

Office of Administration

State Facilities Energy Briefing

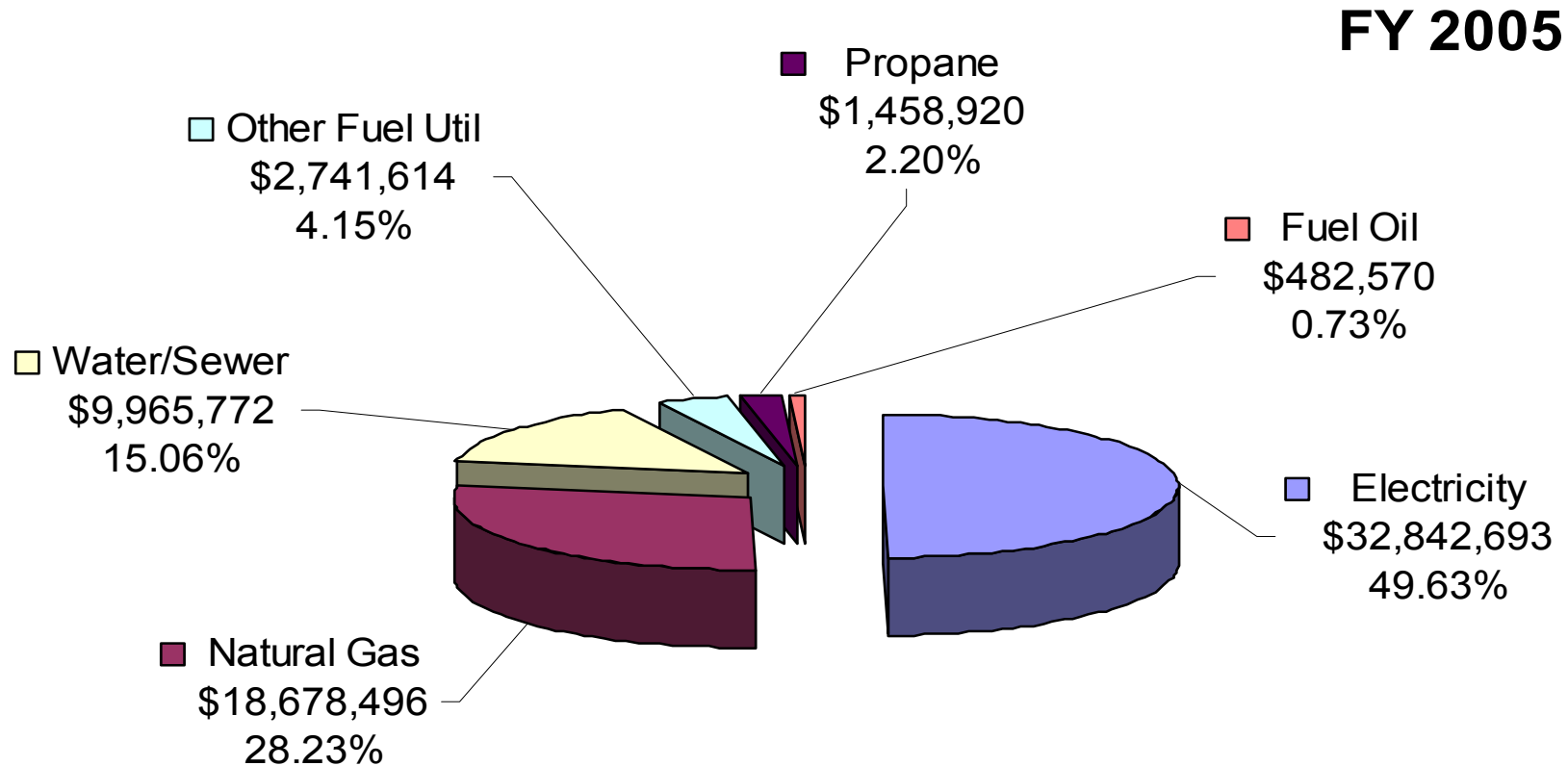
David L. Mosby

Director

DFMDC

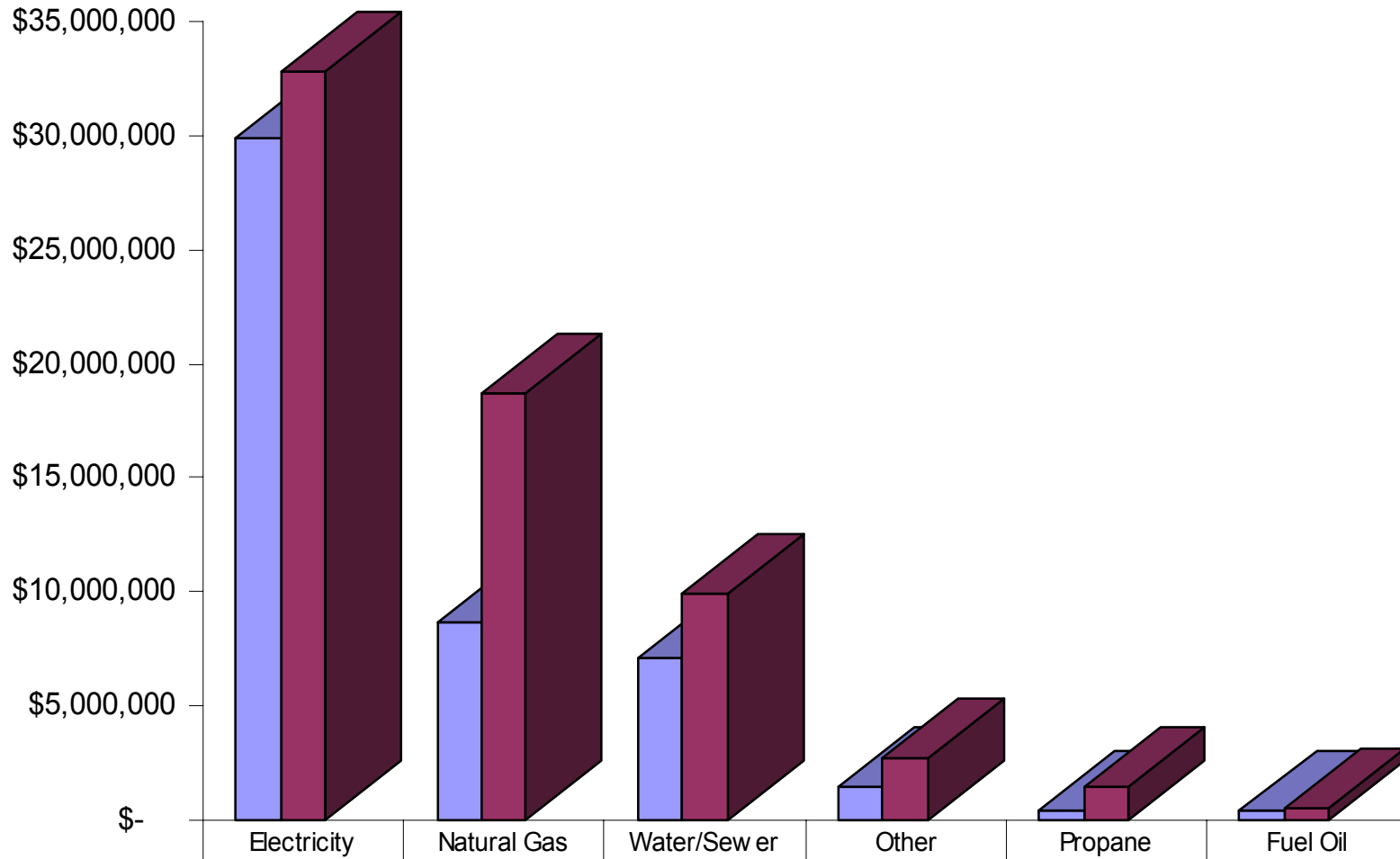
Utility Expenditure by Utility Type

FY 2005 \$66,170.065



FY 2000 VS FY 2005 by Utility Type

