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Identification and Valuation of Intangible Personal Property

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Discussion Outline

- Definitions and principles
- Unit valuation principle standards and procedures
- Identification of intangible property
- Attributes of intangible property

Discussion Outline (cont.)

- Intangible property valuation standards and procedures
- Extraction of intangible property from the total unit
- Typical extraction method illustrative example
- Typical objections to intangible property valuations
- Summary and conclusion

Discussion Objective

- This discussion considers
  - the identification, valuation, and extraction from the total unit value
  - of exempt intangible property
  - to conclude a taxable unit value
  - for ad valorem property taxation purposes
- Each of the above statements is significant.

Definitions and Principles

- Identification
  - There is no single list of intangible property
  - Appraisers typically consider GAAP accounting, income taxation, and authoritative literature for listings
  - There are general criteria for what is – and what is not - intangible property

Definitions and Principles (cont.)

- Valuation
  - The appropriate standard of value is determined by state statute
  - Standards of value may be similar – but could have a subtle difference
  - Appraisers value the intangible property as part of the total unit
  - HABU is an important consideration

Definitions and Principles (cont.)

- Extraction
  - In jurisdictions where intangible property is exempt from taxation, the intangible property value should be removed from the total unit value
  - The residual from the total unit is the value of the taxable unit
  - The extraction formula is:

        total unit value
      - exempt property value
      = taxable unit value

  - There are several extraction methods. We will consider the direct extraction method.

Definitions and Principles (cont.)

- Exempt property
  - Determination of any exempt property is an issue of state statute
  - Determination of exempt intangible property is an issue of state statute
  - Statutory intangible property listings may be descriptive, comprehensive, or illustrative
  - Determination of exemption is a legal issue – not an appraisal issue

Definitions and Principles (cont.)

- Intangible
  - Definition: cannot be seen or touched
  - Value of intangible property comes from ownership rights – not from tangible elements
  - "Intangible" is an adjective – not a noun
  - There are differences between intangible property, intangible attributes, intangible influences, etc.

Definitions and Principles (cont.)

- Property
  - Property is a legal term.
  - Property is a bundle of rights defined by federal or state statute.
  - Asset is an accounting term.
  - Assets are reported on an entity's balance sheet.
  - Asset recognition criteria are determined by FASB CON 6,
  - Not all property are assets. Not all assets are property.
  - The subject of a property tax appraisal is property – not assets.

Definitions and Principles (cont.)

- Total unit value
  - Total unit includes all property types encompassed in the unit valuation
  - Depending on unit valuation methods applied, these property types include:
    - Working capital accounts
    - Real estate

Definitions and Principles (cont.)

- Tangible personal property
- Intangible personal property
- Regulatory and other accounts
- Intangible investment attributes

- Some of these property types may not be subject to taxation
- Total unit should only include property in existence on the valuation date

Definitions and Principles (cont.)

- Taxable unit value
  - Taxable unit should include only property types subject to taxation in the taxing jurisdiction
  - There may be numerous types statutory exemptions including some (or all) intangible property
  - Total unit minus exempt property equals taxable unit
  - Taxable unit should only include property in place on valuation date

Definitions and Principles (cont.)

- Ad valorem
  - Latin: "according to the value"
  - The standard of value is determined by state statute
  - Appraisers should apply the same standard of value to all unit property types
  - All property types should be appraised based on each property's contribution to the total unit value
  - All property types should be appraised based on HABU concluded for the total unit

Definitions and Principles (cont.)

- Property taxation
  - The tax (and the appraisal) is based on the value of property
  - Property tax is not a tax on:
    - Asset value
    - Income value
    - Business value
    - Property owner value

What is an Intangible Property?

