




TO: Mayor and City Council Members

CC: Marc A. Ott, City Manager

FROM: Larry Weis, General Manager 

DATE: June 6, 2014

SUBJECT: Semi-Annual Report in response to Resolution No. 20130523-069, regarding the Multifamily Energy Efficiency Rebate Program

Pursuant to Resolution No. 20130523-069, Austin Energy submits the second report investigating possible effects of participation in multifamily property energy efficiency rebate programs on rental prices. As with the December 1, 2012 report, there continues to be no evidence of a direct relationship between multifamily rebate participation and rent price changes. Austin Energy conducted statistical analyses of the data to provide a clearer picture when comparing rental rates.

The data sources include:

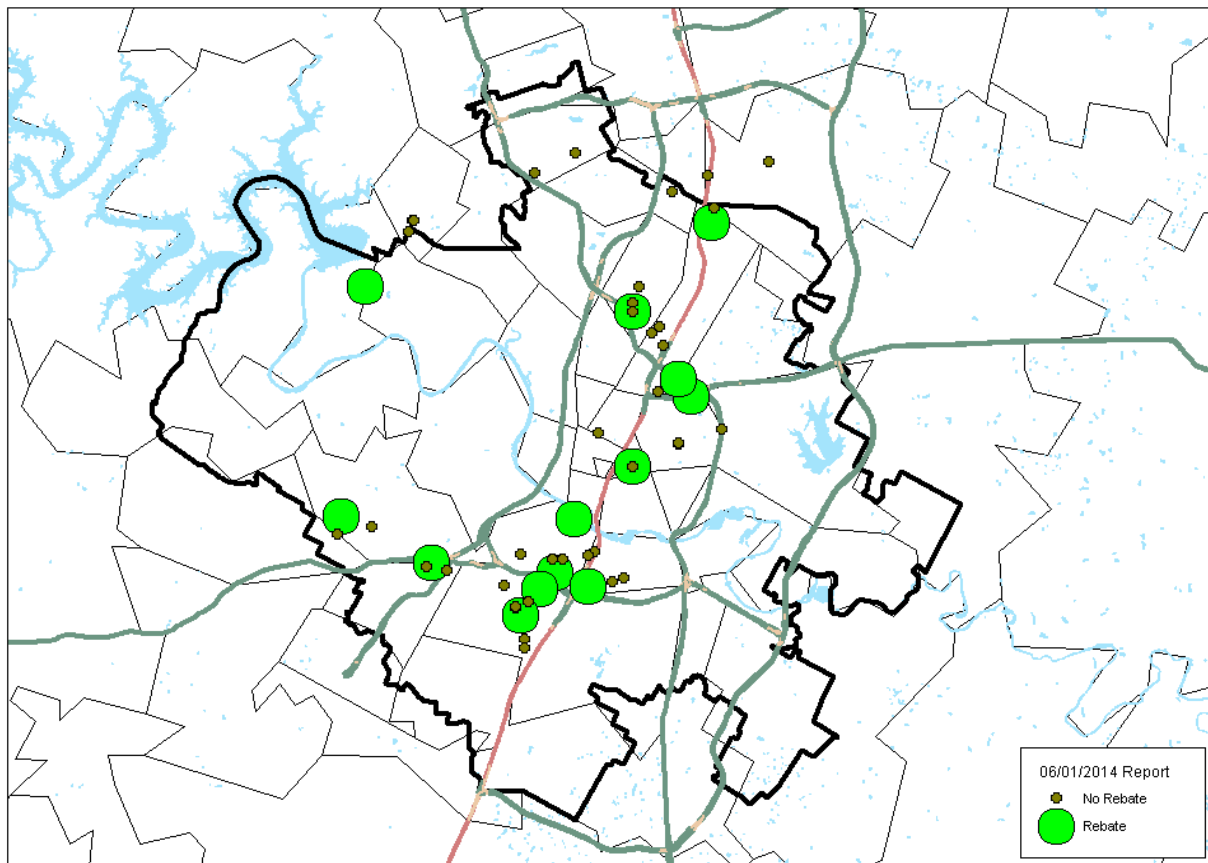
- Austin Energy Multifamily Rebate Program participation data
- Austin Investors Interest multifamily apartment data

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.
 - With only two quarters of data, results are limited.
- Austin Energy will report semi-annually on the possible relationship between energy efficiency rebate participation and rent prices.

