

# THE VALUATION OF APARTMENTS

By Tim Klein & Dan Blonigen

# Goals of this course

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- Introduction to the basic concepts of Apartment Valuation
- You will leave with the ability to value an apartment in your jurisdiction!

# Outline



- What is an apartment
- The Inspection
- Valuation
  - ▣ Sales Verification & Comparison
  - ▣ Income Capitalization
- Mass Appraisal Techniques
- Case Study
- Q & A

# Current Market

- 32% of US Households are Renters – NMHC
- 30% of Apartment renters are under age 30, 58% under age 44 -NMHC
- Represents 38% of new housing starts – *US Census, May 2014*
- “Minneapolis-St. Paul, one of the strongest rental markets in the nation.” – Marcus Millichap 2014

# 4<sup>th</sup> in the Nation – Marcus Millichap

## National Apartment Index

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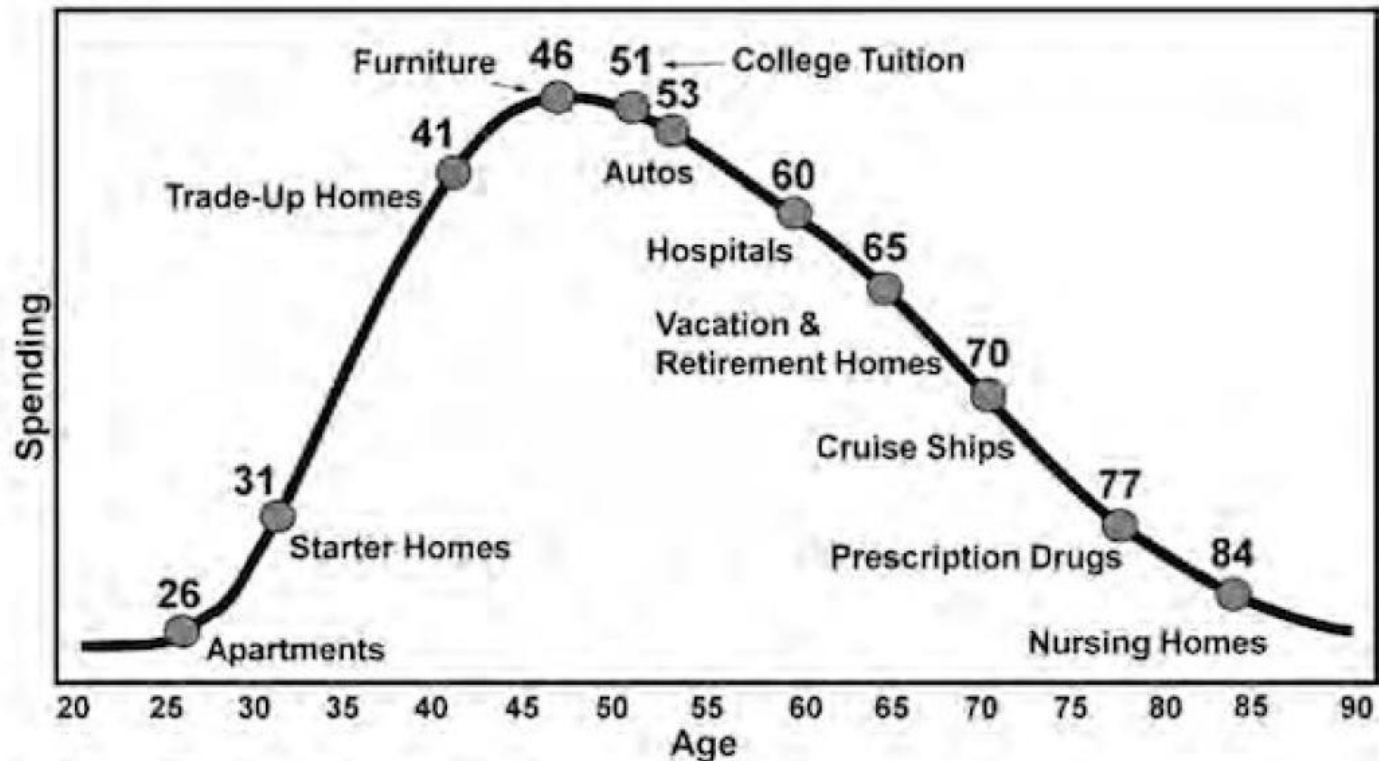
MSA	Rank 2014	Rank 2013 <sup>1</sup>	13-14 Change
New York City	1	1	■ 0
San Francisco	2	3	▲ 1
Denver	3	11	▲ 8
Minneapolis	4	7	▲ 3
San Diego	5	6	▲ 1
Northern New Jersey	6	8	▲ 2
Seattle-Tacoma	7	5	▼ 2
San Jose	8	2	▼ 6
Oakland-East Bay	9	18	▲ 9
Portland	10	12	▲ 2
Orange County	11	4	▼ 7
Houston	12	13	▲ 1
Miami	13	21	▲ 8
Dallas/Fort Worth	14	14	■ 0

# Cap Rates

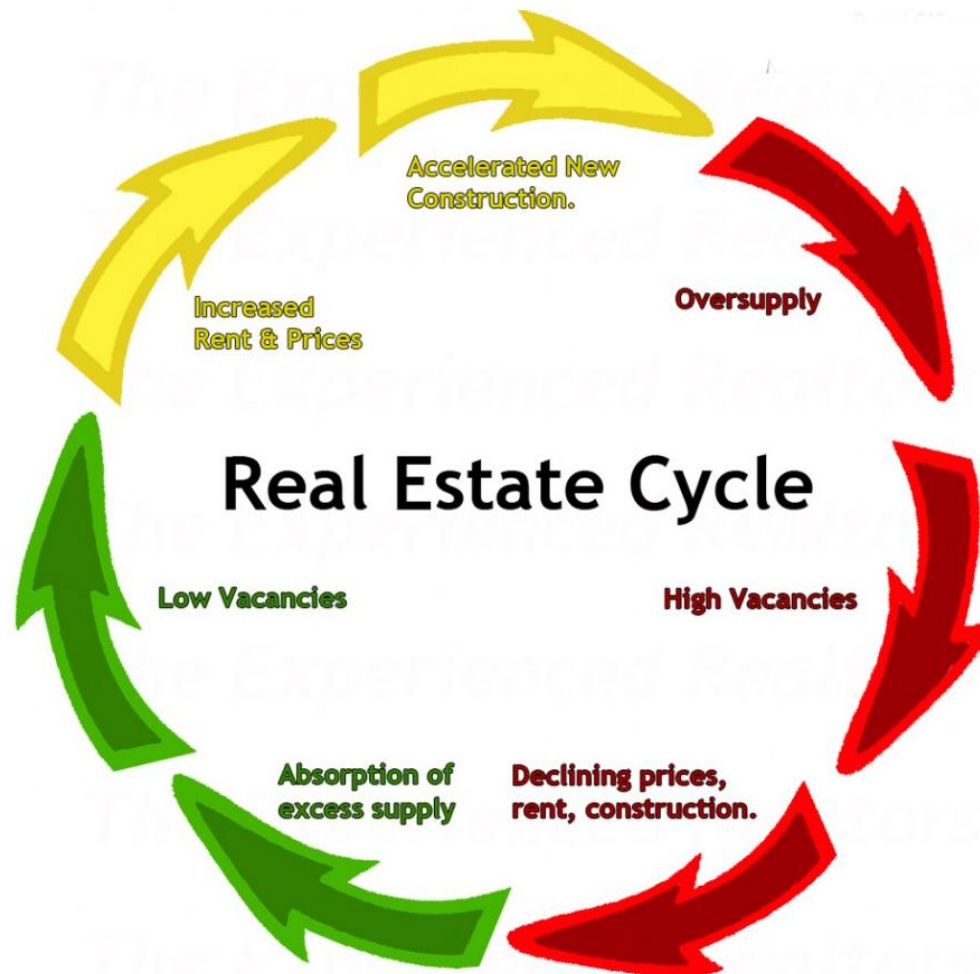
- National
  - ▣ Korpacz 1Q '13: Average 5.73%
  - ▣ Korpacz 1Q '14: Average 5.79%
  
- Minneapolis
  - ▣ RERC 1Q '13: Average 6.0%

# Consumer Life Cycle

Figure 1-1: Consumer Life Cycle



Data Source: U.S. Census Bureau, Dent Research







# What is an Apartment

# What is an Apartment

- An Apartment is a housing unit of one or more rooms, designed to provide complete living facilities for one or more occupants.
- An Apartment Building is a structure containing four or more dwelling units with common areas and facilities.
- Common Area includes entrances, lobby, elevators or stairs, mechanical space, grounds, pool, etc...

