







# Real Estate Principles and Appraisal Procedures

Presented to

**BAPEPAM-LK** 

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#### **Land Economics**

- 1. Land
- 2. Real Estate
- 3. Real Property

Are they all the same?







#### **Land Characteristics**

- Each Parcel is unique in its location and composition.
- Land is durable as a long-term asset, but the supply of land is finite.
- Land is not only an economic concept, but also a valued commodity to people.







#### **Land Defined**

- Land The earth's surface (land and water), and anything that is included e.g., wildlife, timber, fish, soil.
- Land theory suggests that ownership is from the center of the earth to the ends of the universe.
- In real practice land ownership has limitations due to governmental controls and practical considerations.







## **Air Rights**

- Right to undisturbed use and control of designated air space above a specific land area within stated elevations.
- Right to construct buildings in the air space over the land.
- Right to control view/solar access.
- Right to lease or sell these rights.







## **Surface Rights**

Rights include land, water, and anything attached to the land—either naturally or placed by human hands.







## **Subsurface Rights**

- Rights to the use and profits of the underground portion of a designated property.
- Right to extract coal, minerals, oil, gas and water.
- Right to construct and maintain tunnels, subways, sewers, and basements.







## **Land Perspectives**

- Governmental and legal
  - Under a free market economy, land use is regulated within a framework of laws.
  - The law does not focus on the physical characteristics of land.
  - The law recognizes the potential conflict between private ownership and public use.







## Land Perspectives cont'd

- Economic
- Land is a major source of wealth, which can be measured monetarily.
- The economic concept of land incorporates modern value theory.
- Land is a resource that all individuals share.
- Environmental preservation concerns
- Historic preservation concerns
- Private development versus public interest concerns
- Land is a marketable commodity.







## Land Perspectives cont'd

- Environmental and geographic
  - Land has diverse physical characteristics.
  - Land can be used for multiple purposes.
    - Agriculture

Industry

Commerce

Habitation

Recreation







## Real Estate, Personal Property, and Real Property

- Real estate
  - Real estate is land (i.e., physical raw land) and all things that are a natural part of the land, such as trees and minerals.
  - Real estate includes appurtenances.
  - All real estate improvements were once personal property; when attached to the land, they become real estate







## **Appurtenance**

Something that has been added or appended to a property and has since become an inherent part of the property; usually passes with the property when title is transferred.







## **Personal Property**

- Personal property. Identifiable tangible objects that are considered by the general public as being "personal," for example, furnishings, artwork, antiques, gems and jewelry, collectibles, machinery, and equipment; all tangible property that is not classified as real estate.
- Personal Property can be removed from the land







#### **Fixtures**

- Fixture An item that was once personal property but has since been installed or attached to the land or building in a rather permanent manner so that it is regarded in law as part of the real estate.
- Similar to Appurtenance







## **Real Property**

- Includes all interests, benefits, and rights inherent in the ownership of physical real estate.
- The <u>fee simple interest</u> is the total range of ownership interests in real property. It is the most complete form of ownership.
- Other rights attached to real property ownership include the right of enjoyment (use the property in a legal manner); the right of exclusion (keep others from entering or using the property); and the right to do all or none of these things.







#### **Partial Interests**

- Partial interest Divided or undivided rights in real estate that represent less than the whole.
- The removal of one or more rights in real property can affect value. Appraisers are sometimes asked to value a partial interest in real property.







# Rights and Interests in Real Estate







#### **Estates in Land**

- Fee simple is the most complete form of ownership
- <u>Leased fee</u> interest is an ownership interest held by a landlord with the rights of use and occupancy conveyed by lease to others.
- <u>Leasehold</u> interest is an ownership interest held by a tenant with the rights of use and occupancy.







#### **Encumbrances and Liens**

- Encumbrance A permanent interest or right in real property that may decrease or increase the value of the fee estate but does not prevent its conveyance by the owner e.g. Restrictions and Easements
- Lien A claim against the owner's property rights, which may or may not become permanent e.g. Mortgages and Taxes.







#### **Easements**

An interest in real property that conveys use, but not ownership, of a portion of an owner's property.







#### **Encroachments**

An encroachment occurs when a portion of an improvement extends beyond the site boundary of its owner's land.







#### **Deed Restriction**

A limitation that passes with the land regardless of the owner; usually limits the property's type or intensity of use.







## **Controls on Ownership**

- Four powers of government
  - Taxation
  - Eminent domain
  - Police power
  - Escheat







#### **Taxation**

 The right of government to raise revenue through assessments on valuable goods, products, and rights.







