

# Exploring Expenses

Relating people, place and structures

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# Getting to know your property -

- The better you understand the dynamics of your property – systems, design, operations and tenancy – the better you can both critically examine variance within the subject's historic expenses as well as justify the rationale for your selection of “best” comparable expenses.
  - Within the line item ranges delimited by the Comparable expenses, this understanding provides a platform from which the analyst can interpolate expense estimates which are internally consistent and which achieve a good measure of empirical validity.
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## Property Specific Vacancy/Turnover Characteristics

- What percentage of the units turnover per year?
  - Are the unit turnovers clustered in one unit type or another?
  - What work is done to the unit upon turnover?
  - Who performs the work - contractor or staff?
  - How long does it take to make the unit ready for occupancy?
  - How much advance notice is given for move-outs?
  - What is the typical marketing time for turnovers? Low end - typical? High end - typical?
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# Property Specific Turnover Analysis

## Model Analysis for Turnover, Vacancy, Marketing/Advertising 100 Unit Multifamily / \$1,500 unit Average Rent

	<u>Annual % Property Turnover:</u>	<u>25%</u>	<u>30%</u>	<u>35%</u>	<u>40%</u>
Avg. Time to fill - # Weeks		2	3	4	5
% Vacant/Per Unit		3.85%	5.77%	7.69%	9.62%
	<i>Annual Property Turnover @ % Vacant/Per Unit =</i>				
	<u>Estimated Frictional Vacancy</u>	<u>0.96%</u>	<u>1.73%</u>	<u>2.69%</u>	<u>3.85%</u>

# Vacant Units Annual	25	30	35	40
Expense to Make Ready for Occupancy -				
Cleaning	\$ 75	\$ 75	\$ 75	\$ 75
Painting	\$ 500	\$ 500	\$ 500	\$ 500
Repair	\$ 150	\$ 150	\$ 150	\$ 150
Vacant Utility Expense	\$ 46	\$ 69	\$ 92	\$ 115
Total	\$ 771	\$ 794	\$ 817	\$ 840

Total Turnover Expense	\$ 19,280	\$ 23,829	\$ 28,608	\$ 33,619
Per Unit/Expense	\$ 193	\$ 238	\$ 286	\$ 336

### Marketing/Advertising

Rental Broker @ 50% 1st Month Rent	\$ 18,750	\$ 22,500	\$ 26,250	\$ 30,000
Per Unit/Expense	\$ 188	\$ 225	\$ 263	\$ 300

“For existing projects, operating expenses must be adjusted on the basis of comparable projects, but will primarily be based on the past 3 years of operating experience for the subject project. ”

Multifamily Accelerated Processing (MAP) Guide  
Revised August 18, 2011

- What is the baseline expense estimate paradigm? Are you comparing the historic expense experience to the Comparable expenses or comparing the Comparables to the historic? Put another way, are the historic expenses presumed to be a strong representation of the cost of operations of the subject property which are being **confirmed** by the Comparable data – or - are the Comparables presumed to be a strong indication of a “market standard” of operations against which the historic experience is tested?
- In the first case, confirmation, the analysis is very practical and typically shallower since the historic subject property expense line items are typically deemed acceptable if they fall within the range of the individual Comparable line items. Only when particular subject property line items fall outside of the range do the Comparables demand better explanatory
- In the case of establishing a baseline of market standards, variances must be accounted for through specific physical, functional, and operational analysis of the Comparables, recognizing the interrelationships between expense categories.

# Comparative RE Tax Analysis

## Real Estate Tax Example Analysis

100 Unit Subject Property/\$1,500 month average rent

Range of Real Estate Tax Comparables	<u>Per Unit</u>	<u>Assessment</u>
Comparable #1	\$1,200	\$80,000
Comparable #2	\$1,650	\$110,000
Comparable #3	\$1,470	\$98,000
Comparable #4	\$2,150	\$143,333
Comparable #5	\$1,875	\$125,000
Comparable #6	<u>\$1,935</u>	<u>\$129,000</u>
Average	<b>\$1,713</b>	\$114,222
Subject Property Current RE Tax	<b>\$1,739</b> per unit	
Subject Estimated EGI	\$1,710,000	
Estimated Operating Expenses	\$782,600	\$7,826 /unit with RE Taxes
Before Current RE Taxes	\$608,700	\$6,097 /unit Before RE Taxes

### Scenario #1 - Comparing Comparables to Subject - Current RE taxes are well within the range and deemed reasonable - no additional analysis.

