

**Quarterly Report on Energy, Water
And Vehicle Fuel Conservation**

**Quarterly Report to the Governor,
Legislative Budget Board
and the State Energy Conservation Office**

Texas Health and Human Services Commission

Fourth Quarter
Calendar Year 2007

The energy and water conservation plan submitted to your office December 1, 2005, described three required elements of our consolidated Resource Efficiency Plan (REP) for the health and human services enterprise (HHS), an estimated 20 percent savings in energy and water usage for state schools and hospitals, a goal of reducing vehicle fuel consumption by one to two percent, and implementation of a User Awareness Program (UAP) for space occupied by HHS employees around the state. A status report on the Preliminary Utility Assessment (PUA) for the Criss Cole Rehabilitation Center was included with our REP.

Executive Order RP 49 requires each state agency to provide quarterly updates to their energy conservation plan. This report provides the updated information for the HHS energy and water conservation plan as required by Executive Order RP 49.

State Schools and Hospitals

Energy and water conservation projects at state schools and hospitals continue to reduce the consumption of electrical power, natural gas, water, and associated costs. A cost baseline was established using historical information. The reported cost savings were developed using the historical data, the cost of retrofits for the energy and water conservation measures, and the estimated savings from those retrofits. The savings identified and reported provide the funding source to secure the performance contracts to pay for the retrofits. The savings are guaranteed through performance contracts with the contractors involved. Table 1 details the available savings data for the state schools and hospitals for this reporting period ending June 2007. The numbers for September 2007 have been revised from the last report to reflect recently completed information.

Fleet Fuel Management

There are various factors that may influence vehicle usage or potential cost savings such as changes to client services, natural disasters (i.e. the active hurricane season in 2005 increased vehicle usage for client evacuation and support functions), and ongoing efforts to consolidate support services across HHS agencies. The Fleet Fuel Management details for the reporting period ending December 2007 are reported in Table 2.

The large increase in "Other Regular Fuel" shown in Table 2 is probably the result of the large rainfalls in 2007 requiring more mowing of grass than in 2006, an exceptionally dry year.

User Awareness Program

The health and human services agencies' UAP is designed to provide an effective and efficient way to manage energy and water conservation in buildings owned and maintained by private sector owners, or in cooperation with Texas Facilities Commission (TFC) staff who manages the state owned buildings we occupy. As energy and water costs continue to rise, we will ensure HHS employees do their part in conserving those resources and controlling costs.

Energy and water conservation awareness posters are available for local offices to use to involve and inform staff on how to save energy and water resources. In state owned buildings, we are cooperating with TFC in their efforts to reduce energy and water use.

Criss Cole Rehabilitation Center

Funding requests were submitted during the 80th Legislative Session for Capital Building Projects, repair or rehabilitation of buildings or facilities, based on a detailed energy audit conducted in 2005. The energy savings projects requested for FY2008 are as follows:

- Repair the fresh multi-air intakes at the air-handlers. Completion of this project will provide the ability to control the fresh air mix to keep CO2 levels low and provide enough fresh air exchange to keep the air from becoming stale. Completion of this project would also reduce energy consumption by lowering the amount of chill water used during winter and allow modulation of the amount of hot air outside coming in during summer thus reducing boiler use in helping to balance the system. A contract has been awarded, and the project is 96 percent complete.
- Replace two 1890 Mbtuh Peerless boilers with six high-efficiency pulse stage boilers. A contract has been awarded for an engineer to provide analysis, drawings and specifications which will be used to issue an IFB for a contractor to replace the boilers.
- A lighting system retrofit project will replace T12 fluorescent lamps and incandescent lamps with T8 compact fluorescent lamps and electronic ballasts. There is a risk of overheating ballasts due to age, and energy usage increases are projected. This project will be pursued later in the year, to accommodate contract oversight on the other projects.

LPB Energy Consultants

LPB is working to complete an audit of all electric, water/wastewater and gas bills. The results of this audit could produce savings in the form of rebates if errors are found. We will also be developing an electronic interface later in the year to accommodate timely data transfer between LPB and HHSC for utility bill payment processing.

In conclusion, we will post this report on the HHS website as required by Executive Order RP 49, with links to all the HHS agencies. If you have any questions please contact Lee Harsh, Director of Facility Management and Leasing, at (512) 424-6973.

