



Income Valuation of Commercial Property

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COMMERCIAL PROPERTY

- 37,000 Total Improved Parcels Statewide
 - 47,000 Total Structures
- Preferred method for commercial valuation is the income approach
 - Majority of parcels are still valued using cost approach

PARCELS WITH INCOME VALUES

- Approximately 24% of properties statewide were valued using the income approach in 2003 Cycle
- Approximately 38% of properties statewide are valued using the income approach in current cycle
- Approximately 33% of properties in seven largest counties were valued using the income approach in 2003 cycle
- Approximately 42% of properties in seven largest counties are valued using the income approach in current cycle

COST APPROACH

- Cost
 - Predominantly used for commercial property statewide.
 - Good indicator of value when applied to new property
 - Easy to apply
- Cost collection of commercial new construction helps develop statewide cost table based on actual construction costs.

SALES COMPARISON APPROACH

- Limited application for commercial property with improvements
 - Typically limited to Structure Type/Use
 - Difficult to evaluate other variables due to limited amount of sales
 - Other property attributes are difficult to correlate
 - Location
 - Grade
 - Age
 - Condition
 - Size

INCOME APPROACH

- Income Approach – The income approach requires the development of basic data sets of income and expense information dependant on the type of income producing property under appraisal. Through use of a capitalization rate, income is capitalized into an estimate of value.
- Eight Income models within the state
 - One for each of the seven largest urban areas and one model for the rest of the state
 - Sub models for each structure type

INCOME MODEL

- Montana Appraisal Manual
 - A mathematical formula developed from typical income and expense statements, typical capitalization rates, and capitalization techniques for the purpose of determining present worth of the future benefits of a property

INCOME APPROACH IN A NUT SHELL

Potential Gross Income

Less: Vacancy and Collection Loss

Less: Typical Operating Expenses

Equals: Net Operating Income

The Net Operating Income is divided by an appropriate cap rate to arrive at a market value.

$$I / R = V$$

I = Income, R = rate, V = Value

INCOME APPROACH CALCULATION

- Income = \$24,000
- V/C Loss = -\$1200 (5%)
- Expenses = -\$6,840 (30%)
- Net Income = \$15,960
- Cap Rate = 10.5%
- Value = \$152,000



I & E COLLECTION FORMS

- Three general types of forms
 - Mobile Home Court
 - Hotel / Motel
 - Other (Retail, Warehouse, Office, Mini Warehouse)
- Expense page is same for each form
- Collects different rental information based on Sq Ft/Unit
- Annual mass mailing of (I&E) collection forms sent to all improved commercial properties that have a coded structure.
 - Voluntary taxpayer participation
 - Approximately 20% return rate (14% with useable data)
 - Other methods used to capture Income and expense
 - Sales review, Personal Contact, AB-26, Appeals, publications

Basic Model Types

- Apartment
 - Apartment Units (Bedroom/Bathroom combinations)
- Square Foot
 - Retail, Office, Warehouse, Mini-Warehouse
- Hotel/Motel
 - Hotel Units
- Unit Model
 - Mobile home courts, Cabins, Parking Space

MODEL DEVELOPMENT

- Models are developed in Excel/Access database cyclical reappraisal
- Models are developed for the “typical” structure found in the model using:
 - Stabilize I & E reported by taxpayer to reflect economic rent (market rent) and typical expenses
 - Information verified by contacting owner/agent
 - Used to calculate typical NOI (normalized) based on property type
- Multi-county/Multi-region models developed when insufficient local data available

Steps for Income Modeling

- Sales Verification
 - Maintain sale database file of all valid commercial property sales Vacant and Improved
 - Capture building characteristics at time of sale
 - Insure property characteristics are correct and do not include personal property, blue sky, business list
- Income Collection
 - Mass mailing to all property owners in the state with improved commercial property
 - Income and Expense analysis using Excel/Access to develop annual NOI
 - Stabilization
 - Review reported I&E to insure that information reflects market rent and typical (allowable) expenses
 - Normalization
 - Established typical rent and expense percentages

COLLECTION FORM EXAMPLE



MONTANA
Form AB62A

Geo-Code
Assessment Code

**MONTANA DEPARTMENT OF REVENUE
INCOME & EXPENSE REPORTING FORM**

Name & Address:

Person filing this form: (If different from above)

Return to:
Department of Revenue
P O Box 5805
Helena, MT 59604-5805

The Montana Department of Revenue requests the following applicable information to help us determine equitable values for assessment purposes. Please send your completed form back in the self-addressed envelope within 10 days. If you have questions or require assistance please call the local Department of Revenue Office at . Income and expense data is not a matter of public record and is held strictly confidential in accordance to 15-30-303 MCA. Leases are acceptable documentation.