# Apt Styles– Low Rise

- Typically 1 -3 stories
- No elevators
- 12-50 units
- Intermediate density



# Apt Styles– Mid Rise

- Usually steel or reinforced concrete
- 4-10 stories
- Elevator service
- Intermediate density



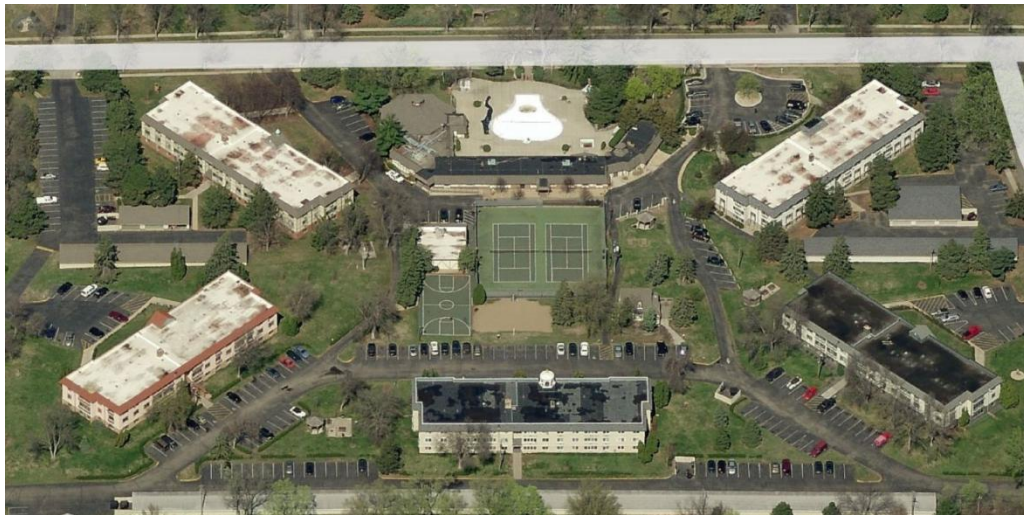
# Apt Styles– High Rise

- ❑ Steel or reinforced concrete
- ❑ More than 10 stories
- ❑ Elevator service
- ❑ High density
- ❑ Usually in urban core



# Apt Styles– Garden Apartments

- Usually 2-3 stories
- Wood frame construction
- Landscaped sites
- Low density
- Extensive amenities (Pool, clubhouse)





# Apt Styles– Townhome Style

- ❑ Larger units
- ❑ Often two floors
- ❑ Usually 2-4 stories
- ❑ Can be garden or high density



# Apt Styles— Townhome Style

Garden Style Townhome



High Density – 4 story





# Student Housing

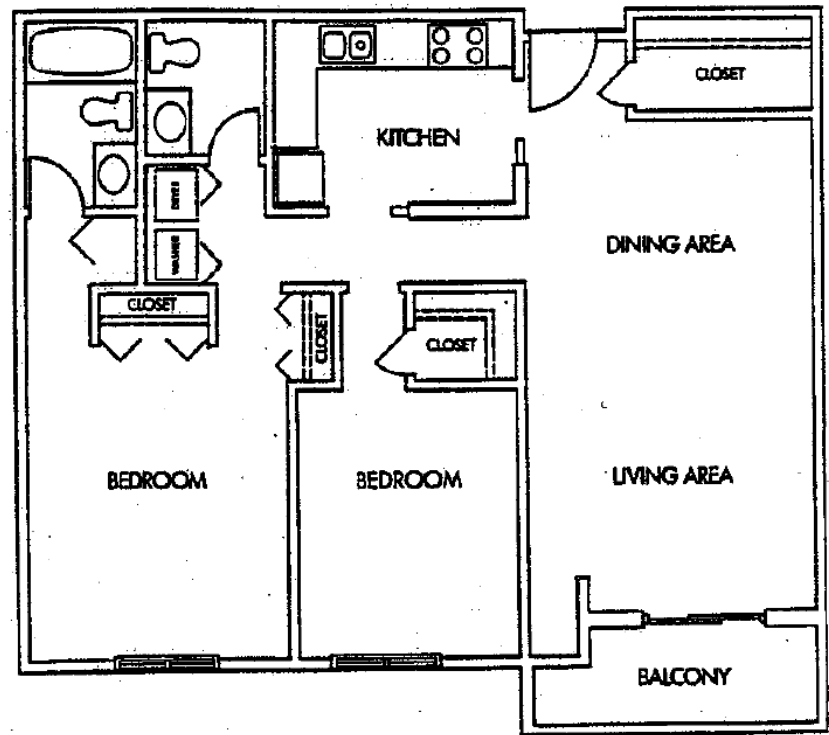
- ❑ Higher Bedroom count
- ❑ Multiple leases
- ❑ Shorter lease terms



# Types of Units

- Studio/Efficiency
- 1 Bedroom
- 2 Bedroom
- 3 Bedroom
- 4 Bedroom
- Plus Den
- Unit Mix

## 2 BEDROOM (B1-1, C2-2)



# Amenities

- Unit Amenities
  - ▣ Refrigerator
  - ▣ Range/Oven with Hood Fan
  - ▣ Dishwasher
  - ▣ Microwave
  - ▣ Garbage Disposal
  - ▣ Washer/Dryer
  - ▣ Hardwood Floors
  - ▣ Stainless Steel Appliances
  - ▣ Ceiling Fans
  - ▣ Walk in Closets

# Amenities

## □ Complex Amenities

- ▣ Community Room/Pub Room/Private Resident Bar
- ▣ Business Center
- ▣ Indoor/Outdoor Pool/Spa
- ▣ Lobby/Concierge Services
- ▣ Fitness Center/Yoga Studio
- ▣ Dog Park/Dog Wash Stations
- ▣ Laundry Rooms
- ▣ Garages
- ▣ Storage Units
- ▣ Playground/Sports Facilities
- ▣ Retail Space
- ▣ Car Wash/Hour Car

# Uniform Apartment Classification

- Class AA, A, B, C, D
  - ▣ In practice, Class A, B & C
  
- Determined by
  - ▣ Rental Rates
  - ▣ Occupancy
  - ▣ Age/Condition
  - ▣ Construction Quality
  - ▣ Location

# Uniform Apartment Classification

**TABLE 1 Uniform Apartment Classification**

A Method to Classify Apartment Complexes by Pertinent Characteristics-Minimum Class Standards (MCS)					
Characteristics	Class AA (MCS)	Class A (MCS)	Class B (MCS)	Class C (MCS)	Class D (MCS)
1. Rent rank (dollars per square foot)	90%	80%	50%	20%	0%
Percent of occupancy*	Excellent	Very good	Average	Fair	Poor
2. Age	0-10 years	0-10 years	0-20 years	0-30 years	Any age
Condition	Excellent	Very good	Average	Fair	Poor
3. Construction					
Size (number of units)	120 or more	100 or more	80 or more	any	any
Construction quality	Excellent	Very good	Average	Fair	Poor
Exterior appeal	Excellent	Very good	Average	Fair	Poor
Interior appeal	Excellent	Very good	Average	Fair	Poor
Functional utility	Excellent	Very good	Average	Fair	Poor
Heating, ventilation, and air conditioning (HVAC) (central system)	Excellent	Very good	Average	Fair	Poor
Layout and floor plans	Excellent	Very good	Average	Fair	Poor
Landscaping	Excellent	Very good	Average	Fair	Poor
Parking spaces (on-site)	Excellent	1 or more/BR	1 or more/BR	1 or more/Unit	not required
Recreation area	yes	yes	not required	not required	not required
Amenities in units	10 or more	8 or more	6 or more	not required	not required

\*Appraisal Journal, Classifications for Commercial Real Estate, 1992

# Class AA



Under Construction



# Class A



Built: 2007



# Class A

## □ High End Amenity Package



# Class B



Built: 1988

# Class B





# Class C



Built: 1967

# Class C Property





# Inspecting the Property

# Inspecting the Property

- Units
  - ▣ Representative sample
- Common Areas
  - ▣ Laundry, workout rooms, basement parking, mechanical systems etc..
- Exterior
  - ▣ Garages
  - ▣ Recreational Amenities
- Interview Property Manager

# Inspecting the Property – Prop Manager

- Unit Floor Plans
- Unit Counts
- Current Vacant
- Concessions
- Tenant Paid Utilities
- Deferred Maintenance

1 Bedroom 1 Bath Garden ~ 704 Square Feet





# Inspecting the Property - Units

- ❑ Kitchen
- ❑ Bedrooms
- ❑ Bathroom
- ❑ Storage Space
- ❑ Patio/Deck
- ❑ Heating/cooling
- ❑ Washer/Dryers



Take pictures!

# Inspecting the Property – Common Area

## Outdoor



## Indoor



# Inspecting the Property – Common Area

In Unit Laundry



Common Laundry



# Inspecting the Property – Common Area

Dated



Modern





# Inspecting the Property – Common Area

Dated



Modern



# Inspecting the Property – Common Area

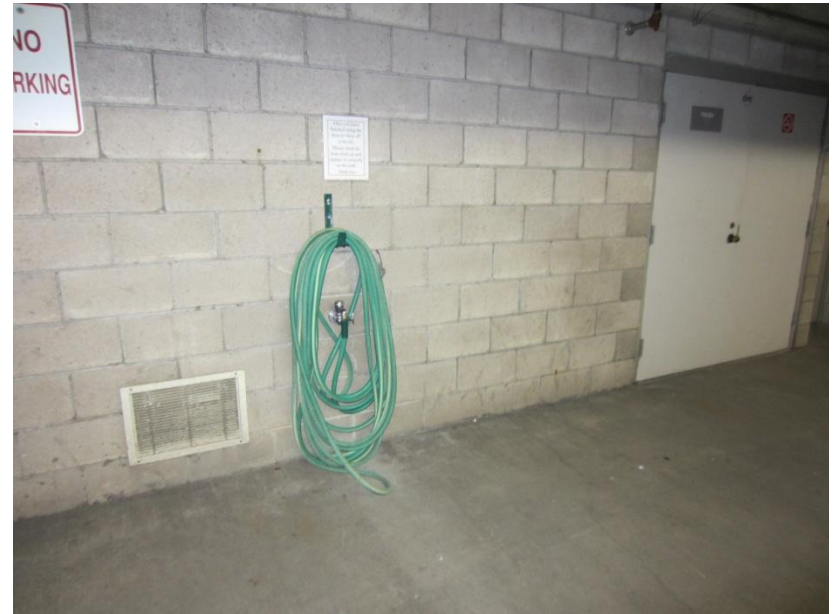


# Inspecting the Property – Common Area

## Underground Parking



## Car Wash





# Inspecting the Property – Common Area

## Common Heat



## Separate Utilities





# Inspecting the Property - Maintenance Items

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- Roof
- Elevators
- HVAC
- Parking lot



# The Approaches to Value

Step 1	Definition of the Problem					
Identify client and other Intended users	Identify the intended use	Identify the type and definition of value	Identify effective value date	Identify relevant characteristics of the property	Assignment conditions*	
					Extraordinary Assumptions	Hypothetical Conditions
Step 2	Scope of Work					
Step 3	Data Collection and Analysis					
Market Analysis  Demand studies Supply studies Marketability studies			Highest and Best Use Analysis  Site as though vacant Ideal improvement Property as improved			
Step 4	Application of the Approaches to Value					
Cost		Sales Comparison		Income Capitalization		
Step 5	Reconciliation of Value Indicators and Final Value Opinion					
Step 6	Report of Defined Value Opinions					

# The Appraisal Process

- Identifying the scope of work
- Defining the appraisal problem
- Underlying analyses
- **Applying the appraisal approaches**
  - ▣ **Sales Comparison Approach**
  - ▣ **Income Approach**
- Reconciliation of Value



# Sales Comparison Approach

# Sales Comparison Approach

- (also known as the market approach): A method which can be utilized to estimate the market value of a property by making a comparative study of recent sales for which offers to purchase have been made.
- A major premise of the sales comparison approach is that the market value of a property is directly related to the prices of comparable, competitive properties which have similar utility to that of the subject property.

