



Utility Management Report

Year Five of Program

Mid - Year Report

July 2010 – December 2010



TDIndustries

Accomplishments to Date Year 5

- Conducted monthly on-site analysis of utility data to identify areas of concern followed by immediate investigation and/or corrective action.
- Continued discipline to tightly manage HVAC Systems through the EMS systems.
- Avoided \$73,970 in utility cost for summer school due to Friday closings
- Completed Implementation of Intelligent Irrigation Control on twelve campuses.
- Performed Phase II retrofit on 20 campuses.
 - Lighting retrofit, Occupancy sensors, Digital switches (18 Campuses)
 - Improved HVAC Controls / Cooling Tower Control (2 Campuses)

Total Cost Comparison (July 2010 – December 2010)

Category	Year 4 2009-2010	Year 5 2010-2011	% change Y4 to Y5	Cost Change Y4 to Y5
Electric	\$2,324,824	\$2,437,365	4.8%	\$112,541
Gas	\$218,284	\$173,557	-20.5%	-\$44,727
Water	\$552,684	\$608,996	10.2%	\$56,312
Refuse	\$312,033	\$355,461	13.9%	43,428
Total	\$3,407,819	\$3,575,382	4.9%	\$167,563

Total Consumption Comparison (July 2010 – December 2010)

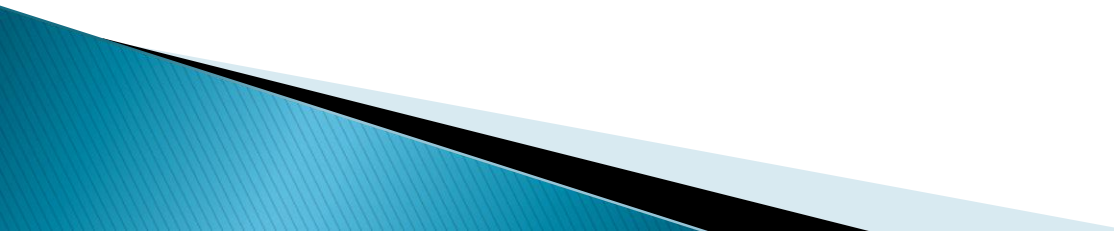
Category	Year 4 2009-2010	Year 5 2010-2011	% change Y4 to Y5	Change Y4 to Y5
Electricity (kWh)	24,893,661	26,407,999	6.1%	1,514,338
Gas (therms)	292,323	265,827	-9.1%	-26,496
Water (ccf)	112,549	131,083	16.5%	18,534

Analysis by Utility Type (from previous year)

Electricity:

- Unit cost (rate) decreased 1.2%
- Consumption increased by 6.1%
- 24.2% more cooling degree days - significant
- Net increase in dollars of \$112,541

Natural Gas:

- Unit cost (rate) decreased by 12.6%
 - Consumption decreased by 9.1%
 - 35.6% less heating degree days - significant
 - Net decrease in dollars of \$44,727
- 

Analysis by Utility Type (from previous year)

