sales Value		\$ 17,927,505,882
15				
16		<i>Plus Additions to Taxable Sales Value:</i>		
17	S6	<i>Possessory Interest</i>	\$ 1,101,900	
18	S6	<i>Noncapitalized Leased Property</i>	<u>5,366,059</u>	
19	L17+L18	<i>Total Additions to Taxable Sales Value</i>		<u>6,467,959</u>
20				
21	L14+L19	Sales Indicator		<u><u>\$ 17,933,973,842</u></u>
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Sales Price

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Equity Sales Price:		
2		Cash or Cash Equivalent	\$ -	
3		Stock Price on Date of Transaction	12,740,000,000	
4		Legal and Professional Fee	480,000,000	
5		Other Costs	320,000,000	
6	L2 thru L5	Total Equity Sales Price		\$ 13,540,000,000
7				
8		Liabilities Assumed:		
9		Current Liabilities	\$ 500,000,000	
10		Long Term Debt	10,000,000,000	
11		Deferred Credits and Other L/T Liabilities	1,090,000,000	
12	L9 + L10 + L11	Total Liabilities Assumed		11,590,000,000
13				
14	L6 + L12	Sales Price		\$ 25,130,000,000
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Sales Price

The sales price in the case of a utility company is made up of two parts: the sales price paid for the equity interest and the fair market value of any liabilities assumed.

The sales price paid for the equity interest can be in the form of cash, stocks, exchange of stocks, or other non-cash items. Stocks and non-cash items should be converted to cash equivalents by estimating their fair market value on the date of sale. Additionally, any legal or professional fees, or incidental costs incurred related to the sale should be added to the sales price.

The liabilities assumed include current liabilities, long term debts, deferred credits and other long term liabilities. They should be estimated at market value as of the date of sale.

The data needed for Schedule S1 can generally be obtained by examining trade journals and financial reports to shareholders and regulatory agencies.

Deductible Assets

Line No.	[a] Reference	[b] Description	[c] Amount
1		Deductible Assets:	
2		Cash and Cash Equivalents	\$ 1,000,000
3		Investments	20,000,000
4		Accounts Receivable	600,000,000
5		Notes Receivable	20,000,000
6		Prepaid Expenses	500,000
7		Misc. Deferred Charges	37,500,000
8		Inventories	105,000,000
9		Leashold Improvement	50,000,000
10		Property in Federal Enclaves	12,000,000
11		Licensed Motor Vehicles	14,000,000
12			
13	L2 thru L11	Total Deductible Assets	<u>\$ 860,000,000</u>
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Deductible Assets

The Revenue and Taxation Code has provisions for assets exempt from property taxation. The related provisions are Section 212 (a) and (b) and Section 219.

Section 212 states that:

- (a) Notes, debentures, shares of capital stock, solvent credits, bonds, deeds of trust, mortgages, and any interest in that property are exempt from taxation.
- (b) Money kept on hand to be used in the ordinary and regular course of a trade, profession, or business is exempt from taxation.

Section 219 states that:

For the 1980-81 fiscal year and fiscal years thereafter, business inventories are exempt from taxation and the assessor shall not assess business inventories.

Based on the above provisions, a company's cash, cash equivalents, investments, receivables, prepaid expenses, and inventories are all exempt and should be removed from the sales price for property tax purposes.

In addition, Revenue and Taxation Code Section 10758 (fee in lieu of ad valorem taxes) provides that vehicles subject to license fees imposed by the Department of Motor Vehicles (DMV) are not to be assessed again by other assessment agencies because property taxes have been paid as part of the fee paid to DMV.

Other deductible property includes leasehold improvements (if the improvements are taxed to the lessor) and property in federal enclaves.

Data needed for the deductible assets can be obtained from financial statements and reports to shareholders or regulatory agencies.

Nonutility Operations

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1	SI	Sales Price		\$ 25,130,000,000
2				
3		Consolidated Income from Operations before		
4		Interest, Extraordinary Items and Income Taxes	\$ 5,000,000,000	
5				
6		Income from Nonutility Operations before		
7		Interest, Extraordinary Items and Income Taxes	750,000,000	
8				
9	L7 / L4	% of Nonutility Income to Consolidated Income		<u>15.00%</u>
10				
11	L1 * L9	Nonutility Operations		<u>\$ 3,769,500,000</u>
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Nonutility Operations

If a company has both utility and nonutility operations, the value of nonutility operations should be removed from the sales price to arrive at a value indicator for the utility operations only.

The method illustrated in Schedule S3 to calculate the percentage of nonutility income to consolidated income is referred to as the “Income Influence Method” by the Western States Association of Tax Administrators. Applying the percentage so derived to the sales price leads to the amount of the sales price attributed to nonutility operations.

Usually, the consolidated income from all operations and incomes from various segments can be obtained by examining the company’s financial statements or reports filed with regulatory agencies.

Intangible Assets

Line No.	<i>[a]</i> Reference	<i>[b]</i> Description	<i>[c]</i> Amount
1		Intangible Assets:	
2		Organization	\$ 2,000,000
3		Goodwill	448,000,000
4			<hr/>
5	<i>L2 + L3</i>	Total Intangible Assets	<u><u>\$ 450,000,000</u></u>
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42		Note: Appendix I addresses exempt intangibles.	

California Utility Allocation Factor and Unitary Allocation Factor

Line No.	[a] Reference	[b] Description	[c] Amount
1		Income from System Utility Operation before	
2		Interest, Extraordinary Items, and Income Taxes	\$ 4,250,000,000
3			
4		Income from California Utility Operations before	
5		Interest, Extrordinary Items and Income Taxes	4,000,000,000
6			
7			
8	L5 / L2	California Utility Allocation Factor	<u>0.9412</u>
9			
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18			
19		Income from California Utility Operations before	
20		Interest, Extrordinary Items and Income Taxes	\$ 4,000,000,000
21			
22		Income from California Unitary Operations before	
23		Interest, Extrordinary Items and Income Taxes	3,800,000,000
24			
25			
26	L23 / L20	Unitary Allocation Factor	<u>0.9500</u>
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California Utility Allocation Factor and Unitary Allocation Factor

California Utility Allocation Factor

When a company operates both within and outside California, only the properties within California are subject to property tax. A factor is used to allocate the value between properties within California and outside California.

The allocation factor is obtained by dividing income from California utility operation before interest, extraordinary items and income taxes by consolidated income before interest, extraordinary items and income taxes. Both data can be obtained by examining the company's financial statements to shareholders and regulatory agencies.

Unitary Allocation Factor

Revenue and Taxation Code Section 723 states that the Board may use the principle of unit valuation to value all the properties of an assessee that are operated as a unit in the primary function of the assessee. When so valued, the properties are known as "unitary properties". The properties of an assessee not valued through the use of the principle of unit valuation are known as "nonunitary properties". Based on this provision, the Board uses the principle of unit valuation when appraising public utilities and railroads.

To separate unitary property from nonunitary property, a factor or ratio derived from unitary income (or nonunitary income) to the total income is used. The income can be obtained by examining a company's financial statements, reports filed with the regulatory agencies, or property tax statements.

Possessory Interest and Noncapitalized Leased Property

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		Possessory Interest		
2		Rent or Franchise Payment		\$ 262,450
3				
4	<i>Note</i>	Basic Capitalization Rate	13.280%	
5	<i>Note</i>	Income Tax Component	8.120%	
6	$\frac{i}{(1+i)^n - 1}$	Amount to Amortize \$1	2.419%	
7	<i>L4 thru L7</i>	Total Capitalization Rate		<u>23.819%</u>
8				
9	<i>L2 / L8</i>	Possessory Interest		<u><u>\$ 1,101,900</u></u>
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19				
20		Minimum Annual Lease Payments for 10 years		\$ 1,000,000
21				
22		Basic Capitalization Rate	13.280%	
23	$\frac{i}{(1+i)^n - 1}$	Amount to Accumulate \$1 - 10 years	5.356%	
24				
25	<i>L22 + L23</i>	Total Capitalization Rate		<u>18.636%</u>
26				
27				
28	<i>L20 / L25</i>	Noncapitalized Leased Property		<u><u>\$ 5,366,059</u></u>
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40		Note: The basic capitalization rate and income tax component used in the computations		
41		above should match those used in the calculation of the capitalized earnings ability (CEA)		
42		value indicators.		

Possessory Interest and Noncapitalized Leased Property

Possessory Interest

A possessory interest is an interest in real property that exists as a result of the possession of, or a right to possess or occupy land and/or improvements unaccompanied by ownership of a fee simple or life estate in the property. A taxable possessory interest normally exists whenever a utility has exclusive right to possess tax-exempt, publicly-owned property. The utility benefits from the possession of this property right, and it is taxed for the value of the benefits it receives.⁵²

A taxable possessory interest value is added to the value indicator because it is a real property right that is not generally represented on the balance sheet of the assessee's accounting records.⁵³

A taxable possessory interest can be valued using any of three primary appraisal approaches: cost, income, or comparative sales. For mass appraisal, the most common approach used is the income approach because data regarding economic or market rents and franchise fee payments are readily available.