In order to provide quality comparisons, each rebate property was matched with a comparable property by location and/or class and year built. Including similar properties that have not gone through an energy efficiency rebate allows for better analysis of the impact of rebate participation on rental prices. 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 are along the central corridor of Austin.

FIGURE 1. Participating and Comparable Properties



The data attached covers multifamily complexes with approved Letters of Intent (LOI), at or above \$50,000, from Quarter 3 of 2013 through Quarter 1 of 2014, as measured by calendar quarters, not fiscal. The average projected rebate for these properties in this report was \$106,890. The projected rebate costs covered approximately 84% of the total project costs for this sample. Attachment A provides the multifamily data tracked to create the report.

The data shows that rental prices per square foot for these properties vary from \$0.70 in Q3-2012 to \$2.09 in Q1-2014. The average rental prices for properties going through energy efficiency upgrades were within these bounds, from \$0.75 to \$2.09. The number of units per complex ranged from 50 to 624.

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 significant correlations are those above 0.50. Most notably, the relationship between rebate and kW savings indicates greater savings with greater rebate dollars. The relationship between average rent per square foot and kWh savings demonstrates greater energy savings in apartments with higher rents. With the kWh savings, it is anticipated that the electric portion of the utility bill will be lower, thereby offsetting higher rent per square foot.

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 | -0.0802 | 1 | | | | |
| Number of Units | -0.0183 | 0.4430 | 1 | | | |
| Bedroom Mix | 0.3675 | 0.2394 | 0.2561 | 1 | | |
| kW Savings | 0.2835 | 0.7592 | 0.7941 | 0.9551 | 1 | |
| kWh Savings | 0.6188 | 0.3036 | 0.1776 | 0.9633 | 0.6055 | 1 |

There was no consistent finding when comparing rebated complexes against similar complexes. As occupancy rates have increased, over 95%, rent per square foot has also increased. This was found for both rebated and non rebated complexes, yet not uniform across all properties. In other words, fluctuations in rent per square foot did not shown an upward trend but rather variations up and down.

Increases in rent were found in non rebated complexes reporting renovations including floors, appliances and amenities such as pools and fitness rooms. Improvement in rebated complexes comprise duct sealing, attic insulation, new HVAC equipment, water-saving devices, energy efficient lighting and appliances, windows and solar screens, and reflective roofs. The benefits of energy efficiency improvements over amenity improvements include the opportunities for lower energy use and utility bills, not found with pool or weight room improvements. Attachment B provides a table of the averages and standard deviations for the comparable rent per square foot costs.

Staff will continue to monitor the multifamily energy efficiency rebate program, as well as investigate the relationship between rebate program participation and rent variations. Preliminary analysis indicates no relationship between multifamily rebate participation and rent changes. Rent per square foot appears to remain a function of market conditions, occupancy, and property improvements. The consistent benefit of rebate participation is the reduction in energy use which can lead to lower utility bills for multifamily residents.

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 |
|-----------------|------------------------|---------------------------------------|-------------------------------|--------------|------------------------|-----------------------|-----------------------|------------------------------|------------------------------|--------------------------------|
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 3/17/14 | Wildwood | 7610 Cameron Rd Austin 78752 | MERP | \$106,687.00 | \$213,500.00 | \$106,813.00 | \$0.97 | | | \$0.96-0.99 |