- "Intangible" means something that lacks physical substance
  - "Intangible" means that the economic benefit of the property does not come from its physical substance
  - Intangible property value is based on the rights and privileges to which the property entitles the owner/operator

Intangible Property Attributes

- Intangible property should have the following attributes
  - It should be subject to a specific identification and recognizable description
  - It should be subject to legal existence and legal protection
  - It should be subject to the rights of private ownership, and that private ownership should be transferable
  - There should be some tangible evidence or manifestation of the existence of the intangible property

Intangible Property Attributes (cont.)

  - It should be created or come into existence at an identifiable time or as the result of an indefinable event
  - It should be subject to being destroyed or to a termination of existence at an identifiable time or as the result of an identifiable event
- There should be a specific bundle of legal rights associated with the intangible property

ASC Topic 805 Recognition Considerations

- FASB ASC 805-30-20 Glossary:

  Identifiable Intangible Assets

  The acquirer recognizes separately from goodwill the identifiable intangible assets acquired in a business combination. An intangible asset is identifiable if it meets either (1) the separability criterion or (2) the contractual – legal criterion described the definition of "identifiable."

ASC Topic 805 Recognition Considerations (cont.)

- FASB ASC 805-30-20 Glossary:

  Identifiable

  An asset is identifiable if it meets either of the following criteria:

  1. It is separable, that is, capable of being separated or divided from the entity and sold, transferred, licensed, rented, or exchanged, either individually or together with a related contract, identifiable asset, or liability, regardless of whether the entity intends to do so.
  2. It arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

Tangible Evidence of Intangible Property

- The value of intangible property comes from its non-physical elements
- The value of tangible property comes from its physical elements
- The tangible evidence of intangible property does not convert that property into tangible property, because the tangible evidence does not affect the value of that property

Tangible Evidence of Intangible Property (cont.)

Intangible property	Tangible evidence
Assembled workforce	Employee lists; employee records
Customer relationships	Contracts; shipping and billing records
Proprietary technology	Engineering drawings
Patents	Patent registration
Trademarks	Trademark registration
Software	Print-out of source code
Goodwill	Financial statements & projections
Supplier contracts	Contract document
Trade secrets	Formula; flowchart

What is Not Intangible Property?

- There are intangible attributes or intangible influences that may affect the value of intangible property
- These attributes or influences are not property.

What is Not Intangible Property? (cont.)

- Examples Include:

1. High market share
2. High profitability or high profit margin
3. Lack of regulation
4. A regulated (or protected) position
5. Monopoly position (or barriers to entry)
6. Market potential
7. Breadth of customer appeal
8. Mystique
9. Heritage
10. Competitive edge
11. Life-cycle status
12. Uniqueness
13. Discounted prices (or full prices)
14. Positive image
15. First to market
16. Technological superiority

What is Not Intangible Property? (cont.)

17. Consumer confidence or trustworthiness
18. Creativity
19. High growth rate
20. High return on investments
21. Size
22. Synergies
23. Economies of scale
24. Efficiencies
25. Longevity

Examples of Intangible Property: Internal Revenue Code Section 197

- Goodwill
- Going-concern value
- Any of the following intangible items:
  - Workforce in place including its composition and terms and conditions (contractual or otherwise) of its employment
  - Business books and records, operating systems, or any other information base (including lists or other information with respect to current or prospective customers)

Examples of Intangible Property: Internal Revenue Code Section 197 (cont.)

- Any patent, copyright, formula, process, design, pattern, knowhow, format, or other similar item
- Any customer-based intangible
- Any supplier-based intangible
- Any other similar item
- Any license, permit, or other right granted by a governmental unit or an agency or instrumentality thereof

Examples of Intangible Property: Internal Revenue Code Section 197 (cont.)

