

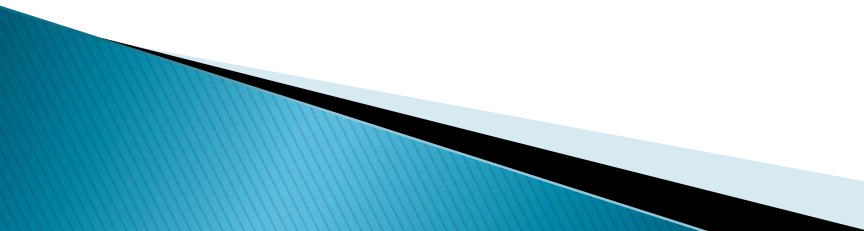


Utility Management Report

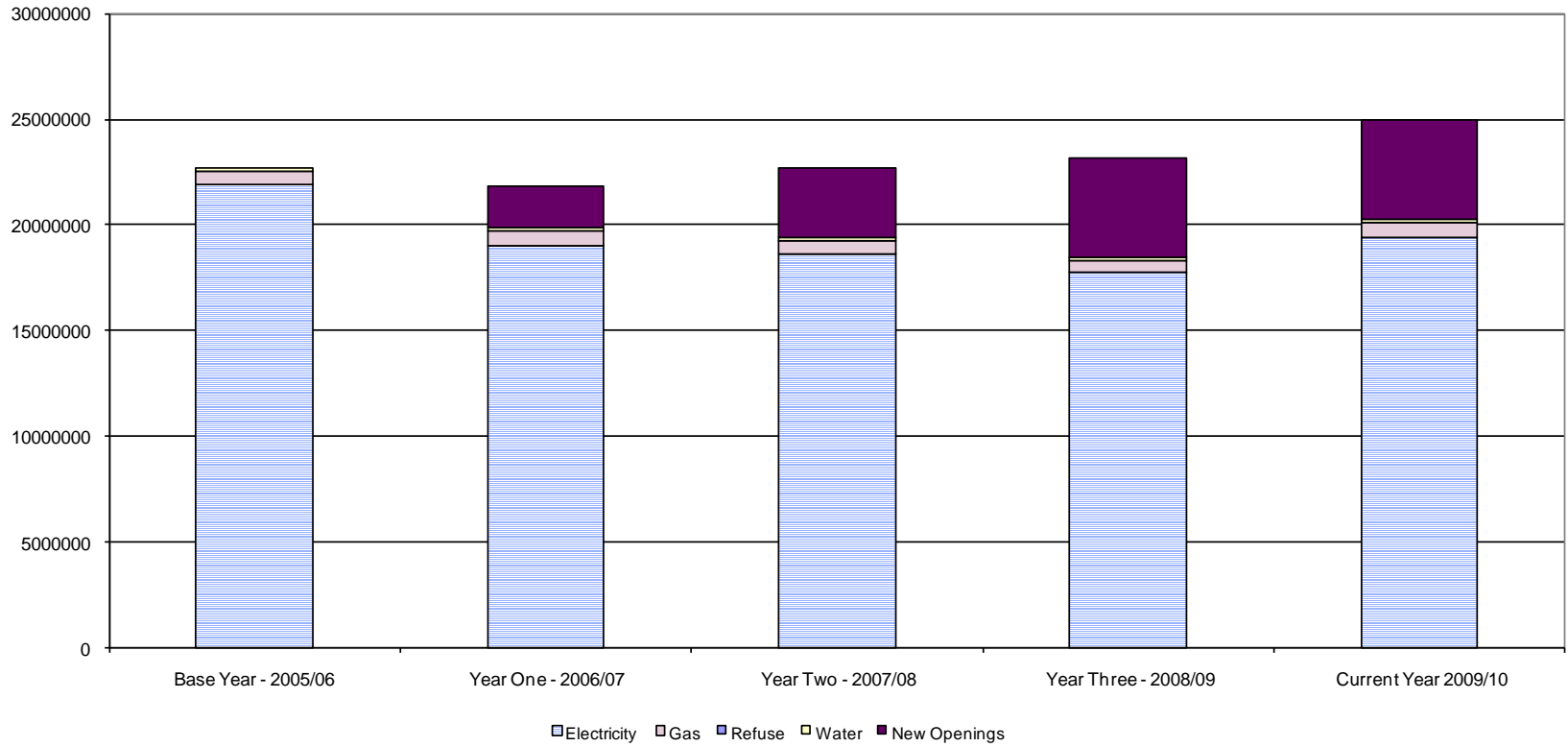
Year Four of Program

July 2009 – June 2010

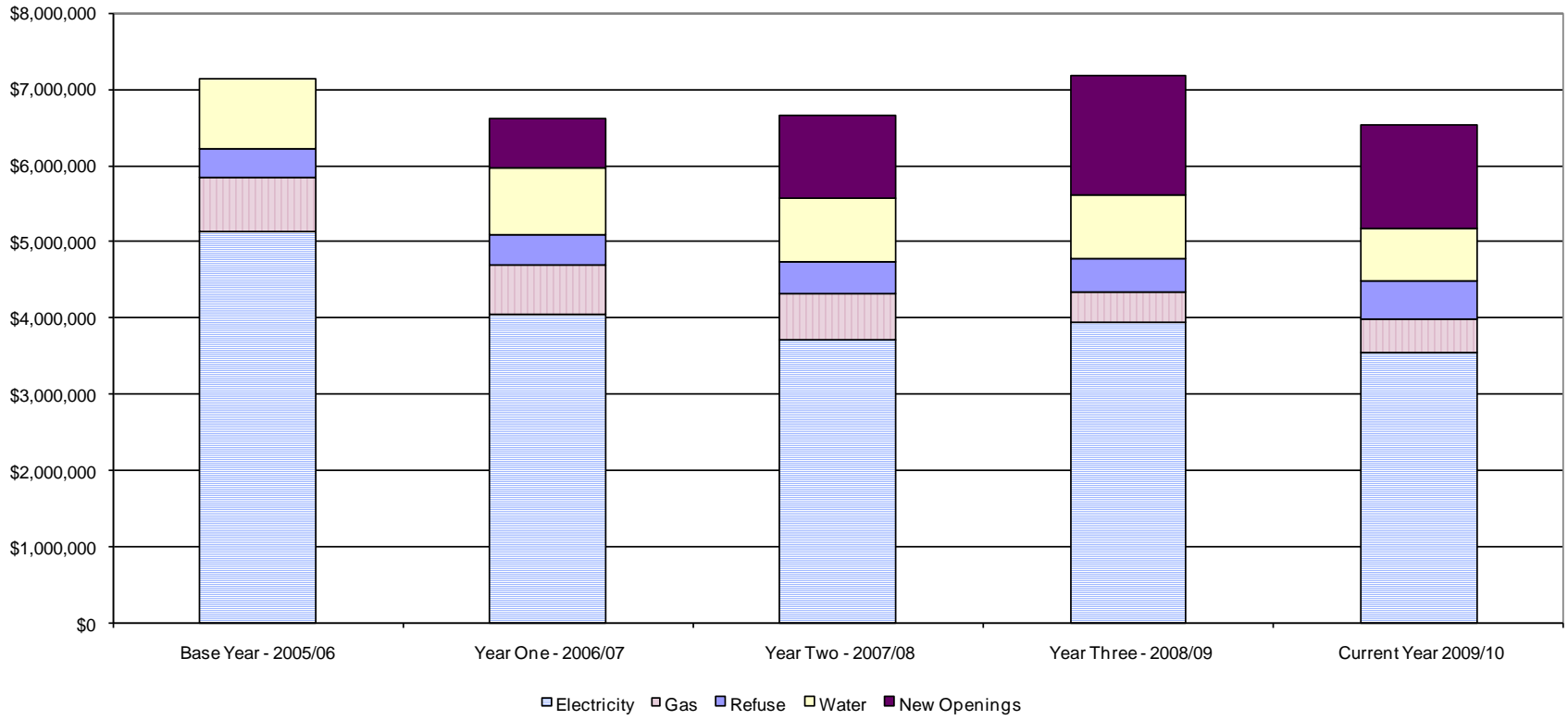
Accomplishments this Year

- 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.
 - Implemented Intelligent Irrigation Control on three campuses. Nine more should be complete by Y.E.
 - Performed Phase II retrofit on 20 campuses.
 - Lighting retrofit, Occupancy sensors, Digital switches (18 Campuses)
 - Improved HVAC Controls / Cooling Tower Control (2 Campuses)
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Total Consumption Comparison (July 2009 – June 2010)