When valuing a possessory interest by the income approach, the present worth of the economic net income attributed to the property for the permitted use is discounted for the estimated term of possession. The discount rate is comprised of a basic capitalization rate, an income tax component, and the amount to accumulate \$1 (calculated at the basic capitalization rate). The formula is:

$$ER / (Y_o + ITC + AAO)$$

where ER the economic or market rent, Y_o the basic capitalization rate, ITC is the income tax component, and AAO is the amount to accumulate \$1.

Noncapitalized Leased Property

Noncapitalized leased property is an additive to the unitary value indicator(s) because leased properties are not recorded on the utility's accounting records except for capitalized leased properties that should be reported in the same manner as property purchased.⁵⁴

In the sales approach, the present value of the future minimum lease payments should be added as an adjustment to the sales price. Although these assets are typically not included in the sale, they are included in the unitary property so an adjustment is required.

⁵² Revenue and Taxation Code sections 107, 107.1, 107.4; Property Tax Rules 20-22, 27, 28.

⁵³ Western States Association of Tax Administrators, Appraisal Handbook, Section II - Cost Approach.

⁵⁴ The appraiser should ascertain whether the recorded cost represent market value.

Pipeline Rate Base Model

Overview

The income from common carrier pipeline property is regulated by law. The Federal Energy Regulatory Commission (FERC) allows the use of net depreciated Trended Original Cost (TOC) as a rate base. Under the TOC rate base model, the pipeline investment is segregated into debt and equity segments based on the capital structure of the pipeline. The debt portion is valued at historical cost less depreciation, while the costs represented by the equity segment are trended by inflation factors and depreciation is recalculated based on the trended cost.

If the pipeline operates in more than one state, the TOC rate base is allocated to California by the use of an interstate allocation formula. Adjustments are then made for other taxable property not included in the rate base (e.g., noncarrier property or construction work in progress). In addition, property included in the rate base, but outside the assessment jurisdiction of the Board of Equalization (e.g., locally-assessed property) must be removed.

Pipeline Rate Base Model

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1	RB1	System Rate Base		\$1,500,000,000
2	RB2	Interstate Allocation Factor		0.21
3	L1*L2	California Rate Base		\$ 315,000,000
4	RB3	State-Assessed Plant and Equipment Factor		0.63
5	L3*L4	California State-Assessed Rate Base		\$ 198,450,000
6				
7	RB1	<i>Plus: Construction Work in Progress (CWIP) - State Assessed</i>	\$ 100,000,000	
8	RB3	<i>Other Adjustments</i>	100,000,000	
9		<i>Total Additions to Rate Base Value</i>		200,000,000
10				
11	L5+L9	Rate Base Value Indicator		<u>\$ 398,450,000</u>
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Adjusted System Rate Base and Construction Work in Progress

Adjusted System Rate Base

System Rate Base is an estimate of assessee's system regulatory rate base. System means that the rate base reflects all pipeline operations, not just those located within California. For property tax reporting purposes, deferred income tax liabilities shall be separately identified and not included in the reported system rate base.

The FERC and the CPUC require the accumulated DIT to be deducted from the rate base. The pipeline operator cannot earn a return on the portion of the rate base represented by DIT because the regulators do not allow a return on investment made with funds provided by deferring the payment of income taxes. However, the operator is allowed to recover the cost of these investments and the rates reflect the recovery of such costs through depreciation..

In this example, the Adjusted System Rate Base is \$1,500,000,000 (\$1,550,000,000 less \$50,000,000). The assessee reported a system rate base of \$1,550,000,000 and a deferred income tax balance of \$50,000,000.

Construction Work in Progress - State Assessed

Regulatory authorities do not include construction work in progress in the rate base. However, CWIP is included in the unitary value indicator because it has value and is taxable for property tax purposes.

Interstate Allocation Factor

Line No.	[a] Reference	[b] Description	[c] Amount	[d] Amount
1		I. Property Investment:		
2		System Historical Cost	\$ 2,000,000,000	
3		Remove:		
4		Adjustments for assets purchased over H.C. (Acct. 166)	(5,000,000)	
5		CWIP	(300,000,000)	
6	L2-L4-L5	Total System Cost for Allocation		\$ 1,695,000,000
7				
8		California Historical Cost w/o CWIP and M&S:		
9		State-Assessed	\$ 250,000,000	
10		County-Assessed	150,000,000	
11	L9+L10	Total California Cost for Allocation		\$ 400,000,000
12				
13	L11/L6	California Factor for Allocation		<u>0.24</u>
14				
15				
16		II. Barrel Miles:	California	System
17		Total Barrel Miles	6,000,000,000	60,000,000,000
18				
19	L17CA/L17SYS	Barrel Miles Factor For Allocation		<u>0.10</u>
20				
21				
22		III. Terminal - Originating & Terminating Barrels:	California	System
23		Barrels Received	54,000,000	456,000,000
24		Barrels Delivered	54,000,000	455,000,000
25				
26	L23 + L24	Total Originating and Terminating Barrels	108,000,000	911,000,000
27				
28	L26CA/L26SYS	Originating & Terminating Barrels Factor For Allocation		<u>0.12</u>
29				
30				
31				
32				
33			California	Weighting
34		IV. Weighted Basis	Percentage	Factor
35	L13 * 75%	Historical Cost	0.24	0.75
36	L19 * 20%	Barrel Miles	0.10	0.20
37	L28 * 5%	Originating & Terminating Barrels	0.12	0.05
38				
39		California Interstate Allocation Factor		<u>0.21</u>
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RB2

California Interstate Allocation Factor

The California interstate allocation factor applies only to interstate pipeline systems that report system rate base numbers. The purpose of this factor is to allocate a portion of the system value to each state. The allocation should reasonably reflect the relative value of assets that have situs in each state.

In calculating the interstate allocation factor staff relies upon the Western States Association of Tax Administrators (WSATA) formula. The WSATA formula uses both property and use factors to allocate the property of interstate pipelines among the respective assessment jurisdictions.

- Property - The property factor is intended to reflect the contribution of various physical assets of the operating system and to identify the distribution of these assets throughout the system. The property factor is based on undepreciated property costs in each state.
- Use - The use factor allocates system value based on the proportion of physical activity within each state to the activity of the entire system. Use factors for a pipeline include barrel-miles to measure relative pipeline usage and originating-and-terminating-barrels to measure relative terminal activity.

Once the property and use factors are identified, ratios are developed by dividing the California property and use factors by the property and use factors of the total system. A 75% weight is applied to the property ratio, a 20% weight is applied to the use factor of barrel-miles, and a 5% weight is applied to the use factor of originating-and-terminating-barrels.⁵⁵

⁵⁵ Western States Association of Tax Administrators Appraisal Handbook - Allocation of Unitary Property page 116.

State-Assessed Plant and Equipment Factor and Other Adjustments

Line No.	[a] Reference	[b] Description	[c] Amount
1		State-Assessed Plant and Equipment	\$ 250,000,000
2		County-Assessed Plant and Equipment	<u>146,825,397</u>
3			
4	L1 + L2	Total California Plant and Equipment	<u><u>\$ 396,825,397</u></u>
5			
6	L1/L4	State Assessed Plant and Equipment Factor	<u><u>0.63</u></u>
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17		Noncarrier Property	\$ 50,000,000
18		Property not included in the Rate Base	<u>50,000,000</u>
19			
20	L17 + L18	Total Other Adjustments	<u><u>\$ 100,000,000</u></u>
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State Assessed Plant and Equipment Factor and Construction Work in Progress

State Assessed Plant and Equipment Factor

The reported rate base includes property that is not assessed by the Board of Equalization. This locally assessed property should be removed from the rate base value indicator.

A factor is used to remove the portion of property that is locally assessed. This factor is calculated by dividing the cost of state-assessed plant and equipment by the total California plant and equipment. The resulting factor is then applied to the California rate base to arrive at the California State Assessed rate base.

Other Adjustments

Other adjustments may be required in order to include nonregulated property or other property not included in the rate base, such as pipeline segments carrying product to military bases. The assessee is required to report such information in detail so that the Valuation Division can make the necessary adjustments to the value indicator.

Appendix I: Exempt Intangibles

Revenue and Taxation Code Section 110 defines "full cash value" and states in 110 (d) (e) & (f) that:

(d) Except as provided in subdivision (e), for purposes of determining the "full cash value" or "fair market value" of any taxable property, all of the following shall apply:

(1) The value of intangible assets and rights relating to the going concern value of a business using taxable property shall not enhance or be reflected in the value of the taxable property.

