



California State
Board *of* Equalization

Presentation on Issues Affecting Value Setting: Value Indicators and the Reconciliation Process



Objectives

- Review valuation timeline
- Overview of the different value indicators
- Summary of why certain value indicators are used for each industry
- Reconciliation process and value indicator weighting
- Review recent history of the wildfire/climate change valuation issue
- Adjustments for wildfires/climate change



Timeline of Annual Valuation Process

January & February:

- Meetings with State Assesseees
 - Discuss topics of interest/concern
 - Begin to consider areas that may need an adjustment
- Capitalization Rate Study
 - Rates used in the income approach value indicators
 - Developed using market data and industry input
- Condition Percent Good and Replacement Cost New Factors
 - Used in cost approach value indicators
 - Developed using both market and industry data



Timeline of Annual Valuation Process

March, April, early May:

- Property Statements due March 1
 - Assesseees can request a filing extension
- SAPD continues to meet with State Assesseees
 - May request additional data/information
 - Formulation of value adjustments
- SAPD staff completing unitary appraisals
 - Several levels of review for each appraisal
 - Assesseees may review their appraisal and work papers



Valuation Timeline Continued:

May:

- SAPD transmits confidential value indicators and final value estimates to the Board (Appraisal Data Reports)
- Annual Unitary Value Setting
 - Board adopts the unitary values at the May Board Meeting
- Notification of Assessed Values
 - News Release
 - Notice of Unitary Value sent by June 1
(Revenue and Taxation Code § 731)
 - Notice of Allocated Assessed Values sent by June 15
(Revenue and Taxation Code § 746)



Value Indicators

- Value indicators are market value estimates for state assessed property that are calculated according to recognized appraisal principles and statutory requirements.
- Property Tax Rule 902 states in part, that each year SAPD shall “...develop value indicators applicable to the unitary property of each state assessee.”
- More than one value indicator may be calculated for each assessee. The appraiser must decide which indicator(s) represent the best estimate of the property’s value.



Approaches to Value

- Property Tax Rule 3 provides that “the assessor shall consider one or more of the following, as may be appropriate for the property being appraised:”
- Comparative Sales Approach
- Stock and Debt Approach
- Replacement or Reproduction Cost Approach
- Historical Cost Approach
- Income Approach



Cost Approach Value Indicators Used by SAPD

- Historical Cost Less Depreciation (HCLD)
 - Historical/original cost of the property less accumulated depreciation
 - Important indicator for closely regulated public utilities
- Reproduction Cost Less Depreciation (ReproCLD)
 - Estimate of current cost to replace existing property with new exact replica
 - Index factors applied to cost of property adjusted by % good factor
- Replacement Cost Less Depreciation (ReplCLD)
 - Estimate of current cost to replace existing property with new equivalent
 - Index factors applied to cost of property by year adjusted by % good factor



Income Approach Value Indicators Used by SAPD

- Capitalized Earning Ability (CEA)
 - Any method that converts future anticipated income into present value
- SAPD primarily utilizes 2 types of CEA value indicators:
 - Perpetual Life
 - Income stream is sustained into perpetuity
 - Limited Life
 - Income stream has a finite life
- Net Liquidation Value (Salvage)
 - Highest and best use of property would be to sell the assets for liquidation value rather than operate the company as a going concern
 - Used mainly for certain “short line” railroads



Sales Approach Value Indicator Used by SAPD

- Sales Model
 - Variation of the traditional comparative sales model
 - Nature of utility companies make them less subject to sales as there are usually very few comparisons
- Generally considered a reliable value indicator if sales agreement has sufficient detail to allow the appraiser to determine what portion of the sales price was allocated to the physical assets
 - Must remove assets exempt from taxation from the sales price



Appraisal Process

- Evaluate which value indicators make most sense for each industry and each state assessee
 - Review prior year appraisals
 - Review prior year petition issues, if any
 - What data is available? Rate regulated? Stable income stream?
- Calculate those indicators based on property statement data
- Make value adjustments as needed
- Reconcile the value indicators
- Present the final value estimate



Gas & Electric Industry Value Indicators

- Investor-Owned Utilities:
 - Primary indicator is HCLD
 - Also considered: perpetual life CEA
- HCLD is a reliable indicator of market value for closely regulated public utilities:
 - Assessor's Handbook 502: Advanced Appraisal (p. 502)
 - Unitary Valuation Methods (p. 1)
 - Western States Association of Tax Administrators Handbook (WSATA) (p. II-8)



