

**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

First 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 March 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 March 2008 are reported in Table 2.

Note: 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 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> 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 are also developing with LPB an electronic interface data transfer file that will load utility payment information directly into electronic payment vouchers for payment of utility bills from accounts paid by HHSC. LPB will receive utility bills, audit them for errors and enter data into the interface file on a regular schedule. The file will be sent to HHSC for uploading in the accounts payable system. LPB will enter 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 is scheduled for the first quarter of FY 2009.

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**  
**January 2008 – March 2008**

| <b>January 2008 –<br/>March 2008</b> | <b>Defined Savings and<br/>Normalized (1)</b> | <b>Percent<br/>Reduction</b> |
|--------------------------------------|-----------------------------------------------|------------------------------|
| Electricity                          | \$401,881                                     | 7.5%                         |
| Natural Gas                          | \$822,819                                     | 15.5%                        |
| Water (2)                            | \$275,312                                     | 5.2%                         |
| Other (3)                            | \$96,905                                      | 1.8%                         |

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**  
**First 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           | 14,197.00                      | 1,238.00                                 | 15,435.00                 | 0.00                      | 0.00                   | 15,435.00                             | 179,132.00            | 11.61                                           |
| 529 HHSC Fleet Operations         | 5,401.00                       | 0.00                                     | 5,401.00                  | 468.00                    | 0.00                   | 5,870.00                              | 38,290.00             | 7.09                                            |
| <b>529 HHSC Total</b>             | <b>19,598.00</b>               | <b>1,238.00</b>                          | <b>20,836.00</b>          | <b>468.00</b>             | <b>0.00</b>            | <b>21,305.00</b>                      | <b>217,422.00</b>     | <b>10.43</b>                                    |
| <b>530 DFPS Total (1)</b>         |                                |                                          |                           |                           |                        |                                       |                       |                                                 |
| 537 DSHS Region/Central           | 19,223.00                      | 0.00                                     | 19,223.00                 | 0.00                      | 0.00                   | 19,223.00                             | 343,993.00            | 17.90                                           |
| 537 DSHS Hospitals                | 64,419.00                      | 910.00                                   | 65,328.00                 | 2,057.00                  | 36.00                  | 67,422.00                             | 734,012.00            | 11.24                                           |
| <b>537 DSHS Total</b>             | <b>83,641.00</b>               | <b>910.00</b>                            | <b>84,551.00</b>          | <b>2,057.00</b>           | <b>36.00</b>           | <b>86,644.00</b>                      | <b>1,078,005.00</b>   | <b>12.75</b>                                    |
| <b>538 DARS Total</b>             | <b>2,979.00</b>                | <b>0.00</b>                              | <b>2,979.00</b>           | <b>0.00</b>               | <b>0.00</b>            | <b>2,979.00</b>                       | <b>44,151.00</b>      | <b>14.82</b>                                    |
| 539 DADS Central                  | 118.00                         | 0.00                                     | 118.00                    | 0.00                      | 0.00                   | 118.00                                | 1,031.00              | 8.74                                            |
| 539 DADS Schools                  | 105,595.00                     | 717.00                                   | 106,311.00                | 4,791.00                  | 184.00                 | 111,287.00                            | 1,065,249.00          | 10.02                                           |
| <b>539 DADS Total</b>             | <b>105,713.00</b>              | <b>717.00</b>                            | <b>106,430.00</b>         | <b>4,791.00</b>           | <b>184.00</b>          | <b>111,405.00</b>                     | <b>1,066,280.00</b>   | <b>10.02</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>Totals 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>                                    |
| January 2008 – March 2008         | 211,932.00                     | 2,864.00                                 | 214,796.00                | 7,317.00                  | 220.00                 | 222,333.00                            | 2,405,858.00          | 11.20                                           |
| <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.