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Best Real Estate Appraisal Practices and the U.S. Experience

Presented to
BAPEPAM-LK

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Topics

- History of the U.S. Appraisal Profession Regulation
- Highest and Best Use Concept
- IFRS 13 - Fair Value
- Property Inspections and Valuation – Mixed Use Properties
- Commercial Property Appraisals

History of the U.S. Appraisal Profession Regulation

Benchmarks

- The Roaring 1920's
- 1928 - NAREB
- 1929 - The Great Depression
- 1932 - AIREA (Appraisal Institute)
- 1935 - University of Chicago
- 1951 - The Appraisal of Real Estate (Text)

- Benchmarks cont'd
- 1959 - Ellwood Tables (Yield Capitalization)
- 1970 - Charles Akerson (Modern Appraisal Theory)
- 1983 - DCF (Discounted Cash Flow)
- 1989 – FIRREA (Regulation of Appraisers)

FIRREA

- The Appraisal Subcommittee
 - National Register Established
 - Licensing Administered by 50 States
- The Appraisal Foundation
 - Appraisal Standards Board (USPAP)
 - Appraisal Qualifications Board
 - Appraisal Practices Board (2010)

License Qualifications (Appraisal Foundation)

- Bachelors Degree
- 300 Hours in Appraisal Training
- Examination
- 3,000 Hours of Experience
- Continuing Education (14 hrs per yr)
- USPAP Every 2 Years

MAI Qualifications (Appraisal Institute)

- Bachelors Degree
- 415 Hours in Appraisal Training (13 courses)
- Comprehensive Examination (4-4 hour modules)
- 4,500 Hours of Experience
- Demonstration Report (Thesis)
- Continuing Education (20 hrs per yr)
- USPAP Every 2 Years



Career Path

- Trainee
- Analyst
- Senior Analyst - MAI
- Director
- Owner

Today

- 104,873 State Licensed and Certified Appraisers
- 38,064 Certified Appraisers
- 7,500 MAIs

Primary Sources of Business

- Lending Institutions (Banks)
- Government
- REITS/Pension Funds
- Corporations
- Special Servicers (CMBS)
- Litigation Support
- Tax Appeal

Major Players – U.S.A

- Integra Realty Resources
- CB Richard Ellis
- Cushman Wakefield
- Newmark Grubb Knight Frank (Landauer) – new
- Colliers PGP – new

- Consolidation – The Integra Story

Operational Benchmarks

- Revenue per Appraiser
- Revenue Per Capita in Marketplace (Population)
- Average Profit per Appraiser
- Desk Cost per Appraiser
- Average Appraisal Fee
- Average Delivery Time





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Highest and Best Use Concept



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Where Does Highest and Best Use Fit Into the Valuation Process?



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Definition of the Problem					
Identification of client/ intended users	Type and definition of value	Date of opinion of value	Identification of characteristics of property (including location and property rights to be valued)	Assignment Conditions	
				Extraordinary Assumptions	Hypothetical Conditions
Scope of Work					
Data Collection and Property Description					
Market Area Data		Subject Property Data		Comparable Property Data	
General characteristics of region, city, and neighborhood		Specific characteristics of land and improvements, personal property, business assets, etc.		Sales, listings, offerings, vacancies, cost and depreciation, income and expenses, capitalization rates, etc.	
Data Analysis					
Market Analysis		Data Analysis		Highest and Best Use Analysis	
Demand studies Supply studies Marketability studies				Site as though vacant Ideal improvement Property as improved	

Definition:

Highest and best use. The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value.



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- Site As Vacant
- Site As Improved

As Vacant

Among all reasonable, alternative uses, the use that yields the highest present land value after payments are made for labor, capital, and entrepreneurial coordination. The use of a property based on the assumption that the parcel of land is vacant or can be made vacant by demolishing any improvements.

As Improved

The use that should be made of a property as it exists. An existing improvement should be renovated or retained as is so long as it continues to contribute to the total market value of the property, or until the return from a new improvement would more than offset the cost of demolishing the existing building and constructing a new one.