Gas & Electric Industry Value Indicators

Further support for HCLD value indicator for rate regulated utilities:

- Property Tax Rule 3(d)
 - “...the assessing agency shall consider as relevant to value, the amount actually invested in the property (less depreciation), if the income from the property (rate of return) is regulated by law and the agency uses historical cost depreciation as a rate base
- Utilities that are closely regulated are subject to rate base regulations which means their authorized earnings, or rates of return, are set by regulators



Gas & Electric Industry Value Indicators

- Electric Cooperatives:
 - Primary indicator is HCLD
 - Not directed toward profit making
- Gas Transmission companies:
 - Primary indicator is HCLD as regulated by FERC (closely regulated)
 - Also consider CEA for companies showing reliable income stream
- Gas Storage companies:
 - Not subject to traditional rate-making process
 - ReproCLD and CEA are both considered



Electric Generation Industry Value Indicators

- Newer Facilities:
 - ReplCLD and CEA value indicators given equal reliance
 - ReplCLD reflects replacement cost of current technology
 - CEA is considered reliable due to reduced volatility in income projections
- Older Facilities:
 - Reliance on ReplCLD and CEA value indicators varies depending on the predictability and reliability of future income streams
 - Long term contracts vs. no contract

Important to consider the age of the facility and length of contract when determining use of these value indicators for this industry.



Intercounty Pipeline Industry Value Indicators

- Common Carrier Pipelines:
 - Primary indicators are ReproCLD, HCLD (rate base), CEA
 - Use of ReproCLD and CEA is based on assessee specific factors
- Nonregulated Natural Gas Transmission Pipelines:
 - Primary indicator is ReproCLD
- Noncommon Carrier Pipelines:
 - Primary indicator is ReproCLD
 - These assessees are usually subsidiaries of other petroleum or mineral extraction companies



Railroad Industry Value Indicators

CEA value indicators are considered most appropriate. ReproCLD is used only sparingly due to old age of assets and difficulty estimating depreciation.

- Class 1 Railroads:
 - Perpetual life CEA
 - Uses most recent year's income
- Shortline Railroads:
 - Primary is perpetual life CEA
 - Salvage (Net Liquidation) used when highest and best use of property is to disassemble and sell component parts of the railroad



Local Telephone Industry Value Indicators

HCLD and ReplCLD value indicators are primarily used due to regulation and market trends. CEA given consideration in some cases based on assessee specific circumstances.

- Traditional Landline companies:
 - Primary indicator is HCLD
 - Rate regulated; provide traditional landline telephone services
- Larger Local Exchange companies:
 - Primary indicator is ReplCLD and CEA also considered
 - Have incentive-based rate regulation; face increasing competition from other providers such as cable companies and competitive local exchange providers



Wireless Telephone Industry Value Indicators

ReplCLD is considered the most reliable value indicator.

- Not closely regulated
- Competitive industry experiencing significant advances in equipment technology
- Replacement cost data is available

CEA value indicator is sometimes considered, but is generally not relied upon as it may include value related to non-assessable property



Interexchange Industry Value Indicators

These assessees are comprised of long distance carriers, alternative access providers, satellite communications, other hybrid telecom services

Primary value indicator is Replacement Cost Less Depreciation (ReplCLD)

- Not rate base regulated
- Highly competitive economic conditions continue to result in contraction of companies and convergence of services
- CEA not considered reliable due to uncertainty of the current income continuing into the future

