



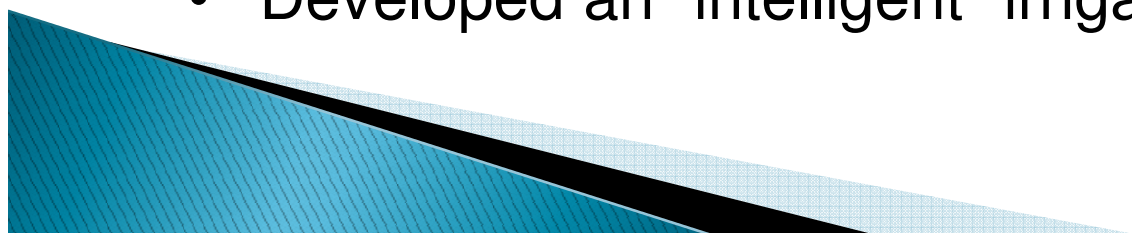
Utility Management Report

Year Three of Program

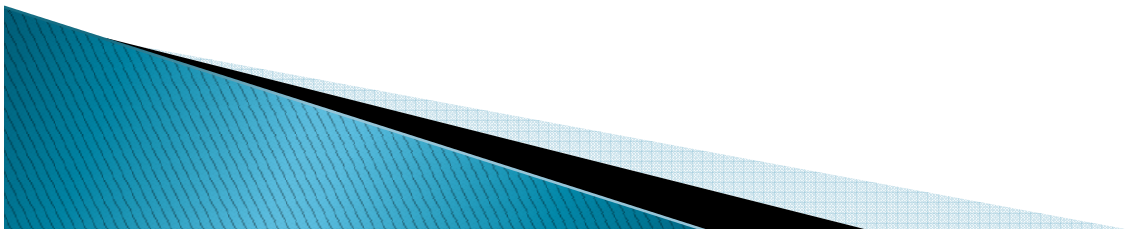
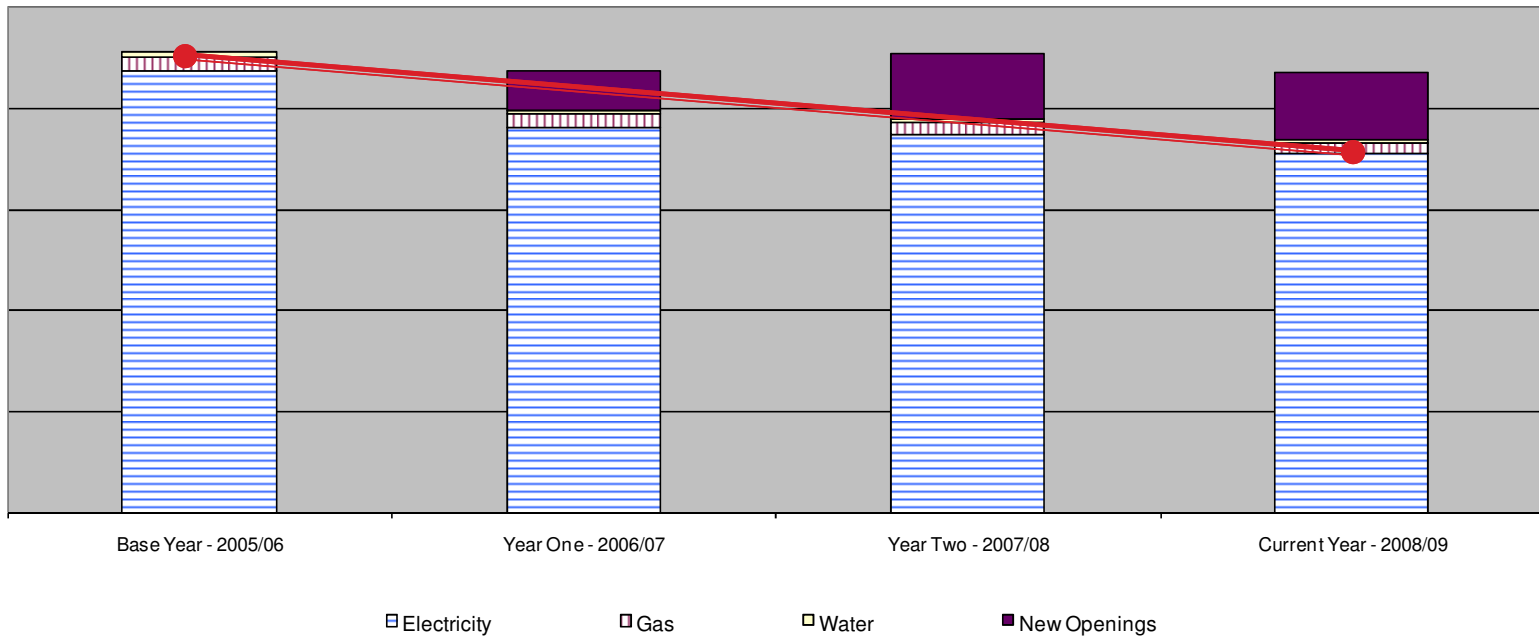
July 2008 – June 2009