Consistent Use:

The concept that land cannot be valued on the basis of one use while improvements are valued on the basis of another.



Example—Consistent Uses

1. +Property Value (improvements and site)	→	100,000
→ Highest and Best Use—Commercial		
→ Vacant Site Value	→	<u>- 70,000</u>
→ Contributory Value of Improvements	→	30,000
2. +Property Value (improvements and site)	→	100,000
→ Highest and Best Use—Factory		
→ Vacant Site Value	→	<u>- 25,000</u>
→ Contributory Value of Improvements	→	75,000

Do Not Mix Steps 1 and 2

→ Commercial Use—Vacant Site Value	→	70,000
→ Contributory Value of Factory Improvements	→	<u>+ 75,000</u>
→ Property Value	→	145,000



Remember –

that as long as the value of a property as improved is greater than the value of the site as though vacant, the property's highest and best use is as improved. Once the value of the site as though vacant exceeds the value of the improved property, including demolition costs, the highest and best use becomes the use of the site as though vacant.

Ideal Improvement -

The improvement that takes maximum advantage of the site's potential given market demand, conforms to current market standards and the character of the market area, and contains the most suitably priced components; the improvement that represents the highest and best use as though vacant.

Ideal Improvement Example:

A neighborhood contains country-style houses built approximately 35 years ago. These homes range in size from 150 to 170 square meter and typically have three bedrooms. When originally constructed, the houses contained one full bath. Over time, the majority of owners added a half bath, for a total of 1.5 baths. A new subdivision is being built nearby and contains houses of similar size, although all have a minimum of 2.5 baths, with one full bath being part of the master bedroom suite.

Interim Use -

The temporary use to which a site or improved property is put until it is ready to be put to its future highest and best use.

Legal nonconforming use -

A use that was lawfully established and maintained, but no longer conforms to the use regulations of the current zoning in the zone where it is located.



Neighborhood in transition –

A market area undergoing an economic and/or demographic shift.

Excess land –

In regard to a vacant site or a site considered as though vacant, the land not needed to accommodate the site's primary highest and best use. Such land may be separated from the larger site and have its own highest and best use, or it may allow for future expansion of the existing or anticipated improvements. In regard to an improved site, the land not needed to serve or support the existing improvements.

