# APARTMENT OPERATING EXPENSE GUIDE -2011/2012 

## INTRODUCTION

This operating expense guide provides general guidelines as to the likely expenses that would be expected to be incurred in the operation of common apartment complexes in Southern California. It should be used as an adjunct to consideration of prevailing and historical expenses for a given apartment property. No liability is assumed by Gregory P. Wingerd for the accuracy or applicability of the information provided herein.

As indicated elsewhere herein, the guidelines provided herein are based upon observation of actual expenses incurred at numerous apartment complexes in Southern California based on profit and loss/expense information provided by owners. In addition to expense guidelines, this guide provides insight as to various methods of estimating operating expenses as a result of cumulative knowledge gleaned from the appraisal of apartment complexes, augmented by periodic interviews with market participants in the multifamily residential sector of the Southern California real estate market.

## OPERATING EXPENSES DEFINED

Briefly stated, operating expenses are the periodic expenditures necessary to maintain property and to continue the production of income. Unlike for accounting purposes, for valuation purposes, expenses do not include debt service payments and peripheral items that are not specifically needed for the continued operation of a property.

## BASIC APPLICABILITY OF EXPENSE GUIDE

This guide is basically targeted toward providing operating expense guidelines applicable for common small- to mid-size apartment complexes in the range of five (5) to fifty (50) units. This size range primarily encompasses one- to three-story complexes of so-called walk-up style, center hall design, and to a lesser extent, elevator-served apartment properties. While expenses can be categorized as fixed and variable, it is not a necessity in the expense estimation process. For many properties, a form format is commonly used by appraisers as such format is requested by financial oriented users (lenders). As a result, expenses are typically categorized to coincide with the requested form format. The most frequently requested forms for apartment valuation are commonly known as the 71 A and 71B, sometimes referred to as the eight page and four page forms, respectively. The forms are from FHLMC, FNMA and Freddie Mac. Contrary to the page count, the reports are actually much larger inclusive of attachments necessary to properly communicate the appraisal and to comply with regulatory, USPAP (Uniform Standards of Professional

Appraisal Practice), and individual client requirements and preferences. Incredibly, despite the fervor for licensing and continuing education for appraisal practitioners during the era of the S \& L debacle of the latter 1980s and issues arising from the so-called Great Recession a couple years ago, these forms have not been significantly upgraded or revised in several decades. Indeed, Form 71B was last revised in the 1970s (see provided excerpt of form) and Form 71A has had only minor revisions, largely relating to discrimination issues, not valuation competency and procedures.


## RESEARCH AND STUDY PROCEDURES

Operating expenses of apartment complexes procured during the course of appraisal assignments during the year 2011 were compiled and analyzed, grouping expenses into the following main categories:

Insurance

## Licenses

## Natural Gas

## Electricity

Water \& Sewer
Trash Removal
Pest Control

## Building Maintenance and Repairs

Interior \& Exterior Decorating
Cleaning Expenses
Supplies (sometimes included with Cleaning Expenses)
Elevator Maintenance
Pool Maintenance (sometimes included with Building Maintenance and Repairs)
Gardener/Landscape Maintenance
Non-resident Management
Resident Management

## Advertising

## Telephone

Legal \& Audit

## Miscellaneous

## Replacement Reserves

The foregoing expense categories are representative of the most common basic categories encountered in the Southern California apartment market; although in some cases categories are combined.

An exception to the categories is that real estate taxes are not included in the analysis due to Proposition 13 in California which dictates establishment of new tax liability upon sale (with the exception of some leasehold situations). As such, an analysis of tax liability of comparable properties does not serve as a reliable indication of tax liability to a new owner. Although real estate taxes were not considered in the analysis, insight as to the estimation of same is provided herein. Tax liability for valuation purposes should be based on an hypothetical sale as of the valuation date in keeping with the definition of Market Value which states that:
"...implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer ...".

Extremes were discarded from the compiled expense history sampling and the guidelines provided herein are the result of an analysis of the remaining expense data.

## APPLICATION OF GUIDELINES

The application of most of the guidelines herein pertain to expenses on a per unit, per month, or per square foot of gross building area basis and same is clarified within each expense category section (or is self-evident).