- Any covenant not to compete (or other arrangement to the extent such arrangement has substantially the same effect as a covenant not to compete) entered into in connection with an acquisition (directly or indirectly) of an interest in a trade or business or substantial portion thereof
- Any franchise, trademark, or trade name

Examples of Intangible Property: Treasury Regulation 1.482-4

- For purposes of section 482, an intangible is an asset that comprises any of the following items:
  1) Patents, innovations, formulas, processes, designs, patterns, or know-how;
  2) Copyrights and literary, musical, or artistic compositions;
  3) Trademarks, trade names, and brand names:
  4) Franchises, licenses or contracts;

Examples of Intangible Property: Treasury Regulation 1.482-4 (cont.)

5) Methods, programs, systems, procedures, campaigns, surveys, studies, forecasts, estimates, customer lists, or technical data; and
6) Other similar items

- For purposes of section 482, an item is considered similar if it derives its value from its intellectual content or other intangible properties.

Generally Accepted Intangible Property Valuation Approaches and Methods

- Cost approach methods
  - Replacement cost new less depreciation method (“RCNLD”)
  - Reproduction cost new less depreciation method (“RPCNLD”)
  - Trended historical cost less depreciation method (“THCLD”)
- Market approach methods
  - Relief from royalty (“RFR”) method
  - Comparable uncontrolled transaction (“CUT”) method
  - Comparable profit margin (“CPM”) method

Generally Accepted Intangible Property Valuation Approaches and Methods (cont.)

- Income approach methods
  - Differential income (with/without) method
  - Incremental income method
  - Greenfield method
  - Profit split method (or residual profit split method)
  - Disaggregated method
  - Distributor method
  - Residual (or excess) income method
  - Capitalized excess earning method ("CEEM")
  - Multiperiod excess earnings method ("MEEM")

Generally Accepted Intangible Property Valuation Approaches and Methods (cont.)

- There are generally accepted procedures that are applied within each method
- There is a body of literature that documents these generally accepted valuation approaches and methods

Intangible Property Valuation – Cost Approach

- Cost approach may be applicable when income approach and/or market approach data are not available
- Certain intangible property lends itself to the cost approach:
  - Recently developed (relatively new) intangible property
  - Intangible property that is fungible or may be easily exchanged or substituted
  - Intangible property for which the owner/operator's historical development cost data are available

Intangible Property Valuation – Cost Approach (cont.)

- When applying the cost approach, the appraiser should consider whether there are sufficient reliable data available to estimate:
  - A current cost measurement (such as replacement cost new or reproduction cost new) and
  - All forms of depreciation and obsolescence (including economic obsolescence)
- The obsolescence estimate may involve an analysis of the intangible property UEL

Intangible Property Valuation Professional Guidance

Accounting Standards Codification, ASC 350: Intangibles-Goodwill and Other, ASC 805: Business Combinations, and ASC 820: Fair Value Measurement. Norwalk, CT: Financial Accounting Standards Board

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Intangible Property Fair Value Measurements

- The *Mandatory Performance Framework* and the *Application of the Mandatory Performance Framework for the Certified in Entity and Intangible Valuations Credential* provide specific guidance on intangible property valuation
- The *Application* includes specific guidance related to:
  - Application of the TAB adjustment
  - Derivation of the discount rate

Intangible Property Fair Value Measurements (cont.)

- Application of valuation discounts and premiums
- Useful economic life measurement
- Assembled workforce valuation
- Reconciliation of alternative intangible property value indications

Intangible Property and Unit Valuation Cost Approach

- Some appraisers recommend heavy reliance on the unit valuation cost approach.
- They propose that intangible property is not captured in a cost approach unit value indication.
- Therefore, intangible property value does not need to be extracted from the cost-based unit value,
- This conclusion is incorrect.

Intangible Property and Unit Valuation Cost Approach (cont.)

- Intangible property value should be considered in the unit valuation cost approach economic obsolescence analysis.
- The following example illustrates this issue.

Intangible Property Impact on Cost Approach Economic Obsolescence

- Assume this hypothetical taxpayer unit fact set

• Taxpayer tangible property- based on a cost approach analysis	$10,000,000
• Taxpayer intangible property- based on a cost approach analysis	$5,000,000
• Taxpayer unit net cash flow (NCF)	$1,000,000
• Taxpayer required return on investment (ROI)/cap rate	10%

Intangible Property Impact on Cost Approach Economic Obsolescence (cont.)