| 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 |
|-----------------|---------------------------------------|---|-------------------------------|--------------|------------------------|-----------------------|-----------------------|------------------------------|------------------------------|--------------------------------|
| 1/10/14 | Marquis at Center Ridge | 701 Center Ridge Dr Austin 78753 | Duct Seal | \$97,551.25 | \$108,529.44 | \$10,978.19 | \$1.14 | | | \$1.08-1.21 |
| 4/8/14 | Club Creek | 502 Longspur Blvd Austin 78753 | MERP | \$107,999.00 | \$120,500.00 | \$12,501.00 | \$0.92 | | | \$0.83-0.95 |
| 5/13/2013 | Meritage at Steiner Ranch (Monterone) | 4500 Steiner Ranch Blvd Austin 78732 | Duct Seal | \$200,000.00 | \$264,473.00 | \$64,473.00 | \$1.03 | | | \$0.91-\$1.03 |
| 2/13/2013 | IMT Monterey Ranch-Canyons | 4701 Staggerbrush Rd Austin 78749 | Duct Seal | \$141,259.68 | \$141,259.68 | \$0.00 | \$1.39 | | | \$0.95-\$1.39 |

ATTACHMENT A
Multifamily Rebate Participation Data

| Complex Name | Range of Rental Rates by Sq Ft - Yr 1 | Range of Rental Rates by Sq Ft - Yr 2 | Reasons for Increase | Electric Bills | ECAD Participation | Estimated kW Savings Per Project | Estimate kWh Savings Per Project | Cost Per kW | Cost Per kWh |
|------------------------|--|--|-------------------------|----------------|-----------------------|--|--|-------------|--------------|
| Archway | | | Market conditions | Tenants | Passing EUI | 104.0 | 380,000 | \$980.77 | \$0.27 |
| Arts at Turtle Creek | | | Market conditions | Tenants | Passing EUI | 85.0 | 474,000 | \$841.18 | \$0.15 |
| Arts South Austin | | | Market conditions | Tenants | Passing EUI | 141.0 | 641,009 | \$702.13 | \$0.15 |
| Hudson Miramont | | | Market conditions | Tenants | Passing EUI | 139.0 | 208,493 | \$714.92 | \$0.48 |
| Rustic Creek | | | Market conditions | Tenants | Passing EUI | 40.0 | 183,000 | \$1,350.00 | \$0.30 |
| South Congress Commons | | | Market conditions | Tenants | Passing EUI | 48.5 | 164,000 | \$1,051.55 | \$0.31 |
| Timbercreek | | | Market conditions | Tenants | Passing EUI | 188.1 | 787,600 | \$701.75 | \$0.17 |
| Toscana Apts | | | Market conditions | Tenants | Passing EUI | 168.9 | 253,272 | \$720.15 | \$0.48 |
| Whisper Hollow | | | Market conditions | Tenants | Passing EUI | 207.0 | 430,000 | \$647.34 | \$0.31 |
| Woodland Corners | | | Market conditions | Tenants | Failing EUI | 26.0 | 153,709 | \$1,980.77 | \$0.34 |
| Wildwood | | | Market conditions | Tenants | Passing EUI | 205.6 | 363,286 | \$518.91 | \$0.29 |

| Complex Name | Range of Rental Rates by Sq Ft - Yr 1 | Range of Rental Rates by Sq Ft - Yr 2 | Reasons for Increase | Electric Bills | ECAD Participation | Estimated kW Savings Per Project | Estimate kWh Savings Per Project | Cost Per kW | Cost Per kWh |
|---------------------------------------|--|--|-------------------------|----------------|-----------------------|--|--|-------------|--------------|
| Marquis at Center Ridge | | | Market conditions | Tenants | Exempt | 136.0 | 204,033 | \$717.18 | \$0.48 |
| Club Creek | | | Market conditions | Tenants | Passing EUI | 146.9 | 237,419 | \$735.19 | \$0.45 |
| Meritage at Steiner Ranch (Monterone) | | | Market conditions | Tenants | Passing EUI | 367.2 | 550,860 | \$544.60 | \$0.36 |
| IMT Monterey Ranch-Canyons | | | Market conditions | Tenants | Passing EUI | 180.7 | 270,996 | \$781.74 | \$0.52 |