## EXPENSE GUIDELINES

## Real Estate Taxes

As indicated previously herein, Proposition 13 in California stipulates that a transfer of fee/leased fee title triggers establishment of a new tax base. Real estate tax liability for a new owner will be re-established upon title transfer, likely reflecting a basis on sale/purchase price, but not necessarily. As such, tax liability for valuation purposes must be based on an hypothetical sale as of the valuation date in keeping with the definition of Market Value.

Estimation of tax liability is commonly done by one of two methods. One method involves loading and unloading the capitalization rate with the tax rate. The other method consists of an iterative, circular-mathematics process, typically using computer spreadsheet software, with the tax rate, direct assessments, the other estimated expenses, and implied value in order to discern tax liability to a new owner.

As implied in the first procedure, all expenses except real estate taxes are deducted from effective gross income in order to develop a temporary net income figure (although Direct/Special Assessments associated with real estate taxes should be deducted as well). The temporary net income figure is capitalized by loading the selected capitalization rate with the tax rate (that is, adding the tax rate to the selected capitalization rate). For example if the selected capitalization rate is $6.5 \%$ and the tax rate is 1.0547 , the income would be initially capitalized at $7.555 \%$ (that is, 0.07555 ). The tax rate is then applied to the resulting value indication to glean tax liability. The analysis is then recalculated using the implied tax liability and the initially selected cap rate ( $6.5 \%$ in the foregoing sample). It is important to make sure the Special/Direct Assessments are also deducted along with the other expenses prior to the load procedure. Direct/Special Assessments for a property can be determined by contacting the appropriate governing agency, or can be roughly estimated based on a recent tax bill or roughly deduced by observing the disparity between taxes charged vs base taxes due relative to the tax rate. The tax rate area and tax rate can be obtained from government records (web sites and in person) and via many subscription sources. In my judgment, this is a rather primitive method of estimating tax liability and fails to make use of modern technology. However, if conducted properly it is a reliable procedure.

In the second procedure, spreadsheet software is used. With iteration set on, an income/expense analysis is developed with all expenses entered into the analysis on a per category basis, except that the cell for real estate taxes is set to calculate as a percentage of the implied value cell, plus direct/special assessments. Thus, taxes are automatically calculated. The following insert portrays a sample of one way of developing the expense estimate (in an actual spreadsheet, an equals sign would proceed entries in each calculation cell).

|  | G | H | 1 | J | K | L | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |
| 2 |  | Potential Gross Income | 208,860 |  |  |  |  |
| 3 |  | Less Vacancy \& Col. Loss | 10,443 | 0.05** |  |  |  |
| 4 |  | Effective Gross Income | 198,417 | 12-13 |  |  |  |
| 5 |  | Less Estimated Operating Expenses |  |  |  |  |  |
| 6 |  | Taxes | 27,563 | (M6*\|22)+M7 |  | Tax Rate | 0.013049 |
| 7 |  | Insurance | 4,275 |  |  | Special/Direct | 2743 |
| 8 |  | Natural Gas | 900 |  |  |  |  |
| 9 |  | Electricity | 1,800 |  |  |  |  |
| 10 |  | Water \& Sewer | 6,300 |  |  |  |  |
| 11 |  | Trash Removal | 1,500 |  |  |  |  |
| 12 |  | Pest Control | 720 |  |  |  |  |
| 13 |  | Maintenance/Repairs | 4,500 |  |  |  |  |
| 14 |  | Interior Painting/Cleaning | 1,500 |  |  |  |  |
| 15 |  | Off-site Management | 9,920 |  |  |  |  |
| 16 |  | On-site Management | 5,100 |  |  |  |  |
| 17 |  | Landscape Maintenance | 900 |  |  |  |  |
| 18 |  | Miscellaneous | 1,000 |  |  |  |  |
| 19 |  | Reserves | 4,050 |  |  |  |  |
| 20 |  | Total | 70,028 | SUM(16:119) |  |  |  |
| 21 |  | Net Income Expectancy | 128,389 | 14-120 |  |  |  |
| 22 |  | Implied Value | 1,902,059 | 121/0.0675 |  |  |  |

## Insurance

This expense category basically covers common property (fire, theft, wind damage, etc.) and liability coverage. This easiest method to estimate this expense is based on premium cost per square foot of gross building area (while alternative methods exist, such as using composite rates in conjunction with replacement cost, it requires peripheral calculations and estimates that can contribute to errors).

