

# Medina City Schools



## Energy Savings Program

PERFORMANCE YEAR 9  
October 2017 – September 2018  
YEAR END SAVINGS REPORT  
December 13<sup>th</sup>, 2018

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Appendix: Electric and Gas Savings Summaries

### **Section 1: Overview**

The Brewer-Garrett Company (“Brewer-Garrett”) is pleased to present results of this year’s energy savings benefits of the Energy Savings Program at Medina City Schools (“Medina”). Construction completed in the fall of 2009, so we are currently tracking savings for Performance Year 9 (October 2017 through September 2018). This report also highlights the success of the combined heat and power (“CHP”) unit installed at the High School in May 2014. Brewer-Garrett used additional data directly from the CHP unit to calculate savings during Performance Year 9.

Year 9, ending in September 2018, was another successful year. Medina saved an additional \$583,582 from both the original energy savings program and the CHP unit for a total cumulative savings of \$4,467,710. See Section 3 for an updated summary of savings over the entire history of the project.

The CHP unit has performed well since its official start in May 2014, producing both electrical and thermal energy as expected. Brewer-Garrett, together with W.W.Williams (the maintenance service provider for the CHP engine), continues to optimize the performance of the CHP system. Medina maintenance staff members have been great partners in this process, making adjustments to the building control system to maximize the benefits of CHP. Brewer-Garrett installed additional temperature sensors to help optimize run times with the goal of maximizing the effectiveness of the heat recovery system while managing maintenance costs.



**YEAR END SAVINGS and CHP REPORT**

**Section 2: Savings Guarantee Summary**

The Performance Guarantee is governed by the Energy Performance Agreements executed by Medina City Schools and The Brewer-Garrett Company on August 31, 2007 and September 30, 2013 (collectively as the "Contract"). The Performance Guarantee, summarized in Table 2a, is based on the Contract dated 8/31/2007 Schedule C "Energy and Operational Savings Guarantee." The Total Guaranteed Savings over the term of this agreement (15 years) is \$4,736,535.

**Table 2a: Performance Guarantee Summary**

Total Guaranteed Savings (\$) per Contract 8/31/2007	\$4,736,535	See Table 3a.
Total Guaranteed Savings (\$) per Contract 9/30/2013	\$419,467	

Guaranteed Savings (\$)					
Performance Year	Water/Sewer/ Energy Savings (\$)	Stipulated Operational Savings (\$)	Total Guaranteed Savings (\$)	Cumulative Guaranteed Savings (\$)	
1	2010	\$315,769	\$0	\$315,769	\$315,769
2	2011	\$315,769	\$0	\$315,769	\$631,538
3	2012	\$315,769	\$0	\$315,769	\$947,307
4	2013	\$315,769	\$0	\$315,769	\$1,263,076
5	2014	\$315,769	\$0	\$315,769	\$1,578,845
6	2015	\$315,769	\$0	\$315,769	\$1,894,614
7	2016	\$315,769	\$0	\$315,769	\$2,210,383
8	2017	\$315,769	\$0	\$315,769	\$2,526,152
9	2018	\$315,769	\$0	\$315,769	\$2,841,921
10	2019	\$315,769	\$0	\$315,769	\$3,157,690
11	2020	\$315,769	\$0	\$315,769	\$3,473,459
12	2021	\$315,769	\$0	\$315,769	\$3,789,228
13	2022	\$315,769	\$0	\$315,769	\$4,104,997
14	2023	\$315,769	\$0	\$315,769	\$4,420,766
15	2024	\$315,769	\$0	\$315,769	\$4,736,535
Total	\$4,736,535	\$0	\$4,736,535		

Note: The Combined Heat and Power (CHP) project (contract executed 9/30/2013) guaranteed \$537,112 to cover the cost of the project (adjusted to \$419,467 since the project was not financed.) This guarantee amount is not included in the table above, since the CHP project was funded via excess savings from years 1 through 3 of the program. See Table 3a.

## **YEAR END SAVINGS and CHP REPORT**

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A second Energy Performance and Service Agreement dated 9/30/2013 provided for the installation of a Combined Heat and Power (“CHP”) Project that was estimated to generate \$62,833 in additional energy savings and increase operational costs by \$17,760 annually for a net savings of \$45,073. This second agreement guaranteed that Medina would recover the cost of the CHP project including construction and financing costs estimated at \$537,122. Since Medina was able to fund the project without financing, thereby eliminating interest costs, the guaranteed amount was adjusted to \$419,467, equivalent to the installed cost for the CHP system.

For auditing and verification purposes the parties agreed that the original Total Guaranteed Savings amount of \$4,736,535 for the original contract should not be increased to reflect the additional CHP project guarantees; instead the Cumulative Actual Savings achieved during Performance Years 1 through 3 was reduced by \$419,467 as shown in Table 3a.

**YEAR END SAVINGS and CHP REPORT**

**Section 3: Performance History**

At the end of Performance Year 9, Medina City Schools had accumulated more than \$4 million in savings since the beginning of the energy savings program, with more than \$1.5 million above the guaranteed savings.

**Table 3a:** Performance History for the Medina City Schools Energy Savings Program

Performance Year	Guaranteed Savings (\$)	Actual Savings (\$)	Cumulative Guaranteed Savings (\$)	Cumulative Actual Savings (\$)
--- Interim Period	-----	\$470,472	-----	\$470,472
1 10/09 - 9/10	\$315,769	\$438,675	\$315,769	\$909,147
2 10/10 - 9/11	\$315,769	\$478,648	\$631,538	\$1,387,795
3 10/11 - 9/12	<del>\$315,769</del>	<del>\$444,287</del>	<del>\$947,307</del>	<del>\$1,832,082</del>
Note: CHP Project contract was signed 9/30/2013 and guaranteed total savings of \$419,467; this Project was funded via the excess savings from years 1 through 3 of the guarantee. The annual Guaranteed Savings amount has not been increased to reflect the additional CHP Project guarantee; instead the Cumulative Actual Savings for Performance Year 3 has been reduced by \$419,467.				
<b>3 rev</b>	<b>10/11 - 9/12</b>	<b>\$315,769</b>	<b>\$444,287</b>	<b>\$947,307</b>
4	10/12 - 9/13	\$315,769	\$501,965	\$1,263,076
5	10/13 - 9/14	\$315,769	\$566,866	\$1,578,845
6	10/14 - 9/15	\$315,769	\$501,972	\$1,894,614
7	10/15 - 9/16	\$315,769	\$440,660	\$2,210,383
8	10/16 - 9/17	\$315,769	\$460,049	\$2,526,152
9	10/17 - 9/18	\$315,769	\$583,582	\$2,841,921
10	10/18 - 9/19	\$315,769		
11	10/19 - 9/20	\$315,769		
12	10/20 - 9/21	\$315,769		
13	10/21 - 9/22	\$315,769		
14	10/22 - 9/23	\$315,769		
15	10/23 - 9/24	\$315,769		
Total		\$4,736,535		

**Energy Audit for Medina City Schools, Year 9**

The undersigned agrees that The Brewer-Garrett Company delivered this audit report to Medina City Schools. If no written reply is made to The Brewer-Garrett Company concerning the validity of this audit in 30 days, it will be considered received by Medina City Schools.

Received by:

Date:

Medina City Schools

Delivered by:

Date:

The Brewer-Garrett Company

**YEAR END SAVINGS and CHP REPORT**

**Section 4: Summary of Savings**

**Table 4a**

<b>Medina City Schools ~ Performance Year 9</b>
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**Summary of Savings**

