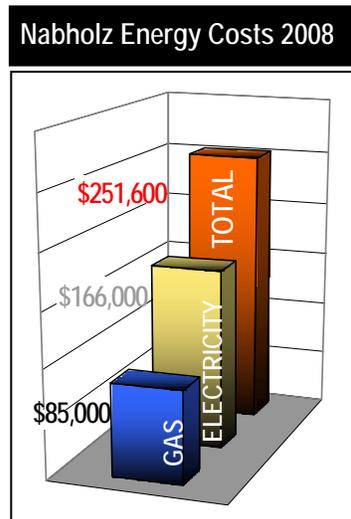


Nabholz Energy Consumption Survey Electricity & Natural Gas 2008



During 2008, Nabholz offices and shops spent \$251,610.97 for heating, cooling, and equipment operation. Costs for electricity totaled \$166,348.94, almost twice as much as the cost for natural gas - \$85,262.03. Although the operations at each location are similar in nature, their use of energy and expenditures for that energy are dramatically different. Energy costs per square foot vary from a low of 23 cents to as high as \$2.84 per square foot. The average kWh usage per square foot spans .25 kWh to 2.52 kWh.

Introduction

This report provides a summary of Nabholz energy consumption and cost by location. Every effort has been made to ensure that information is as complete as possible given the distributed and perpetually growing nature of the corporation. Members of the Sustainable Practices Roundtable Facilities and Operations Committees will review the report's findings and offer recommendations for improved efficiency and energy conservation. The data included will serve as a baseline for evaluating progress made toward efficiency, conservation, and cost-saving goals.

The report summarizes consumption and cost by energy source: electricity and gas are presented separately. A comprehensive spreadsheet of all locations shows detailed consumption and cost data. Graphs and charts originating from this information are used to discuss and compare findings. When possible, similar facilities are grouped for comparison purposes.

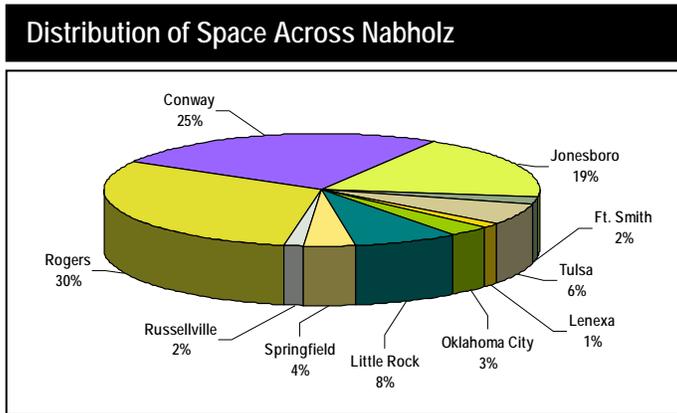
Background

The following data have been assembled by contacting various energy suppliers and utility companies in the four states where Nabholz operates permanent offices. Additionally, staff members at these locations provided sample utility bills and some background information. Further details were gathered through Accounting's hard files and the invoice router system.

In Conway, utility accounts and the locations they represent are a snarl that has become more tangled over time. Names on accounts are not necessarily representative of the current activities taking place at each location. In other instances, meter sharing has made it difficult to sort out what energy goes where. For that reason, Nabholz Properties is included with the operations in that location.

Efforts have been made to determine what meters serve which locations, in Conway and elsewhere, and identify the 'odd' mystery meters that track limited amounts of usage.

In Jonesboro it has been particularly difficult to assemble complete data due to the Jonesboro City Water & Light company policies. Of all the service providers in the four-state area, this was the only company that would not provide a comprehensive printout of energy usage and costs electronically or over the phone. It required a staff member to go to the office, show identification and pay for printouts, which in the end were incomplete.



Floor Space

Important to the study of energy usage is a review of Nabholz space across the organization. The Rogers facilities represent 30 percent of the company's floor space, with Conway following at 25 percent, and Jonesboro at 19 percent.

Square footage estimates of office and shop space, in most instances, were based on measurements by staff at these locations or 'good guesses.' It is hard to be certain if closed storage or other areas were included in the totals.

Many offices and shops share space and one utility bill. With few exceptions, shop spaces are not cooled, some are heated, and others have neither heating or cooling. This is one of the reasons why a location-by-location comparison difficult.