Observed insurance expenses on the compiled expense comparables were in the broad range of roughly $\$ 0.25$ to $\$ 0.55$ per square foot of gross building area, per year, although the majority of properties had expenses in the vicinity of $\$ 0.35$ to $\$ 0.45$ per square foot. Oldervintage buildings typically exhibited the highest expenses per square foot. Apartment complexes equipped with sprinklers for fire protection generally exhibited expenses toward the low end of the observed range. Overall, there appears to have been a slight downward trend in insurance costs over the past couple years.

Buildings of 1920s though 1940s vintage:
Buildings of 1950s through 1970s vintage:
Buildings of 1980s through present-day:

## \$0.40 to \$0.55 Per Square Foot

$\$ 0.30$ to $\$ 0.45$ Per Square Foot
$\$ 0.25$ to $\$ 0.40$ Per Square Foot
Other areas of insurance coverage include Flood and Earthquake. Flood insurance depends upon the flood zone in which a property is located. Flood zones are land areas identified by the Federal Emergency Management Agency (FEMA). Each flood zone describes the land area in terms of its risk of flooding. Flood Zones B, C, X, and X500 are areas outside the $1 \%$ annual chance of floodplain, sheet flow flooding, etc., and insurance is not required. Mandatory purchase of flood insurance applies to all A zones. Zone D is an area of undetermined status/risk. Flood insurance costs are best estimated based on a property's historical expenses for same and obtaining a quote from an insurance agent. Additional information can be obtained from FEMA at www.fema.gov and www.floodsmart.gov. Likewise, earthquake insurance is best estimated based on consideration of historical expenses for a given property. Observed flood insurance costs among the few comparables in the sampling situated within flood zones were rather erratic, generally ranging from $\$ 0.30$ to $\$ 0.50$ per square foot of building area. Total insurance costs for complexes in flood zones (for both common property/liability coverage and flood coverage) were often within the range of $\$ 0.75$ to $\$ 0.90$ per square foot of gross building area.

## Licenses

This category basically pertains to a city business license for which the fee varies from city to city. A telephone call to the appropriate city or government entity can be made to develop an exacting license fee estimate. Typically, cities have a base fee and an additional fee per unit, or have a fee schedule based on gross income. Some cities do not require a license (uncommon however). Historical expenditures for this category are logically a reliable herald of future expense liability. Generally, this expense is not a significant percentage of the total operating expenses for a property. A reasonably safe rule-of-thumb is about $\$ 25$ to $\$ 30$ per unit, although this can be much higher in some cities.

For properties within the City of Los Angeles, the business license fee for 2011 was $\$ 1.27$ per $\$ 1,000$ of gross receipts. In addition, apartment owners are required to pay annual rent control registration fees and SCEP fees (Systematic Code Enforcement Program). As of 2011, the rent control registration fee was $\$ 18.71$ per unit and the SCEP fee was $\$ 35.52$ per unit, although half of the rent control registration fee and all of the SCEP fee can be passed along to tenants as a surcharge if certain requirements are met. Total annual expenses for licenses/fees for complexes within the City of Los Angeles are often in the range of $\$ 70$ to $\$ 75$ per unit if fees are not passed along to tenants.

## Natural Gas

This expense category can vary significantly depending upon whether units are individually metered and with respect to the quantity of common gas fixtures, such as water heaters and dryers. Master-metered buildings obviously incur the highest expenditures. For individually metered complexes, the lowest expense is associated with complexes that have individual water heaters. The highest expenses are associated with complexes that have a shared water heater and a laundry facility that uses natural gas.

For master-metered buildings, with heating, cooking, and hot water paid by the owner, the expense range is often in the vicinity of $\$ 175$ to $\$ 275$ per unit.

For individually metered buildings with a common water heater, this expense was commonly observed in the range of $\$ 150$ to $\$ 225$ per unit, with the high end associated with complexes with a unit mix with high bedroom counts (such as a preponderance of two and three bedroom units). Buildings with mostly singles/studio units exhibit the lowest expense per unit. A typical expense for this category is around $\$ 150$ to $\$ 175$ per unit.

For individually metered buildings with individual in-unit water heaters, this expense can be substantially lower, as natural gas usage is often limited to only that associated with a laundry room. The expense can range from approximately $\$ 30$ to $\$ 150$ per month, dependent upon complex size and the number of laundry machines. A typical expense is $\$ 50$ to $\$ 100$ per month ( $\$ 600$ to $\$ 1,200$ annually). For complexes with no common laundry room or gas requirements, this expense can be zero.

