



MEMORANDUM

TO: Mayor and Council Members

CC: Marc A. Ott, City Manager

FROM: Larry Weis, General Manager *Lil*

DATE: November 27, 2013

SUBJECT: Semiannual Report for Resolution No. 20130523-069 regarding Austin Energy's Multifamily Energy Efficiency Rebate Program

This is the first report investigating possible effects of participation in multifamily property energy efficiency rebate programs on rental prices, pursuant to Resolution No. 20130523-069. As 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

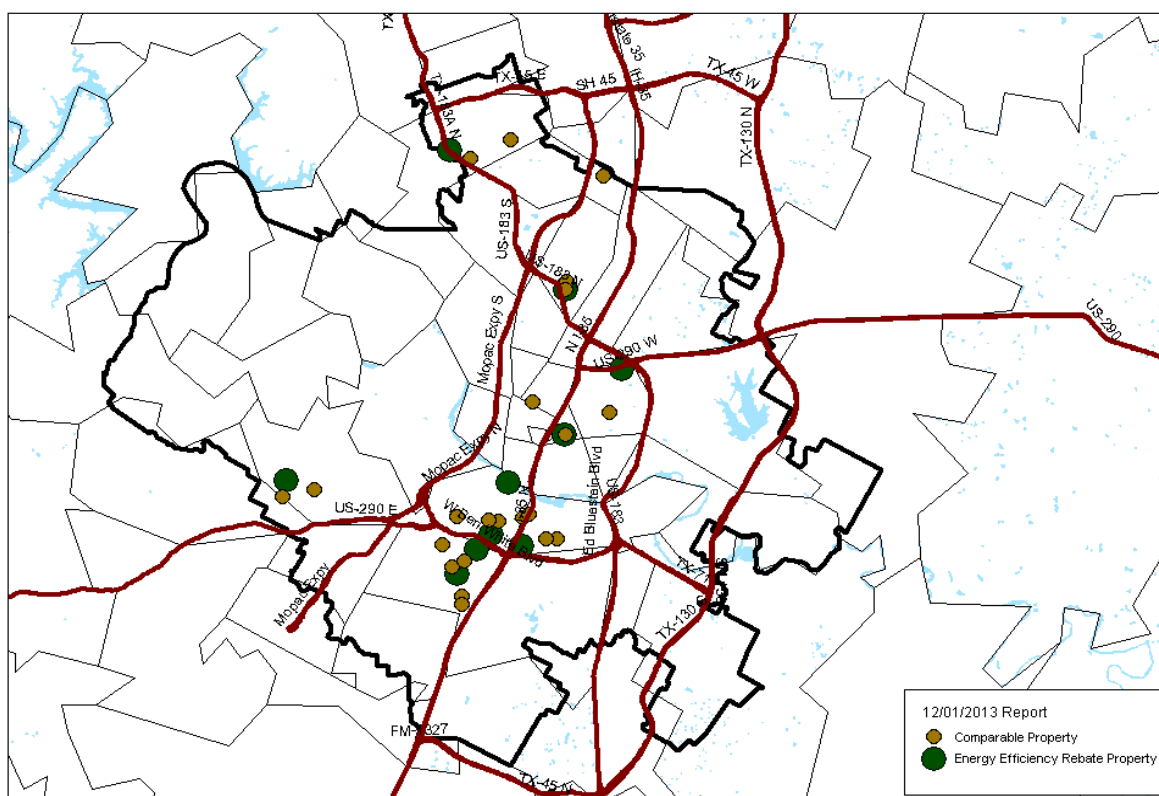
The process to collect and report on the data is as follows:

- Austin Energy will develop a secured database in which the data will be stored.
 - The data is held within Austin Energy'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.

In order to provide quality comparisons, each rebate property was matched with a comparable property by location and/or class and year built. These similar properties that have not gone through an energy efficiency rebate allow for better analysis of the impact of rebate participation on rental prices. With this inclusion, the data set grows to 32 properties. Figure 1 provides a map of the rebate-participating properties in green and the comparable non-rebate recipient properties in brown. The majority of properties for this report for the time period are in the south central area of Austin.

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 the table indicate those properties that are above (orange) or below (blue) 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.