Total Cost Comparison (July 2009 – June 2010)



Summary of Graphs

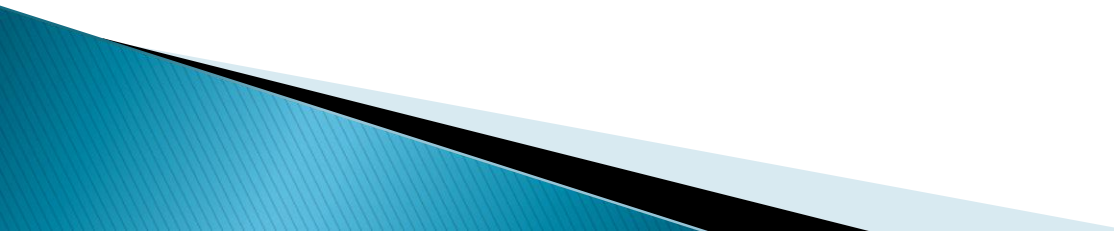
- Total spend on utilities for 2009–2010 was \$6,548,906, down \$623,412 from the previous year.
- Without the newest openings (Blanton, Harpool, Stephens and Gallian), spend on utilities was \$6,076,239, down \$554,413 from the previous year.
- Base Year cost without any new openings (ATC, Navo, Savannah, Nelson, Paloma, Blanton, Harpool, Stephens or Gallian) is down \$431,482, primarily due to conservation practices, DME's reduced electric rate. Gas consumption / cost went up due to weather.
- Over the four years of the program, the district has reduced its cumulative utility spend by \$4,864,591 on the same schools that existed in the Base Year

Analysis by Utility Type (from previous year)

Electricity:

- Unit cost (rate) decreased 17.2%
- Consumption increased by 9.3%
- .5% more cooling degree days - negligible
- Net decrease in dollars of \$387,272

Natural Gas:

- Unit cost (rate) decreased by 10.9%
 - Consumption increased by 27.3%
 - 45.9% more heating degree days
 - Net increase in dollars of \$52,356
- 

Analysis by Utility Type (from previous year)