38% Overall Increase



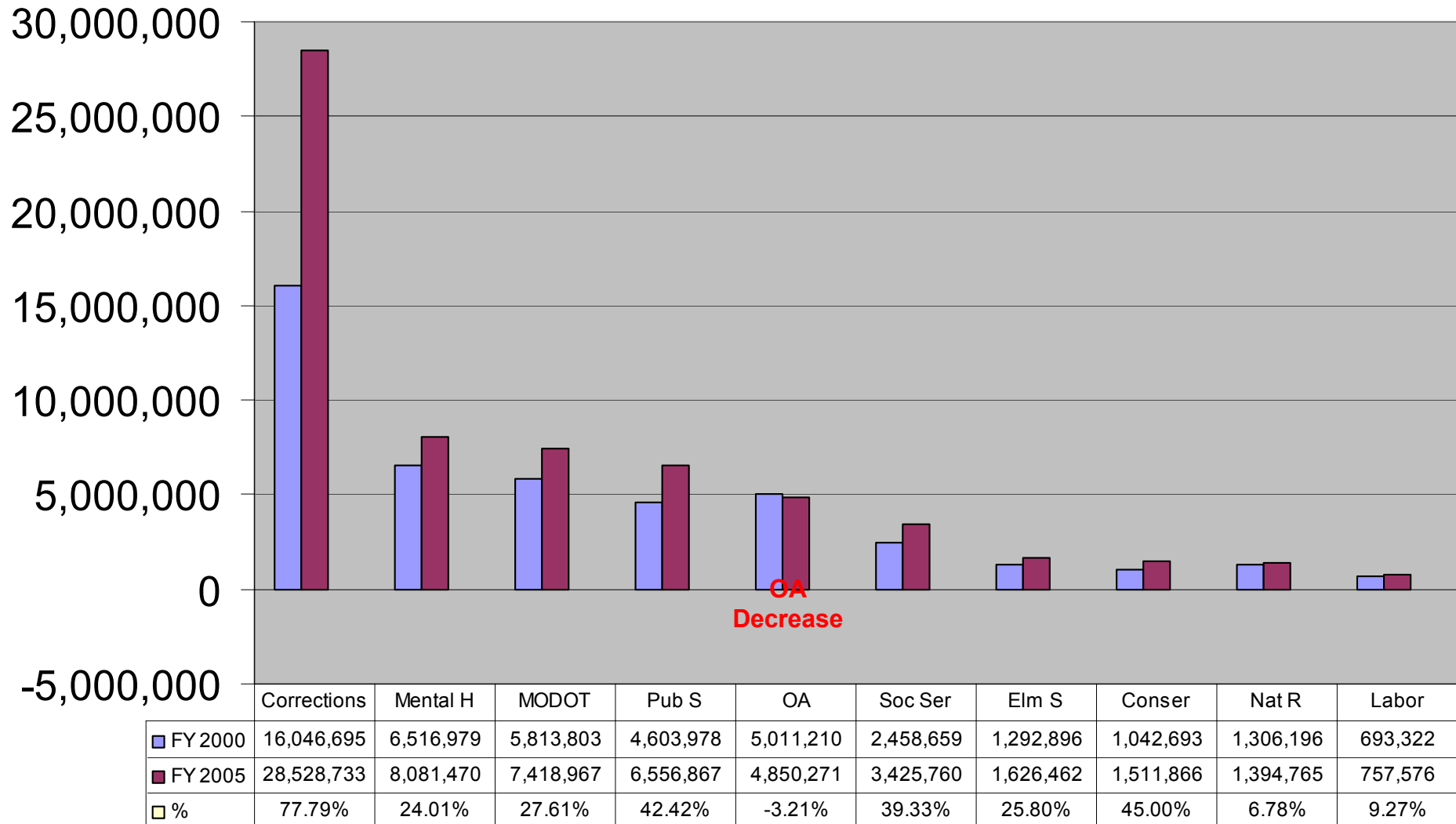
2000	\$29,874,362	\$8,631,084	\$7,109,637	\$1,431,183	\$405,795	\$419,564
2005	\$32,842,693	\$18,678,496	\$9,965,772	\$2,741,614	\$1,458,920	\$482,570
Increase	1.099	2.164	1.402	1.916	3.595	1.150

Top 10 Agencies by Utility Usage

FY 2000 VS FY 2005

9 Have Increased

1 Decreased



OA Electrical Usage (FY 04 Data)

- Since FY 00
 - Square footage has increased by 63,023
 - 2.5% increase
 - Consumption has dropped 6,311,670 KWH's
 - 7.9% reduction
 - Equivalent of closing the SIC and health lab