Costs

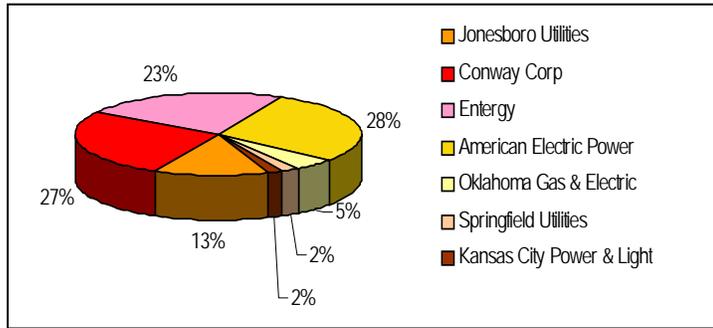
August is the month that brings the highest costs energy cost due to air conditioning. Rates vary by location and provider. They are subject to franchise fees; state, county, and city taxes, delivery charges, and a host of other variables. Additionally, there are adjustments, imposed payments, and specialty programs that may all factor into the cost of power by location. Sometimes these additional costs are easy to recognize in billing statements, but in most cases it is difficult to interpret what fees are for and how they apply.

For the purposes of this survey, those details have been left constant. No attempt has been made to

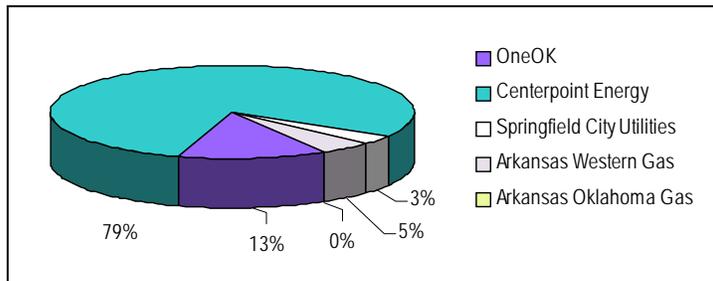
Square Footage of Facilities		
Nabholz Locations Figures do not reflect minor storage space or other areas not reported by staff.	Office	Shop
Conway Main Office	16,000	
Conway Industrial Services	700	6,647
Conway Millwork	893	13,000
Conark	2,620	1,430
Conway Executive	5,000	
Conway Cranes & Equipment	4,700	6,875
Nabholz Properties <i>*no classrooms</i>	2,759	
Tulsa Office	10,500	
Tulsa Shop	400	2,700
Oklahoma City	4,132	2,868
Lenexa	3,214	
Little Rock West	6,340	3,500
Little Rock Downtown	3,500	4,650
Springfield	4,320	4,320
Jonesboro Main Office	9,000	
Jonesboro Millwork	1,100	13,900
Jonesboro NCS	1,840	
Jonesboro Cranes & Equipment	720	16,056
Rogers Main Office	12,000	
Rogers Industrial Services	5,000	50,000
Rogers Cranes & Equipment	900	2,000
Ft. Smith	5,000	
Russellville	960	2,540
Total Space	101,598	130,486

separate fuel charges from these additional costs. Some utilities divide billing into two cycles (spring/summer and fall/winter) and bump energy costs for the hotter months when air conditioning will be running longer. Others adjust fuel costs monthly.

Seven electric power and five gas companies serve the 10 communities in which Nabholz has permanent operations. American Electric Power provides the largest share of kilowatt hours – 28 percent - to the Rogers and Tulsa operations. Conway Corp is a close second at 27 percent of electric energy. A surprise in third place is Entergy at 23 percent. Both Rogers and Conway operations rank first and second respectively in the amount of floor space and electrical energy consumption. Together Little Rock and Russellville’s floor space is just under 25 percent the size of the Rogers facilities, yet these offices consumed 486,480 kWh of energy in 2008.



Energy Providers ▲ Electrical ▼ Natural Gas

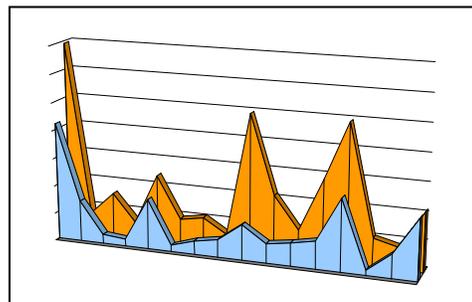


Centerpoint Energy is the dominant gas supplier, providing some 79 percent of the gas used at Nabholz. This volume of business may provide the company with leverage for negotiating rates.

Gas is a far more efficient option for heating than is electricity, but many of Nabholz shops use electric ‘strip’ heaters when needed. Closer inspection of the tradeoffs between electric and gas heating are needed.

ELECTRICITY

In 2008, Nabholz facilities used some 2,083,841 kWh of electricity, enough to power about 2,000 homes for one year. Electric power is the greatest energy cost to the company across all locations with peak demand for cooling in August and September. High temperatures during those months result in energy bills of over \$1,000 in many locations. In 2008, offices used more than 220,000 kWh of energy during August. In total, Nabholz spent nearly \$175,000 on electricity for its shops and offices during 2008.