(2) If the principal of unit valuation is used to value properties that are operated as a unit and the unit includes intangible assets and rights, then the fair market value of the taxable property contained within the unit shall be determined by removing from the value of the unit the fair market value of the intangible assets and rights contained within the unit.

(3) The exclusive nature of a concession, franchise, or similar agreement, whether de jure or de facto, is an intangible asset that shall not enhance the value of taxable property, including real property.

(e) Taxable property may be assessed and valued by assuming the presence of intangible assets or rights necessary to put the taxable property to beneficial or productive use.

(f) For purposes of determining the "full cash value" or "fair market value" of real property, intangible attributes of real property shall be reflected in the value of the real property. These intangible attributes of real property include zoning, location, and other such attributes that relate directly to the real property involved

The above is the basis for the inclusion or exclusion of intangibles in the derivation of staff's value indicators. Any adjustments made to the indicators for intangibles are to be based on sound appraisal methods.⁵⁶ In the CEA approaches, the staff removes intangible value(s) by imputing an income to the intangible item(s) and deducts the imputed income from the income to be capitalized in accordance with Property Tax Rule 8 (e). The direct deduction of reported, recorded, or staff estimated intangible values from the value indicator are used to remove intangible values included in other approaches.

The appraisal treatment of intangible assets is more fully discussed in Assessors' Handbook 502 starting at page 150.

⁵⁶ The appraiser should insure that the indicator(s) includes the value of the intangible before making an adjustment.

Appendix II: Selected Property Tax Rules (as of March 2003)

Rule 1. GENERAL APPLICATION.

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

The rules in this subchapter govern assessors when assessing, county boards of equalization and assessment appeals boards when equalizing, and the State Board of Equalization, including all divisions of the property tax department.

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

Rule 2. THE VALUE CONCEPT.

References: Article 2, Chapter 3, Part 2, Division 1, Revenue and Taxation Code.
Sections 110, 110.1, 401, Revenue and Taxation Code.

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

When applied to real property, the words "full value", "full cash value", "cash value", "actual value" and "fair market value" mean the prices at which the unencumbered or unrestricted fee simple interest in the real property (subject to any legally enforceable governmental restrictions) would transfer for cash or its equivalent under the conditions set forth in the preceding sentence.

(b) When valuing real property (as described in paragraph (a)) as the result of a change in ownership (as defined in Revenue and Taxation Code, Section 60, et seq.) for consideration, it shall be rebuttably presumed that the consideration valued in money, whether paid in money or otherwise, is the full cash value of the property. The presumption shall shift the burden of proving value by a preponderance of the evidence to the party seeking to overcome the presumption. The presumption may be rebutted by evidence that the full cash value of the property is significantly more or less than the total cash equivalent of the consideration paid for the property. A significant deviation means a deviation of more than 5% of the total consideration.

(c) The presumption provided in this section shall not apply to:

(1) The transfer of any taxable possessory interest.

(2) The transfer of real property when the consideration is in whole, or in part, in the form of ownership interests in a legal entity (e.g., shares of stock) or the change in ownership occurs as the result of the acquisition of ownership interests in a legal entity.

(3) The transfer of real property when the information prescribed in the change in ownership statement is not timely provided.

(d) If a single transaction results in a change in ownership of more than one parcel of real property, the purchase price shall be allocated among those parcels and other assets, if any, transferred based on the relative fair market value of each.

History: Adopted June 21, 1967, effective July 23, 1967.
Amended December 17, 1975, effective January 25, 1976.
Amended October 9, 1984, effective September 20, 1985.
Amended July 24, 1991, effective September 25, 1991.

Rule 3. VALUE APPROACHES.

References: Article 2, Chapter 3, Part 2, Division 1, Revenue and Taxation Code.
Sections 110, 401, Revenue and Taxation Code.

In estimating value as defined in section 2, the assessor shall consider one or more of the following, as may be appropriate for the property being appraised:

(a) The price or prices at which the property and comparable properties have recently sold (the comparative sales approach).

(b) The prices at which fractional interests in the property or comparable properties have recently sold, and the extent to which such prices would have been increased had there been no prior claims on the assets (the stock and debt approach).

(c) The cost of replacing reproducible property with new property of similar utility, or of reproducing the property at its present site and at present price levels, less the extent to which the value has been reduced by depreciation, including both physical deterioration and obsolescence (the replacement or reproduction cost approach).

(d) If the income from the property is regulated by law and the regulatory agency uses historical cost or historical cost less depreciation as a rate base, the amount invested in the property or the amount invested less depreciation computed by the method employed by the regulatory agency (the historical cost approach).

(e) The amount that investors would be willing to pay for the right to receive the income that the property would be expected to yield, with the risks attendant upon its receipt (the income approach).

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

Rule 4. THE COMPARATIVE SALES APPROACH TO VALUE.

References: Sections 110, 110.1, 110.5, 401, Revenue and Taxation Code.
Article XIII A, Sections 1, 2, California Constitution.

When reliable market data are available with respect to a given real property, the preferred method of valuation is by reference to sales prices. In using sales prices of the appraisal subject or of comparable properties to value a property, the assessor shall:

(a) Convert a noncash sale price to its cash equivalent by estimating the value in cash of any tangible or intangible property other than cash which the seller accepted in full or partial payment for the subject property and adding it to the cash portion of the sale price and by deducting from the nominal sale price any amount which the seller paid in lieu of interest to a lender who supplied the grantee with part or all of the purchase money.

(b) When appraising an unencumbered-fee interest, (1) convert the sale price of a property encumbered with a debt to which the property remained subject to its unencumbered-fee price

equivalent by adding to the sale price of the seller's equity the price for which it is estimated that such debt could have been sold under value-indicative conditions at the time the sale price was negotiated and (2) convert the sale price of a property encumbered with a lease to which the property remained subject to its unencumbered-fee price equivalent by deducting from the sale price of the seller's equity the amount by which it is estimated that the lease enhanced that price or adding to the price of the seller's equity the amount by which it is estimated that the lease depressed that price.

(c) Convert a sale to the valuation date of the subject property by adjusting it for any change in price level of this type of property that has occurred between the time the sale price was negotiated and the valuation date of the subject property.

(d) Make such allowances as he deems appropriate for differences between a comparable property at the time of sale and the subject property on the valuation date, in physical attributes of the properties, location of the properties, legally enforceable restrictions on the properties' use, and the income and amenities which the properties are expected to produce. When the appraisal subject is land and the comparable property is land of smaller dimensions, and it is assumed that the subject property would be divided into comparable smaller parcels by a purchaser, the assessor shall allow for the cost of subdivision, for the area required for streets and alleys, for selling expenses, for normal profit, and for interest charges during the period over which it is anticipated that the smaller properties will be marketed.

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

Rule 6. THE REPRODUCTION AND REPLACEMENT COST APPROACHES TO VALUE.

Reference: Sections 110, 401, Revenue and Taxation Code.

(a) The reproduction or replacement cost approach to value is used in conjunction with other value approaches and is preferred when neither reliable sales data (including sales of fractional interests) nor reliable income data are available and when the income from the property is not so regulated as to make such cost irrelevant. It is particularly appropriate for construction work in progress and for other property that has experienced relatively little physical deterioration, is not misplaced, is neither over- nor underimproved, and is not affected by other forms of depreciation or obsolescence.

(b) The reproduction cost of a reproducible property other than inventory (for which see section 10 of this chapter) may be estimated either by (1) adjusting the property's original cost for price level changes and for abnormalities, if any, or (2) applying current prices to the property's labor and material components, with appropriate additions for entrepreneurial services, interest on borrowed or owner-supplied funds, and other costs typically incurred in bringing the property to a finished state (or to a lesser state if unfinished on the lien date). Estimates made under (2) above may be made by using square-foot, cubic-foot, or other unit costs; a summation of the in-place costs of all components; a quantity survey of all material, labor, and other cost elements; or a combination of these methods.

(c) The original cost of reproducible property shall be adjusted, in the aggregate or by groups, for price level changes since original construction by multiplying the cost incurred in a given year by an appropriate price index factor. When detailed investment records are unavailable for earlier years or when only a small percentage of the total investment is involved, the investments in such years may be lumped and factored to present price levels by means of an index number that represents the assessor's best judgment of the weighted average price change. If the property was not new when acquired by its present owner and its original cost is unknown, its acquisition cost may be substituted for original cost in the foregoing calculations.

(d) The replacement cost of a reproducible property other than inventory may be estimated as indicated in (b)(2) of this section by applying current prices to the labor and material components of a substitute property capable of yielding the same services and amenities, with appropriate additions as specified in subsection (b)(2).