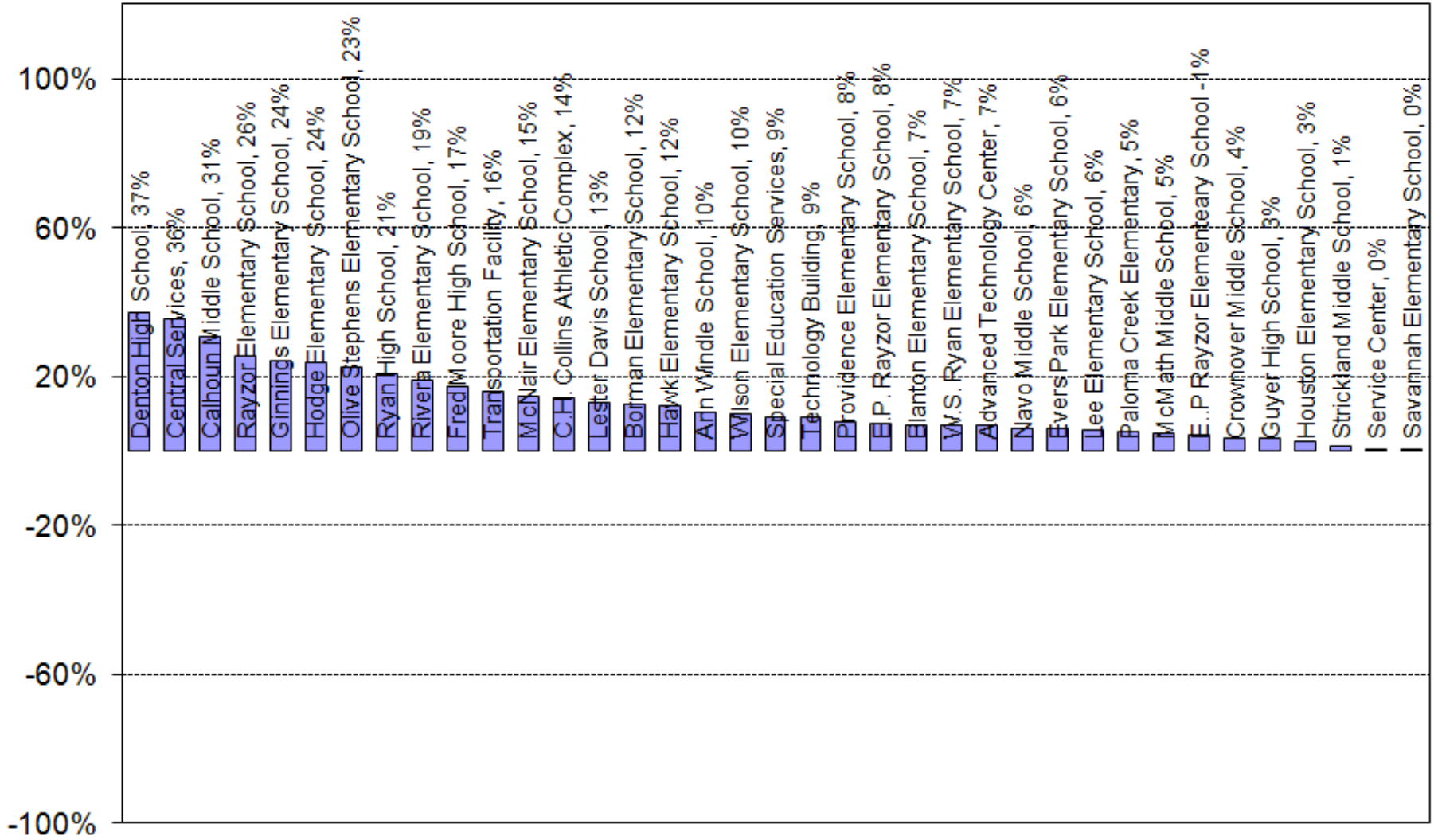
Water:

- Unit cost (rate) decreased 8.2% - DISD went into a lower rate tier
- Consumption decreased 7.1%
- Rainfall increased by 33.2% / up 9.54 inches
- Net decrease in dollars of \$122,868

Refuse:

- Net increase in dollars of \$26,302

Percent Change of Energy Use



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.
 - Electrical consumption up 9.3% from 07-09 to 08-10*.
- 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.
 - Gas consumption up 27.3% from 07-09 to 08-10*.

*Note: Analysis includes ~200K square foot additions to base year campuses. In essence, DISD added an average size Middle School to the buildings sampled in the base year

Summary of Utility Cost and Usage

	Base Year 2005-2006	Year 1 2006-2007	Year 2 2007-2008	Year 3 2008-2009	Year 4 2009-2010
Total Utility Cost	\$6,957,534	6,594,207	\$6,594,647	\$7,172,309	\$6,550,017
Total District SqFt	3,553,417	3,916,124	3,996,458	4,357,383	4,545,055
Total Cost/SqFt	\$1.96	\$1.68	\$1.65	\$1.65	\$1.44

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 \$125,000 / \$139,000
 - Intelligent Irrigation Control – 12 School Sites Estimated Annual Savings
 - HVAC Retrofit – Guyer Computer Lab
 - *Selective Replacement of Large Boilers / Hot Water Heaters*
- Automated Electric “Demand Response” Program “Incentive” Payments Annually / 5 Years
 - Cooperative effort – DME / Oncor / CoServe / ERCOT
 - Pays DISD to Shape / Shed Load only in Grid Emergencies

Thank You / Q&A.....

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