Tracking Office Space & Energy Consumption

Electrical generation to support this volume of consumption produces a variety of pollutants annually: 21,000 metric tons of CO₂ (carbon dioxide), 23.5 metric tons of NO (nitrogen oxide), and 64 metric tons of SO₂ (sulfur dioxide). More than 345,000 milligrams of mercury are an additional byproduct.

Nabholz Operations

For comparison purposes, Nabholz offices are grouped by city and identified by color. Within that breakdown, offices and shops that share meters or share buildings are presented together. Additionally, facilities also are presented by size as a way of further examining size and consumption relationships.

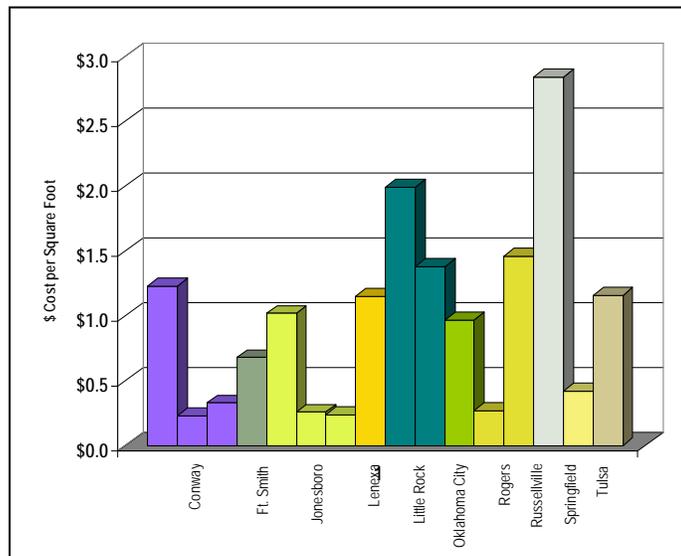
In side-by-side comparisons, the Cranes & Equipment operation in Russellville pays the most per square foot for energy (\$2.84) even though it is the second smallest facility at 3,500 square feet. The Little Rock West office places second in energy spending at a rate of \$1.99 per square foot, followed by the Rogers complex on Second Street (includes Cranes & Equipment) with energy costs of \$1.46 per square foot. Little Rock and Russellville locations are customers of Entergy.

Size Comparisons by Location

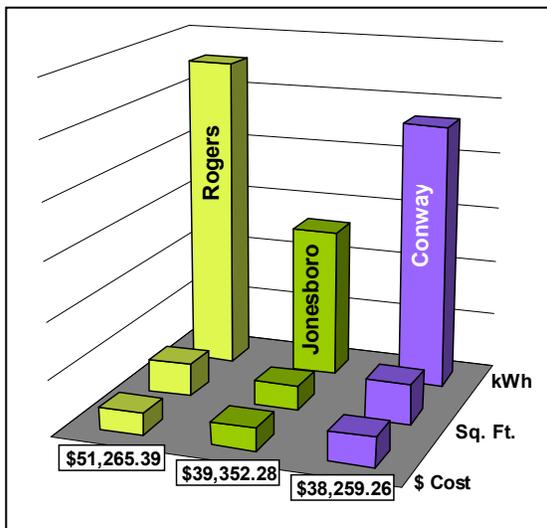
Nabholz offices and shops can be divided into three distinct groups: facilities where combined square footage exceeds 50,000 square feet; locations with under 20,000 square feet; and much smaller spaces under 10,000 square feet. For the purposes of this report, Jonesboro is placed with large facilities because its total floor space is significantly greater than the mid-sized facilities group.

The three largest facilities spent \$128,876.90 on electricity, just slightly more than half of the company's total energy consumption. The average cost per kWh ranged from 6 to 9 cents and the cost per square foot varied from 23 cents in the Conark / Cranes & Equipment to the Rogers main office complex / Cranes & Equipment that

Monthly Average kWh Costs by Square Foot



Large Facilities Comparison



pays more per square foot than the other offices in this group. Averaging \$1.46 per square foot, Rogers has the third highest per square foot cost. Conway's main complex, that includes the executive building, pays \$1.32 per square foot, followed by the Jonesboro central office at \$1.02.