(e) Reproduction or replacement cost shall be reduced by the amount that such cost is estimated to exceed the current value of the reproducible property by reason of physical deterioration, misplacement, over- or underimprovement, and other forms of depreciation or obsolescence. The percentage that the remainder represents of the reproduction or replacement cost is the property's percent good.

(f) When the allowance made pursuant to paragraph (e) exceeds the amount included in the depreciation tables used by the assessor, the reasons therefor shall be noted in the appraisal record for the property and the amount thereof shall be ascertainable from the record.

(g) This rule shall first be observed in assessing property for the 1968-69 fiscal year.

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

Rule 8. THE INCOME APPROACH TO VALUE.

Reference: Sections 110, 401, Revenue and Taxation Code.

(a) The income approach to value is used in conjunction with other approaches when the property under appraisal is typically purchased in anticipation of a money income and either has an established income stream or can be attributed a real or hypothetical income stream by comparison with other properties. It is the preferred approach for the appraisal of land when reliable sales data for comparable properties are not available. It is the preferred approach for the appraisal of improved real properties and personal properties when reliable sales data are not available and the cost approaches are unreliable because the reproducible property has suffered considerable physical depreciation, functional obsolescence or economic obsolescence, is a substantial over- or underimprovement, is misplaced, or is subject to legal restrictions on income that are unrelated to cost.

(b) Using the income approach, an appraiser values an income property by computing the present worth of a future income stream. This present worth depends upon the size, shape, and duration of the estimated stream and upon the capitalization rate at which future income is discounted to its present worth. Ideally, the income stream is divided into annual segments and the present worth of the total income stream is the algebraic sum (negative items subtracted from positive items) of the present worths of the several segments. In practical application, the stream is usually either

- (1) divided into longer segments, such as the estimated economic life of the improvements and all time thereafter or the estimated economic life of the improvements and the year in which the improvements are scrapped and the land is sold, or
- (2) divided horizontally by projecting a perpetual income for land and an income for the economic life of the improvements, or
- (3) projected as a level perpetual flow.

(c) The amount to be capitalized is the net return which a reasonably well informed owner and reasonably well informed buyers may anticipate on the valuation date that the taxable property existing on that date will yield under prudent management and subject to such legally enforceable

restrictions as such persons may foresee as of that date. Net return, in this context, is the difference between gross return and gross outgo. Gross return means any money or money's worth which the property will yield over and above vacancy and collection losses, including ordinary income, return of capital, and the total proceeds from sales of all or part of the property. Gross outgo means any outlay of money or money's worth, including current expenses and capital expenditures (or annual allowances therefor) required to develop and maintain the estimated income. Gross outgo does not include amortization, depreciation, or depletion charges, debt retirement, interest on funds invested in the property, or rents and royalties payable by the assessee for use of the property. Property taxes, corporation net income taxes, and corporation franchise taxes measured by net income are also excluded from gross outgo.

(d) In valuing property encumbered by a lease, the net income to be capitalized is the amount the property would yield were it not so encumbered, whether this amount exceeds or falls short of the contract rent and whether the lessor or the lessee has agreed to pay the property tax.

(e) Recently derived income and recently negotiated rents or royalties (plus any taxes paid on the property by the lessee) of the subject property and comparable properties should be used in estimating the future income if, in the opinion of the appraiser, they are reasonably indicative of the income the property will produce in its highest and best use under prudent management. Income derived from rental of properties is preferred to income derived from their operation since income derived from operation is the more likely to be influenced by managerial skills and may arise in part from nontaxable property or other sources. When income from operating a property is used, sufficient income shall be excluded to provide a return on working capital and other nontaxable operating assets and to compensate unpaid or underpaid management.

(f) When the appraised value is to be used to arrive at an assessed value, the capitalization rate is to include a property tax component, where applicable, equal to the estimated future tax rate for the area times the assessment ratio.

(g) The capitalization rate may be developed by either of two means:

(1) By comparing the net incomes that could reasonably have been anticipated from recently sold comparable properties with their sales prices, adjusted, if necessary, to cash equivalents (the market-derived rate). This method of deriving a capitalization rate is preferred when the required sales prices and incomes are available. When the comparable properties have similar capital gains prospects, the derived rate already includes a capital gain (or loss) allowance and the income to be capitalized should not include such a gain (or loss) at the terminus of the income estimate.

(2) By deriving a weighted average of the capitalization rates for debt and for equity capital appropriate to the California money markets (the band-of-investment method) and adding increments for expenses that are excluded from outgo because they are based on the value that is being sought or the income that is being capitalized. The appraiser shall weight the rates for debt and equity capital by the respective amounts of such capital he deems most likely to be employed by prospective purchasers.

(h) Income may be capitalized by the use of gross income, gross rent, or gross production multipliers derived by comparing sales prices of closely comparable properties (adjusted, if necessary, to cash equivalents) with their gross incomes, gross rents, or gross production.

(i) The provisions of this rule are not applicable to lands defined as open-space lands by Chapter 1711, Statutes of 1967, nor are they applicable in all respects to possessory interests.

History:

Adopted December 12, 1967, effective January 18, 1968.

Amended December 15, 1976, effective January 21, 1977.

Amended September 27, 1977, effective November 25, 1977.

Amended July 27, 1982, effective December 30, 1982.

Rule 20. Taxable Possessory Interests.

Reference: Section 107, Revenue and Taxation Code

(a) POSSESSORY INTERESTS. "Possessory interests" are interests in real property that exist as a result of:

(1) A possession of real property that is independent, durable, and exclusive of rights held by others in the real property, and that provides a private benefit to the possessor, except when coupled with ownership of a fee simple or life estate in the real property in the same person; or

(2) A right to the possession of real property, or a claim to a right to the possession of real property, that is independent, durable, and exclusive of rights held by others in the real property, and that provides a private benefit to the possessor, except when coupled with ownership of a fee simple or life estate in the real property in the same person; or

(3) Taxable improvements on tax-exempt land.

(b) TAXABLE POSSESSORY INTERESTS. "Taxable possessory interests" are possessory interests in publicly-owned real property. Excluded from the meaning of "taxable possessory interests", however, are any possessory interests in real property located within an area to which the United States has exclusive jurisdiction concerning taxation. Such areas are commonly referred to as federal enclaves.

(c) DEFINITIONS. For purposes of this regulation:

(1) "Real property" is defined in section 104 of the Revenue and Taxation Code and includes public waters such as tidelands and navigable waters and waterways.

(2) "Possession" of real property means actual physical occupation. "Possession" requires more than incidental benefit from the public property, but requires actual physical occupation of the property pursuant to rights not granted to the general public; thus, the use of property such as hallways, common areas, and access roads at airports, stadiums, convention centers, or other public facilities by customers or employees of those who may lease other public property at the public facility of which they have exclusive use does not constitute "possession" of those hallways, common areas, or access roads by the lessee of the public property.

(3) A "right," or a "claim to a right," to the possession of real property means the right, or claim to a right, to actual physical occupation of real property. For purposes of this subdivision, a right, or a claim to a right, to the possession of real property may exist as a result of the possessor having or claiming to have: (i) a leasehold estate, an easement, a profit a prendre, or any other legal or equitable interest in real property of less than fee simple or life estate, regardless of how the interest may be identified in a deed, lease, or other document; or (ii) a use permit or agreement, such as a federal grazing permit, a permit to use a berth at a harbor, or a county use permit authorizing professional rafting outfitters to commercially operate on a river, that creates a legal or equitable interest in real property of less than fee simple or life estate.

(4) "Possessor" means the party or parties who hold the possessory interest, and any successors or assigns to such party or parties.

(5) "Independent" means a possession, or a right or claim to possession, if the possession or operation of the real property is sufficiently autonomous to constitute more than a mere agency. To be "sufficiently autonomous" to constitute more than a mere agency, the possessor must have the right and ability to exercise significant authority and control over the management or operation of the real property, separate and apart from the policies, statutes, ordinances, rules, and regulations of the public owner of the real property. For example, the control of an airport runway or taxiway by the Federal Aviation Administration (FAA) or another government agency or its agent is so complete that it precludes the airlines from exercising sufficient authority and control over the management or operation of the runways or taxiway and does not constitute sufficient "independence" to support a possessory interest.

(6) "Durable" means for a determinable period with a reasonable certainty that the possession of the real property by the possessor, or the possessor's right or claim with respect to the possession of the real property, will continue for that period.

(7) "Exclusive of rights held by others in the real property" means the enjoyment of an exclusive use of real property, or a right or claim to the enjoyment of an exclusive use together with the ability to exclude from possession by means of legal process others who may interfere with that enjoyment.