NOI	\$927,400	6.50%	<b>\$14,267,692</b>	\$142,677
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### Scenario #2 - Assumes that NOI relies upon current RE Taxes and that the Assessor uses the same 6.5% cap rate plus a 1.5% RE Tax Add-on

NOI	\$927,400	6.50%	<b>\$14,267,692</b>	\$142,677	<b>\$2,140</b> Imputed RE Tax
NOI before RE tax	\$1,101,300	8.00%	<b>\$13,766,250</b>	\$137,663	<b>\$2,065</b> Imputed RE Tax

### Scenario #3 - Assumes that NOI relies upon existing RE Taxes and that the Assessor uses a higher than market cap rate plus a 1.5% RE Tax Add-on

NOI	\$927,400	6.50%	<b>\$14,267,692</b>	\$142,677	<b>\$2,140</b>
NOI before RE tax	\$1,101,300	9.50%	<b>\$11,592,632</b>	\$115,926	<b>\$1,739</b>



CONSUMPTION & EFFICIENCY

# RESIDENTIAL ENERGY CONSUMPTION SURVEY (RECS)

	Households (millions)	Electricity (kWh)			June 2011 Boston Estimated Annual Expense
		Total	Refrigerators	Other Appliances and Lighting	
<b>Total</b> .....	111.1	7,317	1,359	5,959	
<b>Census Region and Division</b>					
Northeast.....	20.6	6,309	1,259	5,051	\$ 946
New England.....	5.5	6,052	1,208	4,847	\$ 908
<b>Type of Housing Unit</b>					
Single-Family Detached.....	72.1	8,643	1,538	7,107	\$ 1,296
Single-Family Attached.....	7.6	6,162	1,162	5,000	\$ 924
Apartments in 2-4 Unit Buildings.....	7.8	4,647	1,017	3,630	\$ 697
Apartments in 5 or More Unit Buildings...	16.7	3,658	890	2,768	\$ 549
Mobile Homes.....	6.9	6,621	1,232	5,389	\$ 993
<b>Rented</b>					
Single-Family Detached.....	33.0	5,041	1,024	4,019	\$ 756
Single-Family Attached.....	8.0	7,427	1,228	6,203	\$ 1,114
Apartments in 2-4 Unit Buildings.....	3.4	6,020	1,130	4,891	\$ 903
Apartments in 5 or More Unit Buildings.....	5.9	4,464	958	3,506	\$ 670
Mobile Homes.....	14.4	3,636	899	2,737	\$ 545
<b>Total Floorspace (Square Feet)</b>					
Fewer than 500.....	1.2	6,086	1,187	4,899	\$ 913
500 to 999.....	3.2	3,351	933	2,418	\$ 503
1,000 to 1,499.....	23.8	4,410	975	3,435	\$ 662
1,500 to 1,999.....	20.8	6,316	1,171	5,145	\$ 947
2,000 to 2,499.....	15.4	7,746	1,448	6,305	\$ 1,162
2,500 to 2,999.....	12.2	8,148	1,416	6,734	\$ 1,222
3,000 to 3,499.....	10.3	8,649	1,529	7,121	\$ 1,297
3,500 to 3,999.....	6.7	8,747	1,585	7,169	\$ 1,312
4,000 to 4,499.....	5.2	9,522	1,699	7,823	\$ 1,428

**Table A. Average prices of energy products, United States and the Boston area, June 2010 and June 2011**

Energy product	June 2010			June 2011		
	United States	Boston area	Percent difference	United States	Boston area	Percent difference
Electricity (per KWH)	0.132	0.155	17.4	0.134	0.150	11.9
Gasoline (per gallon)	2.783	2.770	-0.5	3.753	3.797	1.2
Utility (piped) gas (per therm)	1.084	0.922	-14.9	1.077	1.056	-1.9