When a complex has a heated pool, the gas expense will increase substantially. To heat a common size pool to 78 degrees, it is not unusual to see an expense of $\$ 300$ to $\$ 400$ per month during summer months. To heat a pool during winter months, which is not particularly prudent, I have observed expenses as high as $\$ 800$ to nearly $\$ 1,000$ per month depending upon pool size/water capacity.

## Electricity

Observed electricity expenses on the compiled expense comparables were in the broad range of roughly $\$ 100$ to $\$ 225$ per unit for individually metered buildings (most commonly within the lower half of said range). When a building has minimal common electric fixtures (such as lights and laundry plugs), the expense is toward or even slightly below the low end of the range (or zero when absolutely no common fixtures exist, although this is uncommon). The expense is toward the high end of the range when numerous common fixtures exist, such as extensive lighting, laundry room(s) with numerous plugs, a recreation room with lighting and plugs, electric security gates, etc..

For master-metered buildings, typical of some so-called medallion buildings of the latter 1950s and early 1960s, the electricity expense often runs in the range of $\$ 200$ to $\$ 350$ per unit. If the complex has air conditioning, the expense can range from $\$ 250$ to $\$ 400$ per unit. Unit mix and intensity of occupancy influences the expense.

## Water and Sewer

Typical water and sewer costs observed in the compiled expense data ranged from about $\$ 250$ to $\$ 450$ per unit, although for properties located in Los Angeles, expenses generally ran higher, in the range of $\$ 350$ to $\$ 550$ per unit. As with other utilities, this expense is sensitive to the unit mix, with a preponderance of studio/single types obviously being at the low end of the range while complexes with many two and three bedroom unit types (or larger, which is rather uncommon) being toward the high end of the range. Historical expenses should carefully be considered in forecasting this expense. Atypically high historical expenses may be a signal as to possible leaks and/or inoperable plumbing fixtures (for example, faucets that will not shut off). Although not often, I occasionally inspect apartment complexes and observe running water in tubs or sinks, with tenants that fail to report same to landlords.

Complexes with individual water meters can have greatly reduced expenses. Local trends and market practices should be considered in expense estimation however. I have observed a few complexes which, despite having individual water meters, had all water/sewer service paid for by ownership of the property due to market trends/tenant expectations (in many areas, property owners commonly pay for water/sewer service and trash removal and tenants have come to anticipate same).

There has been an emerging trend over the past several years for some large complexes (typically 100 units and larger) to use a so-called Ratio Utility Billing System (RUBS) to bill tenants for water/sewer use in the absence of individual metering (the system may be used to bill for other utilities and services as well, such as gas, trash removal, etc.). Such systems typically allocate costs using a formula based on number of occupants, unit type/size, or some other measure. The price billed to tenants is not tied to their actual usage, rendering the equitability of such systems questionable. Although a RUBS system has the potential to substantially lower expenses, such systems are rarely encountered in regards to common small to mid-size complexes in Southern California.

## Trash Removal

Needless to say, this expense category is closely dependent upon complex size and volume, as well as location. In Southern California, the expense tends to be the highest in cities within Orange County. Based on the complied data, the following guides are suggested.

| Units | Expense Per Month |
| :---: | :---: |
| 5 to 10 | $\$ 75$ to $\$ 125$ |
| 11 to 25 | $\$ 100$ to $\$ 200$ |
| 26 to 50 | $\$ 200$ to $\$ 350$ |

## Pest Control

Observed pest control expenses on the compiled expense comparables were in the range of $\$ 25$ to $\$ 75$ per unit, with an expense proximal to $\$ 40$ per unit being common. In numerous cases however, comparable expense histories failed to include this category. For normal preventative service, an expense of $\$ 35$ to $\$ 45$ per unit is suggested, although a lower figure is supported for larger complexes.

## Building Maintenance and Repairs

As the name implies, this category provides for general maintenance and repair expenditures. This expense is dependent upon the condition of a property. Obviously, new and recent-vintage buildings are likely to have the least demanding needs while oldervintage buildings in fair condition will generally have higher repair/maintenance expenses. The expense also tends to be influenced by turnover rate, with properties experiencing high turnover typically exhibiting higher expenses.

