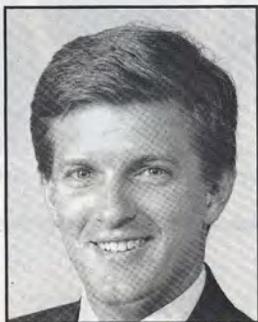
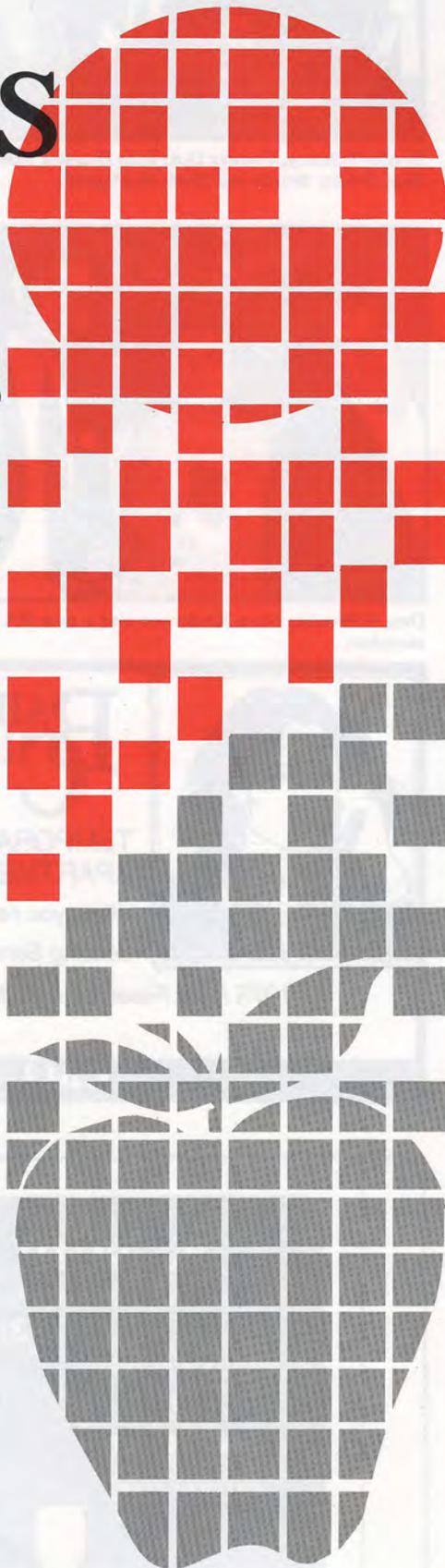


APPLES FROM ORANGES

Comparing Utility Factors of Apartments



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How do you compare an all-bills paid apartment to a no-bills paid apartment? Houston, with over 380,000 apartment units, is one of this country's largest multi-family housing markets. Yet, the majority of these units are less than 15 years old with over 240,000 units constructed from the mid '70s through the early '80s. About 94 percent of the apartment units built during this time included individual electric meters, and the renters became responsible for their own electric bills. On the other hand, there are over 60,000 all-bills paid units still competing in today's market. Though the average age of an all-bills paid apartment is 19 years, it still competes for the same renters as the newer no-bills paid communities. This dichotomy creates an apples and oranges scenario.

Apartment market analysts create an apples-to-apples comparison for the two different types of apartments using a single utility adjustment factor. They assume that the monthly expense associated with utilities is directly proportional to the square footage size of an apartment unit. Typically, a single utility adjustment factor of 8 cents/square foot/month is used; that is, analysts reduce the monthly price of an all-bills paid apartment unit by 8 cents/month for every square foot.

An example of converting an all-bills paid unit to its no-bills paid equivalent for an 850 square foot, one-bedroom unit renting for \$550/month would be:

Utility Adjustment:
 $(850 \text{ sq.ft.}) \times (8 \text{ cents/sq.ft./mo.})$
equals \$68/mo.

Adjusted Price:
\$550/mo. - Utility Adjustment
equals \$550/mo. - \$68/mo.
equals \$482/mo.

The no-bills paid equivalent monthly price for this unit is calculated to be \$482/month. This type of analysis is regularly used in today's apartment industry. The questions that need to be asked are:

1. How accurate is this method?
2. Is it valid to assume that the utility expenses are proportional to the size of the unit and that 8 cents/square foot/month is a good number to use?

To answer these questions a survey of over 380,000 apartment units in Harris and the surrounding counties was conducted. The survey was conducted by dividing the city into 11 market areas and then comparing the rental rate differences between the all-bills paid apartments and the no-bills paid apartments on a per floorplan basis.

The table displays the utility adjustment factors that exists in today's market for each specific type of floorplan (efficiencies

through four-bedrooms) and in each of the 11 major all-bills paid market areas. The significant differences indicate that the utility adjustment factors are related to, or influenced by, both floorplan type and market area. At the same time, the results reveal that the standard assumptions of utility expenses being proportional to unit size and the use of 8 cents/square foot/month for all units could produce a misleading analysis. Keep in mind that as the market conditions change the utility adjustment factors will change along with them. This means that the utility adjustment factors are dynamic and should be re-examined on a regular basis.