# Sales Comparison Approach

- The principle of substitution applies to the sales comparison approach holds that the value of a property tends to be set by the price that would be paid to achieve a substitute property of similar utility and desirability.
- The principle implies that the reliability of the sales comparison approach is diminished if substitute properties are not available in the market.



# Procedure for Applying the Sales Comparison Approach:

- Research the market for properties that are similar to the subject that have recently sold, are listed for sale, or under contract to sell.
- Consider the characteristics of the properties such as property type, date of sale, size, physical condition, location, and land use constraints.
- The goal is to find a set of comparable sales as similar as possible to the subject property to ensure they reflect the actions of similar buyers.

# Procedure for Applying the Sales Comparison Approach:

- Verify the information by confirming that the data obtained is factually accurate and that the transactions reflect arm's-length, market considerations. Verification should elicit additional information about the property and the market so that the comparisons are credible.
- Select the most relevant unit of comparison for the market and develop a comparative analysis.

# Procedure for Applying the Sales Comparison Approach:

- Look for differences between the subject property and comparable and then make appropriate adjustments to each comparable.
- Reconcile the adjusted sales prices into a single value indication.

# Researching Comparables:

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- Research sales through databases, county data, talking with area brokers, reviewing offering memorandums, etc.
- Start with a larger set of comparables and narrow it down to a smaller set.

# Verification Process:

- Talk with the buyer, seller, broker/agent, property manager, and/or representative of the property.
- Verify all property characteristics:
  - ▣ Sales Date
  - ▣ Sales Price
  - ▣ Buyer/Seller
  - ▣ Financing
  - ▣ Unusual Conditions/Did sales price represent market value

# Verification Process:

- Verify all property characteristics:
  - Buyer incurred or planned expenditures after sale (deferred maintenance such as roof repair, parking lot repair, HVAC repair, etc.
  - Physical Characteristics: Unit mix breakdown with unit sizes, condition, amenities, parking stalls (parking rent), utilities tenants pay, etc.
  - Financial information-rents, vacancy, PGI, EGI, operating expenses or ratio, and capitalization rate.
  - Physically inspect comparables, aerials, pictures.

- Name: **Westwood Gardens**
- Location: 2525 Nevada Ave S
- St. Louis Park, MN
- Property ID No.: 08-117-21-24-0009; 0007; 0004
- Sale Date: January 10, 2014
- Buyer: Sela Investments
- Seller: Sidal Realty Co.
- Land Area: 239,491square feet, or 5.49 acres
- Age: 1967
- Gross Building Area: square feet
- Land/Building Ratio:
- Stories: 2 story plus garden level
- No. of Units: 152
- Units/Acre: 27.6 units per acre
- Construction: Wood frame
- Sale Price: \$11,430,000
- Occupancy at Sale:
- Price/Unit: \$75,197
- Terms of Sale: Cash
- Gross Rent multiplier:
- Indicated Cap Rate: 6.5% cap on buyers pro forma (w/ reserve)
- % based on trailing 12 month activity





# Types of Adjustments

- Property Rights Conveyed
- Financing
- Conditions of Sale
- Expenditures after Sale
- Age/Condition
- Quality
- Amenities
- Unit Mix
- Location

# Reconciliation of Value

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- Look at the range of comparables.
- Which were the best comparables.
- Reconcile value based upon unit of comparison.

# Example: Property Summary Chart

COMPARABLE SUMMARY CHART											
Property Name/Location	Sale Date		Sale Price	Unit Mix		Sale Price Per Unit	Number of Garage Stalls	Year Built Age at Sale		Adj. NOI Per Unit <sup>1</sup>	Adj. Cap. Rate <sup>1</sup>
	Month	Year		Type	Number						
Comparable #1	3	2014	\$2,600,000	Studio	0	\$43,333	30	Year Built	1979	\$3,358	7.75%
				1 BR	26						
				2 BR	18						
				3 BR	16			Age at Sale	35		
				Total	60						
Comparable #2	1	2014	\$2,080,000	Studio	0	\$46,222	32	Year Built	1983	\$4,044	8.75%
				1 BR	20						
				2 BR	20						
				3 BR	5			Age at Sale	31		
				Total	45						
Comparable #3	12	2013	\$1,400,000	Studio	0	\$46,667	30	Year Built	1981	\$3,967	8.50%
				1 BR	10						
				2 BR	12						
				3 BR	8			Age at Sale	32		
				Total	30						
Comparable #4	11	2013	\$2,500,000	Studio	0	\$41,667	30	Year Built	1990	\$3,333	8.00%
				1 BR	20						
				2 BR	30						
				3 BR	10			Age at Sale	23		
				Total	60						
Comparable #5	9	2013	\$1,500,000	Studio	0	\$46,875	10	Year Built	1982	\$3,633	7.75%
				1 BR	10						
				2 BR	12						
				3 BR	10			Age at Sale	31		
				Total	32						
Subject	5	2014	--	Studio	0	--	25	Year Built	1981	\$3,600	8.25%
				1 BR	15						
				2 BR	15						
				3 BR	15			Age at Sale	33		
				Total	45						

# Example: Adjustment Summary

COMPARABLE IMPROVED PROPERTY SALES ADJUSTMENT SUMMARY														
No.	Sale Price Per Unit	Property Rights Conv. Adj.	Financing Adj.	Cond. of Sale Adj.	Expend. After Sale Adj.	Market Cond. Adj.	Preliminary Price Per Unit	Age Adj.	Garage Adj.	Amenities Adj.	Size Adj.	Location/ Income Gen. Adj.	Net Net Adj.	Adj. Sale Price Per Unit
1	\$43,333	0%	0%	0%	0%	0%	\$43,333	11%	1%	0%	0%	0%	12%	\$48,533
2	\$46,222	0%	0%	0%	0%	0%	\$46,222	-1%	-2%	0%	0%	-9%	-12%	\$40,675
3	\$46,667	0%	0%	0%	0%	0%	\$46,667	0%	-5%	0%	0%	-5%	-10%	\$42,000
4	\$41,667	0%	0%	0%	0%	0%	\$41,667	-3%	1%	0%	0%	8%	6%	\$44,167
5	\$46,875	0%	0%	0%	0%	0%	\$46,875	9%	3%	0%	0%	-1%	11%	\$52,031
	\$41,667	MIN											MIN	\$40,675
	<b>\$44,953</b>	<b>MEAN</b>											<b>MEAN</b>	<b>\$45,481</b>
	\$46,875	MAX											MAX	\$52,031

VALUE CONCLUSION		
45 Units	X \$45,000 Per Unit =	<b>\$2,025,000</b>
<b>Rounded:</b>		<b>\$2,030,000</b>

# Final Thoughts?

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- Reliability of the Sales Comparison Approach in Valuing Apartments.



# The Income Approach



# The Income Approach

- An appraiser analyzes a property's capacity to generate future income benefits and capitalizes the income into an indication of value.
- The principle of anticipation is fundamental...

# Direct Capitalization - Overview

- Process of converting a single year's income into an indication of value
- NOI (Net Operating Income)
- Divided by
- Capitalization Rate
- =VALUE

# Direct Capitalization - Overview

## 8 – Unit Apt



## Direct Cap

- NOI = \$33,000
- Divided by
- Cap = 8.25%
  
- Calculate the value
  - ▣ \$400,000

# Direct Capitalization - Overview

- PGI (Potential Gross Income)
- - Vacancy
- EGI (Effective Gross Income)
- - Expenses
- NOI (Net Operating Income)
  
- Divided by
- Capitalization Rate
  
- =VALUE

# Direct Capitalization - Overview

## 8 – Unit Apt



## Calculate NOI

- \$70,000 (PGI)
- -5,000(Vac)
- \$65,000 (EGI)
- -\$32,000  
(Expenses)
- NOI = \$33,000

# Direct Capitalization Approach

## **General procedure to valuing property via the direct capitalization approach**

- Step 1: Determine market rents
- Step 2: Determine and apply market vacancy and credit loss
- Step 3: Determine any additional ancillary income
- Step 4: Project stabilized operating expenses
- Step 5: Project market capitalization rate
- Step 6: Capitalize Net Operating Income



# Rent Definitions

## MARKET RENT

- The most probable rent that a property should bring in a competitive and open market.....

## CONTRACT RENT

- The actual rent specified in a lease

Market rent vs Contract Rent-the relationship is similar to that of sale price and market value.