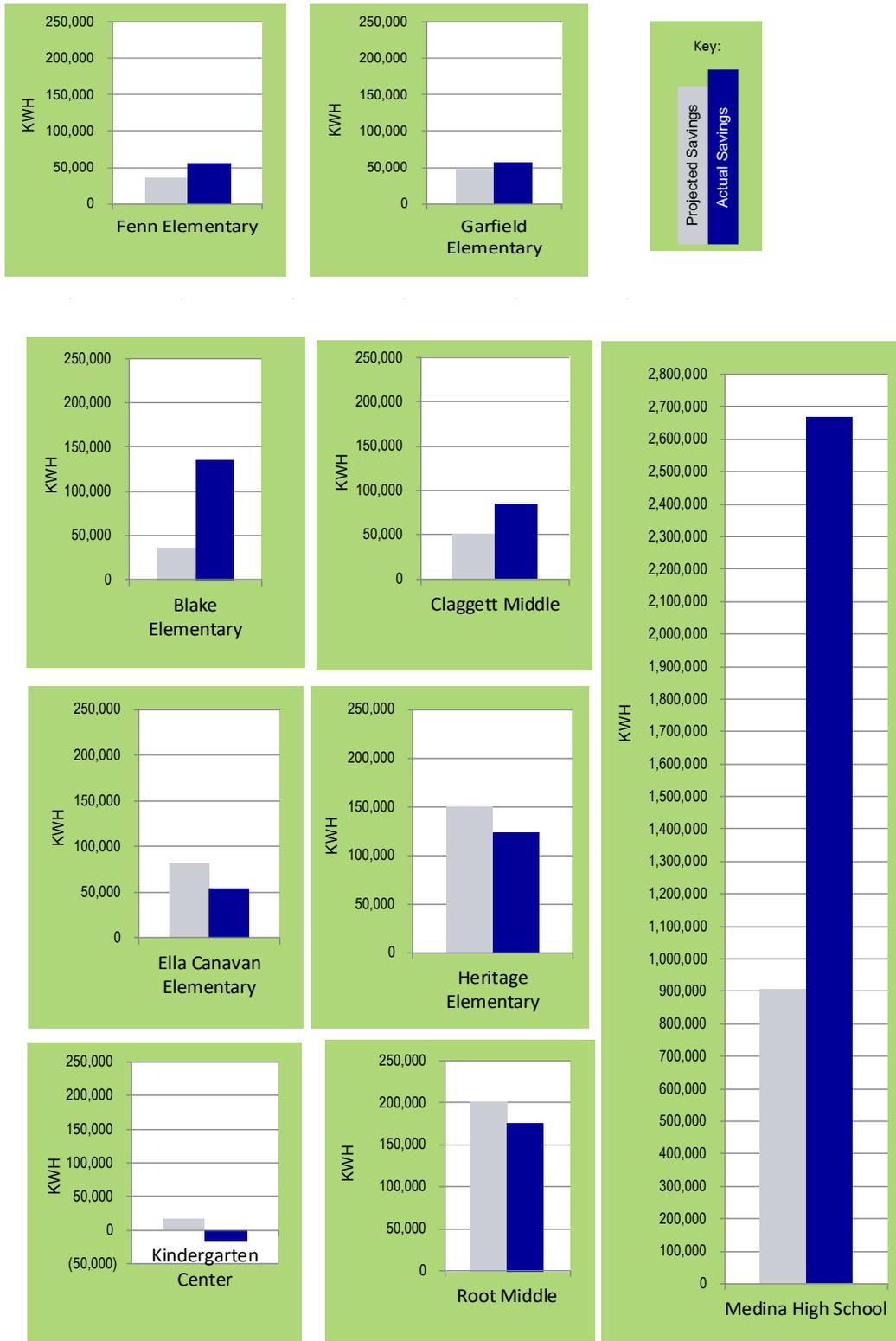
<b>Electric</b>			
KWH Used In Base Year		11,180,440	KWH
Baseline for	Performance Year 9	11,792,361	KWH
Actual Usage for	Performance Year 9	8,457,045	KWH
<b>Total KWH Saved</b>		<b>3,335,316</b>	<b>KWH</b>
<b>Total Dollars Saved</b>		<b>\$434,243</b>	
<b>Natural Gas</b>			
MCF Used In Base Year		42,373	MCF
Baseline for	Performance Year 9	45,212	MCF
Actual Usage for	Performance Year 9	33,549	MCF
<b>Total MCF Saved</b>		<b>11,663</b>	<b>MCF</b>
<b>Total Dollars Saved</b>		<b>\$141,565</b>	
<b>Water and Sewer</b>			
Water Used In Base Year		3,676	CCF
Water Baseline for	Performance Year 9	3,676	CCF
Water Actual Usage for	Performance Year 9	2,093	CCF
<b>Total Water CCF Saved</b>		<b>1,583</b>	<b>CCF</b>
<b>Total Water Dollars Saved</b>		<b>\$6,073</b>	
<b>Total Sewer Dollars Saved</b>		<b>\$18,093</b>	
<b>Lighting M&amp;V Savings at Bus Garage</b>	Performance Year 9	<b>\$1,370</b>	
<b>Stipulated Operational Savings (Costs)</b>			
<b>CHP Maintenance Costs</b>	Performance Year 9	<b>(\$17,761)</b>	
<b>Total Actual Savings</b>	Performance Year 9	<b>\$583,582</b>	
<b>Total Guaranteed Savings</b>	Performance Year 9	<b>\$315,789</b>	

**Section 5: Electric Savings**

Several projects implemented as part of the Medina City Schools Energy Savings Program were projected to achieve electric savings. These projects include a) district wide lighting retrofits and occupancy sensor installations, b) lighting controls at the High School, c) district wide vending machine control, d) variable frequency drives at Ella Canavan, Root and the High School, e) demand ventilation at Blake, Heritage, High School and Root, f) building automation system upgrades at the High School, and g) electric fan coil unit replacement with a natural gas unit at Heritage. The savings at Blake, as a result of our rate investigation with First Energy/Ohio Edison have continued.

The annual projected and actual electric savings for each school are charted side by side on the next page in Figure 5a. We are very pleased to report that the actual electric savings have exceeded the projected savings. In order to provide some perspective on the contribution of each school to savings, the graphs have been scaled similarly. It is clear that the High School provides the largest contribution to electrical savings.

**YEAR END SAVINGS and CHP REPORT**



**Figure 5a**

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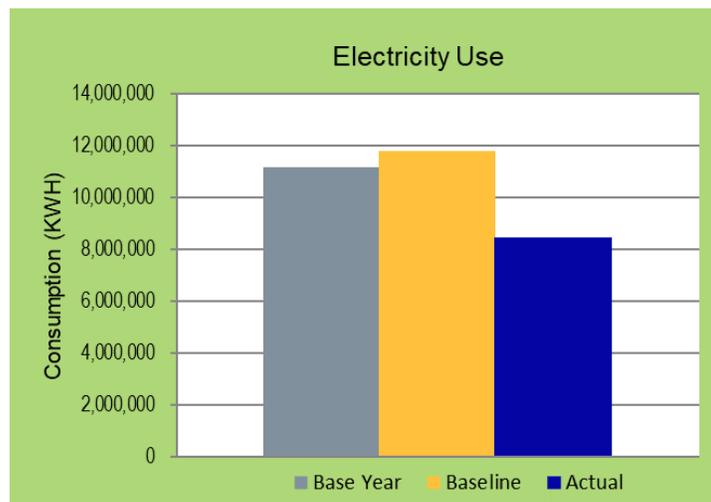
## YEAR END SAVINGS and CHP REPORT

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Electric savings are determined by multiplying the energy and demand saving units by the applicable utility rate to convert units saved to dollars saved. Units of electricity saved are equal to the Baseline kWh minus Actual kWh, where the Baseline is the Base Year adjusted for time, weather and events. The electric savings are calculated monthly and then summed to yield an annual amount. The applicable utility rate is based on the larger of the electric rate paid during the Performance Year or the Base Year as specified in Section 8.1 of the Contract.

The electricity savings at the Bus Garage as a result of the lighting retrofit are calculated based on the Measurement and Verification (M&V) methodology explained in Schedule F of the Contract. This methodology is used because the lighting retrofit is the only Energy Conservation Measure implemented at the Bus Garage; therefore, electric savings due to lighting can be isolated. An analysis of the utility bill is unnecessary. Voltage and amperage readings were taken in several locations throughout the Bus Garage and the other Medina schools, before and after the lighting retrofits took place. The before and after readings were taken with the same meters, in the same locations, and were used to calculate an average of watts of energy used by each lamp technology. The average readings for both the before and after measurements were inserted into a standard lighting spreadsheet to generate units saved. These units saved were multiplied by the utility rate to convert units saved to dollars saved. The electric savings at the Bus Garage resulting from the lighting retrofit are \$1,370 for each year including this Performance Year.

Electric use in all of the Medina City Schools that were affected by Brewer-Garrett is summarized in Figure 5c. During Performance Year 9, the annual electric usage in the schools affected by the Energy Savings Program decreased by over 3 million kWh (28%) from the Baseline. This is a savings of \$434,243 to Medina, and a reduction of 2,482 metric tons of CO<sub>2</sub> emissions.