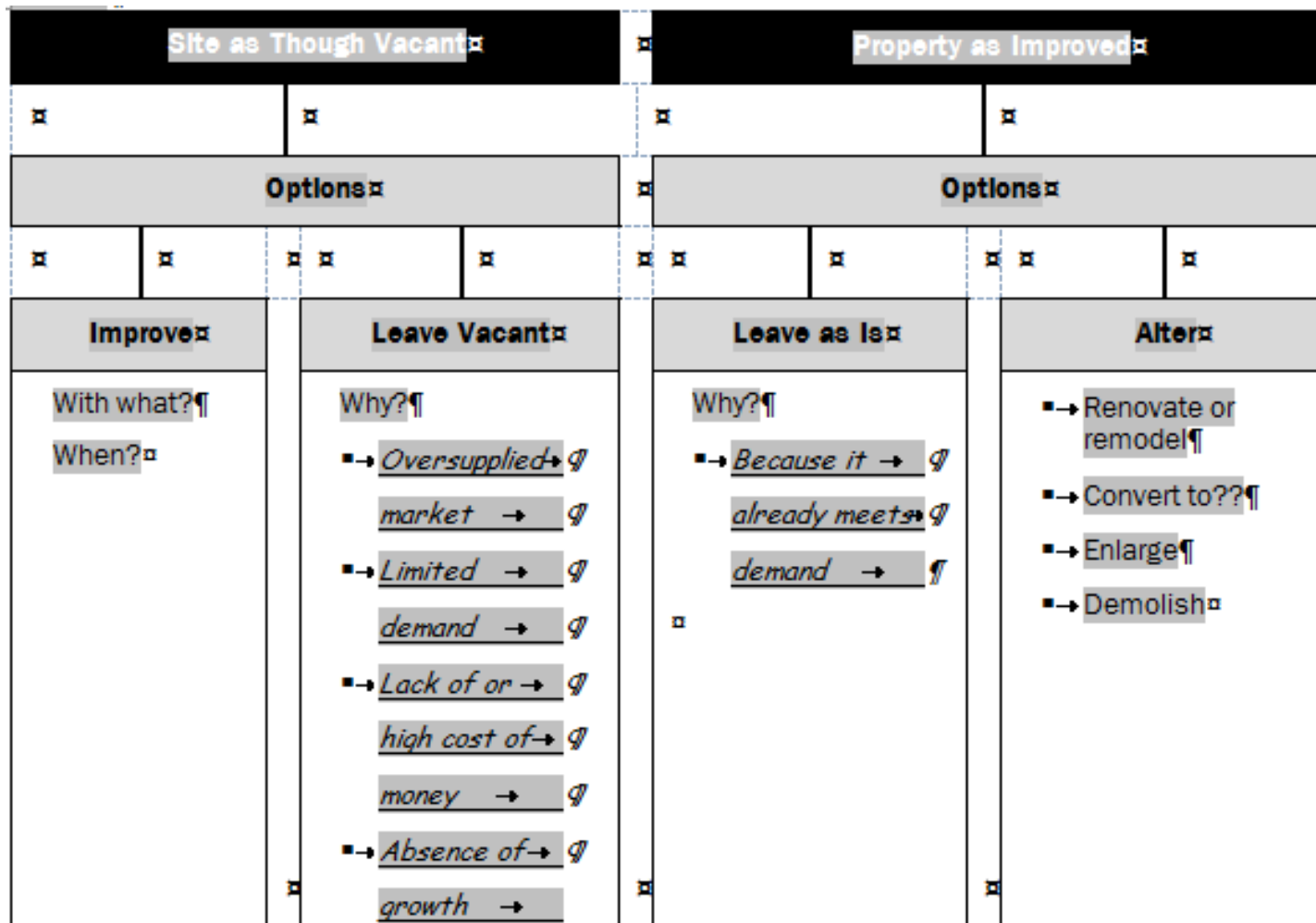
The highest and best use analysis provides conclusions that guide the application of the three approaches to value.

1. Establishes the basis for selection of comparable sale properties for both the site and the improved property. For sales to be comparable, their highest and best use should be similar to that of the subject property.
2. Provides support for the adjustments that may be required and identifies some of the data for measuring appropriate adjustments.

3. Provides the basis for estimates of physical deterioration and functional and external obsolescence used in the cost approach.

4. Provides the basis for selection of market rents and multipliers or the basis for forecasts required to apply the income capitalization approach.

1. Highest and Best Use Decision Tree



Four Tests - Highest and Best Use

Physically Possible
Legally Permissible
Financially Feasible
Maximally Productive

Highest and Best Use vs. Intended Use

Legal Permissibility

Legal permissibility is measured by considering legal restrictions, both public and private, on use. Often the appraiser must consider whether there is a reasonable probability of a zoning change in order for the highest and best use to be realized.

Physical Possibility

Physical possibility addresses the basic question of what will fit on the site that is legally permissible. Test considerations include questions relating to both the site as though vacant and the property as improved.

Financial Feasibility

Financial feasibility addresses the question: Is demand sufficient to justify all the costs? If so, is the project financially feasible, creating entrepreneurial incentive? If the response is negative, the project is not financially feasible and should not go forward.

Maximum productivity

The use, from among reasonable and probable alternatives, that satisfies the criteria of physical possibility, legal permissibility, and financial feasibility and that results in the highest present value.



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Highest and Best Use Conclusion





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IFRS 13 - Fair Value

Fair Value Definition

“the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date”.

What you need to know:

- Exist Price
- Highest and Best Use
- Valuation Premise
- Fair Value Hierarchy

Exit Price

- Exit Price vs. Entry Price
- Market Based vs. User Based
- Not Company Specific
- Think “Market” Value

Exit Price Example

- Developer overpays for adjacent site
- Needs to sell the next day
- Is the value what he paid or what he can sell it for?