ATTACHMENT A
Multifamily Rebate Participation Data

| Complex Name | Number of Units | Project Cost Per Unit | Bedroom Mix | BR Adj | Comparison to Consumer Price Index |
|------------------------|-----------------|-----------------------|-------------|--------|------------------------------------|
| Archway | 54 | \$2,125.00 | 1, 2 | 3 | Unable to compare at this time |
| Arts at Turtle Creek | 96 | \$840.86 | 2 | 2 | Unable to compare at this time |
| Arts South Austin | 140 | \$799.07 | 1, 2 | 3 | Unable to compare at this time |
| Hudson Miramont | 278 | \$397.18 | 1, 2, 3 | 6 | Unable to compare at this time |
| Rustic Creek | 54 | \$1,111.11 | 1, 2, 3 | 6 | Unable to compare at this time |
| South Congress Commons | 50 | \$1,138.82 | 1, 2 | 3 | Unable to compare at this time |
| Timbercreek | 198 | \$746.67 | 1, 2, 3, 4 | 10 | Unable to compare at this time |
| Toscana Apts | 358 | \$377.40 | 1, 2, 3 | 6 | Unable to compare at this time |
| Whisper Hollow | 219 | \$684.02 | 1, 2 | 3 | Unable to compare at this time |
| Woodland Corners | 64 | \$894.14 | 1 | 1 | Unable to compare at this time |
| Wildwood | 344 | \$620.64 | 1, 2 | 3 | Unable to compare at this time |

| Complex Name | Number of Units | Project Cost Per Unit | Bedroom Mix | BR Adj | Comparison to Consumer Price Index |
|---------------------------------------|-----------------|-----------------------|-------------|--------|------------------------------------|
| Marquis at Center Ridge | 348 | \$311.87 | 1, 2 | 3 | Unable to compare at this time |
| Club Creek | 160 | \$674.99 | 1, 2 | 3 | Unable to compare at this time |
| Meritage at Steiner Ranch (Monterone) | 502 | \$398.41 | 1,2,3,4 | 10 | Unable to compare at this time |
| IMT Monterey Ranch-Canyons | 447 | \$316.02 | 1,2,3 | 6 | Unable to compare at this time |

Comparable Rent Per Square Foot

[illegible]