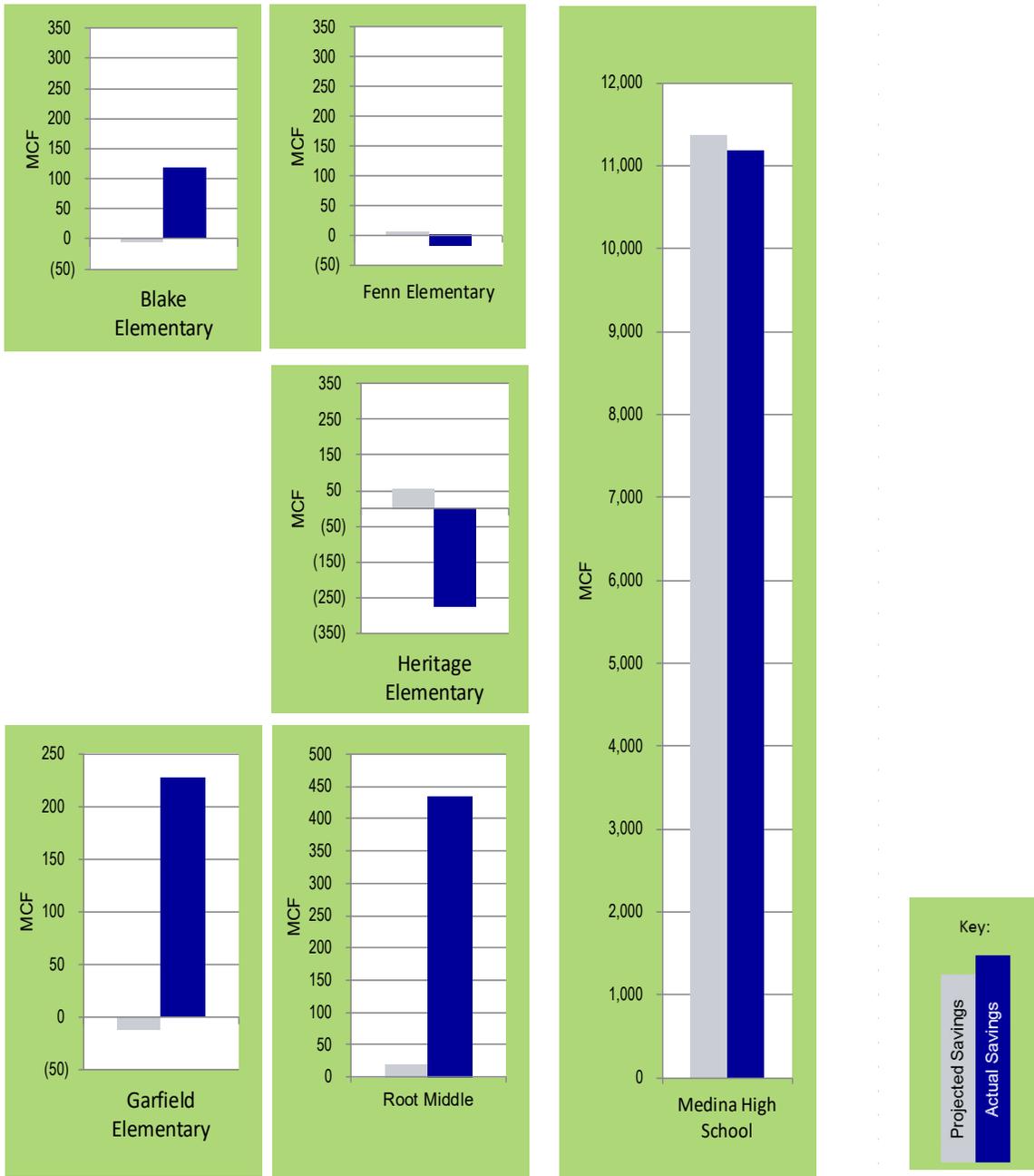
**Figure 5c**

**Section 6: Natural Gas Savings**

Several projects implemented as part of the Medina City Schools Energy Savings Program were projected to result in natural gas savings. These projects include a) demand ventilation at Blake, Heritage, High School and Root, b) building automation system upgrades at the High School, c) heat recovery and pool system modifications at the High School, and d) replacement of heating/ventilating units at Fenn and Garfield. The replacement of an electric fan coil unit with a gas-fired unit at Heritage was expected to save electricity but use more natural gas.

The annual projected and actual natural gas savings for each school are charted side by side on the next page in Figure 6a. As expected, natural gas use at Heritage increased due to the installation of the gas-fired heating unit.

In order to provide some perspective on the contribution of each school to the total savings, the graphs have been scaled similarly.



**Figure 6a**

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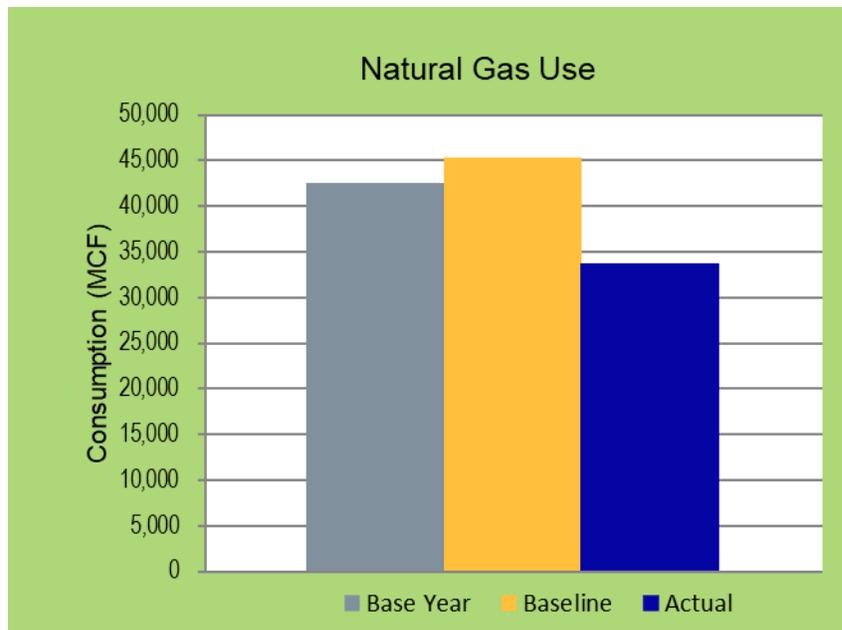
## YEAR END SAVINGS and CHP REPORT

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Natural gas dollar savings are calculated each month by multiplying the monthly natural gas rate in \$/MCF by the units of natural gas saved. The monthly natural gas rate in \$/MCF is calculated based on Total Natural Gas \$ / Total Natural Gas MCF and is calculated separately for each building. The units of natural gas saved are equal to the Baseline MCF minus Actual MCF, where Baseline is the Base Year adjusted for time, weather and events. The natural gas savings are calculated each month, and then summed to yield an annual savings.

The energy savings are calculated based on the larger of the natural gas rate paid during the Performance Year or the Base Year as specified in Section 8.1 of the Contract.

Natural gas use in all the Medina City Schools that were affected by Brewer-Garrett is summarized in Figure 6b. During Performance Year 9, the natural gas usage in the schools affected by the Energy Savings Program has been reduced by 11,663 MCF, or 26% from the Baseline. This is a savings of over \$141,540 to Medina, and a reduction of 641 metric tons of CO<sub>2</sub> emissions.



**Figure 6b**

**Section 7: Water and Sewer Savings**

Water conservation projects were implemented at Claggett and Garfield as part of the Medina City Schools Energy Savings Program and included the replacement of water cooled condensers with air cooled units, and the automation of flush systems for urinals in the boys' bathrooms. In addition, Brewer-Garrett was instrumental in effecting a sewer rate change for Claggett. As a result, water and sewer savings were expected at both Claggett and Garfield.

Sewer savings were expected at the High School, where a sub-meter was installed for the cooling tower. This sub-meter enables the measurement of water evaporation to the atmosphere during the cooling process.

During a review of sewer billing data, it was determined that the Medina County Sanitary Engineering Department has reduced the quantity of sewer UNITS that each school is billed, no doubt in response to a reduction in water use. An analysis was performed to validate the sewer billing practices; this summary is shown in Table 7a. It appears that the High School is under-billed while Claggett and Garfield are over-billed. This data is provided to Medina for informational purposes; we have not approached the Medina County Sanitary Engineering Department.