(A) For purposes of this subdivision, "exclusive uses" include the following types of uses of real property, as well as rights and claims to such types of uses of real property:

(1) The sole possession, occupancy, or use of real property,

(2) The possession, occupancy, or use of real property by co-tenants or co-owners as to leaseholds, easements, profits a prendre, or any other legal or equitable interests in real property of less than fee simple or life estate, where the uses constitute but a single use jointly enjoyed.

(3) The concurrent use of real property, not amounting to co-tenancy or co-ownership under subdivision (A)(2) above, by a person who has a primary or prevailing right to use the real property and/or to have its designees use the real property. For example, a public marina leases boat slips with a lease provision that allows the marina to rent a leased boat slip to a short-term user if the primary lessee is away; subject to the primary lessee's right to exclude the short-term user on the primary lessee's return. Under these facts, the primary lessee has a primary and prevailing right to use the leased boat slip. For purposes of this subdivision, concurrent use of real property demonstrating a primary or prevailing right also includes alternating uses of the same real property by more than one party, such as the case when certain premises are used by a professional basketball team on certain days of each week while a professional hockey team uses the same premises on certain other days.

(4) Concurrent uses of real property, not amounting to co-tenancy or co-ownership under subdivision (A)(2) above, by persons making qualitatively different uses of the real property. For purposes of this subdivision, qualitatively different uses of real property include: (i) those by persons making different kinds of uses of the same real property, such as the case when one person is developing mineral resources on real property while others are concurrently enjoying recreational uses on the same real property; and (ii) those where different persons have the right to concurrently enter onto and take different things from the same real property.

(5) Concurrent uses of real property, not amounting to co-tenancy or co-ownership under subdivision (A)(2) above, by persons engaged in qualitatively similar uses that diminish the quantity or quality of the real property. For purposes of this subdivision, uses that diminish the quantity and/or quality of the real property include: (i) grazing cattle; (ii) mining; (iii) the extraction of oil or gas; and (iv) the extraction of geothermal energy.

(6) Concurrent uses of real property, not amounting to co-tenancy or co-ownership under subdivision (A)(2) above, by persons engaged in qualitatively similar uses that do not diminish the quantity or quality of the real property, provided that the number of concurrent use grants is restricted. For purposes of this subdivision: "concurrent use grants" includes grants, permits, deeds, agreements, and other documents providing rights to the concurrent use of real property; and the number of concurrent use grants is "restricted" when the number of concurrent use grants is restricted either by law or pursuant to the policies or management decisions of the public owner of the real property or other public agency.

Example 1: Commercial rafting outfitters have a county use permit to commercially operate on a river. While any private recreational user may raft on the river without limitation or regulation, only approximately 80 commercial rafting outfitters are presently allowed to operate under permit on the river. The commercial rafting outfitters' use of the river is exclusive for purposes of this regulation since the number of commercial use permits issued by the county to commercial rafting outfitters is restricted, regardless of whether or not the commercial rafting outfitters' use of the river diminishes its quantity or quality.

Example 2: X operates a shuttle van service, picking up passengers at their homes and other locations, and transporting them to the airport. When the shuttle van reaches the airport, it utilizes the public street which surrounds the airport to drop passengers off at the various terminals at the airport. The

street around the airport is available to all licensed drivers, for commercial and noncommercial uses. Neither the traffic laws, nor the policies or management decisions of the public owner of the airport facility restrict the number of users of the public street. In addition, under the assumed facts of this hypothetical, X's use of the public street surrounding the airport does not diminish the quantity or quality of the real property.

Given that (i) the shuttle vans using the public street are making qualitatively similar uses of that real property; (ii) there are no facts indicating that the quality or quantity of the real property is being diminished; and (iii) the number of users of the real property is not restricted, X's right to use the public street surrounding the airport is not exclusive, and X does not have a possessory interest in the public street surrounding the airport.

(B) A use of real property, or a right or claim to a use of real property, that does not contain one of the elements in subdivisions (A)(1) to (6) above, inclusive, shall be rebuttably presumed to be nonexclusive.

(C) In no event shall the presence of occasional trespassers or occasional interfering uses be sufficient in and of itself to make nonexclusive a use, or a right or claim to a use, that is otherwise exclusive for purposes of this regulation.

(8) "Private benefit" means that the possessor has the opportunity to make a profit, or to use or be provided an amenity, or to pursue a private purpose in conjunction with its use of the possessory interest. The use should be of some private or economic benefit to the possessor that is not shared by the general public. The fact that a possession of real property is not for a business or commercial purpose or that the possessor is a non-profit corporation does not preclude the possessor from being found to have received a "private benefit" from that possession.

History: Adopted January 22, 1998, effective May 6, 1998

Rule 21. TAXABLE POSSESSORY INTERESTS-VALUATION

Reference: Sections 107, 107.1, Revenue and Taxation Code.
Section 15606, subdivision (c), Government Code.

(a) Definitions. For the purposes of this regulation:

- (1) "Real property" is defined in rule 20(c)(1).
- (2) "Possession" is defined in rule 20(c)(2).
- (3) A "right" to the possession of real property includes a "claim to a right" to the possession of real property within the meaning of rule 20(c)(3).
- (4) "Possessor" is defined in rule 20(c)(4).
- (5) The "term of possession" of a taxable possessory interest means the term of possession for valuation purposes.
- (6) The "stated term of possession" for a taxable possessory interest as of a specific date is the remaining period of possession as of that date as specified in the lease, agreement, deed, conveyance, permit, or other authorization or instrument that created, extended, or renewed the taxable possessory interest, including any option or options to renew or extend the specified period of possession if it is reasonable to assume that the option or options will be exercised.
- (7) "Contract rent" means any compensation or payments, in cash or its equivalent, that are required to be paid or provided by a possessor under an authorization or instrument that

creates a taxable possessory interest for the rights in real property provided by the taxable possessory interest.

(8) "Economic rent" means the estimated amount that would be paid by the possessor, on the valuation date in cash or its equivalent, for the rights in real property provided by the taxable possessory interest if (i) the rights to possession were offered in an open and competitive market and (ii) the public owner's interest in the property were not exempt or immune from taxation. Economic rent does not include payments by the possessor to the public owner that are not paid as consideration for rights in real property, such as payments for the rental of personal property, for the provision of security services, and for advertising and promotional services.

(9) "Creation" means the creation of a taxable possessory interest. Creation includes (i) an initial grant or other conveyance of a taxable possessory interest; (ii) a subsequent grant or other conveyance of additional land or improvements to a preexisting taxable possessory interest; or (iii) a subsequent grant or other conveyance of additional valuable property rights or uses to a preexisting taxable possessory interest.

(10) "Extension or renewal" means the lengthening of the period of possession of a taxable possessory interest, such as by the exercise of an option to extend or to renew a lease or permit.

(b) Rights to be Valued. Except as provided in subsection (f) or specifically provided otherwise by law, the rights to be valued in a taxable possessory interest are all rights in real property held by the possessor.

(1) The fair market value of a taxable possessory interest is not diminished by any obligation of the possessor to pay rent or to retire debt secured by the taxable possessory interest. In other words, the fair market value of a taxable possessory interest is the fair market value of the fee simple absolute interest reduced only by the value of the property rights, if any, granted by the public owner to other persons and by the value of the property rights retained by the public owner (excluding the public owner's right to receive rent).

(2) Examples of rights in real property that may be granted or retained by the public owner include the following: (i) the right to take possession of the property upon the termination of the taxable possessory interest due to the occurrence of an event such as the expiration of the contract term, a breach of agreement, or the happening of a condition that terminates the possessor's right to possession; (ii) the right to put the property to a higher and better use or otherwise restrict the possessor's use of the property; (iii) the right to terminate possession upon notice; (iv) the right to approve a sublessee or assignee; (v) the right to approve a loan secured by the taxable possessory interest; and (vi) the right to allow other possessors to use the property.

(c) Standard of Value. Assessors shall value a taxable possessory interest consistent with the requirements of subsections (a), (d), (e), and (f) of section 110 of the Revenue and Taxation Code. A taxable possessory interest subject to article XIII A of the California Constitution shall also be valued consistent with the requirements of section 110.1 of the Revenue and Taxation Code.

(d) Term of Possession for Valuation Purposes

(1) The term of possession for valuation purposes shall be the reasonably anticipated term of possession. The stated term of possession shall be deemed the reasonably anticipated term of possession unless it is demonstrated by clear and convincing evidence that the public owner and the private possessor have reached a mutual understanding or agreement, whether or not in writing, such that the reasonably anticipated term of possession is shorter or longer than the stated term of possession. If so demonstrated, the term of possession shall be the stated term

of possession as modified by the terms of the mutual understanding or agreement.