ATTACHMENT B
Comparable Rent Per Square Foot

| Property Name | 3Q13 | 4Q13 | 1Q14 | Avg | StDev | 1Below | 1Above |
|----------------------|--------|--------|--------|--------|--------|--------|--------|
| Archway | \$1.91 | \$1.91 | \$2.09 | \$1.64 | \$0.24 | \$1.40 | \$1.87 |
| Comp 1 | \$1.41 | \$1.41 | \$1.45 | | | | |
| Comp 2 | \$1.66 | \$1.78 | \$1.78 | | | | |
| Rustic Creek | \$1.12 | \$1.00 | \$1.00 | \$0.77 | \$0.14 | \$0.64 | \$0.91 |
| Comp 1 | \$0.69 | \$0.70 | \$0.70 | | | | |
| Comp 2 | \$0.74 | \$0.76 | \$0.76 | | | | |
| Arts at Turtle Creek | \$1.26 | \$0.93 | \$0.93 | \$1.39 | \$0.27 | \$1.12 | \$1.67 |
| Comp 1 | \$1.66 | \$1.66 | \$1.74 | | | | |
| Comp 2 | \$1.55 | \$1.53 | \$1.53 | | | | |
| Comp 3 | \$1.09 | \$1.12 | \$1.14 | | | | |
| Hudson Miramont | \$1.11 | \$1.14 | \$1.14 | \$1.16 | \$0.06 | \$1.10 | \$1.21 |
| Comp 1 | \$1.23 | \$1.23 | \$1.28 | | | | |
| Comp 2 | \$1.17 | \$1.20 | \$1.20 | | | | |
| Arts South Austin | \$1.24 | \$1.24 | \$1.30 | \$1.23 | \$0.05 | \$1.18 | \$1.28 |
| Comp 1 | \$1.20 | \$1.29 | \$1.29 | | | | |
| Comp 2 | \$1.23 | \$1.27 | \$1.34 | | | | |
| Comp 3 | \$1.24 | \$1.33 | \$1.35 | | | | |
| Timbercreek | \$1.83 | \$1.82 | \$1.81 | \$1.39 | \$0.28 | \$1.11 | \$1.68 |
| Comp 1 | \$1.34 | \$1.34 | \$1.34 | | | | |
| Comp 2 | \$1.59 | \$1.59 | \$1.64 | | | | |
| Woodland Corners | \$0.91 | \$0.89 | \$0.89 | \$1.02 | \$0.17 | \$0.85 | \$1.19 |
| Comp 1 | \$1.20 | \$1.20 | \$1.25 | | | | |
| Comp 2 | \$1.23 | \$1.24 | \$1.32 | | | | |
| Toscana Apts | \$1.05 | \$1.06 | \$1.06 | \$1.04 | \$0.03 | \$1.01 | \$1.07 |
| Comp 1 | \$1.05 | \$1.08 | \$1.02 | | | | |
| Comp 2 | \$1.08 | \$1.05 | \$1.04 | | | | |
| Whisper Hollow | \$1.13 | \$1.14 | \$1.14 | \$1.03 | \$0.06 | \$0.96 | \$1.09 |
| Comp 1 | \$1.00 | \$1.00 | \$1.02 | | | | |
| Comp 2 | \$1.07 | \$1.01 | \$1.01 | | | | |
| Enclave | \$0.92 | \$1.53 | \$1.53 | \$1.13 | \$0.27 | \$0.86 | \$1.40 |
| Comp 1 | \$1.00 | \$1.35 | \$1.35 | | | | |
| Comp 2 | \$0.92 | \$1.66 | \$1.74 | | | | |
| | | | | | | | |

| Property Name | 3Q13 | 4Q13 | 1Q14 | Avg | StDev | 1Below | 1Above |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Meritage at Steiner Ranch (Monterone) | \$0.94 | \$1.03 | \$1.03 | \$0.98 | \$0.05 | \$0.93 | \$1.03 |
| Comp 1 | \$0.95 | \$1.00 | \$1.01 | | | | |
| Comp 2 | \$0.95 | \$1.10 | \$1.10 | | | | |
| Comp 3 | \$0.95 | \$1.04 | \$1.07 | | | | |
| IMT Monterey Ranch-Canyons | \$0.96 | \$1.32 | \$1.39 | \$1.07 | \$0.16 | \$0.90 | \$1.23 |
| Comp 1 | \$0.97 | \$1.28 | \$1.30 | | | | |
| Comp 2 | \$0.95 | \$1.32 | \$1.39 | | | | |
| Comp 3 | \$0.98 | \$1.20 | \$1.30 | | | | |
| Wildwood | \$0.96 | \$0.99 | \$0.99 | \$0.96 | \$0.10 | \$0.86 | \$1.06 |
| Comp 1 | \$1.08 | \$1.08 | \$1.08 | | | | |
| Comp 2 | \$0.85 | \$0.86 | \$0.89 | | | | |
| Comp 3 | \$1.07 | \$1.07 | \$0.87 | | | | |
| Marquis at Center Ridge | \$1.21 | \$1.11 | \$1.21 | \$1.04 | \$0.09 | \$0.95 | \$1.13 |
| Comp 1 | \$1.07 | \$1.01 | \$1.04 | | | | |
| Comp 2 | \$0.86 | \$1.03 | \$0.92 | | | | |
| Comp 3 | \$1.04 | \$1.03 | \$1.08 | | | | |
| Club Creek | \$0.93 | \$0.95 | \$0.95 | \$0.93 | \$0.06 | \$0.87 | \$0.99 |
| Comp 1 | \$0.99 | \$0.99 | \$1.04 | | | | |
| Comp 2 | \$0.89 | \$0.91 | \$0.95 | | | | |
| Comp 3 | \$0.89 | \$0.89 | \$0.98 | | | | |