Accomplishments this Year

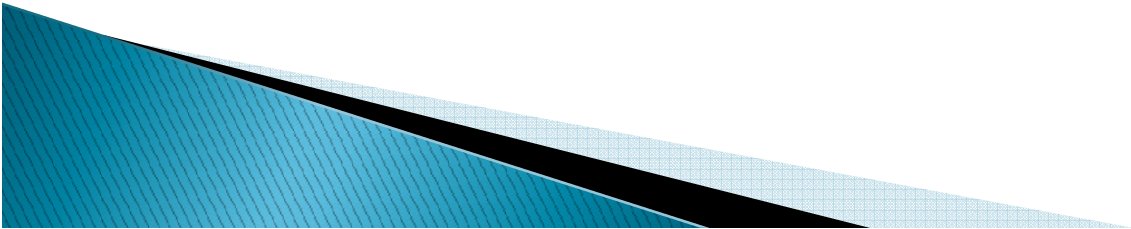
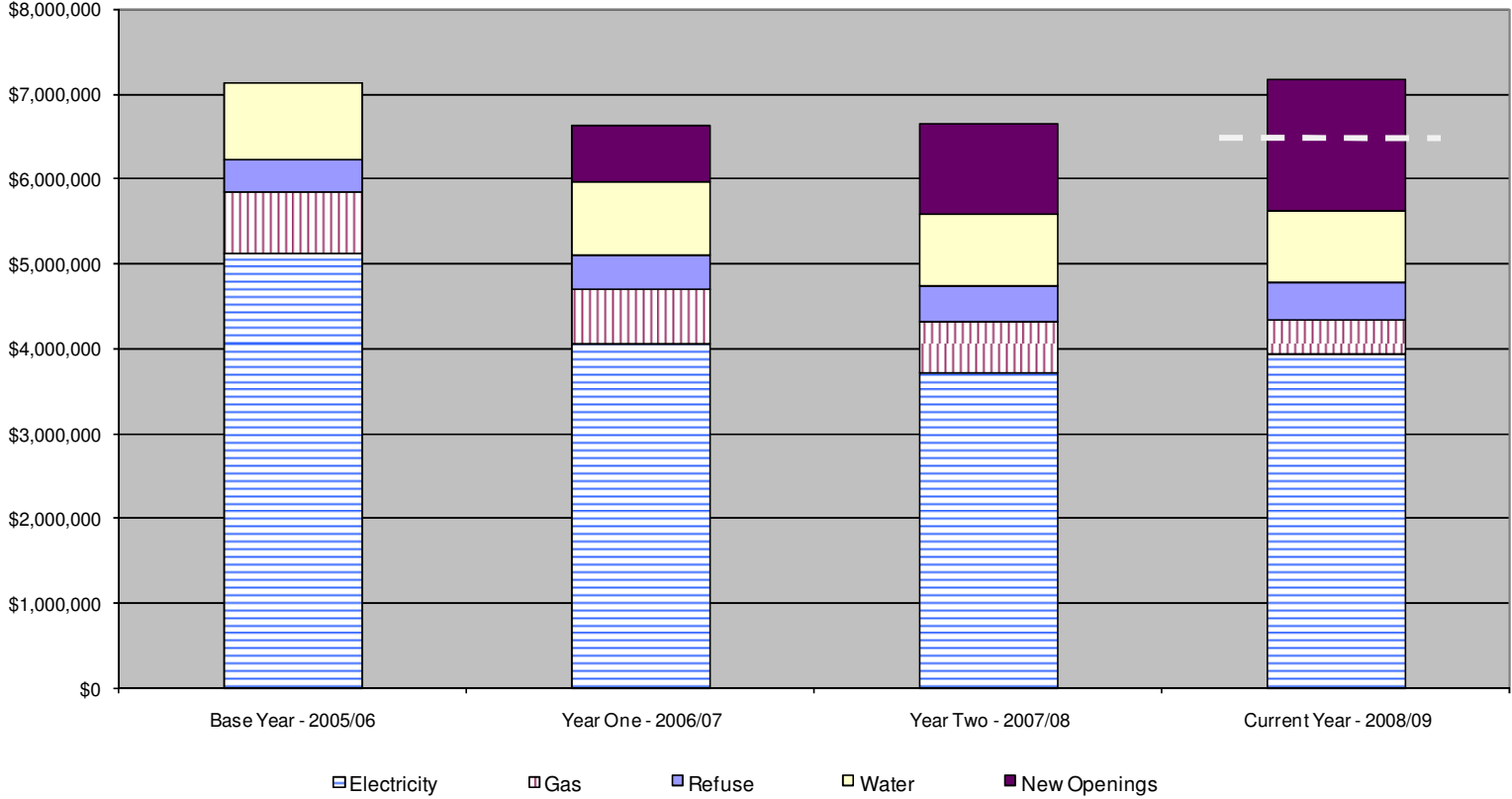
- Conducting monthly on-site analysis of utility data to identify areas of concern followed by immediate investigation and/or corrective action.
- Continued discipline to tightly manage HVAC Systems through the EMS systems.
- Finalized and fine tuned HVAC, Control and Lighting Systems from summer 2008 retrofit work & new openings.
- Assisted with Geothermal application for new campuses.
- Performed in-depth analysis on water costs and consumption.
- Developed an “intelligent” irrigation control application.