# Rent Definitions

- Effective Rent is rental rate net of financial concessions (free rent).
  - ▣ Example \$1000/mo for 12 month; 1 Mo free.  
Effective rent = \$916/mo.
- Rent Roll is a report indicating the rent paying status of each tenant

# Rent Roll

Unit	Resident Name	Rent
310	Brettingen	\$ 995.00
	4/30/2013	
	1 garage	
311	Soholt, Alf & June	\$ 995.00
	5/31/2013	
	1 garage	
312	Anderson, Harlan/Theresa	\$ 995.00
	10/31/2013	
313	Leino, Samuel & Carol	\$ 995.00
	9/30/2013	
314	Bell, Ralph Jr. / Blair, Scott	\$ 1,000.00
	5/31/2013	
315	Gross / Johnson	\$ 995.00
	11/30/2013	

# Sources of Market Rent

- Historical and current rent at subject
- Review most recent leases from rent roll
- Survey rent comparables
  - ▣ Asking Rents
- Market reports or surveys
  - ▣ GVA Marquette Advisors

# Rent Comparables

- Units of Comparison
  - ▣ Rent per unit
  - ▣ Rent per square foot (per month)
  - ▣ Rent per room (student housing)
  
- Adjust for:
  - ▣ Included Amenities
  - ▣ Included Utilities
  - ▣ Concessions

# Apartment Rent Comparables

Comparable #	SUBJECT	#1	#2	#3
Address	123 1st Street N	125 1st Street N	1000 Oak Drive	450 Main Street
City	New Hope	New Hope	New Hope	New Hope
Year Built	1961	1971	1969	1971
# Units	68	70	44	79
Occupancy	98%	100%	92%	95%
Data Month/Year	Jan-13	Jan-13	Jan-13	Jan-13
<b>AMENITIES</b>				
By Unit	Range/oven, Refrig., D/W, Disposal, Wall A/C	Range/oven, Refrig., D/W, Wall A/C	Range/oven, Refrig., D/W, Disposal, Wall A/C	Range/oven, Refrig., D/W, Disposal, Wall A/C
By Complex	Community room, fitness center, storage, elevator	Community room, fitness center, storage, elevator	Outdoor pool, Community room, storage, elevator	Community room, fitness center, storage, elevator
<b>UNIT TYPES</b>				
1 Bedroom				
# 1BRs	12	32	10	30
Size	700	700	675	700
Rent	\$ 750	\$ 725	\$ 750	\$ 750
Rent PSF	\$ 1.07	\$ 1.04	\$ 1.11	\$ 1.07
2 Bedroom				
# 2BRs	44	32	24	30
Size	850	900	800	825
Rent	\$ 900	\$ 925	\$ 900	\$ 900
Rent PSF	\$ 1.06	\$ 1.03	\$ 1.13	\$ 1.09
3 Bedroom				
# 3BRs	12	6	10	19
Size	1,000	975	1,000	1,100
Rent	\$ 1,000	\$ 975	\$ 1,025	\$ 1,050
Rent PSF	\$ 1.00	\$ 1.00	\$ 1.03	\$ 0.95
<b>CONCESSIONS</b>	None	None	\$300 off 1st month	None

# Apartment PGI

## Apartment Pro Forma

Total Number of Units		68
Unit Mix		Market Rent
# of Efficiencies	0	\$0
# of 1 Bedrooms	12	\$750
# of 2 Bedrooms	44	\$900
# of 3 Bedrooms	12	\$1,000
# of Garages	68	\$50

Potential Gross Rent

\$727,200

Garage Rent

\$40,800

**Potential Gross Income**

**\$768,000**

Sum of total income to the real property at full occupancy

# Direct Capitalization - PGI

## 8 – Unit Apt



## Calculate PGI

- 8 x 2BR Units
- \$730 /month
  
- Calculate PGI
  - ▣  $730 \times 8 \times 12 =$
  - ▣  $PGI = 70,080$



# Income Capitalization Approach

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# Market Vacancy

- Vacancy and Collection Loss - a deduction from PGI made to reflect income reductions due to vacancies, tenant turnover, and non-payment of rent
- Often expressed as a percentage of PGI
  - Ex 5% of PGI vacancy & .5 to 1% collection loss
- Should reflect the competitive market

# Market Vacancy

How to determine market Vacancy...

- Historical and current subject occupancy
- Comparable property analysis
- Market Surveys
  - ▣ GVA Marquette Advisors
- Broker Discussions
  
- Usually a strong relationship between rent levels and vacancy

# Market Vacancy

Combarable #	SUBJECT	#1	#2	#3
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City	New Hope	New Hope	New Hope	New Hope
Year Built	1961	1971	1969	1971
# Units	68	70	44	79
Occupancy	98%	100%	92%	95%
Data Month/Year	Jan-13	Jan-13	Jan-13	Jan-13

- Occupied            252
- Total Units        261
- Vacancy indicated by subject and rent comparables: 3.4%

# Market Vacancy

Twin Cities Metro Area	Unit Type	Units	Units Vacant	Avg Rent	Avg Rent	% Change	Vacancy	Vacancy	Change
		Surveyed		3/2013	3/2012		3/2013	3/2012	
	Studio	5,320	147	\$727	\$687	5.7%	2.8%	2.6%	0.1%
	One Bedroom	49,307	1,208	\$843	\$812	3.7%	2.4%	2.7%	-0.2%
	One + Den	2,291	68	\$1,159	\$1,121	3.4%	3.0%	2.6%	0.3%
	Two Bedroom	48,092	1,426	\$1,048	\$1,015	3.2%	3.0%	2.9%	0.1%
	Two + Den	1,071	46	\$1,474	\$1,445	2.0%	4.3%	3.5%	0.8%
	Three Bedroom	5,990	184	\$1,332	\$1,294	2.9%	3.1%	3.4%	-0.3%
	Three Den/Four	312	12	\$1,692	\$1,633	3.6%	3.8%	6.6%	-2.7%
	<b>Total</b>	<b>112,383</b>	<b>3,091</b>	<b>\$966</b>	<b>\$935</b>	<b>3.3%</b>	<b>2.8%</b>	<b>2.8%</b>	<b>-0.1%</b>
New Hope	Unit Type	Units	Units Vacant	Avg Rent	Avg Rent	% Change	Vacancy	Vacancy	Change
		Surveyed		3/2013	3/2012		3/2013	3/2012	
	Studio	12	0	\$632	\$630	0.2%	0.0%	8.3%	-8.3%
	One Bedroom	710	6	\$740	\$705	5.0%	0.8%	2.5%	-1.7%
	Two Bedroom	686	5	\$870	\$836	4.1%	0.7%	2.9%	-2.2%
	Three Bedroom	65	1	\$1,123	\$1,093	2.7%	1.5%	1.5%	0.0%
	<b>Total</b>	<b>1,491</b>	<b>12</b>	<b>\$817</b>	<b>\$783</b>	<b>4.3%</b>	<b>0.8%</b>	<b>2.7%</b>	<b>-1.9%</b>

- The projected vacancy of 3.4% appears to be reasonable and supported by market data.

# Income Capitalization Approach

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# Other Income

- Any miscellaneous additional income attributable to the subject property
- Examples:
  - ▣ Laundry
  - ▣ Vending Machines
  - ▣ Parking
  - ▣ Late fees
  - ▣ Forfeited deposits
  - ▣ Utility Charge-backs – Garbage, sewer water, etc..
- Can be a % of PGI or \$/unit

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- Examples:
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- Can be a % of PGI or \$/unit



# Other Income

## REVENUE

### Rental Income

Residential Rent	3200	29,610.00	29,610.00	29,656.61	28,380.00	29,855.00	29,800.50	29,005.18	29,284.52	28,065.00	29,310.00	28,815.00	28,889.19	350,281.00
Residential Vacancy	3210	(725.00)	(725.00)	(2,601.61)	(1,275.00)	0.00	(867.66)	0.00	(1,064.52)	0.00	(1,520.00)	(725.00)	0.00	(9,503.79)
Total Rental Income		28,885.00	28,885.00	27,055.00	27,105.00	29,855.00	28,932.84	29,005.18	28,220.00	28,065.00	27,790.00	28,090.00	28,889.19	340,777.21

### Other Income

Garage Rent	3300	475.00	500.00	600.00	480.00	560.00	490.00	520.00	480.00	300.00	380.00	420.00	420.00	5,625.00
Bad Debt Recovery	3605	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	100.00	0.00	68.53	0.00	218.53
Cleaning & Damages Income	3615	0.00	0.00	623.21	860.00	260.00	794.00	0.00	130.00	200.00	2,320.00	0.00	0.00	5,187.21
Court/Legal Charges	3620	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	420.00	420.00
Late/NSF Fees	3630	100.00	250.00	200.00	0.00	95.00	200.00	100.00	200.00	150.00	900.00	400.00	150.00	2,745.00
Miscellaneous Income	3645	175.00	175.00	175.00	580.00	175.00	175.00	175.00	(445.00)	175.00	175.00	175.00	100.00	1,810.00
Pet Income	3655	350.00	350.00	930.00	280.00	320.00	295.00	335.00	340.00	310.00	290.00	305.00	305.48	4,410.48
Total Other Income		1,100.00	1,275.00	2,528.21	2,200.00	1,410.00	1,954.00	1,130.00	755.00	1,235.00	4,065.00	1,368.53	1,395.48	20,416.22

TOTAL REVENUE		\$29,985.00	\$30,160.00	\$29,583.21	\$29,305.00	\$31,265.00	\$30,886.84	\$30,135.18	\$28,975.00	\$29,300.00	\$31,855.00	\$29,458.53	\$30,284.67	\$361,193.43
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# Effective Gross Income