<b>Sewer UNITS Billing Analysis</b>		Claggett	Garfield	High School
Annual Actual Water Use	CCF	990	1,103	12,465
Annual Actual Water Use	Gallons	740,520	825,044	9,323,820
Annual Actual UNITS Used	UNITS	106	118	1,332
Annual UNITS Billed	UNITS	180	224	1,187
Monthly Actual UNITS Used	UNITS	8.8	9.8	111.0
Monthly UNITS Billed	UNITS	14.99	18.64	98.94
Overbilled or (Underbilled)	UNITS	74	106	(145)
Overbilled or (Underbilled)	\$	\$2,168	\$3,096	(\$4,232)
Total Overbilled (Underbilled)	UNITS		35	
Total Overbilled (Underbilled)	\$		\$1,032	

Note:

1 "Unit" = 230 gallons/day

1 "Unit" = 7,000 gallons/month

**Table 7a**

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## YEAR END SAVINGS and CHP REPORT

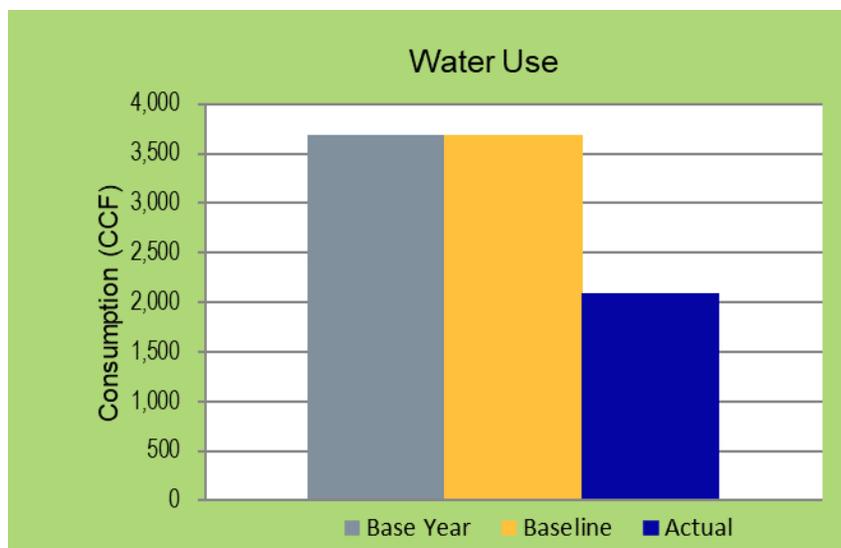
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Water dollar savings are calculated each month by multiplying the monthly water rate in \$/CCF by the units of water saved. The monthly water rate in \$/CCF is calculated based on: Total Water \$ / Total Water CCF, and is calculated separately for each building. The units of water saved are equal to the Baseline CCF minus Actual CCF, where Baseline is the Base Year use with no adjustments. The water savings are calculated each month, and then summed to yield an annual savings.

Sewer dollar savings are calculated bi-monthly, to correspond with actual sewer bills. Sewer savings in this performance report are from: a) Claggett, as the result of the reduction in sewer “units” that Brewer-Garrett was instrumental in securing, and b) Garfield, as the result of the reduction in water use, and the corresponding reduction in sewer “units” that the Medina County Sanitary Engineering Department implemented. No sewer savings for the High School were included in this report. The sewer savings in terms of “units” are multiplied by the sewer rate in \$/unit” on a bi-monthly basis, and then summed to yield an annual savings.

The water and sewer savings are calculated based on the larger of the water and sewer rates paid during the Performance Year or the Base Year as specified in Section 8.1 of the Contract.

The combined water use for Claggett and Garfield is summarized in Figure 7b. The Base Year, Baseline and Actual total usage during Performance Year 9 are shown side-by-side for comparison. The overall water usage in these schools has been reduced by approximately 43% from the Baseline; this is a savings to Medina of over \$24,166 in water and sewer charges.



**Figure 7b**

**Section 8: Operational Savings**

No operational savings were claimed on this project.

**Section 9: Adjustments**

Adjustments are incorporated in the baseline projection for energy use to include changes in the number of days in a billing period as well as weather fluctuations.

The heating/ventilating units at Fenn and Garfield were replaced and air conditioning was added as part of the Energy Savings Program. The energy use associated with the air conditioning equipment is an adjustment to the baseline as addressed in Schedule F of the Contract: Savings Calculation Formulae: Methodology to Adjust Baseline.

The additional demand and energy use for these units is calculated based on the information in Table 9a and is included in the Electric Baseline.

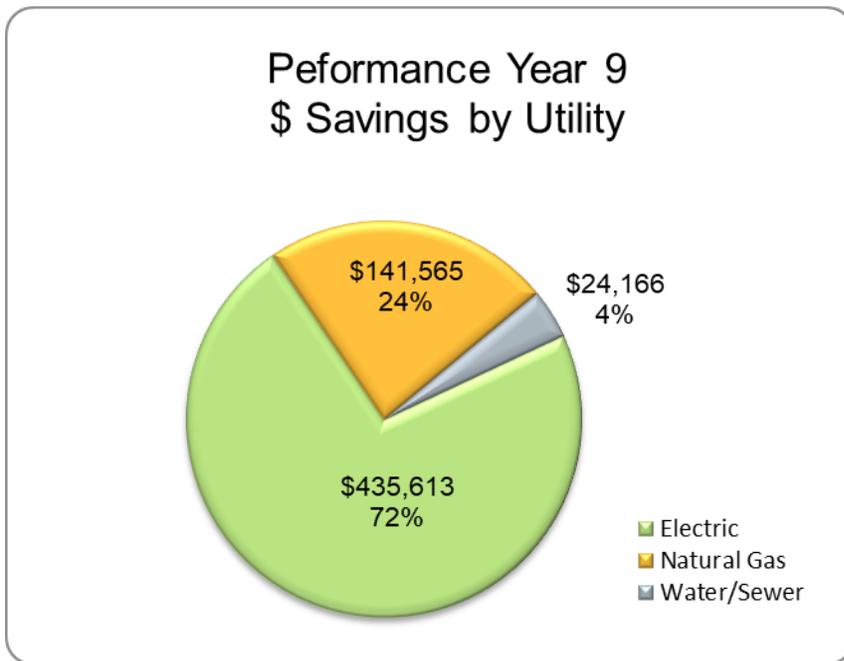
<b>School Name</b>	<b>Quantity</b>	<b>Unit Description</b>
Fenn Elementary	1	Library/Computer Lab Unit 10 ton, EER=11, 2300 hrs
	1	Gym Unit 10 ton, EER=11, 2700 hrs
Garfield Elementary	1	Gym Unit 12 ton, EER=9.7, 2925 hrs

**Table 9a**

**Section 10: Energy Savings – Performance Year 9**

For Performance Year 9 (October 2017 through September 2018), Brewer-Garrett guarantees \$315,769 in annual savings as shown in Table 2a.

Based on utility bills for electric, natural gas, water and sewer, Medina saved \$601,343. However, Medina has incurred additional maintenance costs for oil changes and other CHP engine service items provided by W.W.Williams. These costs were included in the project’s savings projections as a stipulated annual amount of \$17,761. Including these costs reduces the net savings to \$583,582 in Performance Year 9.



**Figure 10a**

**Section 11: CHP Savings**

Brewer-Garrett wants to highlight the performance of the combined heat and power (CHP) unit installed at the High School. The unit feeds electricity and thermal energy to both the High School and adjoining recreation center. The CHP unit itself records electricity production and other important parameters, so Brewer-Garrett was able to assemble data, spanning the Performance Year.



**Figure 6a.** CHP Unit (front and back views with heat recovery piping)

In order to calculate net savings, Brewer-Garrett collects data directly from the CHP unit showing operating temperatures, output and performance. This information was compared to specifications to ensure that performance remained consistent.

Brewer-Garrett is committed to not only continue to enhance the value of the CHP asset for Medina but also to quickly address any issues.

**Section 12: Conclusion**

This report concludes that both the CHP unit and the larger Energy Savings Program at Medina City Schools have so far exceeded guarantee savings targets. The CHP unit has integrated seamlessly into the High School heating system and consistently delivers both electrical and thermal energy to the system.

Brewer-Garrett is pleased to be Medina's energy partner. We believe in bringing value to the partnership in areas outside of merely reporting energy savings.

Natural gas prices remain steady and have even declined over the period, while electricity continues to be more expensive. Therefore, Brewer-Garrett expects the CHP unit to deliver increasing value to Medina in the years to come.