PROPERTY DATA OFFICE / RETAIL / WAREHOUSE / MINI-WAREHOUSE / APARTMENT

PROPERTY ADDRESS:
BUILDING NAME:
STRUCTURE TYPE:

REPORTED INCOME as of 12/31/

Please round to nearest dollar

1 Apartment Rentals @ 100 % Occupancy	\$	_____
2 Office Rentals @ 100 % Occupancy	\$	_____
3 Retail Rentals @ 100 % Occupancy	\$	_____
4 Industrial/Warehouse/Garage Rentals @ 100 % Occupancy	\$	_____
5 Room Rentals @ 100 % Occupancy	\$	_____
6 Other Rentals @ 100 % Occupancy	\$	_____
7 Parking Rental @ 100 % Occupancy	\$	_____
8 Total Potential Income (add lines 1 through 7) @ 100 % Occupancy	\$	_____
9 Loss due to Vacancy & Collection loss	\$	_____
10 Effective Annual Income (line 8 minus line 9)	\$	_____
11 Other Income and reimbursements	\$	_____
12 Amount of rentals subsidized by Government(s)	\$	_____
EXPENSES		
13 Management (cost of administering the leases)	\$	_____
14 Leasing Fees/Commissions/Advertising	\$	_____
15 Legal/Accounting	\$	_____
16 Heating / Air Conditioning Expense	\$	_____
17 Electricity	\$	_____
18 Water	\$	_____
19 Cable TV	\$	_____
20 Other Utilities (Specify _____)	\$	_____
21 Payroll assoc. with property (except management)	\$	_____
22 Supplies (janitorial, etc.)	\$	_____
23 Maintenance & Repairs (Specify _____)	\$	_____
24 Maintenance & Repairs (Specify _____)	\$	_____
25 Maintenance & Repairs (Specify _____)	\$	_____
26 Elevator Maintenance	\$	_____
27 Snow/Trash Removal & Landscape maintenance	\$	_____
28 Other (Specify _____)	\$	_____
29 Other (Specify _____)	\$	_____
30 Building Insurance	\$	_____
31 Reserves for Replacement	\$	_____
32 Security	\$	_____
33 TOTAL EXPENSES (add lines 13 through 32)	\$	_____
34 NET OPERATING INCOME (add lines 10 & 11 minus line 33)	\$	_____

ANNUAL RENTAL DATA (OFFICE, RETAIL, AND WAREHOUSE)										
Floor Level	From: Year	To: Year	Square Feet of Leased Area	Term of Lease From Year To Year	Annual Base Rent	Additional Annual Income	Annual Average Income	Utilities Included in Rent (check all that apply)		
								Electric	Water	Gas
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			
From: To:					\$	\$	\$			

MONTHLY RENTAL DATA - APARTMENTS										
Efficiency/Studio Apartments	Furnished/Unfurnished	Units @	\$	# of Bathrooms	\$	Garage / Storage Rent	Utilities Included in Rent (check all that apply)			
							Electric	Water	Gas	Cable TV
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
1 Bedroom Units										
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
2 Bedroom Units										
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
3 Bedroom Units										
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
4 Bedroom Units										
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					
Furnished		Units @	\$	# of Bathrooms	\$					
Unfurnished		Units @	\$	# of Bathrooms	\$					

MONTHLY RENTAL DATA - MINI-WAREHOUSES				
Unit Size	# Of Units	Monthly Rent	Project Amenities (check all that apply)	
x		\$	Security	
x		\$	On-site Manager	
x		\$	Electricity	
x		\$	Temperature Controlled Units	
x		\$	Yard Lights (leased)	
x		\$	Yard Lights (owned)	
x		\$	Fencing	
x		\$	Other	

Signed: _____ Dated: _____
Signature of Owner or Preparer

Print Name and Title

Telephone No. With Area Code

Steps in Income Modeling

- Stratification of sales/income file to select sample parcels from distinct groups within the total universe based upon the known characteristics of these distinct groups.
 - Compare office buildings to office buildings etc
 - Identify outliers using Maximum and Minimum values found in data.
 - Low or high occurrence of rent or expense percentage data may indicate the extreme in the market place and not typical.
 - Low or high occurrence of rent or expense percentage data may indicate data entry or reporting error.