- Potential Gross Income (PGI)
  - ▣ Deduct market vacancy
  - ▣ Deduct credit loss
  - ▣ Add Other Income
- Effective Gross Income (EGI)

# Income Capitalization Approach

## **General procedure to valuing property via the direct capitalization approach**

- Step 1: Determine market rents
- Step 2: Determine and apply market vacancy and credit loss
- Step 3: Determine any additional ancillary income
- Step 4: Project stabilized operating expenses
- Step 5: Project market capitalization rate
- Step 6: Capitalize Net Operating Income

# Operating Expenses



## OPERATING EXPENSES

- The periodic expenditures necessary to maintain the real property and continue production of the EGI, assuming prudent and competent management

# Expenses

## FIXED

Expenses that generally do not vary with occupancy

- ❑ Real Estate Taxes
- ❑ Insurance

## VARIABLE

Expenses that generally vary with the level of occupancy

- ❑ Management
- ❑ Utilities
- ❑ Payroll
- ❑ Repairs & Maintenance
- ❑ Administration
- ❑ Professional Services

# Owners Income Expense

Owner's Information (from CPA)	
Management (including manager's 1-bedroom apartment)	\$5,000
Insurance (3 years premiums)	\$31,461
Real estate taxes	\$10,206
Maintenance	\$6,991
Common utilities	
Electric	\$2,097
Gas	\$1,049
CATV	\$0
Water & sewer	\$1,398
Debt service	\$62,563
Automobile expense	\$1,600
Depreciation	\$19,701
Miscellaneous (incl. admin/tel/office)	\$2,097
Owner's salary(owner does maintenance)	\$25,000
Total	\$169,163

# Non-Allowable Expenses

---

- ❑ Depreciation
- ❑ Capital Improvements
- ❑ Owner's Personal Expenses
- ❑ Debt Service

# Expenses – Real Estate Taxes

- Allowable Expense but...
- Can be handled two ways
  - ▣ As a line item expense
  - ▣ Loading the cap rate with Effective Tax Rate
- MN Tax Court dictates a Loaded Cap



# Expenses – Loaded Tax Rate

- Effective Tax Rate
  - ▣ RE Taxes divided by
  - ▣ Assessed Value

- Cap Rate
- + Effective Tax Rate
- =Built Up Cap Rate

## Calculations

- \$39,000 taxes
- \$2,000,000 value
- Equals 1.95% ETR
  
- 7.5% cap rate
- 1.95% ETR
- 9.45% Built up rate

# Replacement Allowance

- An allowance that provides for the periodic replacement of building components that wear out more rapidly than the building itself and must be replaced during the building's economic life; sometimes referred to as *reserves*
- *Example: Roof is replaced every 20 yrs at a cost of \$40,000.*

# Expenses

## OPERATING EXPENSE RATIO

- The ratio of total operating expenses, excluding debt service, to either potential or effective gross income
- Most commonly expressed as a ratio to EGI or PGI
  - ▣ Consistency is key

# Owners Income Expense

**54 UNITS**  
**PERIOD ENDING DECEMBER 31, 2011**

**INCOME:**

APART POTENTIAL	615,711	103.46%
LAUNDRY	1,583	0.27%
INSURANCE PROCEEDS	0	0.00%
RENT CREDIT	(10,476)	-1.76%
SECURITY DEPOSIT	(208)	-0.03%
VACANCY LOSS	(11,493)	-1.93%
	<u>595,117</u>	<u>100.00%</u>

**OPERATING EXPENSES:**

GAS/ELECTRIC	26,323	4.42%
SEWER/WATER	25,694	4.32%
TELEPHONE	2,896	0.49%
TRASH	6,716	1.13%
ELEVATOR	7,021	1.18%
SUPPLIES	2,757	0.48%
REPAIR/MAINT	36,681	6.16%
PAINT/DECORATE	7,281	1.22%
SNOW/GROUNDS	18,209	3.06%
INSURANCE	17,166	2.88%
ADVERTISING	2,211	0.37%
SALARIES	29,004	4.87%
CLEANING SERVICE	7,687	1.29%
PROP MANAGEMENT	29,500	4.96%
PROFESSIONAL SERVICES	2,364	0.40%
ADMINISTRATION	2,365	0.40%
REAL ESTATE TAX	<u>70,490</u>	<u>11.84%</u>
	<u>294,344</u>	<u>49.46%</u>

% of EGI

**NET OPERATING INCOME:** 300,773 50.54%

Property Name	Expense Comparables					
Address						
City						
Year Built						
# Units						
Property Management						
Data Year						
<b>Income</b>	<b><u>ANNUAL</u></b>	<b><u>PER UNIT</u></b>	<b><u>% of EGI</u></b>	<b><u>ANNUAL</u></b>	<b><u>PER UNIT</u></b>	<b><u>% of EGI</u></b>
Apartment Rent Received	\$540,556	\$7,949.35	109.22%	\$1,001,308	\$8,344.23	94.35%
Garage Income	\$250	\$3.68	0.05%	\$46,800	\$390.00	4.41%
Vacancy/Rent Loss	(\$56,174)	(\$826.09)	-11.35%	(\$33,390)	(\$278.25)	-3.15%
Other Revenue	<u>\$10,310</u>	<u>\$151.62</u>	<u>2.08%</u>	<u>\$46,581</u>	<u>\$388.18</u>	<u>4.39%</u>
<b>Total Income</b>	<b>\$494,942</b>	<b>\$7,278.56</b>	<b>100.00%</b>	<b>\$1,061,299</b>	<b>\$8,844.16</b>	<b>100.00%</b>
<b>Expenses</b>	<b><u>ANNUAL</u></b>	<b><u>PER UNIT</u></b>	<b><u>% of EGI</u></b>	<b><u>ANNUAL</u></b>	<b><u>PER UNIT</u></b>	<b><u>% of EGI</u></b>
Utilities	\$51,271	\$753.99	10.36%	\$117,504	\$979.20	11.07%
Payroll	\$618	\$9.09	0.12%	\$139,580	\$1,163.17	13.15%
Building Repairs & Maintenance	\$113,790	\$1,673.38	22.99%	\$71,218	\$593.48	6.71%
Grounds Maintenance	\$11,400	\$167.65	2.30%	\$17,176	\$143.13	1.62%
Insurance	\$10,260	\$150.88	2.07%	\$39,828	\$331.90	3.75%
Management Fee	\$0	\$0.00	0.00%	\$55,109	\$459.24	5.19%
Real Estate Taxes	\$61,023	\$897.40	12.33%	\$124,165	\$1,034.71	11.70%
Marketing	\$617	\$9.07	0.12%	\$5,860	\$48.83	0.55%
Office/Administrative	\$4,303	\$63.28	0.87%	\$16,752	\$139.60	1.58%
Professional Services	<u>\$8,121</u>	<u>\$119.43</u>	<u>1.64%</u>	<u>\$9,515</u>	<u>\$79.29</u>	<u>0.90%</u>
<b>Total Expenses</b>	<b>\$261,403</b>	<b>\$3,844.16</b>	<b>52.81%</b>	<b>\$596,707</b>	<b>\$4,972.56</b>	<b>56.22%</b>
<b>NET OPERATING INCOME</b>	<b>\$233,539</b>	<b>\$3,434.40</b>	<b>47.19%</b>	<b>\$464,592</b>	<b>\$3,871.60</b>	<b>43.78%</b>
<b>Total Expenses excluding RE Taxes</b>	<b>\$200,380</b>	<b>\$2,946.76</b>	<b>40.49%</b>	<b>\$472,542</b>	<b>\$3,937.85</b>	<b>44.52%</b>
<b>NOI excluding RE Taxes</b>	<b>\$294,562</b>	<b>\$4,331.79</b>	<b>59.51%</b>	<b>\$588,757</b>	<b>\$4,906.31</b>	<b>55.48%</b>

# Expenses (Surveys)

	\$ Per Unit	\$ Per Sq. Ft.	% of GPR
<b>Revenues</b>			
Gross Potential Rent	11,008	12.02	100.0%
Rent Revenue Collected	9,851	10.76	89.5%
Losses to Vacancy	674	0.74	6.1%
Collection Losses	73	0.08	0.7%
Losses to Concessions	410	0.45	3.7%
Other Revenue	816	0.89	7.4%
<i>Total Revenue</i>	10,667	11.65	96.9%
<b>Operating Expenses</b>			
Salaries and Personnel	1,165	1.27	10.6%
Insurance	222	0.24	2.0%
Taxes	1,058	1.16	9.6%
Utilities	533	0.58	4.8%
Management Fees	303	0.33	2.7%
Administrative	243	0.27	2.2%
Marketing	161	0.18	1.5%
Contract Services	305	0.33	2.8%
Repair and Maintenance	495	0.54	4.5%
<i>Total Operating Expenses</i>	4,485	4.90	40.7%
<i>Net Operating Income</i>	6,181	6.75	56.2%

\*2012 National Apartment Association Survey

# Calculate Net Operating Income

<b>Potential Gross Income</b>			\$768,000
Less: Vacancy & Collection Loss	5.00%		(\$38,400)
<b>Effective Gross Income</b>			\$729,600
Operating Expenses (estimated as a % of EGI)			
Less: Management Fee	5.00%	(\$36,480)	
Less: Operating Expenses	38.00%	(\$277,248)	
Less: Reserves for Replacements	2.00%	(\$14,592.00)	
<b>Total Operating Expenses</b>	% of EGI 45.00%		(\$328,320)
<b>Net Operating Income</b>			\$401,280

# Income Capitalization Approach

## **General procedure to valuing property via the direct capitalization approach**

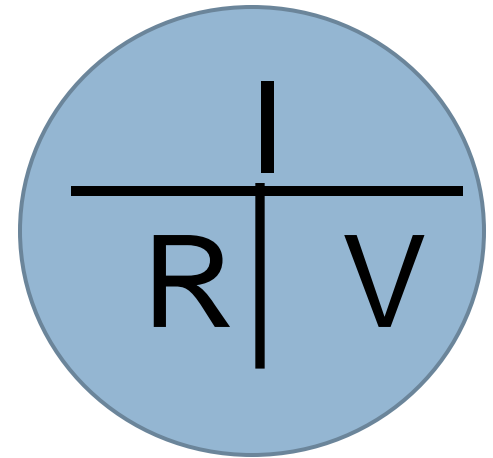
- Step 1: Determine market rents
- Step 2: Determine and apply market vacancy and credit loss
- Step 3: Determine any additional ancillary income
- Step 4: Project stabilized operating expenses
- Step 5: Project market capitalization rate
- Step 6: Capitalize Net Operating Income



# Cap Rates

## CAPITALIZATION RATE (R)

- Any rate used to convert income into value
- Rate = Income/Value
- Value = Income/Rate



# Cap Rates

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How to derive a cap rate...