## **Appendix A – Tables and Charts**

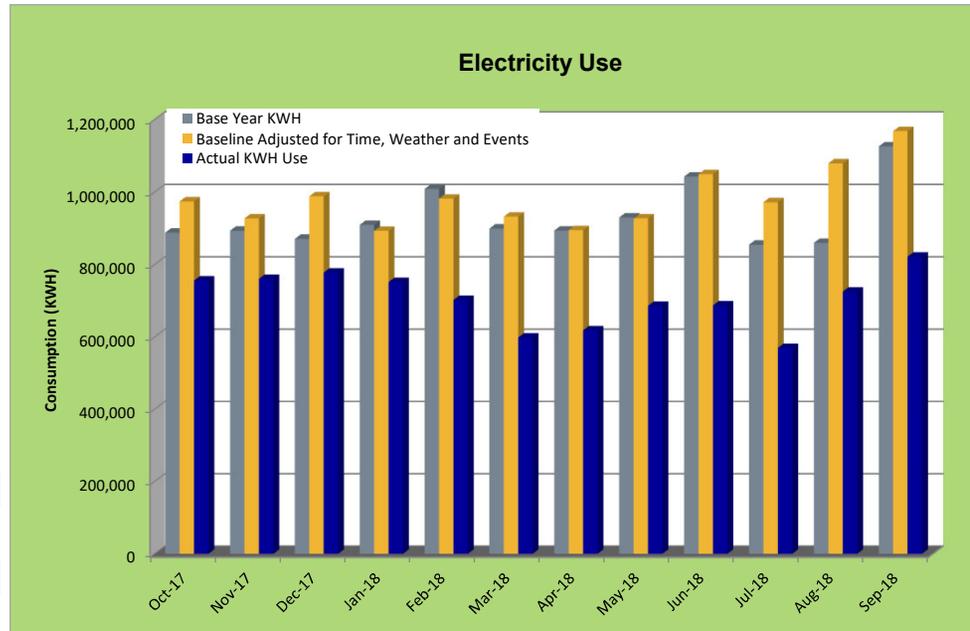
# Medina City Schools ~ Performance Year 9

## Electricity Summary

Electricity Used In Base Year	11,180,440	KWH
Adjustments for Time, Weather and Events	611,921	KWH
Baseline Usage	11,792,361	KWH
Actual Usage	8,457,045	KWH

<b>Total KWH Saved</b>	<b>3,335,316</b>
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<b>Total Dollars Saved</b>	<b>\$434,243</b>
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## Medina City Schools ~ Performance Year 9

### Electricity Savings

#### Electricity Base Year Units KWH

KWH	October	November	December	January	February	March	April	May	June	July	August	September	Total
Blake Elementary	53,120	55,640	55,920	47,080	60,880	58,760	48,520	56,240	53,440	34,360	41,800	55,360	621,120
Claggett Middle	38,080	41,280	40,160	45,920	49,760	45,440	34,560	41,920	33,120	21,440	21,600	44,960	458,240
Ella Canavan Elementary	27,520	24,880	24,720	23,360	25,760	25,760	24,080	29,840	29,360	18,240	14,800	26,800	295,120
Fenn Elementary	19,920	23,280	16,720	18,960	22,800	21,600	18,720	20,560	16,560	12,480	14,880	22,160	228,640
Garfield Elementary	27,360	24,960	26,040	20,160	27,840	26,400	24,120	26,520	29,160	15,000	24,480	30,720	302,760
Heritage Elementary	34,240	42,000	46,880	64,160	58,160	53,520	41,040	37,920	34,400	21,200	28,240	36,400	498,160
Medina High School	589,200	578,400	554,400	600,000	645,600	561,600	613,200	612,000	732,000	684,000	646,800	801,600	7,618,800
Kindergarten Center	8,160	9,240	8,880	8,880	11,040	8,160	9,800	8,520	7,280	6,240	6,080	9,400	101,680
Root Middle	90,640	93,920	97,520	81,280	107,200	98,560	80,080	96,640	107,680	42,000	61,440	98,960	1,055,920
<b>Total KWH</b>	<b>888,240</b>	<b>893,600</b>	<b>871,240</b>	<b>909,800</b>	<b>1,009,040</b>	<b>899,800</b>	<b>894,120</b>	<b>930,160</b>	<b>1,043,000</b>	<b>854,960</b>	<b>860,120</b>	<b>1,126,360</b>	<b>11,180,440</b>

#### Electricity Base Year Cost \$

Cost \$	October	November	December	January	February	March	April	May	June	July	August	September	Total
Blake Elementary	\$9,600	\$9,704	\$9,715	\$9,285	\$9,841	\$9,753	\$9,332	\$9,650	\$9,534	\$8,825	\$9,132	\$9,692	\$114,063
Claggett Middle	\$5,402	\$5,205	\$4,655	\$5,425	\$5,539	\$5,426	\$5,307	\$5,461	\$5,091	\$3,208	\$3,304	\$5,622	\$59,645
Ella Canavan Elementary	\$3,920	\$3,401	\$2,853	\$2,778	\$3,538	\$3,887	\$2,848	\$4,238	\$4,603	\$2,870	\$2,332	\$3,800	\$41,069
Fenn Elementary	\$2,254	\$2,380	\$1,896	\$2,246	\$2,345	\$2,313	\$1,403	\$2,267	\$2,235	\$1,256	\$1,593	\$2,459	\$24,647
Garfield Elementary	\$3,338	\$2,973	\$2,938	\$2,844	\$3,138	\$3,022	\$3,000	\$3,343	\$4,481	\$2,316	\$3,770	\$4,411	\$39,574
Heritage Elementary	\$4,169	\$4,947	\$5,756	\$6,266	\$6,093	\$6,324	\$5,201	\$4,286	\$5,078	\$3,021	\$4,223	\$4,411	\$59,776
Medina High School	\$58,128	\$57,109	\$54,509	\$39,837	\$46,096	\$52,823	\$56,607	\$56,576	\$63,172	\$61,799	\$60,844	\$63,586	\$671,086
Kindergarten Center	\$1,290	\$1,346	\$1,330	\$940	\$997	\$919	\$991	\$1,063	\$1,151	\$988	\$963	\$1,352	\$13,331
Root Middle	\$14,124	\$14,183	\$14,218	\$10,979	\$10,965	\$11,571	\$11,340	\$10,461	\$14,028	\$12,127	\$6,581	\$9,620	\$140,197
<b>Total Cost \$</b>	<b>\$102,225</b>	<b>\$101,247</b>	<b>\$97,872</b>	<b>\$80,600</b>	<b>\$88,552</b>	<b>\$96,037</b>	<b>\$96,028</b>	<b>\$97,345</b>	<b>\$109,374</b>	<b>\$96,412</b>	<b>\$92,742</b>	<b>\$104,952</b>	<b>\$1,163,388</b>

#### Electricity Base Year Unit Cost \$/KWH

Unit Cost \$/KWH	October	November	December	January	February	March	April	May	June	July	August	September	Average Base Year Demand & Energy Rate	
Blake Elementary	\$0.181	\$0.174	\$0.174	\$0.197	\$0.162	\$0.166	\$0.192	\$0.172	\$0.178	\$0.257	\$0.218	\$0.175	\$17.00/KW	\$0.0400/KWH
Claggett Middle	\$0.142	\$0.126	\$0.116	\$0.118	\$0.111	\$0.119	\$0.154	\$0.130	\$0.154	\$0.150	\$0.153	\$0.125	\$16.11/KW	\$0.0593/KWH
Ella Canavan Elementary	\$0.142	\$0.137	\$0.115	\$0.119	\$0.137	\$0.151	\$0.118	\$0.142	\$0.157	\$0.157	\$0.158	\$0.142	\$14.68/KW	\$0.0686/KWH
Fenn Elementary	\$0.113	\$0.102	\$0.113	\$0.118	\$0.103	\$0.107	\$0.075	\$0.110	\$0.135	\$0.101	\$0.107	\$0.111	\$21.98/KW	\$0.0298/KWH
Garfield Elementary	\$0.122	\$0.119	\$0.113	\$0.141	\$0.113	\$0.114	\$0.124	\$0.126	\$0.154	\$0.154	\$0.154	\$0.144	\$15.08/KW	\$0.0662/KWH
Heritage Elementary	\$0.122	\$0.118	\$0.123	\$0.098	\$0.105	\$0.118	\$0.127	\$0.113	\$0.148	\$0.142	\$0.150	\$0.121	\$19.87/KW	\$0.0397/KWH
Medina High School	\$0.099	\$0.099	\$0.098	\$0.066	\$0.071	\$0.094	\$0.092	\$0.092	\$0.086	\$0.090	\$0.094	\$0.079	\$20.65/KW	\$0.0257/KWH
Kindergarten Center	\$0.158	\$0.146	\$0.150	\$0.106	\$0.090	\$0.113	\$0.101	\$0.125	\$0.158	\$0.158	\$0.158	\$0.144	\$14.28/KW	\$0.0724/KWH
Root Middle	\$0.156	\$0.151	\$0.146	\$0.135	\$0.102	\$0.117	\$0.142	\$0.108	\$0.130	\$0.289	\$0.107	\$0.097	\$15.43/KW	\$0.0652/KWH