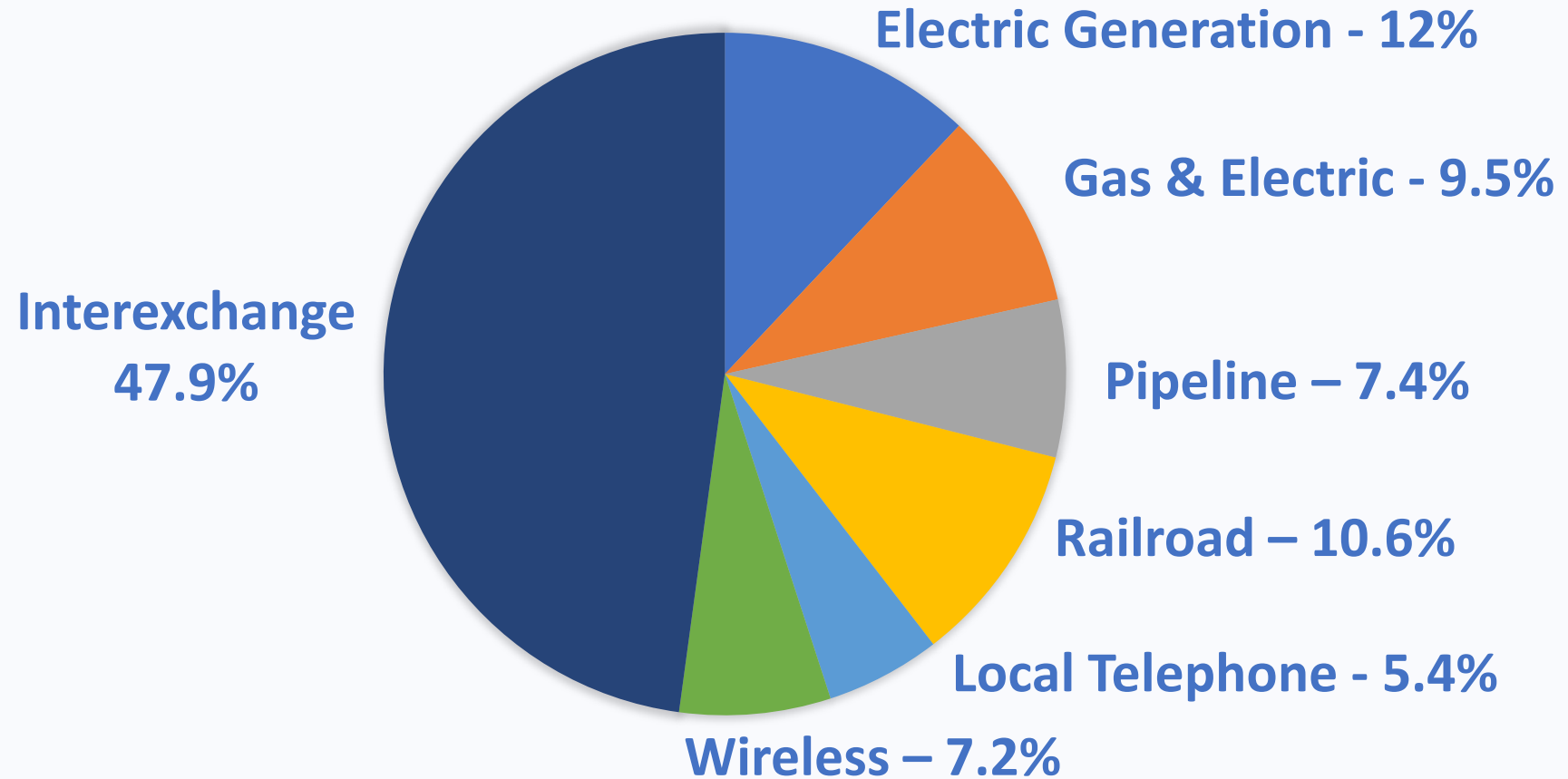


Applicable Value Indicators by Industry

Industries	HCLD	ReproCLD	ReplCLD	CEA	Salvage
Gas & Electric	X			X	
Electric Generation			X	X	
Pipeline	X	X		X	
Railroad		X		X	X
Local Telephone	X		X	X	
Wireless			X	X	
Interexchange			X		



PERCENTAGE OF STATE ASSESSEES BY INDUSTRY





Reconciliation and the Final Value Estimate

- The final analytical step in the appraisal process is to reconcile value indicators from the separate approaches utilized into a final estimate of value.
- Resolving the differences among the value indicators is called reconciliation.
- The result of reconciliation is the final value estimate.

