



MEMORANDUM

TO: Austin City Council

CC: Mark Ott, City Manager, City of Austin

FROM: Larry Weis, General Manager, Austin Energy

DATE: December 1, 2013

SUBJECT: Semi Annual Report for Resolution No. 20130523-069

Pursuant to Resolution No. 20130523-069, Austin Energy submits the first report investigating possible effects of participation in multifamily property energy efficiency rebate programs on rental prices. As this is the first report, comparisons are limited. The report contains data for the initial reporting period; data collected over the course of the next two years will better inform conclusions. However, despite the lack of multi-period data in this first report, Austin Energy conducted statistical analyses on the data to provide a clearer picture when comparing rental rates.

As reported in the July 1, 2013 memo, the data sources include:

- Austin Energy Multifamily Rebate Program participation data
- Austin Investors Interest multifamily apartment data

The process to collect and report on the data is as follows:

- Austin Energy will develop a secured database in which the data will be stored.
 - The data is held within AE's firewalls.
- Austin Energy will collect rebate-related information in real time.
 - While rebate information is collected in real time, apartment-related data is provided quarterly so the report will reflect a quarterly time frame.
- Austin Energy will collect apartment-related data from an external source quarterly as it is updated by Austin Investors Interest.
- Austin Energy will assess statistical differences between rebate participants and non-rebate participants; between levels of rebates; and across other related multifamily demographics.
 - As this is the first report, comparisons are limited.
- Austin Energy will report semi-annually on the possible relationship between energy efficiency rebate participation and rent prices.

The data attached covers multifamily complexes with approved Letters of Intent (LOI) from Quarter 3 of 2013. Data is provided in calendar years, not fiscal years. These 10 complexes met the resolution criteria of receiving rebates of \$50,000 or greater. The average projected rebate for these properties in this report was \$91,597. Attachment A provides the multifamily data tracked to create the report.

FIGURE 1. Participating and Comparable Properties

The data shows that rental prices in the Austin area vary from \$0.69 to \$1.91 per square foot. The average rental prices for properties going through energy efficiency upgrades were within these bounds, from \$0.91 to \$1.91. The number of units per complex ranged from 50 to 278.

Projected rebates for this data set ranged from \$51,500 to \$134,000. The projected rebate costs covered approximately 89.4% of the total project costs for this sample.

As no data point exists in isolation, relationships are drawn between points to better understand the data. These relationships are calculated using a correlation matrix. Table 1 provides the correlation matrix for the numeric data. The first result of note is that there was a negative correlation between rental prices and number of units. While this correlation was small, this suggests that rental prices may be higher for complexes with fewer rentable units. There were positive, however, small and non-significant correlations between all other measures with the exception of number of units and rebate amount; kW savings and rebate amount; kWh savings and rebate amount; and kW savings and number of units. These significant relationships ($r = 0.61$ and above) are to be expected. As the number of units in a multifamily property increase, so does the rebate amount to account for the greater number of upgrades (more solar screens, more duct systems, etc). With larger rebates come more significant measures leading to greater savings.

TABLE 1. Correlation Matrix

Correlations	Avg Rent Per Sq Ft	Rebate	Number of Units	Bedroom Mix	kW Savings	kWh Savings
Avg Rent Per Sq Ft	1					
Rebate	0.2357	1				
Number of Units	-0.2829	0.7288	1			
Bedroom Mix	0.3084	0.4884	0.4874	1		
kW Savings	0.1465	0.9770	0.7695	0.4754	1	
kWh Savings	0.4774	0.6049	0.1279	0.3613	0.6110	1

Comparing the properties that received rebates for making energy efficiency upgrades to similar properties that did not receive rebates revealed that five of the rebated properties were above average in cost while the remaining properties' rental pricing was indistinguishable across properties. Additionally, rental prices per square foot have not consistently trended upward across all of the properties examined in this analysis. For the 10 properties in this report, only four have increased rents from Quarter 2 to Quarter 3 and only two have an anticipated trend upward for the near future. This is a critical finding as the focus of the resolution is to assess the impact of energy efficiency rebates on rental prices. Attachment B provides a table of the

averages and standard deviations for the comparable rent per square foot costs. The colors in table indicate those properties that are above or below the mean for their comparisons group. As the data indicates, some rebate participating properties were above the mean *prior* to energy efficiency participation. Other properties fall well within the average for their location and class within the data set.

Across the participating complexes, there was a mix of comparable rent per square foot costs. As this is the first report and there is no comparable yearly data, actual impacts cannot be determined. However, moving forward, differences of statistical significance found now will impact measurements later. Staff will continue to monitor the multifamily energy efficiency rebate program, as well as investigate the relationship between rebate program participation and rent costs. As this is the first report, comparisons and conclusions are limited. By the next report, due June 1, 2014, staff will have data for additional quarters to analyze. To this additional data staff can apply the appropriate statistical methodology to assess the impact of energy efficiency rebates on rent prices per square foot in the multifamily sector.