Steps for Income Modeling

- Capitalization
 - Develop an overall rate that includes the requirements of discount, recapture and effective tax rate
 - Divide NOI by the sale price of the property
- Direct Sales Analysis is the capitalization of NOI for sold properties
 - Utilizes the normalized income and expense information to arrive at the normal net income
 - Divide NOI by the sale price of the property

Normalization Market Rent

Rent	Area	PGI					
\$3.39	59578	\$201,700					
\$4.00	3600	\$14,400					
\$4.00	7500	\$30,000					
\$5.77	6240	\$36,004					
\$6.50	2400	\$15,600					
\$7.78	4495	\$34,968		Rent Range			Model Range
\$8.70	3192	\$27,770		Poor	Lowest Rent		\$ 3.40
\$9.54	1636	\$15,600		Fair	Median of First Quartile		\$7.75
\$9.78	4724	\$46,200		Average	Median Rent from Model		\$ 10.60
\$10.34	9600	\$99,270		Good	Median of Second Quartile		\$14.10
\$10.61	5654	\$59,989		Excellent	Highest Rent		\$ 24.00
\$11.00	2400	\$26,400					
\$11.64	3006	\$35,000					
\$12.36	2400	\$29,664					
\$12.69	19000	\$241,110					
\$14.11	10248	\$144,599					
\$16.29	15780	\$257,063					
\$16.34	4000	\$65,360					
\$16.62	10683	\$177,551					
\$17.44	21044	\$367,026					
\$24.00	9581	\$229,944					
AVG	\$11.09						
MED	\$10.61						
Min	\$3.39						
MAX	\$24.00						
COUNT	21						

Normalization Vacancy Loss

PGI	Other Income	Vacancy	Vacancy %	EGI
\$99,270		\$4,964	5.00%	\$94,306
\$38,700		\$1,200	3.10%	\$37,500
\$12,000		\$100	0.83%	\$11,900
\$15,000		\$800	5.33%	\$14,200
\$177,551	\$8,000			\$185,551
\$257,063	\$2,000			\$259,063
\$26,400		\$1,700	6.44%	\$24,700
\$37,869		\$2,391	6.31%	\$35,478
\$6,227				\$6,227
\$27,735				\$27,735
\$367,026	\$6,000			\$373,026
\$50,208	\$7,900			\$58,108
\$14,400				\$14,400
\$27,770				\$27,770
\$144,599		\$11,467	7.93%	\$133,132
		AVG	4.99%	
		MED	5.33%	
		Min	0.83%	
		MAX	7.93%	
		COUNT	7	