- Simplified economic obsolescence analysis—not considering the intangible property

required ROI/cap rate			=	10%
actual ROI	$\dfrac{\text{NCF}}{\text{Tangible property value}}$	= $\dfrac{\$1{,}000{,}000}{\$10{,}000{,}000}$	=	10%
Income loss/economic obsolescence percent			=	0%
Value of the taxpayer unit tangible property				$10,000,000

(based on $10,000,000 cost approach value)

Intangible Property Impact on Cost Approach Economic Obsolescence (cont.)

- Correct economic obsolescence analysis—considering the intangible property

required ROI/cap rate			=	10%
actual ROI	$\dfrac{\text{NCF}}{\text{Tangible \& intangible property value}}$	= $\dfrac{\$1{,}000{,}000}{\$15{,}000{,}000}$	=	6.7%
Income loss/economic obsolescence percent			=	33%
(10% - 6.7%) ÷ 10%				
Value of the taxpayer unit tangible property				$6,667,000
(based on $10,000,000 cost approach value before E.O.)				

Typical Procedure to Extract Exempt Property from Unit

- First let's consider the typical procedure to extract exempt tangible property from the unit
- Second, let's consider the typical procedure to extract exempt intangible property from the unit
- By statute, many jurisdictions exempt certain specialized property categories from ad valorem taxation.

Typical Procedure to Extract Exempt Property from Unit (cont.)

- These specialized property categories may include:
  - Working capital (cash, marketable securities, receivables)
  - Construction in progress
  - Locally assessed property
  - Pollution abatement equipment
  - Over the road vehicles
  - Other
- The values for these exempt property categories is often determined by a formula

Typical Procedure to Extract Exempt Property from Unit (cont.)

- Typical valuation formula may include:
  - HCLD (NBV)
  - MV/BV ratio X HCLD
  - Other
- Let's consider a simple example

Tangible Property Extraction Example

- Let's assume a centrally assessed property in the State of Bliss.
- Total reconciled unit value is $100,000,000.
- Value of a locally assessed office building (included in the unit value) is $6,000,000.
- Value of over-the-road vehicles is $4,000,000.
- Value of pollution abatement equipment is $10,000,000.
- What is the value of the taxable unit?

Tangible Property Extraction Example (cont.)

- The taxable unit value is typically calculated:

$100,000,000	Total unit value – based on reconciled income, market, and cost indicators
- 6,000,000	Locally assessed property – based on sales comparison approach
- 4,000,000	OTR vehicles – based on HCLD (NBV)
- 10,000,000	Pollution abatement equipment – based on HCLD (NBV)
= 80,000,000	Value of taxable unit

- This extraction procedure is called the direct subtraction method.

Typical Tangible Property Extraction – Direct Subtraction Method

- Procedure for direct subtraction method

Value	Total property unit value
–	–
Value	Exempt tangible property value
=	=
Value	Taxable property unit value

- Value is subtracted from value to conclude value.

Typical Tangible Property Extraction — Direct Subtraction Method (cont.)

- The subtractions (and any additions) are always made on a reconciled value to reconciled value basis – and not on a valuation approach (e.g., cost) indication to valuation approach (e.g., cost) indication basis.

Intangible Property Extraction Procedures

- There are three typical procedures to extract intangible property value from the total unit value
  - Direct subtraction method
  - Transfer price (income allocation) method
  - Royalty rate method
- The direct subtraction method is typically applied
- The direct subtraction method is the same procedure applied to extract exempt tangible property

Intangible Property Extraction Direct Subtraction Method

- The direct subtraction method is:

  Reconciled value of total unit (based on any/all unit valuation approaches)

  minus: reconciled value of any/all exempt intangible property (based on any/all valuation approaches)

  equals: reconciled value of taxable unit

- Residual taxable unit value is a maximum value. It may include nontaxable property categories not specifically identified.