Total Consumption Comparison (July 2008 – June 2009)

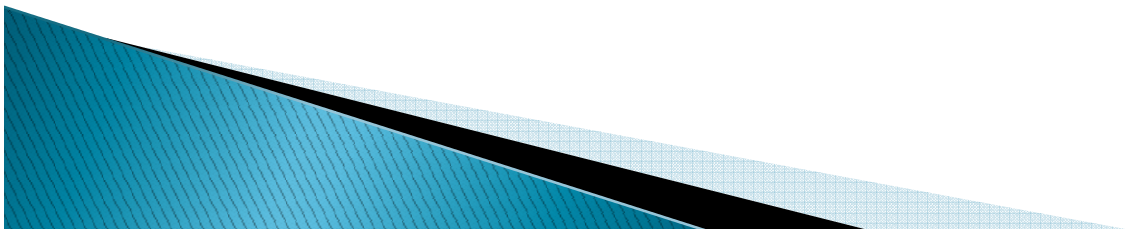


Total Cost Comparison (July 2008 – June 2009)



Summary of Graphs

- Total spend on utilities for 2008–2009 was \$7,172,318, up \$530,214 from the previous year.
- Without the newest openings (Blanton, Harpool, Stephens and Gallian), spend on utilities was \$6,630,652, down \$13,382 from the previous year.
- Over the three years of the program, the district has reduced it's cumulative utility spend by \$3,928,625 on the same schools that existed in the Base Year



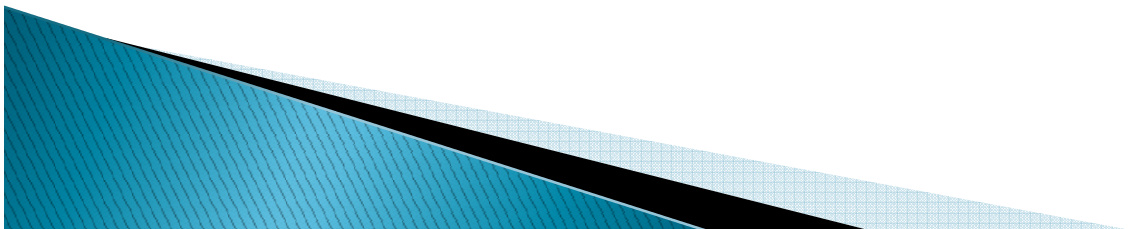
Analysis by Utility Type (from previous year, w/o newest openings)

Electricity:

- Unit cost (rate) **increased** by 11.1% (DME's ECA was up 34% for 10 months)
- Consumption decreased by 4.7%
- 8.4% less cooling degree days
- Net **increase** in dollars of \$202,920

Natural Gas:

- Unit cost (rate) decreased 22.1%
- Consumption decreased 14.1%
- 12.6% less heating degree days
- Net decrease in dollars of \$229,681



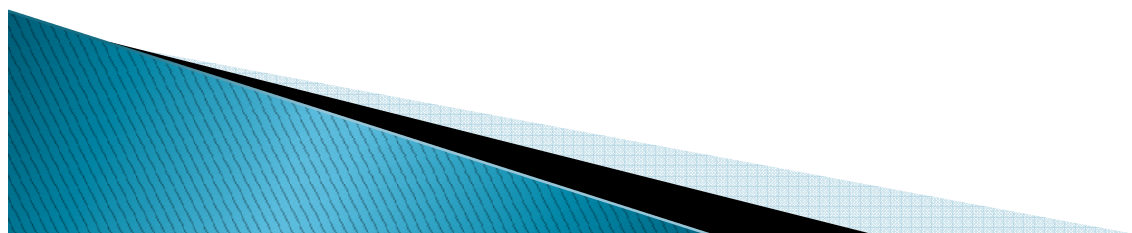
Analysis by Utility Type (from previous year)

Water:

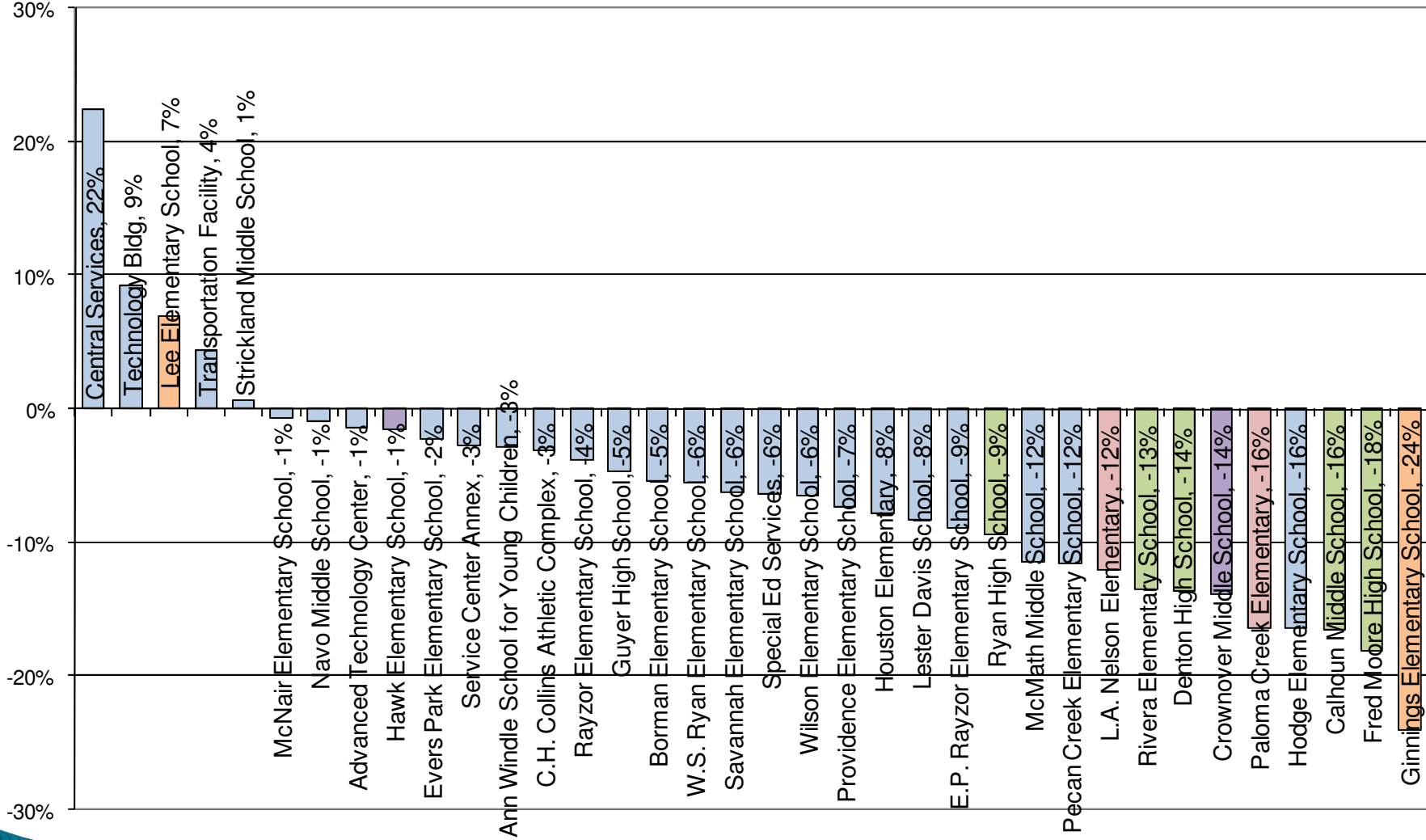
- Unit cost (rate) **increased** 4% (providers outside DMU)
- Consumption decreased 2.1%
- Rainfall increased by 0.6%
- Net **increase** in dollars of \$11,280