(2) If there is no stated term of possession, the reasonably anticipated term of possession shall be demonstrated by the intent of the public owner and the private possessor, and by the intent of similarly situated parties, using criteria such as the following:

(A) The sale price of the subject taxable possessory interest and sales prices of comparable taxable possessory interests.

(B) The rules, policies, and customs of the public owner and of similarly situated public owners.

(C) The customs and practices of the private possessor and of similarly situated private possessors.

(D) The history of the relationship of the public owner and the private possessor and the histories of the relationships of similarly situated public owners and private possessors.

(E) The actions of the parties to the subject taxable possessory interest, including any amounts invested in improvements by the public owner or the private possessor.

(3) For the purposes of this regulation, a taxable possessory interest that runs from month to month, a taxable possessory interest without fixed term, or a taxable possessory interest of otherwise unspecified duration shall be deemed to be a taxable possessory interest with no stated term of possession.

(e) Valuation of Post-De Luz Taxable Possessory Interests. Except as specifically provided otherwise by law, and excluding a taxable possessory interest involving the production of gas, petroleum, or other hydrocarbons, the value of a taxable possessory interest created, extended, or renewed after December 24, 1955 (i.e., a "Post-De Luz" taxable possessory interest) may be estimated using one or more of the following methods, as appropriate for the taxable possessory interest being valued.

(1) **Comparative Sales Approach to Value.** In the comparative sales approach, a taxable possessory interest is valued using the sale price of the subject taxable possessory interest or sales prices of comparable taxable possessory interests, provided such interests shall have sold under the conditions of fair market value described in subsection (a) of section 110. A taxable possessory interest may be valued by the direct comparison method or the indirect comparison method.

(A) **Direct Comparison Method**

In the direct comparison method, the appraiser shall add the following to the sale price of the subject taxable possessory interest, or to the sale price of a comparable taxable possessory interest, to derive an indicator of the fair market value of the subject taxable possessory interest: (i) the present value on the sale date of any unpaid future contract rent for the term of possession; (ii) the fair market value on the sale date of any debt assumed by the buyer of the taxable possessory interest; and (iii) the present value on the sale date of any future costs that the buyer is contractually obligated to pay for the right of possession (e.g., the cost of site restoration at the end of the term of possession) less the present value on the sale date of any future benefits in addition to the right of possession or use that the buyer is contractually entitled to receive (e.g., the salvage value of, or reimbursement value for, improvements existing at the end of the term of possession). The unpaid future contract rent in (i) above shall be reduced by any expense necessary to maintain the income from the taxable possessory interest, including any element of "gross outgo" as defined in subsection (c) of rule 8.

When valuing a taxable possessory interest by comparison with the sales of other taxable possessory interests, the other taxable possessory interests shall be located sufficiently near the subject taxable possessory interest and shall be sufficiently alike in respect to character, size, situation, usability, zoning or other enforceable government restrictions on use (unless rebutted pursuant to subdivision (c) of section 402.1 of the Revenue and Taxation Code), and restrictions on possession or use contained in the legal authorization or instrument that created extended or renewed the taxable possessory interest to make it clear that the comparable taxable possessory interests and the subject taxable possessory interest are comparable in value and that the cash equivalent price realized for the comparable taxable possessory interests may fairly be considered as shedding light on the value of the subject taxable possessory interest. The comparable sales also shall be sufficiently near in time to the valuation date of the subject taxable possessory interest. "Near in time to the valuation date" does not include any sale more than 90 days after the valuation date.

(B) Indirect Comparison Method.

In the indirect comparison method, a taxable possessory interest is valued by (i) estimating the fair market value on the valuation date of the possessor's rights in real property in the taxable possessory interest as if owned in perpetuity (i.e., the value of the fee simple absolute interest in such rights) using sales of fee simple absolute interests in properties that are comparable to the subject property as prescribed in section 402.5 of the Revenue and Taxation Code and whose highest and best use corresponds to, or is comparable with, the permitted use of the subject taxable possessory interest; and (ii) reducing this value by both the present value of those property rights for the period subsequent to the term of possession (i.e., the value of the fee simple absolute interest in such rights at the end of the term of possession) and the present value of all other rights of fee simple absolute ownership, if any, that are not provided to the possessor.

(2) Cost Approach to Value. In the cost approach, a taxable possessory interest is valued by (i) adding the estimated replacement cost new less depreciation of improvements that meet the requirements of the possessor's permitted use to the estimated value of the taxable possessory interest in land; and (ii) reducing this amount by the estimated present value of the improvements that shall revert to or be retained by the public owner at the end of the term of possession.

(A) The replacement cost new less depreciation of the improvements may be estimated as prescribed in subsections (d) and (e) of rule 6. The estimated value of the taxable possessory interest in land may be estimated using the comparative sales approach (direct or indirect method) or the income approach (direct or indirect method), as prescribed in subsections (e)(1) and (e)(3).

(B) If a possessor's property use is limited to specified time periods (e.g., certain hours of the day or certain days of the week) or is shared with other possessors, the value determined by the cost approach shall be reasonably allocated to each possessor in a manner that reflects each possessor's proportionate value of the right to possession.

(3) Income Approach to Value. In the income approach, a taxable possessory interest is valued by discounting the future net income that the interest in real property is capable of producing. A taxable possessory interest may be valued using the direct income method or the indirect income method.

(A) Direct Income Method. In the direct income method, a taxable possessory interest is valued by capitalizing the future net income that the taxable possessory interest is capable of producing under typical, prudent management for the term of

possession.

(B) **Indirect Income Method.** In the indirect income method, a taxable possessory interest is valued by (i) estimating the fair market value of the possessor's rights on the valuation date as if owned in perpetuity (i.e., the value of the fee simple absolute interest in such rights) using the income approach to value as prescribed in rule 8; and (ii) reducing this value by the present value of the those rights for the period subsequent to the term of possession (i.e., the present value of the value of the fee simple interest in such rights at the end of the term of possession).

(C) **Income to be Capitalized.** The income to be capitalized in the valuation of a taxable possessory interest is the "net return" (as defined in subsection (c) of rule 8) attributable to the taxable possessory interest. The income to be capitalized may be based on either (i) the estimated economic rent for the subject taxable possessory interest or (ii) if the estimated economic rent is unreliable or unavailable, the estimated net operating income of a typical, prudent operator of the property subject to the taxable possessory interest. Rental income is preferable to operating income (i.e., income from operating a business) because operating income may be influenced by managerial skills and may derive, in part, from nontaxable property. The income to be capitalized must be attributable to the rights in real property in the subject taxable possessory interest and must reflect the restrictions on use inherent in the subject taxable possessory interest.

Economic rent

a. The economic rent of the subject taxable possessory interest may be estimated by reference to (i) the contract rent for the subject taxable possessory interest; (ii) contract rents for comparable taxable possessory interests; (iii) contract rents for comparable fee simple absolute interests in real property; or (iv) contract rents for other comparable interests in real property. All such contract rents shall have been negotiated in an open and competitive market involving real property reasonably comparable to the subject taxable possessory interest in terms of physical attributes, location, legally enforceable restrictions on the property's use, term of possession, and risk of cancellation of the taxable possessory interest by public owner. In addition, the contract rents shall have been negotiated sufficiently near in time to the valuation date as to shed light on the economic rent of the subject taxable possessory interest.

b. When using the contract rent of a taxable possessory interest as an indicator of the economic rent, the assessor shall add to the contract rent (i) an estimate of the amount, if any, by which the contract rent has been reduced because improvements have been constructed at the possessor's expense that will revert to the public owner at the end of the term of possession; and (ii) an estimate of the amount, if any, by which the contract rent has been reduced because the possessor will bear the cost of restoring the real property to its original condition on reversion to the public owner, including the cost of removing improvements (less any estimated salvage value of, or reimbursement value for, the improvements), or the cost of any similar obligation.

c. To arrive at the income to be capitalized, any expense necessary to maintain the income from the subject taxable possessory interest, including any element of "gross outgo" as defined in subsection (c) of rule 8, whether paid by the public owner or the possessor, must be deducted from the estimated economic rent if the expense will be paid out of the estimated economic rent.

Net Operating Income

a. Net operating income is gross operating income less allowed expenses. Gross operating income, allowed expenses, and net operating income are defined herein consistent with "gross return," "gross outgo," and "net return," respectively, in subsection (c) of rule 8.

b. When valuing a taxable possessory interest using operating income, allowed expenses include the following: cost of goods sold (if applicable), typical operating expenses, typical management expense, an allowance for a return on working capital, and an allowance for a return on the value of any nontaxable property that contributes to the gross operating income. Typical operating expenses may include expenses for the rental of personal property, for the provision of security services, and for advertising and promotional services, provided such expenses are necessary for the production of the gross income. Typical operating expenses and typical management expense include expenses that an owner/operator typically would bear to maintain the property and to continue the production of income from the property but are borne by the public owner in the case of the subject taxable possessory interest.

c. Allowed expenses do not include the following: amortization, depreciation, depletion charges, debt retirement, interest on funds invested in the taxable possessory interest, the contract rent for the taxable possessory interest, property taxes on the taxable possessory interest, income taxes, or state franchise taxes measured by income.