Intangible Property Extraction Example

- Let's consider a simple unit valuation example:
  - The Taxpayer Electric Company is assessed at $100,000,000 in the State of Bliss
  - The assessor applied several income approach and market approach unit valuation methods
  - Internally developed computer software is an important intangible property at Taxpayer
  - Intangible property is exempt from property taxation in Bliss
  - The appraiser values the computer software at $16,000,000
  - To simplify, let's ignore any other exempt intangible property

Taxpayer Total Unit Value Conclusion

Illustrative Taxpayer total unit valuation:

Income approach yield capitalization method [a] $110,000,000

Income approach direct capitalization method [b] $90,000,000

Market approach direct sales comparison method [c] $96,000,000

Value of total unit

Reconciled total unit value $100,000,000

[a] Based on present value of net cash flow

[b] Based on direct capitalization of net operating income

[c] Based on sales of guideline electric companies

Taxpayer Computer Software Valuation

- Illustrative cost approach RCNLD method valuation:

Internally Developed Software	Software Development Effort-in Person Months	Time to Develop Replacement Software-in Calendar Months	Cost per Person Month	RCNLD Component $000
Total direct and indirect costs	1,186	24	$14,585	17,290
Plus: Developer's profit, at 16%				2770
Plus: Entrepreneurial incentive, based on 2 years lost income				3,120
Equals: Total replacement cost new				23,180
Less: Functional obsolescence, based on replacement plan				3,690
Less: Economic obsolescence, at 19%, based on CILM				3,700
Equals: Software RCNLD				15,790
Taxpayer software value (rounded)				$16,000

Taxpayer Intangible Property Extraction — Direct Subtraction Method

Value of total unit	Reconciled total unit value $100,000,000
– Value of intangible property	Reconciled intangible property $16,000,000
= Value of taxable unit	Reconciled taxable unit value $84,000,000

Taxpayer Intangible Property Extraction—Direct Subtraction Method (cont.)

- Direct subtraction analysis

	$100,000,000	reconciled value of Taxpayer total unit
less:	16,000,000	reconciled value of Taxpayer exempt intangible property (computer software)
equals:	$84,000,000	reconciled value of Taxpayer taxable unit (maximum value)

Intangible Property Extraction—Direct Subtraction Method

- procedures

value	total unit value
–	–
value	exempt intangible property value
=	=
value	taxable unit value

Intangible Property Extraction—Direct Subtraction Method (cont.)

- The additions and subtractions are always made on a reconciled value to reconciled value level–and not on a valuation approach indication to valuation approach indication level.

Typical Objections to Intangible Property Valuation

- You can’t sell intangible property separately from the unit – so intangible property has no value.
- You can’t subtract intangible property appraised by one valuation approach from a unit value appraised by a different valuation approach.
- Apply the cost approach to value the total unit. That approach does not include intangible property value.
- You can’t have intangible property and economic obsolescence within the same total unit.
- Intangible property values are not stand-alone fair market values – but contributory values to the unit.

Typical Objections to Intangible Property Valuation (cont.)

- Intangible property (especially assembled workforce) is not recorded on the taxpayer's balance sheet.
- Intangible property can only be valued by reference to a MV/BV ratio.
- Intangible property is not property.
- You need tangible property to contribute to intangible property income.
- Intangible property value just captures a portion of total unit value.

You Can’t Sell Intangible Property Separately

- There is no appraisal or accounting requirement that intangible property must sell separately from tangible property.
- GAAP guidance is very specific: intangible property may sell with tangible property and/or other intangible property.
- Appraisers value all unit property as part of the unit – assuming the total unit sells.

You Can’t Sell Intangible Property Separately (cont.)