Natural Gas Savings

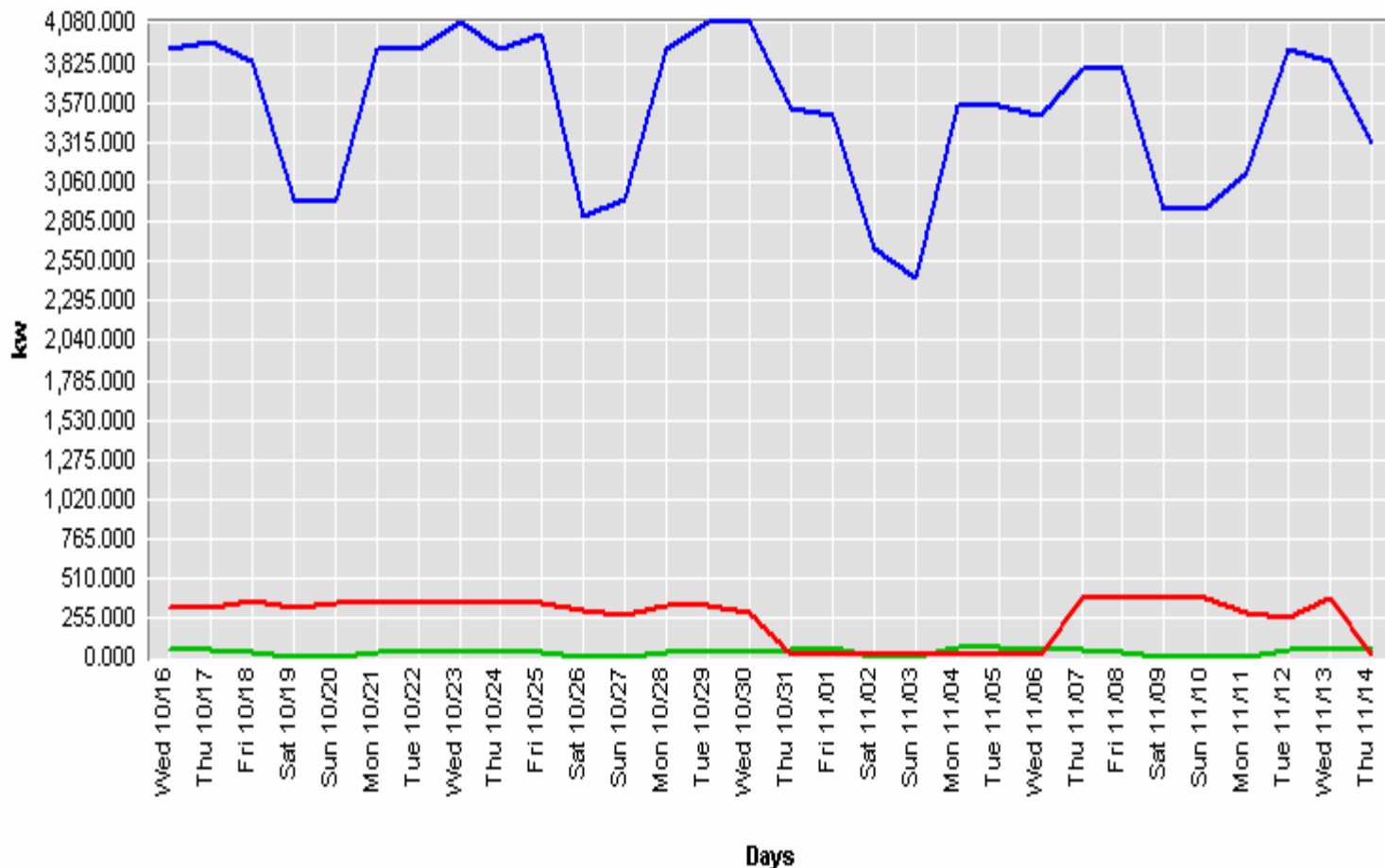
- Cost per MCF
 - Since FY 01 we have purchased natural gas on the futures market.
 - FY 00 \$6.88/MCF
 - FY 01 \$5.53/MCF
 - FY 02 \$5.20/MCF
 - FY 03 \$3.44/MCF
 - FY 04 \$4.53/MCF
 - FY 05 \$7.15/MCF
 - Estimated cost avoidance \$1.4 million (FY 04 Data)

The Secret to Our Success

- “Know Thy Facilities”
 - Formal/Informal energy analysis
 - No cost/ low cost actions
 - Maintain the equipment
- “Know Thy Utility Bill”
 - Proper rate structure/charges (no cost contract to review utility bills)
 - Understand demand charges
 - Bench Mark
- “Know Thy Tenants”
 - Big Turn Off Campaign
 - Load profiles (ABACUS)

ABACUS - Truman

Units: kw High: 4,080.000 Low: 10.800 Avg: 1,271.112



401 W High-02812521

401 W High-02838231

Truman Building Main Chiller

Authority

- RSMO Section 8.237
 - “The Office of Administration shall develop a statewide plan of energy conservation and cost saving for state facilities.”

Statewide Plan (recommendation)

- The State of Missouri shall reduce energy consumption per square foot per degree day in all conditioned facilities by an average of 15% by 2010, relative to FY 2000 levels.
- Establish a program for an energy analysis of each state building identifying opportunities for reduced energy use, the cost and associated savings for each. Under the program the energy star assessment and rating program shall be extended to all state facilities occupied by state employees.

Statewide Plan (recommendation) (cont.)

- Establish a program to require regular maintenance on all lighting, heating, ventilation, and air conditioning systems, including, but not limited to lubricating, balancing, aligning, vacuuming, cleaning, and checking seals, to ensure optimum operations.
- Establish an on going program of Guaranteed Energy Savings Contracts to conduct energy audits and install energy efficient equipment utilizing the resulting utility savings to pay for the work in state facilities.

Statewide Plan (recommendation) (cont.)

- Dedicate up to 10% of each years Facility Maintenance Reserve Fund to finance energy projects that have a two year pay back or less.
- Develop partnerships with local utilities to gather both current and historical cost and consumption data. Investigate opportunities to bundle the purchase of utilities and to negotiate reduced rates.
- Develop partnership opportunities with interested utilities in the development of co-generation and combined heat and power systems to provide onsite energy for current and future state facilities.

Questions?