Highest and Best Use

Physically Possible

Legally Permissible

Financially Feasible

Highest and Best Use vs. Intended Use

Highest and Best Use Example

Factory Value = 4,000,000

Vacant Land Value = 5,000,000

Demolition Cost = 500,000

Vacant Land Value?

Highest and Best Use?

Valuation Premise

- Stand alone or in combination with other assets?
- Which provides Maximum Value?

Example:

- Mixed Use Property (Shopping Center, Office Building and Hotel)
- Shopping Center has more business from hotel vs. stand alone.
- Valuation Premise?

Fair Value Hierarchy

- Level 1 relates to quoted prices for identical assets. Real estate rarely has an identical twin, so valuation normally requires reference to the next level.
- Level 2, which is based on observable values for similar transactions, such as comparable property transactions. Level 2 is logical for real estate.
- Level 3 drops to reliance on subjective and unobservable inputs, such as knowledge, judgment, and experience with the particular market. If Level 3 inputs are applied, sufficient support and discussion is required.

Level 2 and Level 3 Examples

- Level 2 - Land Sales of the same size in the same location with consistent prices per SM.
- Level 3 – Limited sales data that needs significant adjustments.

Inspections and Valuation - Mixed Use Properties



Recommended Information for Inspections

- Building Plans
- Site Plan
- Leases
- Rent Roll
- Historical Income and Expense Statements
- Deed/Title Report
- Engineering Report
- Property Condition Report
- Personal Property Inventory
- Construction Cost (if recently built)
- Tenant by Tenant Expense Reimbursement Reports (3 years)

Recommended Information for Inspections cont'd

- Measurements – U.S. – BOMA example
- Apples to Apples – Comps to Subject
- RSF vs. GBA vs. UBA vs. per room vs. per unit
- Must be based on actions of Market Participants

Valuation – Shopping Center

Income – Rent Roll

SHOPPING CENTER

Tenant	S.M	Rent/SM/Mo.	Ann. Rent
Tenant 1	5,000	15.00	900,000
Tenant 2	7,200	15.50	1,339,200
Tenant 3	4,500	16.00	864,000
Tenant 4	3,500	15.00	630,000
Tenant 5	2,400	19.00	547,200
Tenant 6	700	20.00	168,000
Tenant 7	1,300	19.00	296,400
Tenant 8	968	19.00	220,704
Vacant	3,000	19.00	684,000
Total	28,568	16.48	5,649,504



Valuation – Shopping Center

Income Projection - DCF

INCOME	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Inflation			5%	5%	3%	3%
Base Rent	5,649,504	5,649,504	5,931,979	6,228,578	6,415,436	6,607,899
Expense Reimbursements	4,500,000	4,500,000	4,725,000	4,961,250	5,110,088	5,263,390
Net Parking Income	100,000	100,000	105,000	110,250	113,558	116,964
Percentage Rent	1,000,000	1,000,000	1,050,000	1,102,500	1,135,575	1,169,642
POTENTIAL GROSS INCOME	11,249,504	11,249,504	11,811,979	12,402,578	12,774,656	13,157,895
Vacancy & Collection Loss	10%	10%	5%	20%	10%	10%
	1,124,950	1,124,950	590,599	2,480,516	1,277,466	1,315,790
Collection Loss at 0.0%	1%	1%	1%	3%	1%	1%
	112,495	112,495	118,120	372,077	127,747	131,579
Concessions at 0.0%	3%	3%	1%	5%	2%	2%
	337,485	337,485	118,120	620,129	255,493	263,158
Other Income	0	0	0	0	0	0
EFFECTIVE GROSS INCOME	9,674,573	9,674,573	10,985,141	8,929,856	11,113,950	11,447,369