## Medina City Schools ~ Performance Year 9

### Electricity Savings

#### Electricity Actual Performance Year Units KWH

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>KWH</b>													
Blake Elementary	40,514	44,146	42,024	39,862	41,534	33,334	43,044	38,882	30,151	34,680	48,878	46,796	483,845
Claggett Middle	36,480	35,040	40,480	39,680	25,280	35,200	27,680	36,320	21,600	13,440	26,560	52,000	389,760
Ella Canavan Elementary	19,920	19,600	16,960	17,440	18,160	15,440	20,240	18,800	12,240	10,080	24,640	23,440	216,960
Fenn Elementary	18,080	19,600	20,880	19,600	17,040	20,320	13,280	19,040	16,000	12,560	27,440	20,400	224,240
Garfield Elementary	23,400	27,720	19,440	25,560	24,720	20,400	23,280	24,960	15,360	13,320	34,680	24,360	277,200
Heritage Elementary	32,240	39,040	44,080	40,720	37,760	33,840	33,600	27,920	23,760	18,960	30,080	28,400	390,400
Medina High School	507,600	493,200	524,400	483,600	452,400	385,200	374,400	434,400	512,400	420,000	428,400	534,000	5,550,000
Kindergarten Center	9,360	8,920	10,640	10,640	10,520	9,040	8,360	7,920	11,160	11,000	10,480	10,920	118,960
Root Middle	68,320	73,360	59,280	74,720	74,880	45,920	74,560	78,080	44,560	35,760	94,400	81,840	805,680
<b>Total KWH</b>	<b>755,914</b>	<b>760,626</b>	<b>778,184</b>	<b>751,822</b>	<b>702,294</b>	<b>598,694</b>	<b>618,444</b>	<b>686,322</b>	<b>687,231</b>	<b>569,800</b>	<b>725,558</b>	<b>822,156</b>	<b>8,457,045</b>

#### Electricity Actual Performance Year Cost \$

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>Cost \$</b>													
Blake Elementary	\$5,470	\$5,709	\$4,381	\$4,333	\$4,582	\$4,075	\$5,152	\$5,380	\$4,259	\$4,539	\$6,362	\$6,250	\$60,492
Claggett Middle	\$4,003	\$3,655	\$4,127	\$4,243	\$3,160	\$3,979	\$3,603	\$4,476	\$2,397	\$2,045	\$3,877	\$5,274	\$44,838
Ella Canavan Elementary	\$2,717	\$2,084	\$1,889	\$1,951	\$2,550	\$1,890	\$2,921	\$3,221	\$2,766	\$2,528	\$3,571	\$3,557	\$31,644
Fenn Elementary	\$2,205	\$2,093	\$2,122	\$2,039	\$1,931	\$2,132	\$1,693	\$2,132	\$2,063	\$1,457	\$3,250	\$2,465	\$25,582
Garfield Elementary	\$2,425	\$2,946	\$2,207	\$2,632	\$2,591	\$2,290	\$2,830	\$3,497	\$1,752	\$1,826	\$4,052	\$2,757	\$31,805
Heritage Elementary	\$3,582	\$4,157	\$4,496	\$4,374	\$4,217	\$4,017	\$3,814	\$3,975	\$3,213	\$2,623	\$3,803	\$3,557	\$45,827
Medina High School	\$46,279	\$44,972	\$44,365	\$42,514	\$40,701	\$36,566	\$37,529	\$45,042	\$51,235	\$39,111	\$41,567	\$51,429	\$521,310
Kindergarten Center	\$1,101	\$909	\$1,030	\$1,041	\$1,071	\$953	\$928	\$930	\$1,340	\$1,327	\$1,266	\$1,304	\$13,201
Root Middle	\$9,437	\$7,951	\$7,096	\$8,143	\$9,664	\$6,438	\$10,046	\$11,528	\$6,854	\$5,593	\$12,690	\$11,402	\$106,842
<b>Total Cost \$</b>	<b>\$77,219</b>	<b>\$74,476</b>	<b>\$71,713</b>	<b>\$71,270</b>	<b>\$70,469</b>	<b>\$62,340</b>	<b>\$68,517</b>	<b>\$80,181</b>	<b>\$75,877</b>	<b>\$61,050</b>	<b>\$80,436</b>	<b>\$87,994</b>	<b>\$881,542</b>

#### Electricity Actual Performance Year Unit Cost \$/KWH

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	
<b>Unit Cost \$/KWH</b>													
Blake Elementary	\$0.135	\$0.129	\$0.104	\$0.109	\$0.110	\$0.122	\$0.120	\$0.138	\$0.141	\$0.131	\$0.130	\$0.134	
Claggett Middle	\$0.110	\$0.104	\$0.102	\$0.107	\$0.125	\$0.113	\$0.130	\$0.123	\$0.111	\$0.152	\$0.146	\$0.101	
Ella Canavan Elementary	\$0.136	\$0.106	\$0.111	\$0.112	\$0.140	\$0.122	\$0.144	\$0.171	\$0.226	\$0.251	\$0.145	\$0.152	
Fenn Elementary	\$0.122	\$0.107	\$0.102	\$0.104	\$0.113	\$0.105	\$0.127	\$0.112	\$0.129	\$0.116	\$0.118	\$0.121	
Garfield Elementary	\$0.104	\$0.106	\$0.114	\$0.103	\$0.105	\$0.112	\$0.122	\$0.140	\$0.114	\$0.137	\$0.117	\$0.113	
Heritage Elementary	\$0.106	\$0.102	\$0.107	\$0.112	\$0.119	\$0.114	\$0.142	\$0.135	\$0.138	\$0.126	\$0.125	\$0.117	
Medina High School	\$0.091	\$0.091	\$0.085	\$0.088	\$0.090	\$0.095	\$0.100	\$0.104	\$0.100	\$0.093	\$0.097	\$0.096	
Kindergarten Center	\$0.118	\$0.102	\$0.097	\$0.098	\$0.102	\$0.105	\$0.111	\$0.117	\$0.120	\$0.121	\$0.121	\$0.119	
Root Middle	\$0.138	\$0.108	\$0.120	\$0.109	\$0.129	\$0.140	\$0.135	\$0.148	\$0.154	\$0.156	\$0.134	\$0.139	

## Medina City Schools ~ Performance Year 9

### Electricity Savings

#### Electricity Baseline Units KWH

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>KWH</b>													
Blake Elementary	52,287	59,416	63,994	54,441	59,963	56,482	54,557	48,797	37,464	35,546	43,443	52,044	618,434
Claggett Middle	38,294	43,828	51,481	43,613	46,296	46,111	39,812	38,933	28,321	26,692	32,683	38,796	474,860
Ella Canavan Elementary	21,864	28,165	33,606	26,101	25,262	24,596	22,522	17,491	18,572	17,387	17,650	17,631	270,848
Fenn Elementary	16,389	21,224	29,011	22,322	20,407	21,416	17,675	21,381	28,637	25,459	35,014	21,640	280,575
Garfield Elementary	26,515	26,629	27,807	28,284	27,370	27,663	25,838	28,950	29,237	25,762	34,598	26,341	334,993
Heritage Elementary	39,602	52,788	71,421	54,421	48,923	51,355	37,665	30,672	33,252	29,221	30,385	33,843	513,547
Medina High School	686,280	585,708	592,463	547,567	649,027	591,893	602,093	663,618	822,392	762,038	812,356	899,998	8,215,432
Kindergarten Center	7,098	9,432	11,660	11,408	10,746	10,058	9,480	6,775	7,029	6,244	6,056	6,858	102,844
Root Middle	86,199	100,268	107,349	105,232	94,276	103,040	85,634	71,108	44,885	43,988	67,345	71,504	980,828
<b>Total KWH</b>	<b>974,528</b>	<b>927,458</b>	<b>988,792</b>	<b>893,391</b>	<b>982,270</b>	<b>932,613</b>	<b>895,274</b>	<b>927,725</b>	<b>1,049,790</b>	<b>972,338</b>	<b>1,079,529</b>	<b>1,168,655</b>	<b>11,792,361</b>

#### Electricity Savings or (Shortfall) KWH

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>KWH</b>													
Blake Elementary	11,773	15,270	21,970	14,694	21,603	23,148	11,513	9,915	7,313	4,332	(1,401)	5,248	145,379
Claggett Middle	1,814	8,788	11,001	3,933	21,016	10,911	12,132	2,613	6,721	13,252	6,123	(13,204)	85,100
Ella Canavan Elementary	1,944	8,565	16,646	10,860	10,646	9,156	2,282	(1,309)	6,332	12,541	(9,020)	(5,809)	62,834
Fenn Elementary	(1,691)	1,624	8,131	2,722	3,367	1,096	4,395	2,341	12,637	12,899	7,574	1,240	56,335
Garfield Elementary	3,115	(1,091)	8,367	5,399	(208)	7,263	2,558	3,990	13,877	6,366	1,789	1,981	53,405
Heritage Elementary	7,362	13,748	27,341	28,476	9,732	17,515	4,065	2,752	9,492	14,593	(1,425)	5,443	139,092
Medina High School	178,680	92,508	68,063	63,967	196,627	206,693	227,693	229,218	309,992	342,038	383,956	365,998	2,665,432
Kindergarten Center	(2,262)	512	1,020	768	226	1,018	1,120	(1,145)	(4,131)	(4,756)	(4,424)	(4,063)	(16,116)
Root Middle	17,879	26,908	48,069	30,512	19,396	57,120	11,074	(6,972)	325	(10,244)	(37,082)	(10,336)	146,650
<b>Savings KWH</b>	<b>218,614</b>	<b>166,832</b>	<b>210,608</b>	<b>161,333</b>	<b>282,405</b>	<b>333,919</b>	<b>276,830</b>	<b>241,403</b>	<b>362,559</b>	<b>391,021</b>	<b>346,090</b>	<b>346,499</b>	<b>3,338,112</b>