- Appraisers do not value tangible property assuming it sells separately from the unit
- This “sold separately” objection violates:
  - the unit valuation principle
  - the HABU of the unit
  - USPAP and UASFLA standards

You Can't Subtract One Approach from Another Approach

- Many jurisdictions allow multiple exemptions from the total unit value for
  - OTR vehicles
  - Locally assessed property
  - Pollution abatement equipment
  - Other
- Each of these exempt property categories is typically valued by reference to one valuation approach (often HCLD).

You Can’t Subtract One Approach from Another Approach (cont.)

- These exempt property values are subtracted from the reconciled total unit value.
- The fundamental principle of property value adjustment is:

    Value total unit
  – Value exempt property
  = Value taxable property

- There is no appraisal or accounting principle that requires exempt property values to be subtracted within each unit value approach.

Apply the Cost Approach to Value Total Unit

- Sole reliance on the cost approach excludes consideration of all income approach and market approach unit valuation methods
- Sole reliance on the cost approach ignores the valuation approach principally relied on by market participants: the income approach
- Sole reliance on the cost approach does not eliminate consideration of intangible property value

Apply the Cost Approach to Value Total Unit (cont.)

- Intangible property value should be considered in any cost approach economic obsolescence measurement analysis
- Consideration of intangible property value is a fundamental procedure in property appraisal standards – including USPAP

Intangible Property and Economic Obsolescence in Same Unit

- If there is economic obsolescence in the unit, all property valued by the cost approach will suffer the same economic obsolescence percentage adjustment, including:
  - all tangible property
  - all intangible property
- Economic obsolescence is implicitly incorporated in all property values concluded from the market approach and the income approach

Intangible Property and Economic Obsolescence in Same Unit (cont.)

- Economic obsolescence indicates the unit is suffering an income deficiency. If economic obsolescence exists, no property – tangible or intangible – should be valued by reference to a capitalized excess earnings method.
- The total unit (including a unit experiencing economic obsolescence) includes:
  - working capital
  - real estate
  - tangible personal property
  - intangible personal property
  - regulatory and other property

Intangible Property Values as Contributory Values to the Unit

- In a unit principle valuation, all property values are contributory values to the unit
- That is a fundamental premise of unit principle valuation
- The premise of the unit valuation is: the entire unit sells at one time from a willing seller to a willing buyer
- All property categories – tangible and intangible – transfer in that total unit sale

Intangible Property (especially assembled workforce) Not Recorded on Taxpayer's Balance Sheet

- Under U.S. GAAP, intangible assets generally are not reported on a balance sheet unless they are acquired in a business combination.
- Then, the acquired intangible assets are reported at fair value – not fair market value
- An acquired assembled workforce is reported (at fair market value) on an income tax balance sheet - as a Section 197 intangible asset

Intangible Property (especially assembled workforce) Not Recorded on Taxpayer's Balance Sheet (cont.)

- An acquired assembled workforce is reported on a GAAP balance sheet in certain transaction structures (an asset acquisition – not a business combination)
- In a business combination, the assembled workforce is valued – to ensure that the residual goodwill measurement is at least as large as the workforce fair value
- There is Appraisal Foundation, CEIV, FASB, IVS, and other authoritative guidance regarding assembled workforce valuation

Intangible Property (especially assembled workforce) Not Recorded on Taxpayer's Balance Sheet (cont.)

- Whether or not an asset category is reported under GAAP, intangible property is property that contributes to the value of the total unit
- There is no appraisal requirement that intangible property must be reported on a balance sheet

Intangible Property and the MV/BV Ratio

- First, the MV/BV ratio assumes that the total unit market value is correctly estimated.
- Second, the obvious problem with this procedure is: there is typically no book value for intangible property.
- Intangible property is only reported on a GAAP balance sheet after a business combination (an acquisition)
- If the unit was not recently acquired, there will be no intangible property BV.