Valuation – Shopping Center

Expense Projection - DCF

EXPENSES	per SM							
inflation				5%	5%	3%	3%	
Real Estate Taxes	25.00	714,200	714,200	749,910	787,406	811,028	835,358	
Insurance	2.50	71,420	71,420	74,991	78,741	81,103	83,536	
Common Area Maintenance	30.00	857,040	857,040	899,892	944,887	973,233	1,002,430	
General/Administrative	5.00	142,840	142,840	149,982	157,481	162,206	167,072	
Management	10.00	285,680	285,680	299,964	314,962	324,411	334,143	
Replacement Reserves	1.50	42,852	42,852	44,995	47,244	48,662	50,122	
TOTAL EXPENSES		2,114,032	2,114,032	2,219,734	2,330,720	2,400,642	2,472,661	
NET OPERATING INCOME		7,560,541	7,560,541	8,765,407	6,599,136	8,713,308	8,974,708	
Discount Rate	11.00%		0.90090	0.81162	0.73119	0.65873	0.59345	0.53464
Total Discounted			6,811,299	7,114,201	4,825,231	5,739,726	5,326,052	29,816,509

Valuation – Shopping Center

Valuation - DCF

Reversion	Year 5 NOI	8,974,708
	Terminal Rate	10.50%
	Future Value	85,473,406
	Discount Factor	0.59345
	Discounted FV	50,724,306
	Selling Costs	3%
	Net FV	49,202,577
Valuation	Add PV Cash Flows	29,816,509
	Indicated Value	79,019,087
	Rounded	79,000,000
	Implied Year 1 Cap Rate	9.6%

Valuation – Office

Income – Rent Roll

OFFICE

Tenant	S.M	Rent/SM/Mo.	Ann. Rent
Tenant 1	12,000	18.00	2,592,000
Tenant 2	30,748	17.00	6,272,592
Tenant 3	5,400	16.00	1,036,800
Tenant 4	8,000	15.00	1,440,000
Tenant 5	2,400	17.00	489,600
Tenant 6	616	21.00	155,232
Vacant	1,540	20.00	369,600
Total	62,932	17.03	12,863,808



Valuation – Office

Income Projection - DCF

INCOME	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Inflation			5%	5%	3%	3%
Base Rent	12,863,808	12,863,808	13,506,998	14,182,348	14,607,819	15,046,053
Expense Reimbursements	1,000,000	1,000,000	1,050,000	1,102,500	1,135,575	1,169,642
Net Parking Income	500,000	500,000	525,000	551,250	567,788	584,821
Percentage Rent	0	0	0	0	0	0
POTENTIAL GROSS INCOME	14,363,808	14,363,808	15,081,998	15,836,098	16,311,181	16,800,517
Vacancy & Collection Loss	10%	10%	10%	5%	5%	10%
	1,436,381	1,436,381	1,508,200	791,805	815,559	1,680,052
Collection Loss at 0.0%	1%	1%	1%	0%	0%	1%
	143,638	143,638	150,820	0	0	168,005
Concessions at 0.0%	3%	3%	1%	0%	0%	1%
	430,914	430,914	150,820	0	0	168,005
Other Income	0	0	0	0	0	0
EFFECTIVE GROSS INCOME	12,352,875	12,352,875	13,272,159	15,044,293	15,495,622	14,784,455



Valuation – Office

Expense Projection - DCF

EXPENSES	per SM			5%	5%	3%	3%	
Inflation								
Real Estate Taxes	25.00	1,573,300	1,573,300	1,651,965	1,734,563	1,786,600	1,840,198	
Insurance	2.50	157,330	157,330	165,197	173,456	178,660	184,020	
Utilities	15.00	943,980	943,980	991,179	1,040,738	1,071,960	1,104,119	
Cleaning/Janitorial	10.00	629,320	629,320	660,786	693,825	714,640	736,079	
Grounds	7.50	471,990	471,990	495,590	520,369	535,980	552,059	
Security	10.00	629,320	629,320	660,786	693,825	714,640	736,079	
Repairs/Maintenance	30.00	1,887,960	1,887,960	1,982,358	2,081,476	2,143,920	2,208,238	
General/Administrative	5.00	314,660	314,660	330,393	346,913	357,320	368,040	
Management	10.00	629,320	629,320	660,786	693,825	714,640	736,079	
Replacement Reserves	1.50	94,398	94,398	99,118	104,074	107,196	110,412	
TOTAL EXPENSES		7,331,578	7,331,578	7,698,157	8,083,065	8,325,557	8,575,323	
NET OPERATING INCOME		5,021,297	5,021,297	5,574,002	6,961,229	7,170,066	6,209,131	
Discount Rate	12.00%		0.89286	0.79719	0.71178	0.63552	0.56743	0.50663
Total Discounted			4,483,301	4,443,560	4,954,865	4,556,706	3,523,228	21,961,660