#### **Eminent Domain**

 The right of government to take private property for public use upon the payment of just compensation.







#### **Police Power**

 The right of government through which property is regulated to protect public safety, health, and general welfare.







#### **Escheat**

 The right of government that gives the government ownership of a property when its owner dies without a will or any ascertainable heirs.







# **Contracts, Leases and Deeds**







#### **Contract**

 An agreement between two or more who agree to perform or not to perform a legal act, for legal consideration, within a specified time.







#### Lease

 A written contract in which the rights to use and occupy land or structures are transferred to another for a specified period of time in return for a specified rent.







## **Deed (Title)**

• The combination of all elements that constitute proof of ownership.







## The Nature of Value







#### **Fundamentals of Cost**

- Cost is a fact.
- It is the amount (in dollars) that is required to create, produce, or obtain a property.
- The identification of cost is independent of any exchange process.
- From an appraiser's perspective, cost can also be an estimate of fact.
- Cost is independent of value, but it has a significant influence on value to the degree that on some occasions, value might coincide with cost.







#### **Fundamentals of Price**

- Price the amount a particular purchaser agrees to pay and a particular seller agrees to accept under the circumstances surrounding their transaction.
  - Price may or may not have any relation to the value attributed to a particular property.
  - Once stated, price is a historical fact.







#### **Fundamentals of Value**

- Value The monetary worth of a property, good, or service to buyers and sellers at a given time. The present worth of the future benefits that accrue to real property ownership.
  - Value is based on the process of exchange. It is created in the dynamics that take place between those who buy, sell, or use real and personal property.
  - Value is expressed as an economic concept.
     Therefore, it is not a fact, but rather an opinion of the worth of a property as of a specified time.







#### **Four Factors of Value**

- <u>Utility</u> The ability of a product to satisfy a human want, need, or desire.
- <u>Scarcity</u> The present or anticipated undersupply of an item relative to the demand for it. Conditions of scarcity contribute to value.
- <u>Desire</u> A purchaser's wish for an item to satisfy human needs (e.g., shelter, clothing, food) or individual wants beyond essential life-support needs.
- Effective Purchasing Power The ability of an individual or group to participate in a market, i.e., to acquire goods and services with cash or its equivalent.







### **Supply and Demand in Perspective**

• The four factors that influence value operate within the economic principle of supply and demand. In real estate, *supply* is the amount of a property type available for sale or lease at various prices in a given market as of a given time.







## **Types of Value**







#### **Market Value**

 Market value is the estimated amount for which an asset should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion. (IVS)







### **Other Values - Examples**

- In Use Value-The value a specific property has for a specific use.
- Investment Value-based on individual investment requirements.
- Going-Concern Value-The market value of all the tangible and intangible assets of an established and operating business with an indefinite life, as if sold in aggregate.
- Insurable value-The value of an asset or asset group that is covered by an insurance policy.
- Assessed Value-A value set on real estate and personal property by a government as a basis for levying taxes.
- Fair Value-Pertains to an accounting term defined by IFRS 13







## **Analyzing Market Areas**

- Market area The geographic or locational delineation of the market for a specific category of real estate, i.e., the area in which alternative, similar properties effectively compete with the subject property in the minds of probable, potential purchasers and users.
- The subject property of an appraisal assignment is influenced by the governmental/legal, economic, social, and environmental/geographic forces that permeate the vicinity in which it is located.
- Analyzing the market area provides a framework, or context, in which the value conclusion is developed.







#### Market Areas cont'd

- Purpose of analyzing the market area in an appraisal assignment.
  - Provides a framework to form an opinion of property value
  - Identifies the area that has the greatest influence on the subject property's use and value
  - Establishes potential limits for data searches used in the approaches to value
  - Helps the appraiser determine the stability of an area and may also indicate future land use and value trends







#### **Characteristics of Market Areas**

- The appraiser can start the process of identifying the market area by first roughly defining the physical boundaries.
- Boundaries of a market area reflect the forces that influence values on all surrounding properties in the same way as they do on the appraised property.







### **Change and Transition**

- Change Market areas are dynamic and subject to constant change. The appraiser must analyze the effect, if any, these changes have on value.
- Transition Transition is identified with land use, whereas change is broader and encompasses more characteristics. The two can take place at different rates and have different effects on the same property within a market area.