#### Electricity Savings or (Shortfall) \$

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>\$</b>													
Blake Elementary	\$2,781	\$2,925	\$5,491	\$5,105	\$5,040	\$5,227	\$4,000	\$3,057	\$3,801	\$3,436	\$1,462	\$1,903	\$44,229
Claggett Middle	\$679	\$1,273	\$1,275	\$728	\$2,627	\$1,303	\$1,863	\$340	\$2,852	\$2,017	\$937	(\$831)	\$15,063
Ella Canavan Elementary	\$622	\$1,418	\$2,060	\$1,360	\$1,167	\$1,663	\$856	\$485	\$1,431	\$1,833	\$195	(\$53)	\$13,036
Fenn Elementary	\$67	\$173	\$922	\$458	\$840	\$290	\$820	\$374	\$1,706	\$1,497	\$897	\$150	\$8,194
Garfield Elementary	\$743	(\$130)	\$950	\$488	\$818	\$831	\$519	\$559	\$2,489	\$1,921	(\$13)	\$284	\$9,461
Heritage Elementary	\$1,222	\$1,649	\$3,357	\$1,661	\$1,247	\$2,079	\$862	\$392	\$1,401	\$1,462	\$46	\$682	\$16,058
Medina High School	\$18,050	\$12,442	\$17,785	\$19,365	\$22,777	\$23,036	\$22,824	\$23,767	\$30,996	\$31,851	\$37,255	\$35,249	\$295,397
Kindergarten Center	(\$82)	\$321	\$351	\$81	\$23	\$115	\$124	(\$53)	(\$653)	(\$481)	(\$332)	(\$316)	(\$902)
Root Middle	\$3,360	\$5,731	\$7,008	\$4,122	\$2,503	\$8,009	\$1,568	(\$643)	\$1,161	\$5,101	(\$3,637)	(\$577)	\$33,706
<b>Savings \$</b>	<b>\$27,442</b>	<b>\$25,802</b>	<b>\$39,199</b>	<b>\$33,368</b>	<b>\$37,042</b>	<b>\$42,552</b>	<b>\$33,436</b>	<b>\$28,279</b>	<b>\$45,185</b>	<b>\$48,637</b>	<b>\$36,809</b>	<b>\$36,491</b>	<b>\$434,243</b>

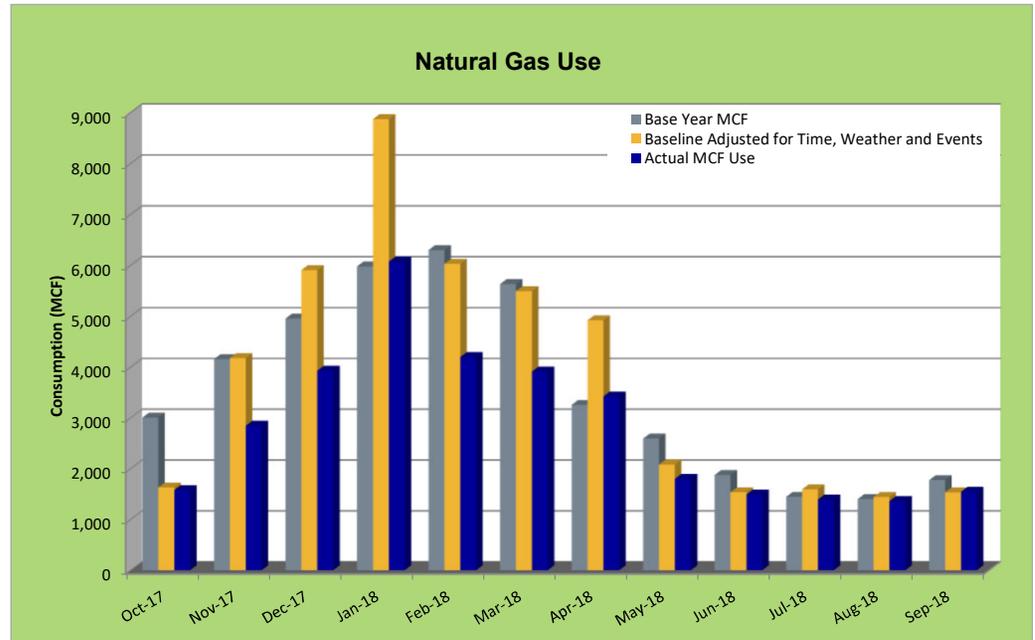
# Medina City Schools ~ Performance Year 9

## Natural Gas Summary

Natural Gas Used In Base Year	42,373	MCF
Adjustments for Time, Weather and Events	2,839	MCF
Baseline Usage	45,212	MCF
Actual Usage	33,549	MCF

<b>Total MCF Saved</b>	<b>11,663</b>
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<b>Total Dollars Saved</b>	<b>\$141,565</b>
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## Medina City Schools ~ Performance Year 9

### Natural Gas Savings

#### Natural Gas Base Year Units MCF

	October	November	December	January	February	March	April	May	June	July	August	September	Total
<b>MCF</b>													
Blake Elementary	3	52	134	258	184	267	179	51	44	11	3	25	1,211
Fenn Elementary	88	250	238	372	407	333	148	101	15	4	14	4	1,974
Garfield Elementary	118	248	300	402	476	376	124	111	3	3	2	3	2,166
Heritage Elementary	12	17	36	64	46	54	27	1	5	0	2	2	266
Medina High School	2,742	3,356	3,932	4,508	4,725	4,275	2,550	2,233	1,765	1,424	1,379	1,713	34,602
Root Middle	43	233	315	376	462	327	227	96	44	3	0	28	2,154
<b>Total MCF</b>	<b>3,006</b>	<b>4,156</b>	<b>4,955</b>	<b>5,980</b>	<b>6,300</b>	<b>5,632</b>	<b>3,255</b>	<b>2,593</b>	<b>1,876</b>	<b>1,445</b>	<b>1,400</b>	<b>1,775</b>	<b>42,373</b>

#### Natural Gas Base Year Cost \$

	October	November	December	January	February	March	April	May	June	July	August	September	Total
<b>Cost \$</b>													
Blake Elementary	\$48	\$571	\$1,567	\$3,714	\$2,265	\$3,679	\$1,947	\$582	\$445	\$125	\$54	\$302	\$15,300
Fenn Elementary	\$752	\$2,671	\$2,765	\$5,311	\$4,939	\$4,553	\$1,600	\$1,114	\$159	\$53	\$165	\$60	\$24,141
Garfield Elementary	\$954	\$2,551	\$3,085	\$5,703	\$5,580	\$4,986	\$1,295	\$1,177	\$21	\$42	\$36	\$48	\$25,479
Heritage Elementary	\$112	\$182	\$412	\$926	\$558	\$734	\$296	\$26	\$62	\$16	\$36	\$37	\$3,396
Medina High School	\$22,664	\$35,483	\$45,205	\$63,965	\$56,940	\$58,043	\$27,140	\$24,096	\$16,629	\$13,055	\$14,586	\$18,848	\$396,654
Root Middle	\$376	\$2,491	\$3,651	\$5,358	\$5,602	\$4,470	\$2,440	\$860	\$435	\$43	\$16	\$353	\$26,096
<b>Total Cost \$</b>	<b>\$24,906</b>	<b>\$43,948</b>	<b>\$56,685</b>	<b>\$84,978</b>	<b>\$75,885</b>	<b>\$76,464</b>	<b>\$34,718</b>	<b>\$27,855</b>	<b>\$17,751</b>	<b>\$13,334</b>	<b>\$14,893</b>	<b>\$19,648</b>	<b>\$491,066</b>