Valuation – Office

Valuation - DCF

Reversion	Year 5 NOI	6,209,131
	Terminal Rate	11.50%
	Future Value	53,992,446
	Discount Factor	0.56743
	Discounted FV	30,636,764
	Selling Costs	3%
	Net FV	29,717,661
Valuation	Add PV Cash Flows	21,961,660
	Indicated Value	51,679,321
	Rounded	51,700,000
	Implied Year 1 Cap Rate	9.7%

Valuation – Hotel

Income from Rooms Projection

GROSS ROOM REVENUE PROJECTION					Year 1	Year 2	Year 3	Year 4	Year 5
Total Rooms			300		300	300	300	300	300
Total Room Nights			109,500		109,500	109,500	109,500	109,500	109,500
Stabilized Occupancy			75%		75%	75%	70%	70%	70%
Projected Room Nights Sold			82,125		82,125	82,125	76,650	76,650	76,650
Stabilized ADR			85.00		85.00	85.00	83.00	82.00	83.00
Projected Room Revenue			6,980,625		6,980,625	6,980,625	6,361,950	6,285,300	6,361,950

Valuation – Hotel

Income Projection - DCF

APPRaiser'S PROJECTIONS	Appraiser's Projection	Appraiser's Projection	Basis						
				Year 1	Year 2	Year 3	Year 4	Year 5	
REVENUE		\$							
Rooms	97.66%	6,980,625		6,980,625	6,980,625	6,361,950	6,285,300	6,361,950	
Food and Beverage	40.00%	2,792,250	% Rm Rev	2,792,250	2,792,250	2,544,780	2,514,120	2,544,780	
Telephone	0.50%	34,903	% Rm Rev	34,903	34,903	31,810	31,427	31,810	
Other Income	1.90%	132,632	% Rm Rev	132,632	132,632	120,877	119,421	120,877	
Total		9,940,410		9,940,410	9,940,410	9,059,417	8,950,267	9,059,417	



Valuation – Hotel Expense Projection - DCF

DEPART. EXP											
Rooms		24.00%	1,675,350	% Dept. Rev.	1,675,350	1,675,350	1,526,868	1,508,472	1,526,868		
Food & Bev.		70.00%	1,954,575	% Dept. Rev.	1,954,575	1,954,575	1,781,346	1,759,884	1,781,346		
Telephone		150.00%	52,355	% Dept. Rev.	52,355	52,355	47,715	47,140	47,715		
Other Income		15.00%	19,894.78	% Dept. Rev.	19,894.78	19,894.78	18,131.56	17,913.11	18,131.56		
Total		37.24%	3,702,174		3,702,174	3,702,174	3,374,060	3,333,409	3,374,060		
GROSS INCOME		62.76%	6,238,236		6,238,236	6,238,236	5,685,357	5,616,858	5,685,357		
UNDISTRIB. OPEX											
Admin & Gen		11.00%	1,093,445	% Total Rev	1,093,445	1,093,445	996,536	984,529	996,536		
Marketing		6.50%	646,127	% Total Rev	646,127	646,127	588,862	581,767	588,862		
Franchise Fee		5.50%	383,934	% Room Rev	383,934	383,934	349,907	345,692	349,907		
Operations & Maint.		5.00%	497,021	% Total Rev	497,021	497,021	452,971	447,513	452,971		
Utilities		5.00%	497,021	% Total Rev	497,021	497,021	452,971	447,513	452,971		
Total		33.00%	3,117,547		3,117,547	3,117,547	2,841,247	2,807,015	2,841,247		
GROSS PROFIT		31.39%	3,120,688		3,120,688	3,120,688	2,844,110	2,809,843	2,844,110		
Management Fee		3.00%	298,212	% Total Rev	298,212	298,212	271,783	268,508	271,783		
INC. PRIOR TO F.E.		28.39%	2,822,476		2,822,476	2,822,476	2,572,327	2,541,335	2,572,327		
FIXED EXPENSES											
Property Taxes (inc @)	3%	5.00%	497,021	Projected	497,021	511,931	527,289	543,108	559,401		
Insurance (inc @)	3%	300	90,000	\$ per Rm	90,000	92,700	95,481	98,345	101,296		
Other				% Total Rev							
Replacement Reser.		5.00%	349,031	% Room Rev	349,031	349,031	318,098	314,265	318,098		
Total		10.24%	936,052		936,052	953,662	940,868	955,718	978,794		
Total Expense		81.02%	8,053,986		8,053,986	8,071,596	7,427,957	7,364,650	7,465,884		
NOI		18.98%	1,886,424		1,886,424	1,868,814	1,631,460	1,585,617	1,593,533		
				Discount Rate	13.00%	0.88496	0.78315	0.69305	0.61332	0.542764	0.48032
				Total Discounted		1,669,402	1,463,555	1,130,683	972,489	864,906	6,101,035