Normal Expenses

EGI	Mngmt	Mngmt %	Util Exp	Util Exp%	Ins	Ins %	Misc	Misc%	Resv	Resv %	Maint Exp	Maint %	Tot Exp Less Mngt	Tot Exp Less Mngt	
\$55,240			\$7,487	13.55%			\$ 222.00	0.40%				\$156	0.28%	\$7,865	14.24%
\$152,040			\$5,980	3.93%	\$3,375	2.22%	\$ 1,242.00	0.82%				\$476	0.31%	\$11,073	7.28%
\$14,364	\$1,500	10.44%	\$4,708	32.78%	\$3,700	25.76%	\$ 500.00	3.48%				\$1,885	13.12%	\$10,793	75.14%
\$48,136							\$ 125.00	0.26%				\$2,993	6.22%	\$3,118	6.48%
\$28,104			\$500	1.78%	\$2,100	7.47%	\$ 500.00	1.78%	\$2,000	7.12%		\$790	2.81%	\$5,890	20.96%
\$34,968			\$210	0.60%	\$1,330	3.80%	\$ 140.00	0.40%	\$228	0.65%		\$31	0.09%	\$1,939	5.55%
\$13,204	\$300	2.27%	\$800	6.06%	\$600	4.54%	\$ 200.00	1.51%	\$1,200	9.09%		\$450	3.41%	\$3,250	24.61%
\$12,000			\$3,480	29.00%	\$1,100	9.17%	\$ 1,100.00	9.17%				\$500	4.17%	\$6,180	51.50%
\$9,000	\$1,200	13.33%	\$600	6.67%	\$600	6.67%	\$ 1,500.00	16.67%				\$1,700	18.89%	\$4,400	48.89%
\$30,000	\$500	1.67%	\$3,300	11.00%	\$3,000	10.00%	\$ 500.00	1.67%	\$5,000	16.67%			\$11,800	39.33%	
\$15,600	\$600	3.85%	\$1,800	11.54%	\$750	4.81%	\$ 800.00	5.13%	\$1,100	7.05%		\$700	4.49%	\$5,150	33.01%
\$201,700					\$12,939	6.41%	\$ 13,669.00	6.78%				\$11,981	5.94%	\$38,589	19.13%
AVG		6.31%		11.69%			8.09%	4.00%		8.11%		5.43%	Sum of Median Expenses		28.84%
MED		3.85%		8.83%			6.54%	1.72%		7.12%		4.17%	28.38%		22.79%
Min		1.67%		0.60%			2.22%	0.26%		0.65%		0.09%			5.55%
MAX		13.33%		32.78%			25.76%	16.67%		16.67%		18.89%			75.14%
COUNT		5		10			10	12		5		11			12

	% of Sum of %		% Calculated for Model	
Util	8.83%	31.13%	7.09%	
Ins	6.54%	23.05%	5.25%	
Misc	1.72%	6.07%	1.38%	
Resv	7.12%	25.08%	5.71%	
Maint	4.17%	14.68%	3.35%	
	28.38%	100.00%	22.79%	22.79%

Cap Rate Development

- Direct Sales Analysis

- **NOI ÷ Sales Price = Rate**
- Information from properties within Montana similar that have sold and reported income and expense information
- Separated into Urban and Rural Cap rate model
- Adjust for Effective Tax rate
 - 1.63% Urban
 - 1.28% Rural

SalePrice	NOI	CAP RATE
\$720,000	\$140,967	19.58%
\$425,000	\$47,375	11.15%
\$420,000	\$45,018	10.72%
\$357,730	\$33,029	9.23%
\$350,000	\$22,214	6.35%
\$250,000	\$17,700	7.08%
\$163,000	\$2,071	1.27%
\$149,900	\$5,820	3.88%
\$110,000	\$13,204	12.00%
\$110,000	\$15,600	14.18%
\$239,520	\$20,000	8.35%
\$70,000	\$3,400	4.86%
	AVG	9.05%
	MED	8.79%
	Min	1.27%
	MAX	19.58%
	COUNT	12
	Overall Rate	8.79%
	Eff Tax Rate	1.63%
	Cap Rate	7.16%

Other Cap Rate Sources

RealtyRates.com INVESTOR SURVEY - 1st Quarter 2009*						
INDUSTRIAL - ALL TYPES						
Item	Input					OAR
Minimum						
Spread Over 10-Year Treasury	0.90%	DCR Technique	0.90	0.060304	0.85	4.61
Debt Coverage Ratio	0.90	Band of Investment Technique				
Interest Rate	4.43%	Mortgage	85%	0.060304	0.051259	
Amortization	30	Equity	15%	0.076000	0.011400	
Mortgage Constant	0.060304	OAR				6.27
Loan-to-Value Ratio	85%	Surveyed Rates				5.95
Equity Dividend Rate	7.60%					
Maximum						
Spread Over 10-Year Treasury	5.79%	DCR Technique	2.00	0.124007	0.50	12.40
Debt Coverage Ratio	2.00	Band of Investment Technique				
Interest Rate	9.32%	Mortgage	50%	0.124007	0.062003	
Amortization	15	Equity	50%	0.165600	0.082800	
Mortgage Constant	0.124007	OAR				14.48
Loan-to-Value Ratio	50%	Surveyed Rates				13.76
Equity Dividend Rate	16.56%					
Average						
Spread Over 10-Year Treasury	2.81%	DCR Technique	1.49	0.080484	0.71	8.45
Debt Coverage Ratio	1.49	Band of Investment Technique				
Interest Rate	6.34%	Mortgage	71%	0.080484	0.056883	
Amortization	25	Equity	29%	0.125280	0.036738	
Mortgage Constant	0.080484	OAR				9.36
Loan-to-Value Ratio	70.7%	Surveyed Rates				10.15
Equity Dividend Rate	12.53%					