- Utilize market extracted cap rate comps
- Broker opinions
- Market surveys

# Cap Rates

## Comparable Sale Scenario

- Sale Price:  
\$1,800,000
- NOI: \$120,600
- What's the overall cap rate?
  - ▣ 6.7%

## 22 Unit Apartment Sale



# Cap Rates

## Comparable Sale Scenario

- Sale Price: \$1,000,000
- PGI: \$100,000
- Vacancy: 5%
- Op. Exp: 25%
- What's the overall cap rate?

## 14 Unit Apartment Sale



# Cap Rates

## Keystrokes for HP 12c

### Keystrokes for HP 12c

- \$100,000 (enter)
- 5 (%) (-)
- 25 (%) (-)
- \$1,000,000 ( $\div$ )
- 0.0713 or 7.13% OAR

## 20 Unit Apartment Sale



# Cap Rates

## □ RERC Real Estate Report

MINNEAPOLIS

2ND QUARTER 2012

Minneapolis Investment Criteria   First-Tier <sup>1</sup> Investment Properties													
	Pre-Tax Yield (%)			Going-In Cap Rate (%)			Terminal Cap Rate (%)			Anticipated 1-Year Growth Rates			
	RERC Estimate	Midwest Region	U.S.	RERC Estimate	Midwest Region	U.S.	RERC Estimate	Midwest Region	U.S.	National Value	Midwest Value	National Rent	Midwest Rent
Offc - CBD	8.9	9.4	9.2	7.3	7.8	7.5	8.0	8.5	8.2	1.7	1.2	1.6	0.9
Offc - Suburban	9.5	9.8	9.6	7.8	8.3	8.0	8.4	8.8	8.6	1.0	0.3	0.8	0.1
Ind - Warehouse	9.1	9.4	9.4	7.6	8.1	7.9	8.2	8.7	8.5	1.7	1.7	1.5	1.5
Ind - R&D	9.4	9.7	9.7	8.0	8.4	8.2	8.5	8.9	8.7	1.2	0.9	1.0	0.6
Ind - Flex	9.6	9.8	9.7	8.1	8.5	8.2	8.7	9.0	8.8	1.1	0.9	1.0	0.6
Ret - Reg Mall	8.9	9.1	9.1	7.2	7.5	7.6	8.0	8.3	8.3	1.0	0.9	0.8	0.6
Ret - Pwr Center	9.1	9.2	9.3	7.6	7.8	7.7	8.2	8.5	8.5	0.9	0.8	0.7	0.5
Ret - Neigh/ Comm.	9.1	9.3	9.4	7.7	8.1	7.8	8.3	8.7	8.6	1.3	1.0	1.1	0.6
Apartment	7.8	8.2	8.3	6.3	6.9	6.5	6.9	7.5	7.1	3.9	3.7	3.6	3.8
Hotel	10.3	10.4	10.4	8.7	8.8	8.6	9.1	9.4	9.2	2.1	2.0	2.1	1.8
<b>Average</b>	<b>9.2</b>	<b>9.4</b>	<b>9.4</b>	<b>7.6</b>	<b>8.0</b>	<b>7.8</b>	<b>8.2</b>	<b>8.6</b>	<b>8.5</b>	<b>1.6</b>	<b>1.3</b>	<b>1.4</b>	<b>1.1</b>

<sup>1</sup> First-tier investment properties are defined as new or newer quality construction in prime to good locations.

Source: RERC Investment Survey.

# Cap Rates

## □ PwC Real Estate Investor Survey (Korpacz)

<b>Table 28</b> <b>NATIONAL APARTMENT MARKET</b> Second Quarter 2013					
	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
<b>DISCOUNT RATE (IRR)<sup>a</sup></b>					
Range	5.00% – 14.00%	5.00% – 14.00%	5.25% – 14.00%	6.25% – 14.00%	6.00% – 10.50%
Average	8.04%	8.06%	8.30%	9.89%	8.16%
Change (Basis Points)		– 2	– 26	– 185	– 12
<b>OVERALL CAP RATE (OAR)<sup>a</sup></b>					
Range	3.50% – 10.00%	3.50% – 10.00%	3.75% – 10.00%	5.00% – 11.00%	3.50% – 8.00%
Average	5.70%	5.73%	5.76%	7.68%	5.75%
Change (Basis Points)		– 3	– 6	– 198	– 5
<b>RESIDUAL CAP RATE</b>					
Range	4.25% – 9.75%	4.25% – 9.75%	4.50% – 9.75%	5.50% – 11.00%	4.50% – 8.50%
Average	6.18%	6.22%	6.15%	7.84%	6.69%
Change (Basis Points)		– 4	+ 3	– 166	– 51
<b>MARKET RENT CHANGE<sup>b</sup></b>					
Range	(2.00%) – 7.00%	(2.00%) – 6.00%	(2.00%) – 8.00%	(10.00%) – 3.00%	0.00% – 8.00%
Average	2.60%	2.57%	2.80%	(0.49%)	3.17%
Change (Basis Points)		+ 3	– 20	+ 309	– 57
<b>EXPENSE CHANGE<sup>b</sup></b>					
Range	1.00% – 3.50%	1.00% – 3.50%	1.00% – 4.00%	0.00% – 4.00%	2.00% – 3.75%
Average	2.67%	2.71%	2.65%	2.38%	2.92%
Change (Basis Points)		– 4	+ 2	+ 29	– 25
<b>MARKETING TIME<sup>c</sup></b>					
Range	0 – 18	0 – 18	0 – 18	1 – 18	1 – 12
Average	5.1	5.1	5.3	7.1	6.0
Change (▼, ▲, =)		=	▼	▼	▼
a. Rate on unleveraged, all-cash transactions    b. Initial rate of change    c. In months					



# CAP RATES

## Market Studies

### □ Realty Rates

RealtyRates.com INVESTOR SURVEY - 4th Quarter 2012*							
RESTAURANTS - ALL TYPES							
Item	Input						OAR
<b>Minimum</b>							
Spread Over 10-Year Treasury	2.03%	<b>DCR Technique</b>		1.15	0.055574	0.75	<b>4.79</b>
Debt Coverage Ratio	1.15	<b>Band of Investment Technique</b>					
Interest Rate	3.75%	Mortgage		75%	0.055574	0.041680	
Amortization	30	Equity		25%	0.108132	0.027033	
Mortgage Constant	0.055574	<b>OAR</b>					<b>6.87</b>
Loan-to-Value Ratio	75%	<b>Surveyed Rates</b>					
Equity Dividend Rate	10.81%						<b>5.63</b>
<b>Maximum</b>							
Spread Over 10-Year Treasury	11.52%	<b>DCR Technique</b>		2.40	0.153729	0.50	<b>18.45</b>
Debt Coverage Ratio	2.40	<b>Band of Investment Technique</b>					
Interest Rate	13.24%	Mortgage		50%	0.153729	0.076864	
Amortization	15	Equity		50%	0.206560	0.103280	
Mortgage Constant	0.153729	<b>OAR</b>					<b>18.01</b>
Loan-to-Value Ratio	50%	<b>Surveyed Rates</b>					
Equity Dividend Rate	20.66%						<b>17.11</b>
<b>Average</b>							
Spread Over 10-Year Treasury	4.68%	<b>DCR Technique</b>		1.71	0.088775	0.62	<b>9.45</b>
Debt Coverage Ratio	1.71	<b>Band of Investment Technique</b>					
Interest Rate	6.40%	Mortgage		62%	0.088775	0.055337	
Amortization	20	Equity		38%	0.162267	0.061121	
Mortgage Constant	0.088775	<b>OAR</b>					<b>11.65</b>
Loan-to-Value Ratio	62.3%	<b>Surveyed Rates</b>					
Equity Dividend Rate	16.2%						<b>12.80</b>



# Income Capitalization Approach

## **General procedure to valuing property via the direct capitalization approach**

- Step 1: Determine market rents
- Step 2: Determine and apply market vacancy and credit loss
- Step 3: Determine any additional ancillary income
- Step 4: Project stabilized operating expenses
- Step 5: Project market capitalization rate
- Step 6: Capitalize Net Operating Income

# Direct Capitalization

- PGI (Potential Gross Income)
- - Vacancy
- EGI (Effective Gross Income)
- - Expenses
- NOI (Net Operating Income)
  
- Divided by
- Capitalization Rate
  
- =VALUE

# Direct Capitalization PRO FORMA

<b>Net Operating Income</b>		\$401,280
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Effective Tax Rate	2.07%
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Capitalization Rate	7.75%
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<b>Overall Capitalization Rate (Loaded)</b>	9.82%
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Capitalized Value (Including Personal Property)	\$4,086,354
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Less: Personal Property	\$750	per Unit	\$51,000
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Capitalized Value (Real Property Only)	\$4,035,354
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Capitalized Value Per Unit (Real Property Only)	\$59,343
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<b>Indicated Value Via Income Approach as of Jan. 2, 2013</b>	<b>\$4,040,000</b>
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<b>Indicated Value per Unit</b>	<b>\$59,300</b>
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# MULTI-FAMILY PRO-FORMA

Advanced Techniques

# Hypothetical Property Analysis

- Non-existing property-Used for Demonstration Purposes
- Minnesota Apartment-Built in 1986
- 50 Units
- Average amenity package
- 30 Detached Garage Stalls
- 10 Storage Lockers

# Potential Gross Apartment Income

- Projecting Potential Gross Apartment Income
  - ▣ Historical and current subject rent
    - Has rent been increasing/decreasing
    - Is occupancy too high? Potential for rent increase?
  - ▣ Survey rent comparables
  - ▣ Rent adjustment analysis
    - Location, unit size, in unit amenities (washer/dryer), complex amenities, parking, parking fee, age/condition, utilities included in rent, etc.
  - ▣ Market studies
    - GVA Marquette Advisors-Quarterly Apartment Trends
  - ▣ Supply/Demand
    - Current demand
    - Proposed projects?