### The Life Cycle of a Neighborhood

- Growth A stage in which the market area gains public favor and acceptance.
- Stability A stage in which the market area experiences equilibrium without marked gains or losses.
- <u>Decline</u> A stage of diminishing demand in a market area.
- <u>Redevelopment</u> A stage characterized by renewal, redevelopment, modernization, and increasing demand.







## Value Influences on Market Areas







### **Government and Legal**

- These considerations relate to laws, regulations, and taxes, and the enforcement of these constraints on market area inhabitants. Relevant governmental considerations include the following factors:
  - Taxation and special assessments
  - Public and private restrictions
  - Schools
  - Police and fire protection
  - Planning and development activities







#### **Economic**

- Economic considerations relate to the financial capacity of a market area's occupants and their ability to maintain properties. Relevant economic considerations include the following factors:
  - Economic profile of residents
  - Types of financing available
  - Price and rent levels
  - Construction, conversion, and vacant land
  - Extent of owner occupancy
  - Vacancy rates
  - Changes in use or economic base







#### **Social**

- Social considerations relate to the status, physical environment, services, affordability, and conveniences of a location. Relevant considerations include the following factors:
  - Population density
  - Age levels of occupants
  - Education levels of occupants







### **Environmental and Geographic**

- Environmental considerations consist of any natural or manufactured features that are contained in or affect the market area. Relevant environmental considerations include the following factors:
- Location within the community
- Topography, soil, climate, and view.
- Land use patterns, density of buildings, and open space
- Age, type, size, condition, and appearance of structures
- Adequacy, cost, and quality of services
- Environmental liabilities







## **Appraisal Procedures**

### **The Valuation Process**

From Analysis to Solutions







### **The Valuation Process**

STEP 1 Definition of the Problem							
Identify client and intended users	Identify the intended use	Identify the purpose of the assignment	Effective date of the opinion	Identify the relevant characteristics of the property	Assignment  Extraordinary Assumptions	conditions Hypothetical Conditions	
STEP 2 Scope of Work							
Page 14							
STEP 3 Data Collection and Property Description							
Market Area Data			Subject Property Data		Comparable Property Data		







STEP 3 Data Collection and Property Description Market Area Subject Comparable Property Data Property Data Data STEP 4 **Data Analysis** Market Analysis Highest and Best Use Analysis







STEP 4

## Data Analysis

Market Analysis

Highest and Best Use Analysis



STEP 5

**Land Value Opinion** 







STEP 5 Land Value Opinion STEP 6 **Application of the Approaches to Value** Income Cost Sales Comparison Capitalization







STEP 6 Application of the Approaches to Value

Cost

Sales Comparison

Income Capitalization



STEP 7 Reconciliation of Value Indications and Final Opinion of Value







## **JakeNJoes**









## **Cost Approach Introduction**

LAND VALUE CONCLUSION					
Indicated Value per Acre	\$400,000				
Subject Acres	1.84				
Indicated Value	\$735,767				
Rounded	\$740,000				







## **Cost Components**

- Direct Costs
- Indirect Costs
- •Entrepreneurial Incentive







### **Depreciation Types**

- Physical Depreciation
- Functional Obsolescence
- External Obsolescence







	COST APPROACH VALUATION									
Replacement Cost New										
Bldg Name	MVS Building Type	MVS Class	Quality	Quantity	Unit	Unit Cost	Cost New			
Jake N Joes	Restaurant	В	Good	7,960	SF	\$300.00	\$2,388,000			
Subtotal - Building Im	provements						\$2,388,000			
Site Improvements							\$100,000			
Subtotal							\$2,488,000			
Plus: Indirect Cost						3.0%	\$74,640			
Subtotal							\$2,562,640			
Plus: Entrepreneurial	Profit					10.0%	\$256,264			
Total Replacement Cost New							\$2,818,904			
Depreciation										
Deferred Maintenance	,						\$0			
Remaining Cost							\$2,818,904			
Age-Life Depreciation						4.2%	-\$119,554			
Functional Obsolescen	nce					5.0%	-\$140,945			
External Obsolescence						0.0%	\$0			
Total Depreciation							-\$260,499			
Depreciated Replacem	ent Cost						\$2,558,405			
Rounded							\$2,560,000			
Value Indication										
Depreciated Replacem	ent Cost						\$2,560,000			
Land Value							\$740,000			
Indicated Property Val	lue						\$3,300,000			
Rounded							\$3,300,000			