#### Natural Gas Base Year Unit Cost \$/MCF

	October	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	
<b>Unit Cost \$/MCF</b>													
Blake Elementary	\$15.95	\$10.99	\$11.70	\$14.40	\$12.31	\$13.78	\$10.88	\$11.40	\$10.11	\$11.40	\$18.13	\$12.09	
Fenn Elementary	\$8.54	\$10.68	\$11.62	\$14.28	\$12.13	\$13.67	\$10.81	\$11.03	\$10.61	\$13.16	\$11.80	\$15.06	
Garfield Elementary	\$8.08	\$10.28	\$10.28	\$14.19	\$11.72	\$13.26	\$10.44	\$10.61	\$6.95	\$14.07	\$18.03	\$16.04	
Heritage Elementary	\$9.35	\$10.68	\$11.44	\$14.47	\$12.14	\$13.58	\$10.97	\$26.43	\$12.30	\$0.00	\$18.03	\$18.39	
Medina High School	\$8.27	\$10.57	\$11.50	\$14.19	\$12.05	\$13.58	\$10.64	\$10.79	\$9.42	\$9.17	\$10.58	\$11.00	
Root Middle	\$8.75	\$10.69	\$11.59	\$14.25	\$12.13	\$13.67	\$10.75	\$8.96	\$9.89	\$14.47	\$0.00	\$12.62	

# Medina City Schools ~ Performance Year 9

## Natural Gas Savings

### Natural Gas Actual Performance Year Units MCF

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>MCF</b>													
Blake Elementary	19	104	199	379	227	223	158	41	12	9	10	16	1,397
Fenn Elementary	29	212	374	602	365	315	230	48	16	13	13	16	2,233
Garfield Elementary	11	239	355	625	369	324	260	62	7	7	6	10	2,275
Heritage Elementary	5	36	82	213	92	75	60	9	3	1	1	4	581
Medina High School	1,490	2,085	2,612	3,746	2,816	2,644	2,454	1,576	1,432	1,350	1,319	1,477	25,001
Root Middle	24	170	306	508	330	331	260	64	21	12	14	22	2,062
<b>Total MCF</b>	<b>1,578</b>	<b>2,846</b>	<b>3,928</b>	<b>6,073</b>	<b>4,199</b>	<b>3,912</b>	<b>3,422</b>	<b>1,800</b>	<b>1,491</b>	<b>1,392</b>	<b>1,363</b>	<b>1,545</b>	<b>33,549</b>

### Natural Gas Actual Performance Year Cost \$

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>Cost \$</b>													
Blake Elementary	\$213	\$641	\$1,161	\$1,922	\$1,439	\$1,174	\$882	\$335	\$183	\$168	\$172	\$205	\$8,496
Fenn Elementary	\$269	\$1,153	\$2,051	\$2,988	\$2,224	\$1,597	\$1,217	\$371	\$206	\$191	\$189	\$205	\$12,660
Garfield Elementary	\$167	\$1,284	\$1,958	\$3,104	\$2,251	\$1,642	\$1,359	\$443	\$155	\$155	\$149	\$171	\$12,838
Heritage Elementary	\$133	\$298	\$561	\$1,156	\$670	\$486	\$414	\$165	\$132	\$121	\$121	\$137	\$4,392
Medina High School	\$7,564	\$10,019	\$13,401	\$17,728	\$16,115	\$12,271	\$11,521	\$7,677	\$7,267	\$7,010	\$6,643	\$7,411	\$124,628
Root Middle	\$242	\$954	\$1,705	\$2,545	\$2,025	\$1,670	\$1,356	\$453	\$234	\$185	\$194	\$207	\$11,770
<b>Total Cost \$</b>	<b>\$8,588</b>	<b>\$14,348</b>	<b>\$20,836</b>	<b>\$29,442</b>	<b>\$24,723</b>	<b>\$18,840</b>	<b>\$16,750</b>	<b>\$9,444</b>	<b>\$8,177</b>	<b>\$7,829</b>	<b>\$7,467</b>	<b>\$8,336</b>	<b>\$174,782</b>

### Natural Gas Actual Performance Year Unit Cost \$/MCF

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	
<b>Unit Cost \$/MCF</b>													
Blake Elementary	\$11.23	\$6.17	\$5.83	\$5.07	\$6.34	\$5.26	\$5.58	\$8.18	\$15.28	\$18.61	\$17.18	\$12.84	
Fenn Elementary	\$9.28	\$5.44	\$5.48	\$4.96	\$6.09	\$5.07	\$5.29	\$7.73	\$12.88	\$14.68	\$14.51	\$12.84	
Garfield Elementary	\$15.22	\$5.37	\$5.52	\$4.97	\$6.10	\$5.07	\$5.23	\$7.15	\$22.09	\$22.16	\$24.76	\$17.07	
Heritage Elementary	\$26.54	\$8.27	\$6.84	\$5.43	\$7.28	\$6.48	\$6.91	\$18.33	\$43.88	\$120.74	\$120.55	\$34.28	
Medina High School	\$5.08	\$4.81	\$5.13	\$4.73	\$5.72	\$4.64	\$4.69	\$4.87	\$5.07	\$5.19	\$5.04	\$5.02	
Root Middle	\$10.08	\$5.61	\$5.57	\$5.01	\$6.14	\$5.05	\$5.22	\$7.08	\$11.16	\$15.42	\$13.88	\$9.40	

# Medina City Schools ~ Performance Year 9

## Natural Gas Savings

### Natural Gas Baseline Units MCF

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>MCF</b>													
Blake Elementary	1	156	229	355	237	215	191	57	20	18	17	19	1,514
Fenn Elementary	25	259	412	522	352	340	240	38	5	7	7	7	2,214
Garfield Elementary	12	224	396	702	435	372	301	48	3	4	3	3	2,503
Heritage Elementary	2	28	49	84	53	46	38	7	0	0	0	0	305
Medina High School	1,550	3,292	4,446	6,542	4,542	4,166	3,864	1,864	1,471	1,561	1,415	1,467	36,179
Root Middle	39	217	376	667	413	353	288	67	36	3	0	36	2,496
<b>Total MCF</b>	<b>1,629</b>	<b>4,177</b>	<b>5,908</b>	<b>8,872</b>	<b>6,031</b>	<b>5,492</b>	<b>4,920</b>	<b>2,081</b>	<b>1,536</b>	<b>1,593</b>	<b>1,442</b>	<b>1,532</b>	<b>45,212</b>

### Natural Gas Savings or (Shortfall) MCF

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>MCF</b>													
Blake Elementary	(18)	52	30	(24)	10	(8)	33	16	8	9	7	3	117
Fenn Elementary	(4)	47	38	(80)	(13)	25	10	(10)	(11)	(6)	(6)	(9)	(19)
Garfield Elementary	1	(15)	41	77	66	48	41	(14)	(4)	(3)	(3)	(7)	228
Heritage Elementary	(3)	(8)	(33)	(129)	(39)	(29)	(22)	(2)	(3)	(1)	(1)	(4)	(276)
Medina High School	60	1,207	1,834	2,796	1,726	1,522	1,410	288	39	211	96	(10)	11,178
Root Middle	15	47	70	159	83	22	28	3	15	(9)	(14)	14	434
<b>Savings MCF</b>	<b>51</b>	<b>1,331</b>	<b>1,980</b>	<b>2,799</b>	<b>1,832</b>	<b>1,580</b>	<b>1,498</b>	<b>281</b>	<b>45</b>	<b>201</b>	<b>79</b>	<b>(13)</b>	<b>11,663</b>

### Natural Gas Savings or (Shortfall) \$

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
<b>\$</b>													
Blake Elementary	(\$287)	\$568	\$355	(\$347)	\$127	(\$110)	\$357	\$186	\$115	\$172	\$118	\$33	\$1,287
Fenn Elementary	(\$33)	\$503	\$436	(\$1,149)	(\$160)	\$343	\$106	(\$106)	(\$138)	(\$88)	(\$80)	(\$142)	(\$505)
Garfield Elementary	\$13	(\$159)	\$427	\$1,099	\$770	\$638	\$423	(\$150)	(\$82)	(\$77)	(\$70)	(\$114)	\$2,718
Heritage Elementary	(\$92)	(\$80)	(\$381)	(\$1,873)	(\$478)	(\$398)	(\$246)	(\$64)	(\$132)	(\$121)	(\$121)	(\$137)	(\$4,121)
Medina High School	\$497	\$12,766	\$21,081	\$39,680	\$20,795	\$20,667	\$15,003	\$3,103	\$369	\$1,934	\$1,011	(\$107)	\$136,797
Root Middle	\$153	\$507	\$813	\$2,267	\$1,003	\$302	\$298	\$26	\$171	(\$137)	(\$194)	\$180	\$5,390
<b>Savings \$</b>	<b>\$252</b>	<b>\$14,105</b>	<b>\$22,731</b>	<b>\$39,677</b>	<b>\$22,057</b>	<b>\$21,442</b>	<b>\$15,941</b>	<b>\$2,995</b>	<b>\$303</b>	<b>\$1,683</b>	<b>\$665</b>	<b>(\$287)</b>	<b>\$141,565</b>