

Utility Management Report Report for FY July 2013 – June 2014 December 9, 2014



	Fiscal Year 2009-2010	Fiscal Year 2010-2011	Fiscal Year 2011-2012	Fiscal Year 2012-2013	Fiscal Year 2013-2014 (Includes Myers)
Total Utility Cost \$6,957,534	\$6,616,897	\$6,993,558	7,114,894	\$6,806,387	\$7,422,598
Total Energy Mbtu 213,131	245,065	237,958	235,792	235,623	253,248
Total District SqFt 3,553,417	4,528,449	4,677,071	4,689,543	4,761,856	4,943,330
Total Cost/SqFt \$1.96	\$1 .46	\$1.50	\$1.52	\$1.43	\$1.50
Energy Use Index kBtu/SF 60.0	54.1	50.9	50.3	49.5	51.2

			% change	Cost Change	New Schools (Myers)
	July 2013- June 2014	July 2012- June 2013			
Electric	\$4,762,126	\$4,591,329	3.7%	\$170,797	\$108,319
Gas	\$622,194	\$408,440	52.3%	\$213,75 4	\$3,357
Domestic Water	\$647,064	\$620,636	4.3%	\$26,428	\$7,590
Irrigation	\$478,971	\$538,912	-11.1%	-\$59,941	\$63,555
Refuse	\$705,057	\$647,069	9.0%	\$57,988	\$24,365
TOTAL	\$7,215,412	\$6,806,386	6.0%	\$409,026	\$207,186

Effect of Rate Changes									
Category	Fiscal Year 2013-2014	FY 2013-2014 Cost Calculated with Current Unit Cost	FY 2013-2014 Cost Calculated on FY 2012-2013 Unit Cost	Cost Difference					
Electric (kWh)	50,113,253	\$4,870,445	\$4,650,756	\$219,689					
Gas (Therm)	822,656	\$625,551	\$502,839	\$122,712					
Dom Water (CCF)	66,959	\$654,654	\$657,581	-\$2,927					
Irrig Water (CCF)	121,174	\$542,526	\$452,610	\$89,916					
Total:		\$6,693,176	\$6,263,786	\$429,390					

Analysis by Utility Type

Electricity:

- Unit cost (rate) increased 4.8%
- Consumption <u>decreased</u> by 1.1%
- same number of cooling degree days
- Net increase in dollars of \$170,797

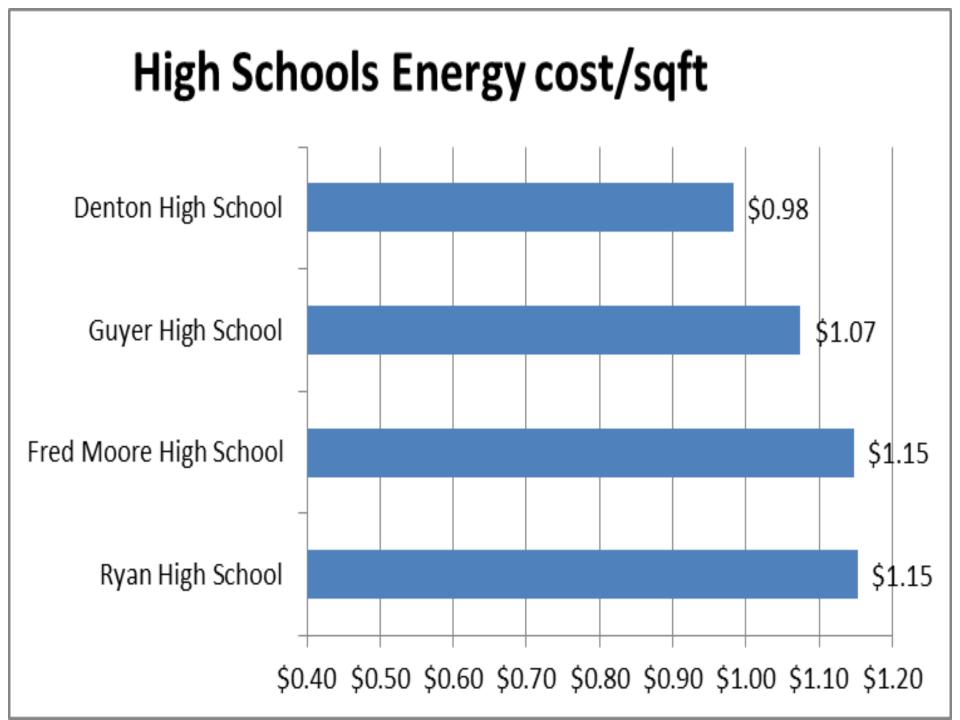
Natural Gas:

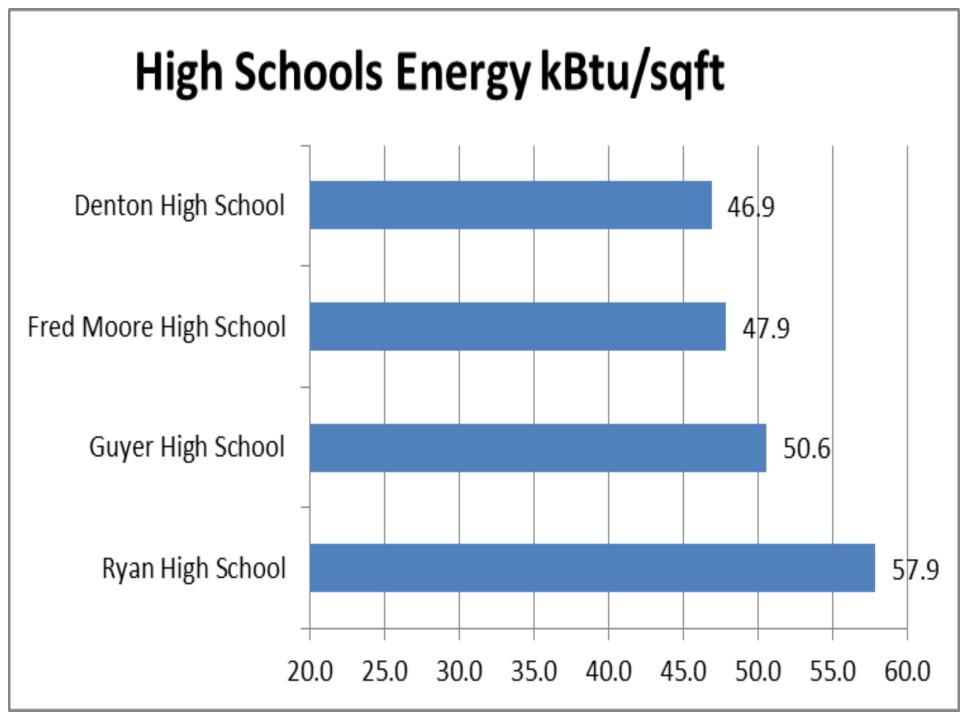
- •Unit cost (rate) increased by 23.7%
- •Consumption increased by 23.1%
- •27.3% more heating degree days
- •Net increase in dollars of \$213,754

Analysis by Utility Type

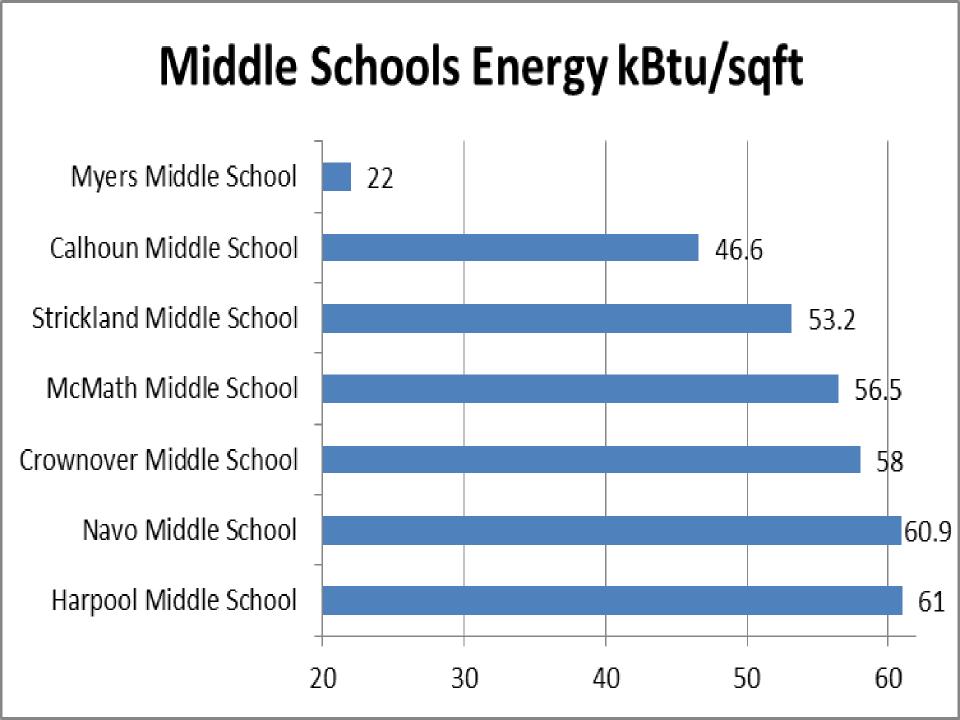
Water:

- Domestic Unit cost (rate) decreased 0.5%
- Domestic consumption increased 4.8%
- Irrigation Unit cost (rate) increased 12.1%
- Irrigation consumption <u>decreased</u> 20.7%
- Rainfall increased by 2.7% / up 0.65 inches
- Domestic net increase in dollars of \$26,428
- Irrigation net <u>decrease</u> in dollars of \$59,941
 Refuse:
- Net increase in dollars of \$57,988

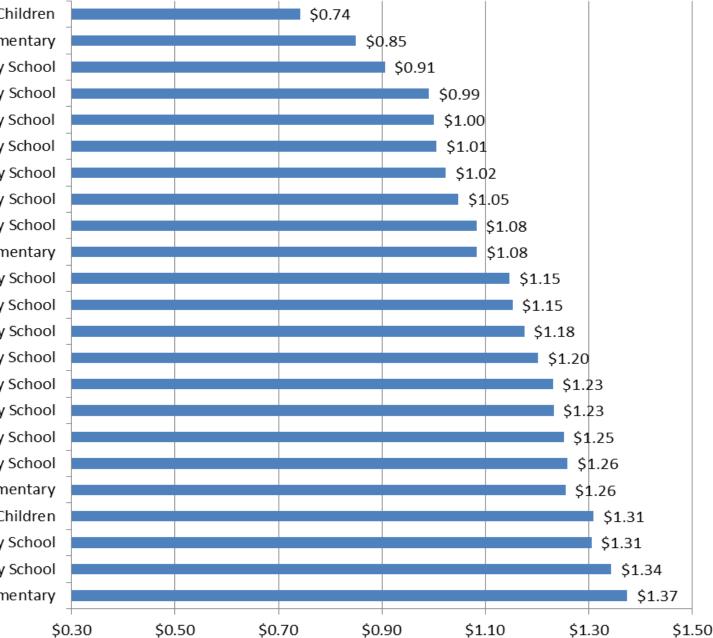




Middle Schools Energy cost/sqft \$0.62 Myers Middle School Calhoun Middle School \$0.97 Strickland Middle School \$1.09 Crownover Middle School \$1.16 \$1.21 McMath Middle School Navo Middle School \$1.22 \$1.29 Harpool Middle School \$0.40 \$0.80 \$0.60 \$1.00 \$1.20 \$1.40