Refuse:

- Net **increase** in dollars of \$28,863



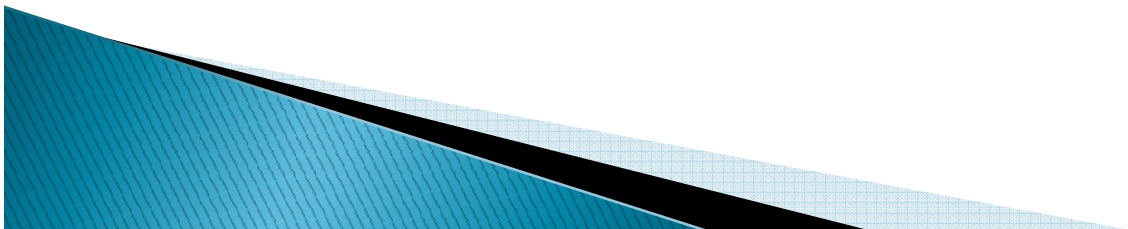
Change of Energy Use from Previous Year



House Bill 3693

- The District is required to set a goal to reduce electrical consumption by 5% for each year from 2007 for the following six years.
 - Electrical consumption down 12.3% from 05-06 to 06-07.
 - Electrical consumption down 1.8% from 06-07 to 07-08.
 - Electrical consumption down 4.7% from 07-08 to 08-09.
- Although not called for in the bill, gas consumption is as follows.
 - Gas consumption up 11.1% from 05-06 to 06-07.
 - Gas consumption down 14.7% from 06-07 to 07-08.
 - Gas consumption down 15.1% from 07-08 to 08-09.

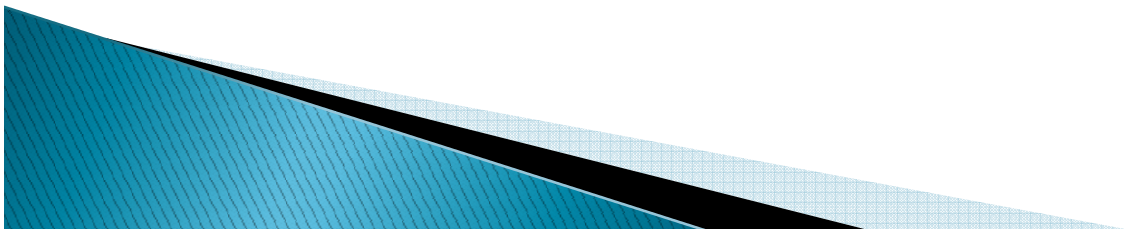
Note: Analysis does include any new campuses.



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).
- Implement “Intelligent” Irrigation Control on twelve campuses.
- Perform Phase II lighting retrofit.
- Improved HVAC Controls on one campus.
- Assist with the implementation of Geothermal on Pre-K and multiple utility saving measures on ES #21.

\$208,305
Estimated Savings



Energy Conservation Measures

Simple Payback

- Lighting Upgrades 4.5 Years
- HVAC Controls 5.6 Years
- Intelligent Irrigation Controls 5.6 Years
- Thermal Storage 5.2 Years
- Indoor Water Conservation 8.0 Years
- Solar Water Heating 13.4 Years
- Solar Energy 17.8 Years
- Wind Energy 34.8 Years