Valuation – Hotel

Valuation - DCF

Reversion		
	Year 5 NOI	1,593,533
	Terminal Rate	12.00%
	Future Value	13,279,442
	Discount Factor	0.54276
	Discounted FV	7,207,549
	Selling Costs	3%
	Net FV	6,991,322
Valuation		
	Add PV Cash Flows	6,101,035
	Indicated Value	13,092,358
	Rounded	13,100,000
	Implied Year 1 Cap Rate	14.4%

Valuation – Consolidated

NOI - DCF

NOI		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Shopping Center		7,560,541	8,765,407	6,599,136	8,713,308	8,974,708	
Office		5,021,297	5,574,002	6,961,229	7,170,066	6,209,131	
Hotel		1,886,424	1,868,814	1,631,460	1,585,617	1,593,533	
Total		14,468,263	16,208,222	15,191,824	17,468,991	16,777,372	
Discount Rate	11.50%	0.89685	0.80435	0.72138	0.64697	0.58024	0.52039
Total Discounted		12,975,911	13,037,020	10,959,086	11,301,958	9,734,895	58,008,871

Valuation – Consolidated

Rates Matrix

Market	Year 1	Year 2	Year 3	Year 4	Year 5	Average	Weighted
Discount	% Income	% Income	% Income	% Income	% Income		Average
Rate							
11.0%	52%	54%	43%	50%	53%	51%	5.5%
12.0%	35%	34%	46%	41%	37%	39%	4.6%
13.0%	13%	12%	11%	9%	9%	11%	1.4%
							11.5%
Market	Year 1	Year 2	Year 3	Year 4	Year 5	Average	Weighted
Terminal	% Income	% Income	% Income	% Income	% Income		Average
Rate							
10.5%	52%	54%	43%	50%	53%	51%	5.3%
11.5%	35%	34%	46%	41%	37%	39%	4.4%
12.0%	13%	12%	11%	9%	9%	11%	1.3%
							11.01%

Valuation – Consolidated

Valuation

	Year 5 NOI	16,777,372
	Terminal Rate	11.01%
	Future Value	152,383,033
	Discount Factor	0.58024
	Discounted FV	88,418,667
	Selling Costs	3%
	Net FV	85,766,107
	Add PV Cash Flows	58,008,871
	Indicated Value	143,774,978
	Rounded	143,800,000
	Implied Year 1 Cap Rate	10.1%
Proof	Shopping Center	79,000,000
	Office	51,700,000
	Hotel	13,100,000
	Total	143,800,000





Commercial Property Appraisals

- Economic Influences
- Market Influences
- Lease Structure
- Chart of Accounts
- Units of Measurement
- Risk Measurement



Commercial Property Appraisal Sample

- Shopping Center – LeCroix Plaza
- Office – 50 Whitecap
- Industrial – Projo Building
- Hotel – Marriott Chicopee



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QUESTIONS

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