## Sales Comparison Approach







SUMMAR	VOF	COMPA	RARIE IMPR	OVED SALES

Name/Address	Sale Date; Status	Yr. Built; # Stories; % Occ.	Acres; FAR; Parking Ratio	Subtype	Effective Sale Price	Leasable SF	\$/Leasable SF	Cap Rat
Applebee's	Jul-10	2006	2.71	Restaurant: Sit  Down	\$1,832,727	5,300	\$345.80	_
105 Pleasant Valley St.	Closed	1	0.04	_				
Methuen		_	_	_				
Essex County								
MA								
Comments:		_	-	structed as a build-to al data regarding the			_	perty was
Applebee's	Feb-09	2003	1.31	Restaurant: Sit Down	\$1,823,000	5,200	\$350.58	7.74%
56 Plaistow Rd.	Closed	1	0.09	_				
Haverhill		_	17.50/1,000	_				
Essex County								
MA								
Comments:			ased at the time capitalization ra	of sale to Applebee ate of 7.74%.	's. The transac	ction was re	eported to ha	ive
50 South Avenue	Apr-10	1998	2.67	Restaurant: Full Service	\$3,225,000	7,956	\$405.35	_
50 South Ave.	Closed	1	0.06	_				
Burlington		_	_	_				
Middlesex County								
MA								
Subject		1960	1.84	Restaurant: Sit Down		7,960		
Jake N Joes		1	0.10					
Norwood, MA		NA	_					







IMPF	ROVED SALES	ADJUSTMEN	T GRID		
	Subject	Comparable 1	Comparable 2	Comparable 3	
Property Name	Jake N Joes	Applebee's	Applebee's	50 South	
				Avenue	
Address	475 Providence	105 Pleasant	56 Plaistow Rd.	50 South Ave.	
	Hwy.	Valley St.			
City	Norwood	Methuen	Haverhill	Burlington	
County	Norfolk	Essex	Essex	Middlesex	
State	Massachusetts	MA	MA	MA	
Sale Date		Jul-10	Feb-09	Apr-10	
Sale Status		Closed	Closed	Closed	
Sale Price		\$1,832,727	\$1,823,000	\$3,225,000	
Price Adjustment					
Description of Adjustment					
Effective Sale Price		\$1,832,727	\$1,823,000	\$3,225,000	
Gross Building Area	7,960	5,300	5,200	7,956	
Gross Leasable Area	7,960	5,300	5,200	7,956	
Price per SF of Gross Leasable		\$345.80	\$350.58	\$405.35	
PROPERTY RIGHTS	ii cu	Leased Fee	Leased Fee	ψ402.62	
% ADJUSTMEN	т	0%	0%	0%	
FINANCING TERMS	1	070	070	070	
% ADJUSTMEN	T	0%	0%	0%	
CONDITIONS OF SALE	1	070	070	070	
% ADJUSTMEN	T	0%	0%	0%	
MARKET CONDITIONS	12/15/2011	Jul-10	Feb-09	Apr-10	
ANNUAL % ADJUSTMENT	12/13/2011	0%	0%	0%	
CUMULATIVE ADJUSTED PRI	CF	\$345.80	\$350.58	\$405.35	
LOCATION	CE	Similar	Similar	Superior	
% ADJUSTMEN	T	0%	0%	-10%	
ACCESS/EXPOSURE	1	Similar	Similar	Similar	
% ADJUSTMEN	T	0%	0%	0%	
SIZE	1	Similar	Similar	Similar	
% ADJUSTMEN	T	0%	0%	0%	
PARKING	1	Similar	Similar	Similar	
% ADJUSTMEN	T	0%	0%	0%	
BUILDING TO LAND RATIO (1		Similar	Similar	Similar	
% ADJUSTMEN		0%	0%	0%	
BUILDING QUALITY	1	Inferior	Inferior	Similar	
% ADJUSTMEN	T	5%	5%	0%	
AGE/CONDITION	-	Inferior	Inferior	Inferior	
% ADJUSTMEN	T	10%	10%	10%	
ECONOMIC CHARACTERIST		Similar	Similar	Similar	
% ADJUSTMEN		0%	0%	0%	
Net \$ Adjustment	-	\$51.87	\$52.59	\$0.00	
Net % Adjustment		15%	15%	0%	
Final Adjusted Price		\$397.67	\$403.16	\$405.35	
	15%	15%	0%		
Overall Adjustment					
			397.67 - \$405.35 \$402.06		







## **Sales Comparison Conclusion**

VALUE INDICATION BY SALES COMPARISON						
Indicated Value per SF	\$405.00					
Subject Square Feet	7,960					
Indicated Value	\$3,223,800					
Rounded	\$3,220,000					