(D) Capitalization Rate. Subsection (g) of rule 8 provides that a capitalization rate may be developed by either comparing the anticipated net incomes of recently sold comparable properties with their sales prices, or by deriving a weighted average of the capitalization rates (rates of return) for debt and equity capital appropriate to California money markets. In accordance with rule 8, the capitalization rate used in the valuation of a taxable possessory interest may be developed by (i) comparing the anticipated net incomes from comparable taxable possessory interests with their sales prices stated in cash or its equivalent and adjusted as described in subsection (e)(1)(A); (ii) comparing the anticipated net incomes of comparable fee simple absolute interests in real property with their sales prices stated in cash or its equivalent, provided the comparable fee properties are not expected to produce significantly higher net incomes subsequent to the subject taxable possessory interest's term of possession than during it; or (iii) by deriving a weighted average of the capitalization rates for debt and equity capital appropriate for the subject taxable possessory interest, weighting the separate rates of debt and equity by the relative amounts of debt and equity capital expected to be used by a typical purchaser of the subject taxable possessory interest. Consistent with subsection (f) of rule 8, the capitalization rate shall contain a component for property taxes where applicable.

(f) Valuation of Pre-De Luz Taxable Possessory Interests. Except as specifically provided otherwise by law, and excluding a taxable possessory interest involving the production of gas, petroleum, or other hydrocarbons, the value of a taxable possessory interest created prior to December 24, 1955, and not since renewed or extended (i.e., a "Pre-De Luz" taxable possessory interest) is the excess of the fair market value on the valuation date of the taxable possessory interest over the present value of unpaid future contract rent for the unexpired term of possession (i.e., for the term of possession). This value may be estimated using one or more of the following methods, as appropriate for the taxable possessory interest being valued.

(1) Comparative Sales Approach to Value. A Pre-De Luz taxable possessory interest may be valued by the comparative sales approach using the direct comparison method or the indirect comparison method, as described in subsection (e)(1), but with the following modifications:

(A) Direct Comparison Method. In the direct comparison method, the present value of the unpaid future contract rent is not added to the sale price of the taxable possessory interest.

(B) Indirect Comparison Method. In the indirect comparison method, the value of the possessor's rights as if owned in fee is reduced by the present value of the unpaid future contract rent of the taxable possessory interest, as well as by the value of those property rights for the period subsequent to the term of possession.

(2) Cost Approach to Value. A Pre-De Luz taxable possessory interest may be valued by the cost approach as described in subsection (e)(2), but the present value of any unpaid future contract rent of the taxable possessory interest in land for the term of possession is also deducted.

(3) Income Approach to Value. A Pre-De Luz taxable possessory interest may be valued by the income approach using the direct income method or the indirect income method, as described in subsection (e)(3), but with the following modifications:

(A) Direct Income Method. In the direct income method, the net income to be capitalized is reduced by the unpaid future contract rent for the term of possession, as well as by allowed expenses.

(B) Indirect Income Method. In the indirect income method, the present value of the unpaid future contract rent for the term of possession is deducted from the value of the fee interest, as well as the deduction of the present value of the property rights for the period subsequent to the term of possession.

History: Adopted January 6, 1971, effective February 18, 1971.

Amended December 17, 1975, effective January 25, 1976.

Amended January 22, 1998, effective May 6, 1998.

Amended March 27, Amended March 27, 2002, effective July 11, 2002. Amended to provide for the valuation of taxable possessory interests and to include provisions of former rules 23, 24, 25, and 26, which were repealed.

Rule 22. CONTINUITY OF POSSESSORY INTERESTS.

Reference: Sections 107, 107.1, 107.4, Revenue and Taxation Code.

(a) The continuity of possession or exclusive use necessary to establish a possessory interest will vary according to the location and character of the property. The continuity of use necessary for finding a possessory interest to exist is satisfied when the possessor of the property uses it to substantially the same extent as would an owner engaged in the same activity.

(b) Standards for determining the existence of taxable possessory interests based on continuity are:

(1) Actual or constructive possession or exclusive use of property on the lien date for the current year.

(2) Recurrent possession or exclusive use, whether or not the period extends through the lien date, when there is a history on the lien date of recurring use by the present or former possessors making a similar use of the property.

(3) Infrequent actual possession or exclusive use on a recurrent basis when the continuation of the right to possession or exclusive use is conditioned on or evidenced by the possessor having made a contribution to the value of the property by way of investment on or near the property occupied.

History: Adopted January 6, 1971, effective February 18, 1971.

Rule 28. EXAMPLES OF TAXABLE POSSESSORY INTERESTS.

Reference: Sections 107, 107.1, 107.2, 107.3, 107.4, Revenue and Taxation Code.

The following are examples of commonly encountered taxable possessory interests:

- (a) The right to explore for, capture, and reduce to possession gas, petroleum, and other hydrocarbons in public lands.
- (b) The possession of an employee in housing owned by a public agency, irrespective of whether occupancy of the housing is a condition of employment except when the facility also serves as the employee's work area to which the employer has full access.
- (c) The right to cut and remove standing timber on public lands.
- (d) The right to graze livestock or raise forage on public lands.
- (e) The possession of public property at harbors, factories, airports, golf courses, marinas, recreation areas, parks, and stadiums. Possessory interests may include land subject to the ultimate grant of a United States patent, commercial and industrial sites, and water rights.

History: Adopted January 6, 1971, effective February 18, 1971.

Rule 902. UNITARY PROPERTY VALUE INDICATORS AND STAFF DISCUSSIONS.

Reference: Sections 721, 722, 723, 724, 725, Revenue and Taxation Code.

Each year the Valuation Division shall make capitalization rate studies and develop value indicators applicable to the unitary property of each state assessee. A copy of the appropriate capitalization rate study and a summary of the calculations of the value indicators shall be provided by the Chief, Valuation Division, to the affected assessee on request. The assessee shall be informed that the staff will be available to discuss the data supplied.

History: Adopted January 7, 1976, effective February 8, 1976.

Rule 905. ASSESSMENT ELECTRIC GENERATION FACILITIES

Reference: California Constitution, article XIII, section 19; and section 721, Revenue and Taxation Code.

(a) Commencing with the assessment for the lien date for the 2003 assessment year, an electric generation facility shall be state assessed property for purposes of article XIII, section 19 of the California Constitution if: (1) the facility has a generating capacity of 50 megawatts or more; and (2) is owned or used by a company which is an electrical corporation as defined in subdivisions (a) and (b) of section 218 of the Public Utilities Code; or, the facility is owned or used by a company which is a state assessee for reasons other than its ownership of the electric generation facility or its ownership of pipelines, flumes, canals, ditches, or aqueducts lying within two or more counties.

(b) "Electric generation facility" does not include a qualifying small power production facility or a

qualifying cogeneration facility within the meaning of Sections 201 and 210 of Title II of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. §§796(17), (18) and 824a-3) and the regulations adopted for those sections under that act by the Federal Energy Regulatory Commission (18 C.F.R. 292.101-292.602).

(c) For purposes of this section, "company" means:

- (1) A person as defined in Revenue and Taxation Code section 19;
- (2) A separate division or other functional unit of a business enterprise which is created and maintained to operate any electric generation facility, where the business enterprise is engaged in a primary business other than generating, transmitting, distributing or selling electricity to the public.

(d) If an electric generation facility is operated by a separate division or other functional unit of a business enterprise, as described in this rule, the business enterprise must maintain accounting and other records sufficient to distinguish the costs and revenues of the separate division or unit from other divisions and units of the business enterprise.

(e) As adopted on September 1, 1999 and effective November 27, 1999, this rule is applicable to define electric generation facilities subject to state assessment to and including December 30, 2002. As amended on November 28, 2001, and filed with the Secretary of State on May 14, 2002, this rule is applicable to define electric generation facilities subject to state assessment as of December 31, 2002 and thereafter.

History: Adopted September 1, 1999, effective November 27, 1999; amended November 28, 2001, effective June 13, 2002.

Glossary

Abnormal Costs - amounts recorded in the property accounting records that are above and beyond what is typically expected in the construction or acquisition of a particular property type. Example: costs incurred to correct construction flaws.

Ad Valorem Tax Component - the part of the total capitalization rate that reflects the property taxes that a hypothetical purchaser would incur upon purchase of the subject property. This component is expressed as a relationship between the expected annual property tax expense and value.