# Potential Gross Apartment Income

## □ Subject Projection

POTENTIAL GROSS APARTMENT INCOME						
Unit Type	# of Units		Projected Monthly Rent		# of Months	Projected Annual Rent
1-BR/1-BA Unit (700 Square Feet)	30	x	\$750	x	12	= \$270,000
2-BR/2-BA Unit (850 Square Feet)	20	x	\$900	x	12	= \$216,000
<b>Projected Gross Apartment Income</b>	<b>50</b>	<b>x</b>	<b>\$810</b>	<b>x</b>	<b>12</b>	<b>= \$486,000</b>

# Parking Potential Gross Parking Income

- Projecting Potential Gross Parking Income
  - ▣ Survey comparable properties
  - ▣ Typical parking rent
    - Included in rent or additional fee?
    - Detached/Attached/Tuck Under/Underground/Surface?
    - Downtown/Uptown/Dinkytown Mpls/St. Louis Park-\$100-\$150 per month
    - Twin Cities suburban area-\$45 to \$100 per month
    - Outside the Twin Cities metropolitan area-\$25 to \$50 per month

## POTENTIAL GROSS PARKING/GARAGE INCOME

	<u># of Stalls</u>		<u>Rent Per Month</u>		<u># of Months</u>		
Potential Gross Garage Income	30	x	\$50	x	12	=	\$18,000



# Apartment Vacancy/Credit Loss Analysis

- Subject historical vacancy and credit loss
- Survey comparables in the market
- Market studies
  - ▣ GVA Marquette Advisors
- Is vacancy a bad thing?
- Typical credit loss?

# Parking Vacancy/Credit Loss Analysis

- Subject's historical vacancy/credit loss
- Parking vacancy comparables
- Interview property managers
- Parking ratio analysis
- Type of property/location
  - ▣ Senior housing/Affordable Housing versus Market Rate
  - ▣ Light Rail-Bus Lines

# Effective Gross Ancillary Income

- Miscellaneous Income
  - ▣ Laundry, month to month fees, application fees, early termination fees, vending, security deposit forfeits, recovered collection loss, pet revenue, guest unit, late fees, move out charges, NSF (non-sufficient funds) charges, phone/internet/cable commissions.
- RUBS (ratio utility billing system) Income
  - ▣ Utilities (typically water/sewer/trash) are not individually metered and tenant is charged back their pro-rata share of utilities.
- Storage Locker Income
  - ▣ Included or additional charge
    - \$5 to \$25 per month

# Rent Concessions/Loss to Lease

- Look at comparables
- Market studies
- Interview real estate professionals/property managers
- Revenue management systems (Yieldstar)

# Effective Gross Income

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- Effective Gross Income (EGI): the anticipated income from all operations of the real property adjusted for vacancy and collection losses.

# Effective Gross Income

## □ Subject Projection

### EFFECTIVE GROSS INCOME CALCULATION

#### INCOME PROJECTIONS:

Unit Type	# of Units		Projected Monthly Rent		# of Months		Projected Annual Rent
1-BR/1-BA Unit (700 Square Feet)	30	x	\$750	x	12	=	\$270,000
2-BR/2-BA Unit (850 Square Feet)	20	x	\$900	x	12	=	\$216,000
Projected Gross Apartment Income	50	x	\$810	x	12	=	\$486,000
Less: Vacancy and Credit Loss Allowance @ 5.00%							(\$24,300)
<b>Effective Gross Apartment Income</b>							<b>\$461,700</b>

	# of Stalls		Rent Per Month		# of Months		
Potential Gross Garage Income	30	x	\$50	x	12	=	\$18,000
Less: Vacancy and Credit Loss Allowance @ 5.00%							(\$900)
<b>Effective Gross Garage Income</b>							<b>\$17,100</b>

<b>Effective Gross Miscellaneous Income (50 Units x \$150 Per Unit)</b>	<b>\$7,500</b>
<b>Effective Gross RUBS Income</b>	<b>\$0</b>
<b>Effective Gross Storage Locker Income (10 Units x \$10 Per Month x 12 Months x 90% Occupancy)</b>	<b>\$1,080</b>
<b>Rent Concessions/Loss to Lease:</b>	<b>\$0</b>

<b>TOTAL EFFECTIVE GROSS INCOME -- ALL SOURCES</b>	<b>\$487,380</b>
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# Operating Expense Projections

- Standardized Expense Categories
  - ▣ Real Estate Tax
  - ▣ Insurance
  - ▣ Utilities
    - Gas
    - Electricity
    - Water/Sewer/Trash
  - ▣ Repairs and Maintenance
  - ▣ Management (% of Effective Gross Income)
  - ▣ Advertising
  - ▣ Administration
  - ▣ Caretaker/Payroll
  - ▣ Reserves for Replacement

# Operating Expense Projections

- Subject's historical operating expenses
  - ▣ Trends in expenses-% annual increases
- Expense comparables
  - ▣ Trends in comparables
  - ▣ Are comparable expense categories grouped similar to the subject



# Operating Expense Projections

## □ Subject Projection

OPERATING EXPENSE PROJECTION			
EXPENSE PROJECTIONS:	% of EGI	Per Unit	Annually
Real Estate Tax	12.82%	\$1,250	\$62,500
Insurance	2.05%	\$200	\$10,000
Utilities	8.21%	\$800	\$40,000
Repairs and Maintenance	10.26%	\$1,000	\$50,000
Management (3.50% of EGI)	4.00%	\$390	\$19,500
Advertising	1.03%	\$100	\$5,000
Administration	1.54%	\$150	\$7,500
Caretaker/Payroll	8.21%	\$800	\$40,000
Reserves for Replacement	2.56%	\$250	\$12,500
<b>Total Operating Expenses Including Reserves</b>	<b>50.68%</b>	<b>\$4,940</b>	<b>\$247,000</b>

# NET OPERATING INCOME

- Net Operating Income (NOI): the actual or anticipated income remaining after all operating expenses are deducted from effective gross income, but before mortgage debt service and book depreciation are deducted. May be calculated before or after deducting replacement reserves.

# NET OPERATING INCOME

## □ Subject Projection

NET OPERATING INCOME PROJECTION	
Total Effective Gross Income--All Sources	\$487,380
Less: Total Operating Expenses Inc. Reserves	(\$247,000)
<b>NET OPERATING INCOME</b>	<b>\$240,380</b>
<b>Per Unit:</b>	<b>\$4,808</b>

# CAPITALIZATION RATE ANALYSIS

- ▣ Market Extraction Method-Use of Comparable Sales
  - ▣ Trailing capitalization rate
    - How is trailing calculated?
  - ▣ Pro-forma capitalization rate
  - ▣ Value added deal
- ▣ Band of Investment Method
- ▣ Surveys
  - ▣ Korpacz
  - ▣ RERC
- ▣ Broker Discussions
  - ▣ CBRE
  - ▣ NAI Everest
  - ▣ Moran and Company
- ▣ Risk?

# CAPITALIZATION RATE ANALYSIS

## CAPITALIZATION RATE EXAMPLE

**Sale Price \$3,210,000**

	Trailing 12 Month	Trailing 9 Month Annualized	Trailing 6 Month Annualized	T1 Inc. Annualized/ T12 Expenses	Year 1 Pro-Forma
Net Operating Income	<u>\$210,576</u> 6.56%	<u>\$219,885</u> 6.85%	<u>\$225,342</u> 7.02%	<u>\$233,688</u> 7.28%	<u>\$240,750</u> 7.50%

# CAPITALIZATION RATE ANALYSIS

- Value added deals
  - ▣ 1980's vintage apartments
  - ▣ Upgrades to appliances, countertops, cabinets, bathrooms, flooring, etc.
  - ▣ Results in aggressive capitalization rate due to upside potential