Intangible Property and the MV/BV Ratio (cont.)

- After an acquisition, intangible property fair value is tested periodically for impairment.
  - Intangible property BV can only be written down
  - Once impaired, intangible property BV can never be restored even when the fair value is restored
- The lack of a BV for most internally developed intangible property invalidates the use of a MV/BV ratio procedure.

Intangible Property is Not Property

- This is a legal – not appraisal – issue
- The question of what is property is a matter of state (sometimes federal) statute
- Appraisers estimate value. Appraisers do not determine legal status
- Intangible attributes and/or influences do not have the legal elements of property

Intangible Property is Not Property (cont.)

- Some states may not recognize certain definitions of goodwill as property
- Generally, there are numerous categories of intangible personal property that are legally recognized – and protected – as property

You Need Tangible Property to Contribute to Intangible Property Income

- Typically, the unit needs tangible property to contribute to intangible property income (and value)
- Typically, the unit needs intangible property to contribute to tangible property income (and value)
- Both tangible property and intangible property are needed to contribute to the unit income (and value)
- All tangible property and all intangible property have a contributory value that collectively results in the total unit value

Intangible Property Value Represents a Portion of the Total Unit Value

- All property categories – tangible and intangible – represents a portion of the total unit value
- All tangible property and intangible property values represent a portion of the total unit value

Intangible Property Value Represents a Portion of the Total Unit Value (cont.)

- All property categories are needed to operate the total unit, including:
  - Working capital accounts
  - Real estate
  - Tangible personal property
  - Intangible property
  - Regulatory and other property accounts
- All property categories contribute to the total unit value

Other Taxation Authority Responses to Intangible Property Extraction

- Intangible property is the same as going concern value. We value the total unit on a going concern basis. We value the tangible property on a going concern basis. Intangible value is unit value is tangible property value.
- There is no single generally accepted list of intangible property.
- Every taxpayer in this jurisdiction owns some intangible property. The subject taxpayer is not unique.

Other Taxation Authority Responses to Intangible Property Extraction (cont.)

- We don’t have the time, data, or expertise to value each taxpayer’s exempt intangible property.
- If we give an intangible property exemption to this taxpayer, we’ll have to give an exemption to every similar taxpayer.
- We just don’t believe in intangible property.
- We can’t see any intangible property.

Other Taxation Authority Responses to Intangible Property Extraction (cont.)

- We didn't add any intangible property value to the unit value, so there is nothing to extract.
- Taxpayers should note that some taxation authority representatives may have no experience or expertise with regard to the intangible property valuation.
- Taxpayers should note that some taxation authority representatives may have no experience or expertise with regard to GAAP accounting issues.

Summary and Conclusion

- Definitions and principles
- Unit valuation principle standards and procedures
- Identification of intangible property
- Attributes of intangible property
- Intangible property valuation standards and procedures
- Extraction of intangible property from the total unit
- Typical extraction method illustrative example
- Objections to intangible property valuation
- Questions and discussions

Identification and Valuation of Intangible Property

- Supplemental materials

Unit Definitions and Principles

- Fundamentals of the unit valuation principle
  - Unit valuation principle is not unique to property taxation
  - The "unit rule" is required by USPAP and by UASFLA
  - The unit valuation principle appraises a bundle of different types as a single unit
  - Some of property types included in the unit valuation may not be subject to property tax
  - The ultimate objective of the unit principle valuation is to appraise the taxable unit of property

Business Value, Total Unit Value, and Taxable Unit Value

Relationship of Business Value, Total Unit Value, and Taxable Unit Value

Business Value

Total Unit Value

Taxable Unit Value of Land, Buildings, and Equipment

Add Working Capital Accounts, Intangible Property, and Other/Regulatory Property

Add Nonoperating Assets, Present Value of Growth Opportunities, and Intangible Investment Attributes

Business Value, Total Unit Value, and Taxable Unit Value (cont.)