Elementary Schools Energy cost/sqft

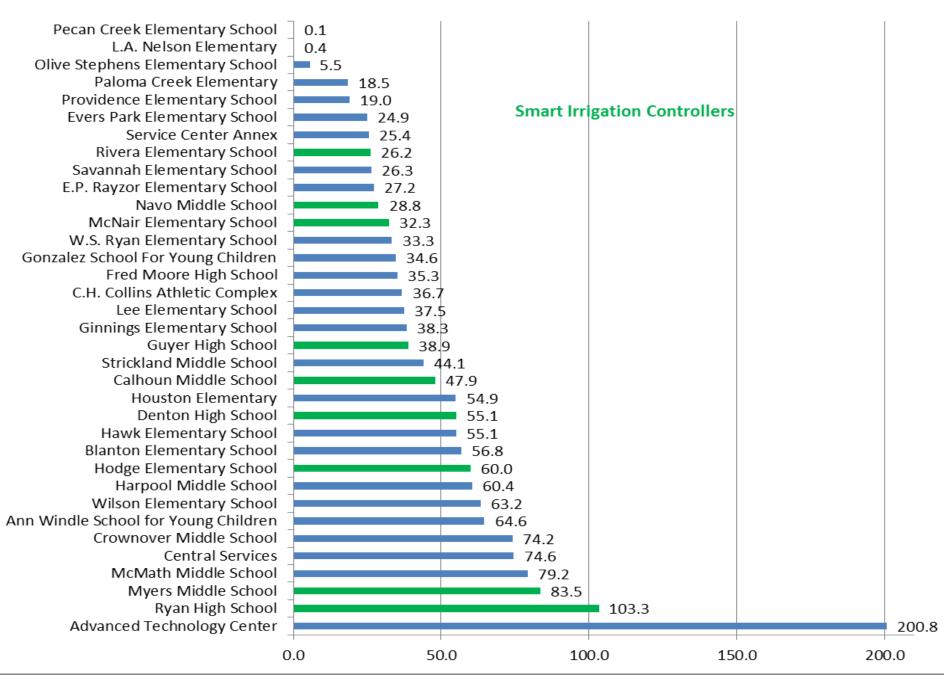


Gonzalez School For Young Children Cross Oaks Elementary Pecan Creek Elementary School Wilson Elementary School Providence Elementary School Savannah Elementary School E.P. Rayzor Elementary School **Rayzor Elementary School** Borman Elementary School Houston Elementary Lee Elementary School W.S. Ryan Elementary School **Ginnings Elementary School Olive Stephens Elementary School Blanton Elementary School** Hawk Elementary School **Rivera Elementary School** McNair Elementary School Paloma Creek Elementary Ann Windle School for Young Children Hodge Elementary School **Evers Park Elementary School** L.A. Nelson Elementary

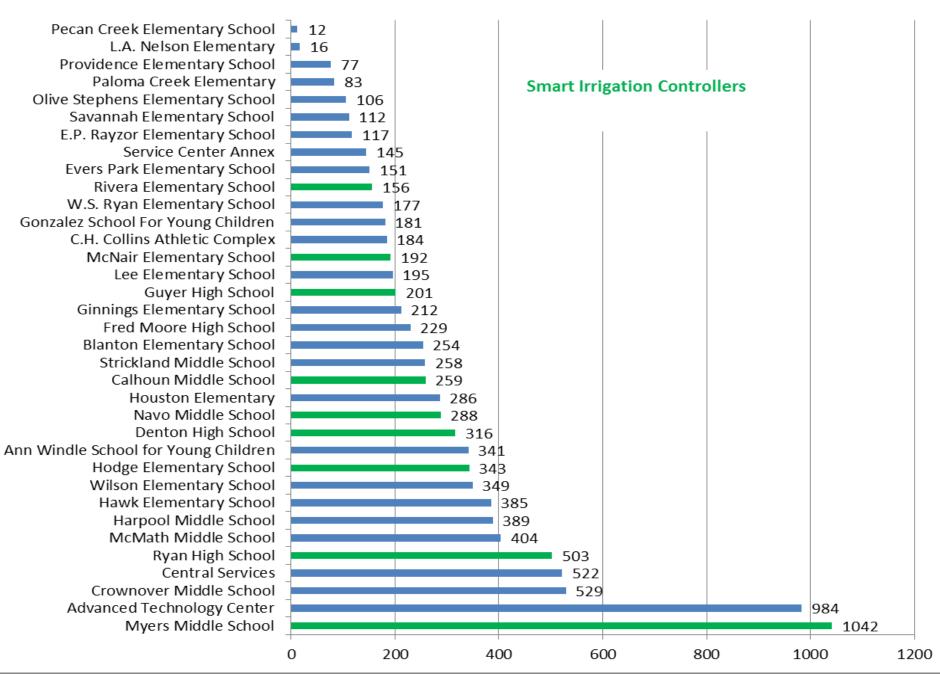
Elementary Schools Energy kBtu/sqft

Gonzalez School For Young Children 26.7 Cross Oaks Elementary 32.4 Pecan Creek Elementary School 36.4 E.P. Rayzor Elementary School 37.B Wilson Elementary School 40.7 Savannah Elementary School 42.2 Providence Elementary School 42.6 W.S. Ryan Elementary School 44.6 Rayzor Elementary School 45.3 Borman Elementary School 46.1 Houston Elementary 48.2 L.A. Nelson Elementary 50.8 **Olive Stephens Elementary School** 51 Hawk Elementary School 51.4 **Blanton Elementary School** 51.8 Paloma Creek Elementary 51.8 **Ginnings Elementary School** 55 Lee Elementary School 55.4 McNair Elementary School 55.7 Ann Windle School for Young Children 57 **Rivera Elementary School** 58.8 Hodge Elementary School 60.9 **Evers Park Elementary School** 67.8 20 30 40 50 60 70

Facilities with Irrigation Meters kGal/Zone



Facilities with Irrigation Meters \$/Zone



Recent and Future Activities

- Evaluated and reported the economic and technical viability of retrofitting Denton Guyer with LED lighting from a lighting vendor, not recommended at this time
- Detected and fixed water leaks at Calhoun, Evers Park and ATC
- Evaluated low energy use at Hawk and determined the utility electric meter was off, corrected by utility
- Presented thermal storage (peak load shifting) opportunity to DME
- Evaluated demand response opportunities at Oncor served schools
- Staff is currently evaluating the Building Performance Management pilot program
- Continuing to explore other energy conservation opportunities to present to the Board as technologies become more economic.

Thank You / Q&A.....