# CAPITALIZATION RATE ANALYSIS

## □ Value Added Property Example-Hypothetical

PROPERTY	<u>#1</u>	<u>#2</u>	<u>#3</u>	<u>#4</u>	<u>#5</u>
<b>Cost to Upgrade Per Unit</b>	<b>\$750</b>	<b>\$1,500</b>	<b>\$2,500</b>	<b>\$3,500</b>	<b>\$5,000</b>
Monthly Rent Premium	\$25	\$50	\$75	\$100	\$150
Multiplied by 12 Months:	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>
Annual Rent Premium	\$300	\$600	\$900	\$1,200	\$1,800
Multiplied by Proj. Occupancy	95%	95%	95%	95%	95%
Multiplied by Proj. Expense Ratio (45%)	<u>55%</u>	<u>55%</u>	<u>55%</u>	<u>55%</u>	<u>55%</u>
Annual Net Operating Income Premium	\$157	\$314	\$470	\$627	\$941
Divided by Projected Capitalization Rate	<u>6.50%</u>	<u>6.50%</u>	<u>6.50%</u>	<u>6.50%</u>	<u>6.50%</u>
Upgraded Value Per Unit	\$2,412	\$4,823	\$7,235	\$9,646	\$14,469
Less: Cost to Upgrade	<u>\$750</u>	<u>\$1,500</u>	<u>\$2,500</u>	<u>\$3,500</u>	<u>\$5,000</u>
<b>Additonal Net Value Created-Per Unit</b>	<b>\$1,662</b>	<b>\$3,323</b>	<b>\$4,735</b>	<b>\$6,146</b>	<b>\$9,469</b>

# Direct Capitalization Value

## □ Subject Projection

DIRECT CAPITALIZATION	
Net Operating Income	\$240,380
Capitalization Rate	<u>7.50%</u>
FEE SIMPLE MARKET VALUE INDICATION	\$3,205,067
ROUNDED TO:	\$3,210,000
Per Unit	\$64,200





# Case Study

# Case Study

MULTI-FAMILY PRO FORMA--CASE STUDY						
<b>INCOME PROJECTIONS:</b>						
Unit Type	# of Units	Projected Monthly Rent		# of Months		Projected Annual Rent
1-BR/1-BA Unit (600 Square Feet)	x		x	12	=	
2-BR/2-BA Unit (825 Square Feet)	x		x	12	=	
Projected Gross Apartment Income	x		x	12	=	
Less: Vacancy and Credit Loss Allowance @						
<b>Effective Gross Apartment Income</b>						
<b>Effective Gross Miscellaneous Income</b>						
<b>Rent Concessions:</b>						
<b>TOTAL EFFECTIVE GROSS INCOME -- ALL SOURCES</b>						
<b>TOTAL OPERATING EXPENSES</b>						
<b>NET OPERATING INCOME</b>						
DIRECT CAPITALIZATION						
<b>Net Operating Income</b>						
Capitalization Rate						
Effective Tax Rate						
Loaded Cap Rate (Total)						
<b>FEE SIMPLE MARKET VALUE INDICATION</b>						
<b>ROUNDED TO:</b>						
Per Unit						



# Mass Appraisal

# Mass Appraisal

- Separate by Class
- Isolate the variables.
  - ▣ PGI
  - ▣ Vacancy
  - ▣ Operating Expenses
  - ▣ Cap Rate
- Extract Trends
  - ▣ Or
- Create a Model

# Mass Appraisal - Trends



CLASS C											
2013		2014									
BASE PRO FORMA		RENT CHANGE		VACANCY CHANGE		CAP RATE CHANGE		TAX RATE CHANGE		Total PRO FORMA	
Rent	1	Rent	1.03	Rent	1	Rent	1	Rent	1	Rent	1.03
Vac	0.05	Vac	0.05	Vac	0.03	Vac	0.05	Vac	0.05	Vac	0.03
NOI	0.95	NOI	0.9785	NOI	0.97	NOI	0.95	NOI	0.95	NOI	0.9991
Cap	8.50%	Cap	8.50%	Cap	8.50%	Cap	8.00%	Cap	8.50%	Cap	0.08
Tax	1.85%	Tax	1.85%	Tax	1.85%	Tax	1.85%	Tax	1.95%	Tax	0.0195
Loaded	10.35%	Loaded	10.35%	Loaded	10.35%	Loaded	9.85%	Loaded	10.45%	Loaded	0.0995
Value	9.178744	Value	9.4541063	Value	9.3719807	Value	9.64467	Value	9.0909091	Value	10.041206
		Change	3.00%	Change	2.11%	Change	5.08%	Change	-0.96%		9.40%

# Mass Appraisal Model

	A	B	C	D	E	F	G	H	I
1									
2	<b>Income Pro Forma - 2014 Assessment</b>								
3	Sample Mass Appraisal								
4	Old Cedar Ave S								
5	Bloomington, MN								
6									
7									
8									
9									
10	<b># of</b>	<b>Estimated</b>	<b>Estimated</b>			<b>Economic</b>	<b>Economic</b>	<b>Monthly</b>	
11	<b>UNITS</b>	<b>Unit Type</b>	<b>SF per Unit</b>	<b>Total SF</b>		<b>Market Rent</b>	<b>Market Rent</b>	<b>Economic</b>	
12		<b>Model Name</b>				<b>per Month</b>	<b>per SF</b>	<b>Market Rent</b>	
13									
14	2	Efficiency	400	800		\$515	\$1.29	\$1,030	
15	73	1 Bedroom	875	63,875		\$715	\$0.82	\$52,195	
16	27	2 Bedrooms	1,150	31,050		\$945	\$0.82	\$25,515	
17	3	3 Bedrooms	1,650	4,950		\$1,300	\$0.79	\$3,900	
18									
19	105	Total Units		100,675	NRA		\$0.82	\$82,640	
20									
21	50	Garages				\$30		\$1,500	
22									
23	Monthly Market Rent								\$84,140
24	Annual Market Rent								\$1,009,680
25									
26	<b>Capitalization Process</b>								
27									
28	<b>POTENTIAL GROSS INCOME (PGI)</b>								<b>\$1,009,680</b>
29									
30	LESS: VACANCY & COLLECTION LOSS								
31	% OF PGI								5.00%
32									(\$50,484)
33	OTHER INCOME:								1.00% of PGI
34									\$10,097
35	<b>EFFECTIVE GROSS INCOME (EGI)</b>								<b>\$969,293</b>
36									
37	LESS: ANNUAL OPERATING EXPENSES								35.00% OF EGI
38	LESS: ANNUAL RESERVES FOR REPLACEMENT								\$250/unit 2.71% OF EGI
39	TOTAL ANNUAL ALLOWANCE								37.71% OF EGI
40									\$339,252
41									\$26,250
42									\$365,502
43	<b>NET OPERATING INCOME (NOI)</b>								<b>\$603,790</b>
44									
45	<b>CAPITALIZATION</b>								
46	OVERALL RATE								7.50%
47	TAX RATE (pay 2014)								1.95%
48	BUILT-UP RATE								9.45%
49									
50	CAPITALIZED VALUE								\$6,389,316
51									
52	LESS PERSONAL PROPERTY								\$1,000 per Unit
53									\$105,000
54	<b>Indicated Value Via Income Approach</b>								<b>\$6,284,316</b>
55									
56	<b>Indicated Value per Unit</b>								<b>\$50,848</b>
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9									
10	<b># of</b>	<b>Model Name</b>	<b>Estimated</b>	<b>Estimated</b>			<b>Economic</b>	<b>Economic</b>	<b>Monthly</b>
11	<b>UNITS</b>		<b>Unit Type</b>	<b>SF per Unit</b>	<b>Total SF</b>		<b>Market Rent</b>	<b>Market Rent</b>	<b>Economic</b>
							<b>per/Month</b>	<b>per SF</b>	<b>Market Rent</b>
14	2		Efficiency	400	800		\$515	\$1.29	\$1,030
15	73		1 Bedroom	875	63,875		\$715	\$0.82	\$52,195
16	27		2 Bedrooms	1,150	31,050		\$945	\$0.82	\$25,515
17	3		3 Bedrooms	1,650	4,950		\$1,300	\$0.79	\$3,900
18									
19	105	Total Units			100,675	NRA		\$0.82	\$82,640
20									
21	50	Garages					\$30		\$1,500
22									
23	Monthly Market Rent								
24	Annual Market Rent								
25									\$84,140
									\$1,009,680

Floor Plans

Property Details

★ Ratings and Reviews

Moving Center

▼ Floor Plan Options (4)

FLOOR PLAN	BED	BATH	RENT	SQ FT	DEPOSIT	AVAILABILITY
Studio	studio	1	\$515	400		<a href="#">CHECK AVAILABILITY</a>
1 Bedroom	1	1	\$600 - \$715	875	\$300	<a href="#">CHECK AVAILABILITY</a>
2 Bedroom	2	1	\$945 - \$999	1150	\$350	<a href="#">CHECK AVAILABILITY</a>

# Mass Appraisal Model

26	Capitalization Process							
27								
28	POTENTIAL GROSS INCOME (PGI)						\$1,009,680	
29								
30	LESS: VACANCY & COLLECTION LOSS							
31	% OF PGI				5.00%		(\$50,484)	
32								
33	OTHER INCOME:				1.00%	of PGI	\$10,097	
34								
35	EFFECTIVE GROSS INCOME (EGI)						\$969,293	
36								
37	LESS: ANNUAL OPERATING EXPENSES				35.00%	OF EGI	\$339,252	
38	LESS: ANNUAL RESERVES FOR REPLACEMENT				\$250/unit	2.71%	OF EGI	\$26,250
39	TOTAL ANNUAL ALLOWANCE					37.71%	OF EGI	\$365,502
40								
41	NET OPERATING INCOME (NOI)						\$603,790	
42								
43	CAPITALIZATION							
44	OVERALL RATE				7.50%			
45	TAX RATE (pay 2014)				1.95%			
46	BUILT-UP RATE				9.45%			
47								
48	CAPITALIZED VALUE						\$6,389,316	
49								
50	LESS PERSONAL PROPERTY				\$1,000	per Unit	\$105,000	
51								
52	Indicated Value Via Income Approach						\$6,284,316	
53								
54						Rounded	\$6,284,000	
55	Indicated Value per Unit					Per Unit	\$98,848	



# Mass Appraisal Model

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- Test Your Model!
  - ▣ Listings
  - ▣ Sales
  - ▣ Appeals

# Question & Answer