ATTACHMENT A
Multifamily Rebate Participation Data

Date of Project	Complex Name	Address	Description of Work Completed	LOI Rebate	Total Cost of Upgrades	Owner's Share of Cost	Average Rent by Sq Ft	Average Rent by Sq Ft - Yr 1	Average Rent by Sq Ft - Yr 2	Range of Rental Rates by Sq Ft	Range of Rental Rates by Sq Ft - Yr 1	Range of Rental Rates by Sq Ft - Yr 2	Reasons for Increase
9/16/13	Archway	2506 Manor Rd Austin 78722	BetterBldgs	\$102,000.00	\$114,750.00	\$12,750.00	\$1.91			\$1.41-\$1.91			Market conditions
9/5/13	Arts at Turtle Creek	714 Turtle Creek Blvd Austin 78745	BetterBldgs	\$71,500.00	\$80,723.00	\$9,223.00	\$1.26			\$1.26-\$1.66			Market conditions
9/26/13	Arts South Austin	400 W St Elmo Austin 78745	BetterBldgs	\$99,000.00	\$111,870.00	\$12,870.00	\$1.24			\$1.20-\$1.24			Market conditions
9/11/13	Hudson Miramont	Travis Hills Dr Austin 78735	Duct Seal	\$99,373.50	\$110,415.00	\$11,041.50	\$1.11			\$1.11-\$1.23			Market conditions
7/24/13	Rustic Creek	7211 Northeast Dr Austin 78723	BetterBldgs	\$54,000.00	\$60,000.00	\$6,000.00	\$1.12			\$0.69-\$1.12			Market conditions
7/3/13	South Congress Commons	126 W Alpine Rd Austin 78704	BetterBldgs	\$51,000.00	\$56,941.00	\$5,941.00	\$1.57			\$1.34-\$1.57			Market conditions
8/13/13	Timbercreek	614 South 1st Austin 78704	BetterBldgs	\$132,000.00	\$147,840.00	\$15,840.00	\$1.83			\$1.34-\$1.89			Market conditions
7/18/13	Toscana Apts	13355 U.S. 183 Austin 78750	Duct Seal	\$121,598.00	\$135,109.33	\$13,511.33	\$1.05			\$1.05-\$1.08			Market conditions
7/10/13	Whisper Hollow	3300 Parker Ln Austin 78741	BetterBldgs	\$134,000.00	\$149,800.00	\$15,800.00	\$1.13			\$1.00-\$1.13			Market conditions
7/31/13	Woodland Corners	9008 Galewood Dr Austin 78758	BetterBldgs	\$51,500.00	\$57,225.00	\$5,725.00	\$0.91			\$0.91-\$1.23			Market conditions

ATTACHMENT A
Multifamily Rebate

Complex Name	Electric Bills	ECAD Participation	Estimated kW Savings Per Project	Estimate kWh Savings Per Project	Cost Per kW	Cost Per kWh	Aug 2012 Electric Bill	Aug 2013 Electric Bill	% Decrease in Energy Costs	Number of Units	Project Cost Per Unit	Bedroom Mix	Comparison to Consumer Price Index
Archway	Tenants	Passing EUI	104.0	380,000	\$980.77	\$0.27	Not enough data	\$97.14		54	\$2,125.00	1, 2	Unable to compare at this time
Arts at Turtle Creek	Tenants	Passing EUI	85.0	474,000	\$841.18	\$0.15	Not enough data	\$109.31		96	\$840.86	2	Unable to compare at this time
Arts South Austin	Tenants	Passing EUI	141.0	641,009	\$702.13	\$0.15	Not enough data	\$49.62		140	\$799.07	1, 2	Unable to compare at this time
Hudson Miramont	Tenants	Passing EUI	139.0	208,493	\$714.92	\$0.48	Not enough data	\$76.40		278	\$397.18	1, 2, 3	Unable to compare at this time
Rustic Creek	Tenants	Passing EUI	40.0	183,000	\$1,350.00	\$0.30	\$101.40	\$96.07	-0.0525	54	\$1,111.11	1, 2, 3	Unable to compare at this time
South Congress Commons	Tenants	Passing EUI	48.5	164,000	\$1,051.55	\$0.31	Not enough data			50	\$1,138.82	1, 2	Unable to compare at this time
Timbercreek	Tenants	Passing EUI	188.1	787,600	\$701.75	\$0.17	\$81.00	\$74.47	-0.0807	198	\$746.67	1, 2, 3, 4	Unable to compare at this time
Toscana Apts	Tenants	Passing EUI	168.9	253,272	\$720.15	\$0.48	\$106.00	\$104.74	-0.0119	358	\$377.40	1, 2, 3	Unable to compare at this time
Whisper Hollow	Tenants	Passing EUI	207.0	430,000	\$647.34	\$0.31	\$67.69	\$61.15	-0.0967	219	\$684.02	1, 2	Unable to compare at this time
Woodland Corners	Tenants	Failing EUI	26.0	153,709	\$1,980.77	\$0.34	\$30.10	\$26.72	-0.1124	64	\$894.14	1	Unable to compare at this time