For apartment complexes constructed during the early 1900s, such as 1900 through the 1940 s, this expense is generally in the range of $\$ 350$ to $\$ 500$ per unit. For complexes of the 1950s and 1960s, the expense is commonly in the range of $\$ 275$ to $\$ 400$ per unit. For complexes built during the 1970s through 1980s, the expense is generally in the range of $\$ 250$ to $\$ 350$ per unit. For recent-vintage buildings or recently renovated buildings, the expense is the lowest, often in the range of $\$ 200$ to $\$ 275$ per unit. For complexes of any age in substantially below average condition or experiencing atypically high turnover, the above costs can be increased by $\$ 100$ to $\$ 150$ per unit (or more in very extreme cases).

As a side comment, the typical costs for interior restoration of apartment buildings is in the range of $\$ 3,000$ to $\$ 7,000$ per unit, but generally around $\$ 3,500$ to $\$ 5,000$ per unit. However, as a result of the lingering recession and job losses, it is plausible that restoration work could be engaged at a lower cost.

## Interior and Exterior Decorating

While the title of this expense category is rather vague, it basically relates to the preparation costs for re-rental/re-leasing a unit, such as painting (cleaning is similar, but pertains to cleaning). The expense should be tempered by expected turnover. Additionally, the expense varies relative to unit mix and unit sizes. Large units, such as two and three bedroom units, are obviously more expensive to paint than small units such as single/studios and one bedrooms. In the observed expense information, this expense category is sometimes included in the Building Maintenance and Repairs section.

A reasonable guide for this expense is $\$ 275$ for bachelor and studio/single units, $\$ 300$ for one bedroom units, $\$ 325$ for two bedroom units, and $\$ 350$ for three bedroom units multiplied by the expected turnover rate. Expenses can be higher for complexes with atypically large units. An annual turnover rate of $20 \%$ to $30 \%$ is rather common, although in areas subject rent control, it's generally lower. In coastal tourist type areas, turnover is often high. The expense often equates to between $\$ 75$ and $\$ 125$ per unit overall.

## Cleaning

This category basically pertains to preparatory work to re-rent/re-lease a unit (carpet cleaning, etc.). It has been my observation that this expense is often in the range of $\$ 75$ to $\$ 175$ per unit depending on unit mix of the complex and unit sizes. A reasonable rule-ofthumb is $\$ 150$ per unit multiplied by the expected turnover rate. An annual turnover rate of $20 \%$ to $30 \%$ is rather common, although in areas subject rent control, it's generally lower. In coastal tourist type areas, turnover is often high.

## Supplies

This expense category tends to be best supported for larger complexes in that normally it is included in the categories of maintenance, repairs, and/or cleaning. For most small complexes, this category is not required (the expenses cited previously basically include supplies associated with maintenance, interior decorating, cleaning, etc.).

## Elevator Maintenance

Elevator maintenance generally runs in the range of $\$ 200$ to $\$ 350$ per month for a full service contract. Also, an annual inspection and permit often runs around $\$ 150$ to $\$ 200$.

## Pool Maintenance

This expense is sometimes included in reported expense histories within the Building Maintenance and Repairs category. The expense is typically in the range of $\$ 200$ to $\$ 250$ per month for a medium to small pool.

## Gardener/Landscape Maintenance

This expense obviously varies relative to the amount of plant life landscaping. For small complexes that have land that is largely paved for driveways and parking, this expense is toward the low end and often pertains to sweeping or blowing such areas. For complexes with extensive plant life, the expense is generally toward the upper end of the observed range. The observed range for this expense is roughly $\$ 75$ to $\$ 125$ per month for apartments of 5 to 15 units; $\$ 125$ to $\$ 200$ for complexes of about 16 to 30 units; and $\$ 150$ to $\$ 300$ for complexes up to 50 units.

## Non-resident Management

This expense, also known as off-site management, is commonly in the vicinity of $4 \%$ to $5 \%$ of effective gross income. The percentage generally decreases as size increases.