Table 1
Health and Human Services Commission
Energy and Water Conservation Report
State Schools and Hospitals
July 2007 – September 2007

July 2007 – September 2007	Defined Savings and Normalized (1)	Percent Reduction
Electricity	\$366,335	8.9%
Natural Gas	\$732,477	17.8%
Water (2)	\$248,820	6.0%
Other (3)	\$92,490	2.2%

NOTES:

- (1) “Defined” savings are calculated as described in note (2). “Normalized” savings are calculated with a weather adjusted baseline consumption using models developed to calculate pre-retrofit and post-retrofit savings. Electric and natural gas utility bills are used for this process.
- (2) “Water” savings are stipulated, i.e., calculated once and carried forward for the life of the project. Plumbing fixtures were changed out for water saving devices and savings determined based on flow rates between the new and old devices and estimated usage calculated on the number of clients and industry standard average flows for the new fixtures per client.
- (3) “Other” includes deletion of boiler chemicals that are no longer needed due to decommissioning of steam plants, laundry equipment upgrades, and a more favorable rate structure for electrical services for the San Antonio State Hospital.

Some of the energy and water saving projects that produced these savings are still in implementation stage with adjustments being made to metering equipment. The accuracy of the numbers reported will improve over time as the adjustments are made.

Table 2
Health and Human Services Commission
Fleet Fuel Consumption Report
Fourth Quarter – 2007

Agency/Department	Gallons of Vehicle Fuel	Gallons of Alternate Vehicle Fuel	Total Vehicle Fuel	Other Regular Fuel	Other Alt. Fuel	Total Fuel - Vehicle and Other	Miles Traveled	MPG - Miles Traveled /Total Vehicle Fuel
529 HHSC Region/Central	13,132.89	1,105.80	14,238.69	0.00	0.00	14,238.69	169,993.00	11.94
529 HHSC Fleet Operations	3,225.35	0.00	3,225.35	3,510.36	0.00	6,735.71	32,164.00	9.97
529 HHSC Total	16,358.24	1,105.80	17,464.04	3,510.36	0.00	20,974.40	202,157.00	11.58
530 DFPS Total (1)								
537 DSHS Region/Central	18,331.00	0.00	18,331.00	0.00	0.00	18,331.00	327,952.00	17.89
537 DSHS Hospitals	62,699.00	834.00	63,533.00	2,418.00	23.00	65,974.00	742,498.00	11.69
537 DSHS Total	81,030.00	834.00	81,864.00	2,418.00	23.00	84,305.00	1,070,450.00	13.08
538 DARS Total	3,604.00	0.00	3,604.00	0.00	0.00	3,604.00	62,510.00	17.35
539 DADS Central	69.00	0.00	69.00	0.00	0.00	69.00	748.00	10.78
539 DADS Schools	106,364.00	924.00	107,289.00	4,925.00	161.00	112,375.00	1,096,062.00	10.22
539 DADS Total	106,434.00	924.00	107,358.00	4,925.00	161.00	112,444.00	1,096,810.00	10.22
Totals for 2006	772,585.00	18,302.00	790,887.00	32,803.00	701.00	824,391.00	9,421,755.00	11.91
January 2007 – March 2007	190,111.00	4,295.00	194,406.00	7,347.00	145.00	201,898.00	2,193,655.00	11.28
April 2007 – June 2007	201,311.00	5,107.00	206,418.00	12,582.00	189.00	219,189.00	2,332,016.00	11.30
July 2007 – September 2007	191,007.00	4,285.00	195,292.00	14,203.00	176.00	209,672.00	2,127,923.00	10.90
October 2007 – December 2007	207,426.00	2,864.00	210,290.00	10,853.00	184.00	221,327.00	2,431,927.00	11.56
Total for 2007	789,855.00	16,551.00	806,406.00	44,985.00	695.00	852,086.00	9,085,521.00	11.27
<i>Reduction/Increase</i>	<i>(17,269.00)</i>	<i>1,751.00</i>	<i>(15,519.00)</i>	<i>(12,183.00)</i>	<i>6.00</i>	<i>(27,695.00)</i>	<i>336,234.00</i>	
<i>Percent Reduction/Increase</i>	<i>(2.24%)</i>	<i>9.57%</i>	<i>(1.96%)</i>	<i>(37.14%)</i>	<i>0.86%</i>	<i>(3.36%)</i>	<i>3.57%</i>	

(1) DFPS no longer owns any vehicles.