

# **University of North Texas Health Science Center**

## **Energy Conservation Plan**

### **April 2006 Update**

The University of North Texas Health Science Center at Fort Worth, a component institution of the UNT System, is dedicated to excellence in education, research, healthcare and service. UNTHSC facilities consist of approximately 33 acres, 27 buildings and 1.5 million gross square feet.

Dr. Ronald R. Blanck, UNTHSC President, has taken an active role in making university faculty and staff aware of utility conservation efforts. Campus wide notices have been sent out reminding personnel to turn off lights when leaving conference rooms, offices, labs, classrooms, etc. and turning off computers when they are not in use. Monthly "Energy Smart" notices are sent out through the campus Daily News offering suggestions of how to reduce energy and fuel consumption at home and on campus. Occupancy sensors have been placed in many offices, all applicable conference rooms, and public restrooms of existing buildings. All new construction since 2001 has included lighting occupancy sensors and automatic lavatory faucets and flush valves.

All work associated with the Energy Management and Conservation Project was 100% completed in January 2001. Actual reduction of electrical and water consumption has exceeded expectations and the performance contract guarantee, based on contract utility rates, has resulted in total cost avoidance to date of \$1,577,844. According to EPA figures, these utility savings have reduced CO<sub>2</sub> emissions by approximately 25,425 tons. This is approximately equivalent to removing 5,085 cars from the road for one year, or planting 6,916 acres of trees. Utility conservation efforts are ongoing and will be evaluated and implemented in existing and future campus facilities.

Recently completed energy conservation projects include infrared inspections, power quality monitoring and power factor studies of the campus electrical distribution system; and the installation of a hot water blend valve for building heating.

Upcoming energy conservation projects include upgrading supply and exhaust controls in the Research and Education building. Evaluating the energy usage and cost benefit of completing a new detailed energy audit for a potential future Energy Conservation Performance Contract.

Energy and utility conservation efforts, practices, and equipment are budgeted into all future building projects as a part of the overall design and construction budget.

Current projects to upgrade infrastructure systems, allowing for improved system reliability, safety, and energy efficiency are being funded through Higher Education Assistance Funds.

Employees are encouraged to utilize the golf carts and truck alls when possible while working on the main campus. Many of the golf carts are electric and the gas powered carts use minimal fuel. The truck alls get approximately 40 miles gallon. Employees are also expected to drive the vehicles in a conservative manner related to accelerating and braking.

Past electric and natural gas contracts have been for fixed periods of time with a fixed utility rate. These contracts had no flexibility to lock in rates when the energy market was low. UNTHSC has contracted with THG Energy & Technology Solutions to assist in creating the Request For Proposals, evaluating the bids, making a contract award recommendation, monitoring the energy market, making recommendations of when and how long to lock in electric rates and monitoring energy bills associated with a new electric service provider. The proposed electric contract will be approximately three years with the flexibility to lock in lower rates at various times and for various durations based energy market fluctuations within the contract term. This is the most flexible procurement method and provides the best opportunity for UNTHSC to procure the best electric rates and manage utility costs.



UNT Health Science Center  
Actual Savings vs Guarantee

Annual Guarantee: \$286,654  
Current Guarantee: \$1,457,158



