

**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**

**Second Quarter  
Calendar Year 2008**

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 2008.

### **Fleet Fuel Management**

There are various factors that may influence vehicle usage or potential cost savings such as changes to client services, evacuations and other support activities in the event of natural disasters, and the age of fleet vehicles. The fleet fuel management details for the reporting period ending June 2008 are reported in Table 2.

### **User Awareness Program**

The HHS 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 80<sup>th</sup> Legislature, Regular Session, 2007, 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 fiscal year 2008 are as follows:

- Repair the fresh multi-air intakes at the air-handlers. Project is complete. Project provides the ability to control the fresh air mix to keep CO<sub>2</sub> levels low and provide enough fresh air exchange to keep the air from becoming stale. The project is expected to 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.
- Replace two 1890 Mbtuh Peerless 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. The contracted engineer has provided specifications and blueprints.
- A lighting system retrofit will replace T12 fluorescent lamps and incandescent lamps with T8 compact fluorescent lamps and electronic ballasts. This project will be pursued in fiscal year 2009 to accommodate contract oversight on the other projects.

## **LPB Energy Consultants**

LPB continues the audit of all electric, water/wastewater and gas bills paid by the Health and Human Services Commissioner (HHSC) on the behalf of the health and human services agencies, and the utility bills paid by the Department of Assistive and Rehabilitative Services (DARS), the Department of State Health Services (DSHS), and the Department of Aging and Disability Services (DADS) for their resident client facilities. The results of this audit could produce savings in the form of rebates if errors are found. A report of those savings will be included in this report later this calendar year when all audit results for fiscal year 2008 are available.

We have developed, in cooperation with LPB, an electronic interface data transfer file that loads utility payment information directly into electronic payment vouchers for payment of utility bills from accounts paid by HHSC. LPB receives the utility bills, audits them for errors and enters data into the interface file on a regular schedule. The file is sent electronically to HHSC for uploading in the accounts payable system. LPB also enters cost and consumption data from the invoices into a database available to the HHS agencies for management and budgeting reporting on utility costs. The implementation of the bill payment process by LPB began on September 1, 2008, and is working as designed. Within the next few months we will begin working on electronic interface data transfer files to load payment information into the accounts payable systems for DADS, DSHS, and DARS to pay utility bills for resident client facilities they manage. With the conclusion of those projects all utility bills paid by HHS agencies will be audited and processed for payment by LBP and cost and consumption data entered into the on-line database for HHS agency use.

**Table 1**  
**Health and Human Services Commission**  
**Energy and Water Conservation Report**  
**State Schools and Hospitals**  
**April 2008 – June 2008**

<b>April 2008 – June 2008</b>	<b>Defined Savings and Normalized (1)</b>	<b>Percent Reduction</b>
Electricity	\$612,502	12.6%
Natural Gas	\$597,645	12.3%
Water (2)	\$271,280	5.6%
Other (3)	\$92,301	1.9%

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**  
**Second Quarter – 2008**

<b>Agency/Department</b>	<b>Gallons of Vehicle Fuel</b>	<b>Gallons of Alternate Vehicle Fuel</b>	<b>Total Vehicle Fuel</b>	<b>Other Regular Fuel</b>	<b>Other Alt. Fuel</b>	<b>Total Fuel - Vehicle and Other</b>	<b>Miles Traveled</b>	<b>MPG - Miles Traveled /Total Vehicle Fuel</b>
529 HHSC Region/Central	12,769.00	1,498.00	14,267.00	0.00	0.00	14,267.00	182,749.00	12.81
529 HHSC Fleet Operations	5,220.00	0.00	5,220.00	704.00	0.00	5,924.00	37,736.00	7.23
<b>529 HHSC Total</b>	<b>17,989.00</b>	<b>1,498.00</b>	<b>19,487.00</b>	<b>704.00</b>	<b>0.00</b>	<b>20,191.00</b>	<b>220,485.00</b>	<b>11.31</b>
<b>530 DFPS Total (1)</b>								
537 DSHS Region/Central	20,330.00	0.00	20,330.00	0.00	0.00	20,330.00	388,875.00	19.13
537 DSHS Hospitals	64,657.00	748.00	65,406.00	3,172.00	66.00	68,644.00	768,231.00	11.75
<b>537 DSHS Total</b>	<b>84,987.00</b>	<b>748.00</b>	<b>85,735.00</b>	<b>3,172.00</b>	<b>66.00</b>	<b>88,973.00</b>	<b>1,157,106.00</b>	<b>13.50</b>
<b>538 DARS Total</b>	<b>4,061.00</b>	<b>0.00</b>	<b>4,061.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4,061.00</b>	69,118.00	<b>17.02</b>
539 DADS Central	95.00	0.00	95.00	0.00	0.00	95.00	904.00	9.48
539 DADS Schools	114,402.00	851.00	115,253.00	6,521.00	182.00	121,955.00	1,160,068.00	10.07
<b>539 DADS Total</b>	<b>114,497.00</b>	<b>851.00</b>	<b>115,348.00</b>	<b>6,521.00</b>	<b>182.00</b>	<b>122,051.00</b>	<b>1,160,972.00</b>	<b>10.06</b>
<b>Totals for 2006</b>	<b>772,585.00</b>	<b>18,302.00</b>	<b>790,887.00</b>	<b>32,803.00</b>	<b>701.00</b>	<b>824,391.00</b>	<b>9,421,755.00</b>	<b>11.91</b>
<b>Total for 2007</b>	<b>789,855.00</b>	<b>16,551.00</b>	<b>806,406.00</b>	<b>44,985.00</b>	<b>694.00</b>	<b>852,085.00</b>	<b>9,085,521.00</b>	<b>11.27</b>
<b>January 2008 – March 2008</b>	<b>211,932.00</b>	<b>2,864.00</b>	<b>214,796.00</b>	<b>7,317.00</b>	<b>220.00</b>	<b>222,333.00</b>	<b>2,405,858.00</b>	<b>11.20</b>
<b>April 2008 – June 2008</b>	<b>221,534.00</b>	<b>3,097.00</b>	<b>224,631.00</b>	<b>10,397.00</b>	<b>248.00</b>	<b>235,276.00</b>	<b>2,607,681.00</b>	<b>11.61</b>
Reduction/Increases	(17,269.00)	1,751.00	(15,519.00)	(12,183.00)	6.00	(27,695.00)	336,234.00	
Percent Reduction/Increase	(2.24%)	9.57%	(1.96%)	(37.14%)	0.86%	(3.36%)	3.57%	

(1) DFPS no longer owns any vehicles.