**Table WH6. Average Consumption for Water Heating by Major Fuels Used, 2005**  
**Physical Units per Household**

	U.S. Households (millions)	Total U.S. Using a Major Water Heating	Major Fuels Used <sup>b</sup>					
			(physical units of consumption per household using the					
			Electricity (kWh)	Natural Gas (thousand cf)	Fuel Oil (gallons)	LPG (gallons)		
<b>Total.....</b>	111.1	109.8	2,814	23	228	278		
<b>Census Region and Division</b>								<b>Boston Area</b>
Northeast.....	20.6	19.9	2,608	22	227	295	\$	<b>240</b>
New England.....	5.5	5.3	2,552	21	230	286	\$	<b>229</b>
Middle Atlantic.....	15.1	14.5	2,637	22	225	298	\$	<b>240</b>
<b>Climate Zone<sup>1</sup></b>								
Less than 2,000 CDD and--								
Greater than 7,000 HDD.....	10.9	10.6	3,012	24	226	269	\$	<b>261</b>
5,500 to 7,000 HDD.....	26.1	25.8	2,818	22	232	242	\$	<b>240</b>
4,000 to 5,499 HDD.....	27.3	26.8	2,991	23	225	320	\$	<b>250</b>
Fewer than 4,000 HDD.....	24.0	23.9	2,750	25	N	297	\$	<b>272</b>
2000 CDD or More and--								
Less than 4,000 HDD.....	22.8	22.6	2,673	24	N	249	\$	<b>261</b>
<b>Type of Housing Unit</b>								
Single-Family Detached.....	72.1	71.8	3,030	26	233	284	\$	<b>283</b>
Single-Family Attached.....	7.6	7.5	2,808	22	Q	Q	\$	<b>240</b>
Apartments in 2-4 Unit Buildings.....	7.8	7.7	2,493	17	194	Q	\$	<b>185</b>
Apartments in 5 or More Unit Buildings..	16.7	16.1	2,150	14	237	249	\$	<b>152</b>
Mobile Homes.....	6.9	6.8	2,844	18	Q	265	\$	<b>196</b>
<b>Ownership of Housing Unit</b>								
<b>Owned.....</b>	78.1	77.6	2,881	25	227	275	\$	<b>272</b>
Single-Family Detached.....	64.1	63.8	3,014	26	228	281	\$	<b>283</b>
Single-Family Attached.....	4.2	4.1	2,442	22	Q	Q	\$	<b>240</b>
Apartments in 2-4 Unit Buildings.....	1.8	1.8	1,867	20	Q	N	\$	<b>218</b>
Apartments in 5 or More Unit Building	2.3	2.3	1,556	17	Q	N	\$	<b>185</b>
Mobile Homes.....	5.7	5.6	2,785	17	N	245	\$	<b>185</b>
<b>Rented.....</b>	33.0	32.2	2,670	18	232	297	\$	<b>196</b>
Single-Family Detached.....	8.0	8.0	3,136	26	Q	Q	\$	<b>283</b>
Single-Family Attached.....	3.4	3.4	3,102	21	Q	Q	\$	<b>229</b>
Apartments in 2-4 Unit Buildings.....	5.9	5.8	2,629	17	181	Q	\$	<b>185</b>
Apartments in 5 or More Unit Building	14.4	13.8	2,276	14	235	249	\$	<b>152</b>
Mobile Homes.....	1.2	1.1	3,146	21	Q	Q	\$	<b>229</b>

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# Ranking/Weighting Expense Research & Conclusions

- Proportionately greater expenses warrant proportionately greater substantiation/analysis. This is particularly true when there exists greater variation within the universe of outcomes.

**OPERATING EXPENSES****Annual****% Total**

## Administrative

Management Fee	\$ 60,000	7.3%
Admin Payroll	\$ 101,297	12.3%
Advertising	\$ 23,458	2.8%
Other Renting Expenses	\$ 3,750	0.5%
Office Expense	\$ 11,814	1.4%
Telephone	\$ 12,780	1.5%
Legal	\$ 3,400	0.4%
Collection Expense	\$ 900	0.1%
Audit	\$ 9,900	1.2%
Bookkeeping	\$ 16,248	2.0%
Bad Debt	\$ 6,500	0.8%
Misc Admin	\$ 3,000	0.4%

Total Administrative \$ 253,047 30.7%

## Utilities

Gas	\$ 76,954	9.3%
Electricity	\$ 15,907	1.9%
Water	\$ 12,000	1.5%
Sewer	\$ 28,000	3.4%

Total Utilities \$ 132,861 16.1%

## Operating &amp; Maintenance

Payroll	\$ 103,673	12.6%
Cleaning Supplies	\$ 2,000	0.2%
Exterminating Supplies	\$ -	0.0%
Ground Supplies	\$ 500	0.1%
Repair Materials	\$ 24,000	2.9%
Decorating Supplies	\$ 2,280	0.3%
Cleaning Contract	\$ 19,982	2.4%
Exterminating Contract	\$ 1,470	0.2%
Grounds Contract	\$ 36,700	4.4%
Repairs Contract	\$ -	0.0%
Decorating Contract	\$ 39,637	4.8%
Trash	\$ 11,888	1.4%
Security	\$ -	0.0%
HVAC	\$ 1,500	0.2%
Snow	\$ 8,950	1.1%
Vehicles/Equipment	\$ 2,500	0.3%

Total Operating & Maintenance \$ 255,080 30.9%

## Taxes &amp; Insurance

Real Estate Taxes	\$ 71,808	8.7%
Payroll Taxes	\$ 18,408	2.2%
Permits/Licenses	\$ -	0.0%
Property Insurance	\$ 25,066	3.0%
Workman's Comp	\$ 3,293	0.4%
Employee Ins/Fringe Benefits	\$ 65,423	7.9%

Total Taxes & Insurance \$ 183,998 22.3%

TOTAL OPERATING EXPENSES

\$ 824,986

100.0%

64.9% 9 Categorie