The fact that the utility adjustment factors are dependent on the floorplan type is easily explained by considering the major appliances that consume electricity in a typical apartment. Regardless of the number of bedrooms in an apartment, each unit contains only one air conditioner, one oven, and one refrigerator. Though these appliances are more "heavily" used as the number of bedrooms increases (due to the additional people living in the unit), the increased usage is not enough to compensate for the additional square footage of the extra bedrooms. This is reflected in the utility adjustment factors typically decreasing as the number of bedrooms increase.

Along with the dependency on floorplan type, the utility adjustment factors are also related to an apartment's market area. For

example, the utility adjustment factors that exist for one-bedroom units range from 4.31 cents/square foot/month in the Hobby Airport area to 9.75 cents/square foot/month in the Far West market area. The major factor controlling these differences is the competition within the individual market areas. Keep in mind that the price difference between an all-bills paid apartment and an equivalent no-bills paid apartment is not necessarily the actual cost of utilities.

To illustrate the affect of market area competition on the utility adjustment factors consider the following example of apartment (A), a no-bills paid apartment, and apartment (B), an all-bills paid equivalent apartment. Both apartments offer 850 square feet with apartment A renting for \$500/month and apartment B renting for \$575/month. With 850 square feet, this corresponds to an 8.82 cents/square foot/month utility adjustment factor. As market conditions change, apartment A decides to offer a free rent special (one month free on a six month lease). In order to stay competitive, apartment B offers the same special. This particular free rent special is the equivalent of a 16.67 percent discount in monthly rent. With the new discounted prices of \$416.65/month for apartment A and \$479.15/month for apartment B, let's re-examine the utility adjustment factors. The utility adjustment needed to make these two apartments equal is now \$62.50. With 850 square feet this corresponds to a 7.35 cents/square foot/

month utility adjustment factor. Keep in mind that this free rent special affects both the "base" rental price and the utility adjustment factors by 16.67 percent.

Notice the low utility adjustment factors that exist in the Hobby Airport and Clear Lake market areas. One explanation of this is that there are only a few all-bills paid apartments relative to the number of no-bills paid apartments in these areas. This unbalanced market forces the all-bills paid apartments to compete with the newer no-bills paid apartments more fiercely than in the other market areas. In other words, the all-bills paid apartments are not able to pass much of the utility cost on to the residents.

The following example illustrates how the utility adjustment factors in different market areas affect the analysis or comparison of a 850 square foot, one bedroom unit. If this unit were in the Pinemont market area the utility adjustment would be:

$$\begin{aligned} \text{Utility Adjustment:} \\ (850 \text{ sq.ft.}) \times (5.55 \text{ cents/sq.ft./mo.}) \\ \text{equals } \$47.18/\text{mo.} \end{aligned}$$

Yet, if this same apartment unit were in the Far West market area the utility adjustment would be:

$$\begin{aligned} \text{Utility Adjustment:} \\ (850 \text{ sq.ft.}) \times (9.75 \text{ cents/sq.ft./mo.}) \\ \text{equals } \$82.88/\text{mo.} \end{aligned}$$

With an all-bills paid price of \$550/month, the no-bills paid equivalent price for the Pinemont and Far West market areas become \$502.82/month and \$467.12/month respectively. Comparing these prices to the \$82/month result we got when using an 8 cents/square foot/month utility adjustment factor we see an error of -4.1 percent in the Pinemont area and an error of +3.2 percent in the Far West market area. This reveals that using the standard assumption of 8 cents/square foot/month as a utility adjustment factor is a very inaccurate and misleading method in all cases except for perhaps one-bedroom units in Baytown.

If you own or manage an all-bills paid apartment and prefer to look at prices that include utility costs, the utility adjustment conversion can be done by adding the utility adjustment to the no-bills paid apartment instead of subtracting it from the all-bills paid apartments.

In conclusion, it is important to remember that utility adjustment factors are largely dependent on both the floorplan type and the market area of the apartment. Since market conditions affect the utility adjustment factor, the utility adjustment factor must be re-examined on a timely basis. Don't simply use a single utility adjustment factor for all units in all market areas. The proper choice of the utility adjustment factors could prevent you from making a sour apple from a ripe orange. ABODE

UTILITY ADJUSTMENT FACTORS (cents/square feet/month) October 1988

Area of Town	Efficiencies	1-Bdrm.	2-Bdrms.	3-Bdrms.	4-Bdrms.
Baytown	11.61	8.20	6.02	4.55	4.34
Clear Lake	9.17	5.87	4.82	3.61	3.07
Far West	13.19	9.75	5.83	3.69	3.16
Hobby	14.44	4.31	3.68	3.17	3.09
Inner Loop	9.87	6.98	3.96	4.31	3.81
Near West	12.6	7.77	5.82	4.98	4.87
Northline/Aldine	12.5	7.53	7.40	6.91	5.13
Pasadena	9.52	6.31	5.98	5.79	6.29
Pinemont	6.26	5.55	6.62	6.36	6.58
Southwest	7.56	9.74	8.36	4.31	4.02
Spring Branch	8.23	6.05	5.32	6.67	5.11

Source: Apartment Data Services