## **Income Approach**

	RENTAL ANALYSIS SUMMARY - RETAIL									
				Overall						
	Property Name;			Comparison						
No.	Tenant	Leased SF	Rent/SF	to Subject	Comments					
1	Confidential	4,970	\$46.28	Superior						
	Confidential									
2	Quinsigamond Plaza	2,500	\$33.00	Inferior	Upward adjustment for					
	Chipotle				quality/condition					
3	Musgrove Building	2,660	\$36.09	Inferior	Upward adjustment for					
	Brasserie 28				quality/condition					
4	Mansfield Marketplace	3,700	\$35.00	Inferior	Upward adjustment for					
	Asian Grill & Sushi				quality/condition					
5	Confidential	4,000	\$38.00	Similar						
	Confidential									
					_					







p									
CONCLUDED MARKET LEASE TERMS									
		Market			Lease				
		Rent/	Rent		Term				
Space Type	SF	SF/Yr	Escalations	Lease Type	(Mos.)				
Retail	7,960	\$38.00	CPI	Triple Net	120				







OPERATING PROJECT	TIONS					
IRR						
	Projection					
INCOME						
Base Rent	\$302,480					
Expense Reimbursements	\$0					
Net Parking Income	\$0					
Percentage Rent	\$0					
POTENTIAL GROSS INCOME	\$302,480					
Vacancy & Collection Loss @ 5.0%	-\$15,124					
Other Income	\$0					
EFFECTIVE GROSS INCOME	\$287,356					
EXPENSES						
Real Estate Taxes	\$0					
Insurance	\$0					
Common Area Maintenance	\$0					
General/Administrative	\$0					
Management	\$2,874					
Replacement Reserves	\$1,194					
TOTAL EXPENSES	\$4,068					
NET OPERATING INCOME	\$283,288					















	CAPITAL	IZATIO	N RATE	COMPAR	ABLES			
	Gross Effective							
		Year	Sale	Leasable	%	Price	Cap	
No.	Property Name	Built	Date	Area	Occup.	/SF	Rate	
1	Jake Wirths Boston	1998	Nov-10	14,006	_	\$178.00	8.50%	
2	Applebee's Haverhill	2003	Feb-09	5,200	_	\$350.58	8.74%	
3	50 South Avenue	1998	Apr-10	7,956	_	\$405.35	9.00%	
	Average (Mean) Cap Rate:						8.75%	







BAND OF INVE	ESTMEN	T ME	ETHOD					
MORTGAGE / EQUITY ASSUMPTIONS								
Loan To Value Ratio	65%							
Interest Rate	6.00%							
Amortization (Years)	20							
Mortgage Constant	0.0860							
Equity Ratio	35%							
Equity Dividend Rate	9.00%							
WEIGHTED A VERAGE OF MOR	RTGAGE A	ND EQ	UITY REQU	TREMENTS				
Mortgage Requirement	65%	X	8.60%	= 5.59%				
Equity Requirement	35%	X	9.00%	= 3.15%				
Indicated Capitalization Rate				8.74%				
Rounded				8.75%				







DIRECT CAPITALIZATION ANALYSIS								
				Rent			\$/SF	
		SF	Space Type	Applied	\$/SF	Annual	Bldg	
INCOME								
Base Rent								
JakeNJoes		7,960	Retail	Market	\$38.00	\$302,480	_	
Potential Gross Rent		7,960				\$302,480	\$38.00	
Expense Reimbursements						\$0	\$0.00	
Net Parking Income						\$0	\$0.00	
Percentage Rent						\$0	\$0.00	
Vacancy & Collection Loss	5.00%					-\$15,124	-\$1.90	
Other Income						\$0	\$0.00	
Effective Gross Income						\$287,356	\$36.10	
EXPENSES								
Management	1.00%					\$2,874	\$0.36	
Replacement Reserves						\$1,194	\$0.15	
Total Expenses						\$4,068	\$0.51	
NET OPERATING INCOME						\$283,288	\$35.59	
Capitalization Rate						8.75%		
Indicated Value						\$3,237,582	\$406.73	
Rounded						\$3,240,000	\$407.04	







### **Final Value - Reconciliation**

SUMMARY OF VALUE INDICATIONS					
Cost Approach	\$3,300,000				
Sales Comparison Approach	\$3,220,000				
Income Capitalization Approach	\$3,240,000				
Reconciled	\$3,230,000				







## Reconciliation

- Appropriateness of Data and Analysis
- Accuracy of Opinion Data Driven
- Quality of Data
- Final Opinion







# QUESTIONS

?????