## Resident Management

Also known as on-site management, this expense pertains to an on-site manager and sometimes an assistant manager. An on-site manager is responsible for daily operations for a property. On-site management routinely inspects a property to see if any repairs are needed, then make arrangements to fix the problem. Generally, they collect rents, keep account of transactions and submit regular reports to owners showing income, expenses, and vacancies. Managers are generally expected to enforce rules and regulations and to investigate and handle resident complaints. In California, an on-site manager is required for
apartment complexes with sixteen or more units. The fee for on-site management is generally an allowance of one-half to full monthly rent depending upon complex size and manager duties. For complexes of 5 to 25 units, one-half free rent for a typical unit is a good rule-of-thumb. For larger complexes up to 50 units, full free rent is reasonable (for complexes larger than 50 units, a salary is often included). On-site management does not necessarily replace off-site management, although the presence of an on-site manager may allow for a reduced off-site management expense. Typically expenses for both on- and offsite management should be anticipated for complexes with sixteen or more units.

## Advertising

For small complexes this expense category is not pertinent, although a small figure can be used depending on prevailing trends and market conditions. The expense tends to increase in markets where rents have peaked and supply is greater than demand. This expense generally ranges from nothing to about $\$ 75$ per unit, per year. For large complexes, beyond the scope of this expense guide, the expense can be significant, including not only local media usage but also internet web site charges.

## Telephone

An allowance for on-site management for a phone is not particularly common for small complexes, but can range from nothing to $\$ 75$ per month.

## Legal and Audit

This expense tends to rise during difficult market conditions where rents have peaked and evictions become greater in quantity. I have observed that this expense generally ranges from nothing to $\$ 50$ per unit, per year. A reasonable rule-of-thumb is $\$ 30$ per unit for complexes of 20 units and larger and nothing for smaller complexes unless market conditions and/or past performance suggest a chronic problem.

## Miscellaneous

This category is catch all for various things not covered in the other categories and/or as a contingency figure for potential errors in same. It can be influenced by the confidence level as to the accuracy of the other expense estimates. For rather small complexes, it is often an unnecessary category.

## Replacement Reserves

This category is rather hypothetical in character in that with the exception of very large complexes, I rarely see apartment owners actually make periodic deposits into a fund for reserves. Instead, most owners of small- to mid-size complexes deal with replacements on an as needed, as they occur basis (for such things as a roof, water heaters, kitchen equipment, carpet, etc.). Nevertheless, replacement expenditures periodically occur. This category can be treated as percentage of income or on a per unit basis. While a detailed analysis leading to a per unit basis can be conducted, a reasonable rule-of-thumb is about $\$ 225$ to $\$ 275$ per unit. The level of reserves is obviously dictated by the age and condition of a complex. A new or relatively new complex is obviously warranted as having low reserve requirements while an aging complex may have numerous near future replacement needs.

## FINAL COMMENTS

Due to Proposition 13 in California, and due to areas subject to rent control (such as Santa Monica, Los Angeles, and West Hollywood), expenses viewed as a percentage of effective gross income are not highly consistent. However, as a rather crude observation, it is somewhat common for older-vintage apartment complexes in Southern California, such as those of 1900s through 1940s vintage that are individually metered, to have expenses in the vicinity of $40 \%$ to $45 \%$ of effective gross income. For complexes of the 1950s and 1960s era, it is somewhat common to see expenses at $35 \%$ to nearly $40 \%$. For complexes of the 1970 s through 1980s vintage, an expense in the range of $33 \%$ to $38 \%$ is somewhat typical. For relatively new complexes, an expense of $30 \%$ to $35 \%$ could be expected (some new complexes, particularly those built as condos, have separate water meters). Again, this varies significantly in that high value properties with resultant high real estate tax obligations, such as in coastal cities and in cities/communities such as Beverly Hills, West Hollywood, Beverly Hills adjacent, Century City, etc., can have high expenses as a percentage. Likewise, properties subject to rent control can have high expenses when viewed on a percentage of effective gross income (often in the range of $38 \%$ to $50 \%$ ) depending upon the disparity between actual rent and market rent. Furthermore, mastermetered apartment complexes generally have high percentage expenses, such as $40 \%$ to nearly $50 \%$.

It should be recognized that this guide is solely based on observations from documentation collected during the appraisal of a broad variety of apartment types within Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties (largely Los Angeles County). This guide is intended to provide reasonable rules-of-thumb as to likely expenses that would be incurred in the operation of common low-rise walk-up and center hall type apartment complexes and, to a lesser degree, elevator-served apartment complexes. No guarantee as to the accuracy, reliability, or applicability of the expenses herein is implied or expressly made. Users should carefully consider historical expenses of properties in attempting to forecast future expense obligations. The need for flood or earthquake insurance should also be considered and historical expenses for same are generally a reasonably good herald of future expense obligations.

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