*4th Quarter 2008 Data

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Model Summary

001, L01004, MASTER CARD FOR CT1832 MULTI-DISTRICTS - 2 & Situs As Of 01/16/2010

Property Level Income Summary (Type Warehouse, Investment Class Other)

 Income Models (1)

 1. SF Income Model Summary Type Warehouse, Rating Average,

 Square Foot Model Detail (1)

 1. SF Income Model Detail 045 - Warehouse, Income Area 88879

 I & E Data Capture (0)

NOI: **\$271,657**

Square Foot Model Summary

Type Rating

Name Comments

Other Income

Other Income Description

Income Overrides

Vac & Coll Ovr Reason

Expenses Ovr Reason

Effective Gross Income

PGI	\$382,180	Vac & Coll %	0
Vac & Coll	\$49,836	Total EGI	\$332,343

Expense Amounts

Management	\$14,856	Management	4.47
Utilities	\$21,602	Utilities	6.50
Insurance	\$4,055	Insurance	1.22
Res for Repl	\$5,716	Res for Repl	1.72
Maintenance	\$3,656	Maintenance	1.10
Miscellaneous	\$10,801	Miscellaneous	3.25
Total Expenses	\$60,686	Total Exp %	18.26

Amenities for Mini-Warehouses

Security
 On-Site Manager
 Electricity
 Temperature Controlled Units
 Yard Lights (Leased)
 Yard Lights (Owned)
 Fencing

Other

Area **88,879**

NOI: **\$271,657**

Model Detail

EGI: **\$332,343**

Square Foot Model Detail

Income Use Use Group **Warehouse** Comments

Income Overrides

Rent Rate Ovr Reason

Area for Income Calculations

Income Area Total Gross Area **88,879**

Income Model Information

Income Grp	BLG
Model	BLG-Whr-AV
Rent	\$4
Vac & Coll	13
Management %	4.47
Utility %	6.50
Insurance %	1.22
Res for Repl %	1.72
Maintenance %	1.10
Miscellaneous %	3.25

Income Calculations

Area	88,879
PGI	\$382,180
Vac & Coll	\$49,836
EGI	\$332,343
Management	\$14,856
Utilities	\$21,602
Insurance	\$4,055
Res for Repl	\$5,716
Maintenance	\$3,656
Miscellaneous	\$10,801
Total Expenses	\$60,686

Potential Gross Calculated from model rent and income area

Expense Amounts Calculated From Model Percentages

Expense Percentages From Model

Orion Income Model

Income Value: **\$3,087,000**

Property Level Income Data and Summary

Primary Building Type: Building or Business Name:

Investment Class: Comments:

Property Level Income Overrides

NOI Override: Override Reason:

Cap Rate Ovr: Override Reason:

Income Model Summaries

Square Foot Income Summary

Income Area	88,879
PGI	382,180
EGI	332,343
Total Expenses	60,686
NOI	271,657

Apartment Income Summary

Total Units	0
PGI	0
EGI	0
Total Expenses	0
NOI	0

Efficiencies	0
1 Bed Rm	0
2 Bed Rms	0
3 Bed Rms	0
4 Bed Rms	0
5 Bed Rms	0

Hotel/Motel Income Summary

Total Units	0
PGI	0
EGI	0
Total Expenses	0
NOI	0

Unit Model Income Summary

Total Units	0
PGI	0
EGI	0
Total Expenses	0
NOI	0

NOI from all Model Summaries

Capitalization Rate

Cap Rate	7.17	Tax Unit Grp	03-0989
Eff Tax Rate	1.630000	Overall Rate	8.80

Modeled Income Value Calculations

NOI	271,657	Residual Land	0
Calc Income Value	\$3,087,020	FF and E	0
		Income Value	\$3,087,000

Income Value

Income Value: **\$3,087,000**