ATTACHMENT B
Comparable Rent Per Square Foot

Property Name	Property ID	Measure	Contractor	\$\$ on LOI	2Q12	3Q12	4Q12	1Q13	2Q13	3Q13	Avg	StDev	1Below	1Above	Trend	Diff
South Congress Commons	309750	BetterBldgs	360 Energy Savers	\$51,000.00						\$1.57	\$1.42	\$0.13	\$1.30	\$1.55		
Comp 1										\$1.36						
Comp 2										\$1.34						
Archway	205397	BetterBldgs	360 Energy Savers	102,000.00	\$1.63	\$1.91	\$1.91	\$1.97	\$1.84	\$1.91	\$1.60	\$0.23	\$1.37	\$1.83	\$1.77	-\$0.14
Comp 1					\$1.27	\$1.31	\$1.33	\$1.41	\$1.41	\$1.41						
Comp 2					\$1.52	\$1.52	\$1.52	\$1.64	\$1.66	\$1.66						
Rustic Creek	226838	BetterBldgs	1st Choice Energy	\$54,000.00	\$0.75	\$0.75	\$0.81	\$0.81	\$1.08	\$1.12	\$0.76	\$0.13	\$0.62	\$0.89	\$0.68	-\$0.44
Comp 1					\$0.65	\$0.65	\$0.65	\$0.65	\$0.65	\$0.69						
Comp 2					\$0.70	\$0.70	\$0.74	\$0.74	\$0.74	\$0.74						
Arts at Turtle Creek	325496	BetterBldgs	360 Energy Savers	\$71,500.00	\$1.15	\$1.29	\$1.29	\$1.29	\$1.26	\$1.26	\$1.32	\$0.25	\$1.07	\$1.56	\$1.22	-\$0.03
Comp 1					\$0.96	\$1.01	\$1.08	\$1.58	\$1.66	\$1.66						
Comp 2					\$1.55	\$1.69	\$1.60	\$1.62	\$1.66	\$1.55						
Comp 3					\$1.01	\$1.08	\$1.09	\$1.09	\$1.09	\$1.09						
Hudson Miramont	103824	Duct Seal	Leelyn Energy Services	\$99,373.50	\$1.14	\$1.14	\$1.14	\$1.14	\$1.11	\$1.11	\$1.14	\$0.05	\$1.09	\$1.20	\$1.14	\$0.03
Comp 1					\$1.23	\$1.20	\$1.13	\$1.20	\$1.20	\$1.23						
Comp 2					\$1.12	\$1.03	\$1.12	\$1.06	\$1.10	\$1.17						
Arts South Austin	315648	BetterBldgs	360 Energy Savers	\$99,000.00	\$1.23	\$1.30	\$1.30	\$1.25	\$1.17	\$1.24	\$1.21	\$0.04	\$1.17	\$1.26	\$1.28	\$0.04
Comp 1					\$1.18	\$1.15	\$1.15	\$1.20	\$1.20	\$1.20						
Comp 2					\$1.15	\$1.19	\$1.23	\$1.23	\$1.23	\$1.23						
Comp 3					\$1.16	\$1.19	\$1.23	\$1.23	\$1.24	\$1.24						
Timbercreek	101697	BetterBldgs	360 Energy Savers	\$132,000.00	\$1.42	\$1.50	\$1.50	\$1.64	\$1.83	\$1.83	\$1.33	\$0.28	\$1.05	\$1.60	\$1.39	-\$0.44
Comp 1					\$1.15	\$1.25	\$1.25	\$1.30	\$1.30	\$1.34						
Comp 2					\$0.99	\$0.99	\$1.06	\$1.06	\$0.94	\$1.59						
Woodland Corners	248720	BetterBldgs	1st Choice Energy	\$51,500.00	\$0.81	\$0.85	\$0.85	\$0.85	\$0.85	\$0.91	\$0.98	\$0.15	\$0.83	\$1.13	\$0.82	-\$0.09
Comp 1					\$0.79	\$0.94	\$1.14	\$1.16	\$1.20	\$1.20						
Comp 2					\$0.94	\$0.97	\$0.87	\$1.11	\$0.95	\$1.23						
Toscana Apts	R413951	Duct Seal	Leelyn Energy Services	\$121,598.00	\$1.03	\$1.04	\$1.04	\$1.05	\$1.05	\$1.05	\$1.04	\$0.03	\$1.01	\$1.07	\$1.03	-\$0.02
Comp 1					\$0.96	\$1.11	\$1.02	\$1.03	\$1.00	\$1.05						
Comp 2					\$1.01	\$1.05	\$1.05	\$1.03	\$1.08	\$1.08						
Whisper Hollow	290117	BetterBldgs	360 Energy Savers	\$134,000.00	\$1.01	\$1.01	\$0.98	\$1.06	\$1.13	\$1.13	\$1.02	\$0.06	\$0.96	\$1.08	\$0.98	-\$0.15
Comp 1					\$0.94	\$0.96	\$0.98	\$1.13	\$0.99	\$1.00						
Comp 2					\$0.97	\$0.98	\$0.97	\$1.00	\$1.01	\$1.07						