Source: Assessor's Handbook 501 (p. 110)



Reconciliation of the Value Indicators

- The process by which the appraiser evaluates, chooses, and selects from among value indicators to reach a final value estimate
- Appraiser must rely on their experience, expertise, and professional judgement to determine the validity of each value indicator and appropriateness for the property being valued

Source: Appraisal Institute (Understanding the Appraisal, p. 13)



Reconciliation – Accounting vs. Appraisal

- In accounting, reconciliation is a procedure for confirming that two sets of records are in agreement (Oxford Dictionary of Accounting)
- In appraisal, reconciliation is a process in which the appraiser conducts an analysis of:
 - Relative appropriateness of the approaches applied
 - Accuracy of the data collected and calculations made
 - Quantity of the data available for each approach
 - Consistency in the manner in which the approaches to value were applied

Source: Assessor Handbook 501: Basic Appraisal (p. 110)



Reconciliation Process (Weighting of Indicators)

- The appraiser weighs the relative significance, applicability, and defensibility of each approach and relies most heavily on those most appropriate to the intended use of the appraisal

Source: Appraisal Institute (Understanding the Appraisal, p. 13)

- Averaging the value indicators is not a proper method since it would imply that all value indicators are equally valid, and this is rarely the case. Use of an average bypasses the proper application of an appraiser's experience, expertise, and professional judgement to resolve the differences in the value indicators. (WSATA Handbook, p VII-4)



Final Value Estimate

- The final value estimate is an appraiser's expert opinion of value supported by verifiable data
- There is no mathematical formula or statistical technique
- It is an opinion that should be based on the appraiser's application of generally accepted appraisal methods and procedures taking into consideration each state assessee's unique situation



How SAPD shares Reconciliation with the Board

- SAPD annually transmits the value indicators to the Board in the form of the Appraisal Data Reports (ADR)
 - Shows value indicators that were calculated
 - Shows weighting assigned to each value indicator
 - Shows Final Value Recommendation
 - Confidential (Rev. & Tax Code § 833 and Gov't Code § 15619)
- SAPD annually includes Appraisal Narratives with the ADR which document appraiser's reconciliation of the value indicators



Recent History of Wildfire/Climate Change Issue

- This is an evolving issue that SAPD has been working on with the investor-owned utilities since at least 2017
- Engaged with industry/assessee representatives every year
- Early discussions focused on how to address climate change and wildfire risk
- Much speculation in early years on what action CPUC and/or legislature may take
- Discussion at the February 2018 Board Meeting included an assessee representative and SAPD Chief



Challenges of Wildfire/Climate Change Issue

- Difficulty for SAPD and utilities is how to quantify the impacts
- Specifically, how does this issue affect the value of the physical assets
- SAPD is not a climate change expert; as we do on similar issues, we defer to the regulators, the CPUC, and other industry experts



First Adjustments for Wildfires/Climate Change

- For lien date 2019, SAPD made our first adjustments for this issue
- Adjustments were made based on utilities' Cost of Capital applications with the CPUC
- These applications submitted by utilities to the CPUC were our first source of data that attempted to quantify the impacts
- SAPD made decision to be proactive and allow for an adjustment in our valuations based on this data



Legislative and Regulatory Action

New developments informed our appraisal for the 2020 lien date:

- AB 1054 (2019)
 - Established Wildfire Insurance Fund
 - Designed to stabilize credit markets for utilities
- CPUC rate case decisions for major utilities in December of 2019
 - Included requests for an equity risk premium by the investor-owned utilities
 - CPUC statement that AB 1054 and other policies “mitigated wildfire exposure faced by California’s utilities” thus the request for an equity risk premium was denied



Discussions related to CPUC and AB 1054

- SAPD met with utilities in early 2020 to discuss AB 1054 and CPUC rate case decisions
- Discussion on how to treat payments to the AB 1054 fund, required mitigation costs, etc.
- Topic of the equity risk premium adjustment denied by CPUC was a major component of these discussions
- Utilities contended this risk premium better quantified the risk the utilities were facing



Value Adjustments for CPUC cases and AB 1054

- SAPD considered all of these conversations carefully, analyzed the CPUC decisions and analyzed AB 1054
- SAPD made adjustments for the wildfire/climate change issue for the 2020 lien date based on the new regulatory and legislative events



Weighting Indicators Revisited

- After the 2020 petition season, we did a careful analysis of factors affecting the indicator weightings and decided our confidence level in the weighting of the value indicators was the same
- Analysis of the reliability and quality of the data
- Utilities continue to replace old property with significant amounts of new property which is also consistent with reliance on cost approach



Looking Ahead

- Continue to monitor all aspects of the wildfire/climate change issue
- At this time, no new legislation or regulation affecting state assessment is pending
- Ongoing consideration of studies and data presented by state assesseses



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Thank you