Anticipated Operating Expenses - the amount of future annual expenses anticipated, or expected, from the operation of property by a hypothetical purchaser.

Anticipated Operating Revenues - the amount of future annual revenues anticipated, or expected, from the operation of property by a hypothetical purchaser.

Appraisal Unit - the unit of property that is typically bought and sold in the market.

Band-of-Investment - a method used to derive a capitalization rate in which the appraiser determines the capital structure that a hypothetical purchaser would likely employ and uses the relative percentages of debt and equity to weight the required debt and equity rates of return to develop the basic capitalization rate.

Basic Capitalization Rate - the rate of return on an investment necessary to attract investors. This can be computed by use of the band of investment. This is also known as the return on investment or yield rate, and is prior to any adjustment for capital recapture or taxes.

Book Cost - the amount in dollars of an asset as it is carried in the accounting records of a business. The original cost of an asset.

Capital Structure - the relative percentages of debt and owners' equity that constitute the liability and equity elements of the balance sheet.

Capitalization- any method of converting an income stream into an indicator of value.

Capitalization Rate - a rate used in converting income into an indicator of value. A ratio that expresses a relationship between income and value.

Cash Equivalent - the market value of assets expressed in terms equivalent to cash.

Cash Flow(s) - cash receipts minus disbursements derived from a group of assets for a given period of time.

Comparative Sales Approach - the technique of valuing properties by comparing them with similar properties that have been sold on a specified date. The comparative sales approach requires the sale of a sufficient number of similar properties within a specified period so that their characteristics and sales prices can be compared. It is based on the principle of substitution, which assumes that buyers would not pay more, and sellers would not accept less, for properties that are similar to, or have comparable utilities, to those that are sold in the same time period.

Cost - the expenditure required to develop and construct an improvement or acquire real and personal property.

Cost Worksheet - a worksheet used by the Valuation Division to calculate the cost indicators: Historical Cost Less Depreciation (HCLD) and Reproduction/ Replacement Cost Less Depreciation (RCNLD/ ReplCNLD). It is commonly known as Form V-508.

Debt - an amount owed. The general name for liabilities such as notes, bonds, mortgages that are evidences of amounts owed.

Deferred Charges - miscellaneous long term prepayments. Deferred Charges often is a catchall account for items that do not fit into other asset category and are not material enough individually to constitute a separate category.

Deferred Credits - miscellaneous long term liabilities. Deferred Credits often is a catchall account for long term liabilities that do not fit into other liabilities category and are not material enough individually to constitute a separate category.

Deferred Income Taxes (DIT) - accrued income tax credit or accrued income tax charges arising from the use of different accounting methods for financial reporting and income tax purposes. To conform to regulatory requirements, public utilities generally use straight-line depreciation for financial accounting purposes. However, to minimize income tax liability, accelerated depreciation is generally used. The use of two different depreciation methods creates a tax timing difference known as deferred income taxes.

Depreciation (Appraisal)- a decrease in utility resulting in a loss of the subject property's value. Depreciation can also be expressed as the difference between the replacement / reproduction cost new as of a particular date and the market value at the same date. There are three principal types of depreciation:

- **External (Economic) Obsolescence** - loss in utility and value caused by external negative influences outside the property. The inability of a property to perform the function for which it was originally intended.
- **Functional Obsolescence** - loss in utility and value due to changes in the desirability of the subject property; this may be attributed to changes in taste and style or the result of a poor original design. Functional obsolescence is also curable if the cost to cure is less than the value added by curing this deterioration.
- **Physical deterioration** - loss in utility and value due to physical deterioration in the subject property. Physical deterioration is curable if the cost to cure is less than the value added by curing this deterioration.

Equity - the owners' interest in the assets of a business. It is the residual interest of a business after the claims of non-owners (i.e., debt and other liability holders) are deducted. For a business organized as a corporation, balance sheet equity is typically made up of common stock, preferred stock, and (cumulative) earnings that have not been distributed.

Historical Cost - the total cost of a property when originally acquired, constructed, or first placed into service. Also called "book" cost.

Income Adjustment Factor - an adjustment to the percent good factor that reflects an allowance for the reduction in income from a property as it becomes older.

Income Influence Method – a method of allocating the sale or stock and debt value of a business to different segments or subdivisions according to their contribution to the income of the business.

Income Tax Component - the part of the total capitalization rate that reflects the income taxes that a hypothetical purchaser would incur upon purchase of the subject property. This component is expressed as a relationship between the expected annual income tax expense and value.

J Factor - an adjustment made to straight-line depreciation in the calculation of the income tax component that reflects the relative benefits or disadvantages of the use of modified accelerated cost recovery system depreciation for determining income tax liabilities.

Land Reversion - the market value of land at the end of the remaining economic life of the assets (other than land) in a limited life CEA model. This value is discounted to the valuation date using the basic capitalization rate plus a component for ad valorem taxes.

Lessee - one who has the right to use or occupy property under a lease agreement; a tenant.

Lessor - one who owns the property under a lease agreement; a landlord.

Liabilities - claims held by non-owners on the assets of a business. Liabilities are obligations that a business is obliged to pay before the any claims of the owners are satisfied.

Lien date - All taxable property (both state and locally-assessed) is assessed annually for property tax purposes as of 12:01 a.m. on January 1, which is called the lien date. It is referred to as the lien date because on this date the taxes become a lien against all real property assessed on the secured roll.

Life Study – A survey or study of property lives by property category.

MACRS - the modified accelerated cost recovery system of depreciation allowed by the Internal Revenue Code.

Market Value – the amount of cash or its equivalent that property would bring if exposed for sale in the open market under conditions in which neither buyer nor seller could take advantage of the exigencies of the other and both with knowledge of all of the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions upon those uses and purposes.

Net Book Value - the amount, in dollars, of an asset as carried in the accounting records of a business. The original cost of an asset less its accrued depreciation.

Noncapitalized Leased Property – leased property that is not reflected as a liability on a company's balance sheet.

Nonunitary Operations - income-producing activities engaged in by a public utility that are not essential to the provision of public utility services. Assets owned or used by a public utility that are not essential to provide public utility services are known as "Nonunitary Property".

Nonunitary Property - property not assessed as part of the unit.

Nonutility Operations - income-producing activities engaged in by the non-public utility segments of a business entity.

Normal Costs - costs typically expected in the construction or acquisition of a particular property type.

Percent Good - the complement of depreciation; if a property is 20 percent depreciated, its percent good is 80 percent. Percent good refers to the portion of benefits remaining in an asset compared to the total benefits when new.

R3 Survivor Curve – one of the asset retirement curves published by the Engineering Department at Iowa State University.

Rate Base - the dollar amount established by a regulatory agency upon which a return is allowed.

Rate of Return – see basic capitalization rate.

Recapture - the recovery by an investor of capital invested in a project or group of assets over a period of time. Also known as the return of the investment.

Replacement Cost - the cost to replace the subject property with a property that has equivalent utility as of the valuation date.

Reproduction Cost - the cost to reproduce an exact replica of the subject property as of the valuation date.

Reversion - a lump sum monetary benefit from a property that an investor receives or expects to receive at the termination of an investment.

Right of Way - an interest in real property that conveys the right to use a portion of another's property.

Single Life Method – in the individual or single life method, the percent good is simply a relationship between the present worth of an income for the probable remaining life expectancy and the present worth of an income for total life expectancy. The single life method assumes that the best estimate of the future life expectancy of survivors of a group of items is the average of the group.

Summation Method of Valuation – a valuation technique of combining values of individual assets or asset groups into one value.

Taxable Possessory Interest - a private right to the possession and use of publicly owned property for a period of time less than perpetuity.

Total Capitalization Rate – a capitalization rate that converts the income to be capitalized into a capitalized value. The rate includes the investors' perception of both return on and capital recapture of the investment, plus components for ad valorem property taxes and income taxes.

Trending Factor - an index number expressed in decimal form that estimates the change in cost over time. The trending factor is multiplied by the historical cost to calculate the reproduction or replacement cost new.

Unit Method of Valuation – The technique of valuing property operated as a unit in a primary function of the assessee as “one thing”

Unitary Operations – income-producing activities engaged in by a public utility that are essential to the provision of public utility services. All property owned or used by a public utility that is needed to provide public utility services as known as “Unitary Property”

Working Cash – the amount of cash (or cash balance) required for payment of expenses that are due before the revenue is collected.

WSATA - Western States Association of Tax Administrators. WSATA is an association of tax administrators from twelve western states - Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming. Some of the goals of the association are to facilitate dialogue among tax administrators, industry representatives, and academicians; as well as to promote research on tax issues administered on the state level.

Yield Rate – see basic capitalization rate.