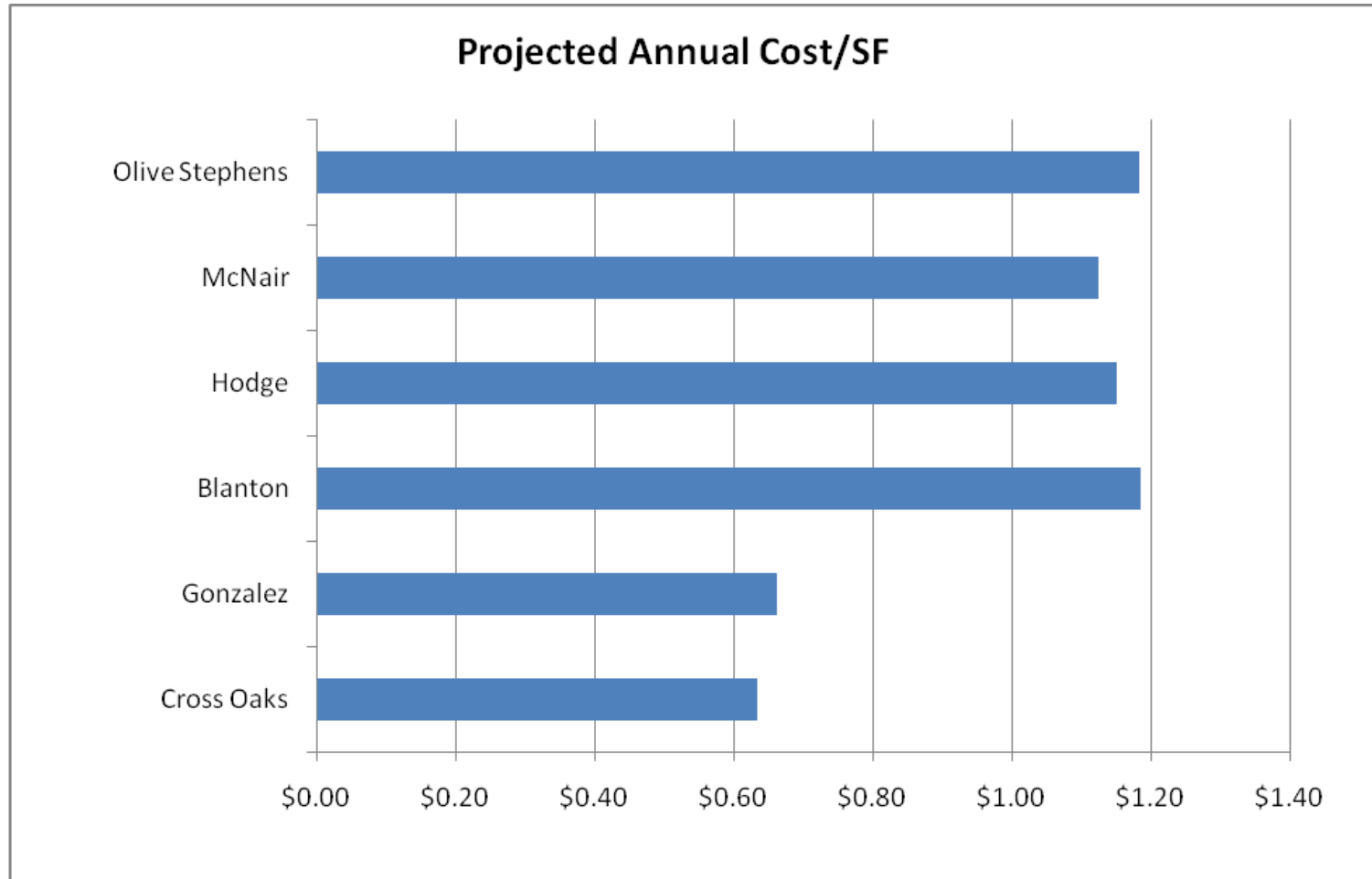
Water:

- Unit cost (rate) decreased 5.4%
- Consumption increased 16.5%
- Rainfall decreased by 14.3% / down 3.18 inches
- Net decrease in dollars of \$56,312

Refuse:

- Net increase in dollars of \$43,428

Geothermal / Traditional HVAC Cost Comparison*



* For this comparison, we annualized existing Buildings and Gonzalez / Cross Oaks utility consumption data for one semester

Looking Forward.....

- Continue to tightly manage building operation through the use of information and the EMS/Control System
 - Over 5,000 Pieces of HVAC Equipment
 - Over ~ 1000 Individual Points / Zones of Irrigation Control
- Phase III Opportunities
 - Exterior Lighting Retrofit – Wall Pack Lights
 - Intelligent Irrigation Control – 12 School Sites
 - HVAC Retrofit – Guyer Computer Lab
 - *Selective Replacement of Large Boilers / Hot Water Heaters*
- Automated Electric “Demand Response” Program
 - Cooperative effort – DME / Oncor & ERCOT
 - Pays DISD to Shape / Shed Load only in Grid Emergencies

\$125,000 / \$139,000
Estimated Annual
Savings

“Incentive”
Payments
Annually / 5
Years

Thank You / Q&A.....

- We Appreciate the Opportunity to be Part of the Denton ISD Team