Relationship of Business Value, Total Unit Value, and Taxable Value

Taxable Unit Value =	Land, Buildings, and Equipment		
Total Unit Value =	Taxable Unit Value	Plus	Working Capital Accounts, Intangible Property, and Other/Regulatory Property
Business Value =	Total Unit Value	Plus	Nonoperating Property, Present Value of Growth Opportunities, and Intangible Investment Attributes

When Is it Appropriate to Develop a Unit Principle Valuation?

- It is typically appropriate to develop a unit principle valuation (sometimes called a utility principle valuation) when:
  - The property is physically, functionally, and economically integrated
  - The property crosses multiple taxing jurisdictions
  - The HABU of the property assumes one physical unit
  - There is a continuous process flow where physical components cannot function independently
  - There do not exist financial statements for a smaller unit
  - The property components operate as a going-concern business operation

When Is it Appropriate to Develop a Unit Principle Valuation? (cont.)

- The unit derives income the sale of goods or services – and not from property rental income
- The property would sell as a single unit
- The comparable sales data involve the sales of going – concern units
- There is a statutory requirement to value the property by applying the unit valuation principle

What Makes a Property Appraisal a Unit Principle Valuation?

- A property appraisal is a unit principle valuation when:
  - In the income approach methods:
    - The income subject to capitalization is business operating income and not property rental income
    - The income subject to capitalization includes some income from future property not yet in place on the valuation date
    - The capitalization rate is based directly on capital market pricing or rate of return data

What Makes a Property Appraisal a Unit Principle Valuation? (cont.)

- In the market approach method:
  - The income subject to the pricing multiples includes business operating income
  - The pricing multiples are extracted from stock market prices
- In the cost approach methods:
  - Economic obsolescence is measured in the aggregate
  - Economic obsolescence income metric is business operating income
  - Comparative benchmark metrics are based on capital market rate of return/capacity data

Generally Accepted Unit Principle Valuation Approaches and Methods

- There are generally accepted unit principle valuation approaches and methods:
  - Cost approach
    - Replacement cost new less depreciation (“RCNLD”)
    - Reproduction cost new less depreciation (“RPCNLD”)
    - Historical cost less depreciation (“HCLD”)
  - Market approach
    - Stock and debt method
    - Direct sales comparison method

Generally Accepted Unit Principle Valuation Approaches and Methods (cont.)

  - Income approach
    - Yield capitalization method
    - Direct capitalization method
- There are generally accepted valuation procedures applied within each method
- There is a body of literature that documents these generally accepted unit valuation approaches and methods

When is Intangible Property Included in the Unit Valuation?

- Intangible property may be included in the unit valuation when:
  - In the income approach:
    - Either business operating income (goods and services) is used or business cost of capital (WACC) components are used in the yield cap or direct cap methods
  - In the market approach:
    - Pricing multiples are extracted from the sales of going – concern businesses
    - Pricing multiples (or direct capitalization rates) are extracted from capital market data

When is Intangible Property Included in the Unit Valuation? (cont.)

- In the cost approach
  - There is economic obsolescence
  - The economic obsolescence analysis does not assign a fair rate of return to the unit's intangible property

Intangible Property Exemption in the Taxing Jurisdiction

- What is exempt intangible property in the taxing jurisdiction?
  - The answer depends on the relevant statutory authority, judicial precedent, and administrative rulings
  - State and local taxing authorities are not bound by GAAP or federal income tax authority
- Many jurisdictions exempt some or all intangible property from property taxation
- Intangible property may include both intangible personal property and intangible real property

Intangible Property Exemption Considerations

- Does the unit valuation include the value of intangible property?
  - Depends on the unit valuation approaches and methods used
  - Depends on the specific unit valuation variables selected
- Appraisers should:
  - Receive legal instructions as to if – and which – intangible property are exempt from property taxation
  - Determine if the total unit value includes exempt intangible property