The operations in Rogers have the largest area of shop space in the company at 52,000 square feet. Jonesboro has the second greatest volume at nearly 30,000 square feet. This report continues to show the Nabholz Custom Millwork operation in Jonesboro that is now closed. For 2009, absence of that facility will significantly alter energy consumption in Jonesboro. Conway falls in line with total shop space of 27,952 square feet. Shops in these three locations are heated when needed,

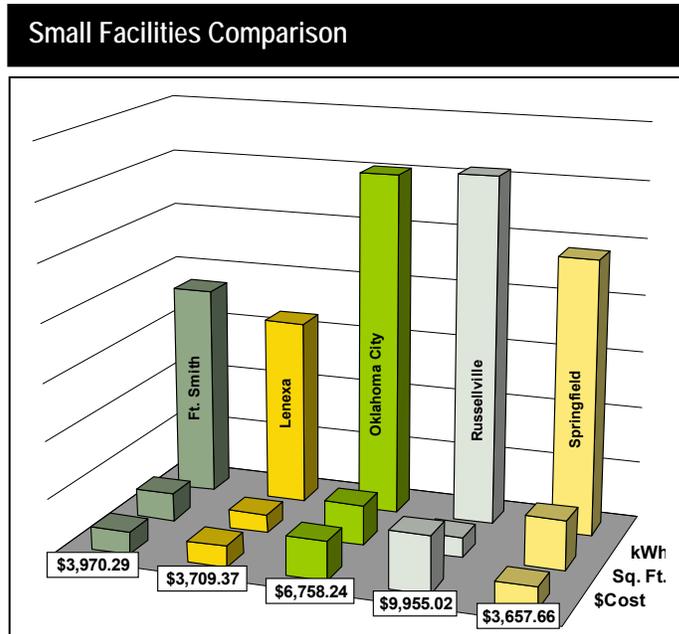
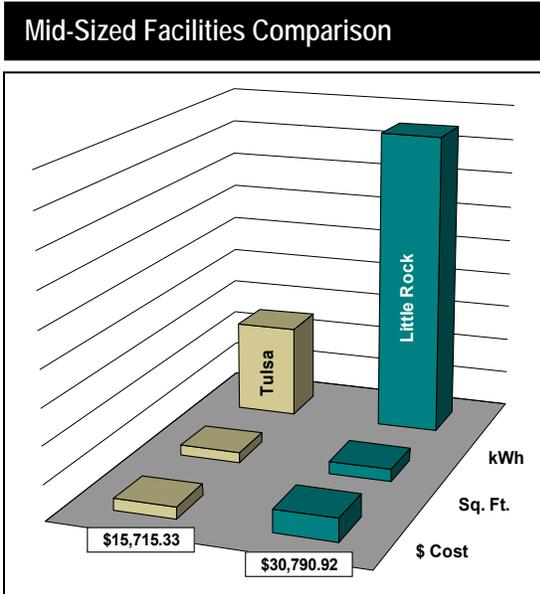
but are not air conditioned during the summer months.

The main / executive office in Conway far outpaces all the other locations in this category and across the company for office space, having 21,000 square feet. When comparing the amount of office space to average monthly kWh consumption, in all but a few instances, there is a direct correlation: the bigger the offices, the more energy used. This is not a revolutionary finding but it does point toward the potential cost savings office energy efficiency improvements may provide.

Of the mid-sized office group, Little Rock and Tulsa, the Little Rock West building pays the most with an average square foot cost per kWh at \$1.99. That is the second highest cost at Nabholz, behind Russellville's average square foot rate of \$2.34.

As the graph to the right shows, combined energy consumption of the Little Rock West and Downtown facilities is about 70 percent greater than Tulsa's energy use, yet Little Rock square footage is only about 25 percent larger. This comparison does reflect the splitting of the energy bill (one meter serves the entire building), kWh, and square footage with the previous tenants, now owners, that occupy the top floor.

This illustrates that although the basic function of Nabholz offices and shops is similar, kilowatt hours used per square foot varies. Contributing to this disparity are most likely building size, age, construction and materials, efficiency of HVAC equipment, lighting, and daylighting, among other factors. How facilities are operated and the tasks performed in them also influence efficiency.



The lowest square foot tier of offices, range in size from 3,214 square feet at Lenexa to 8,640 square feet in Springfield. All of these offices with the exception of Lenexa include shop space, and those shops range in size from 2,500 to 4,300 square feet. The shops have optional heat, but no cooling.

Among this group, Russellville and Oklahoma City have the highest energy usage and by a fairly significant amount compared to the other locations. Russellville, as pointed out earlier, has limited space and high energy consumption. Oklahoma City facilities are closest in size to Springfield and, although they are about 20 percent smaller, they use about 20 percent more energy.

Natural Gas

Nabholz facilities used 66,608 CCF (CCF = 100 cubic feet) of natural gas during 2008 at a cost of \$85, 262.03. Natural gas consumption, unlike electricity, has a wide arc in usage during the year with the greatest demand for heating in December through February followed by a steep drop beginning in March.

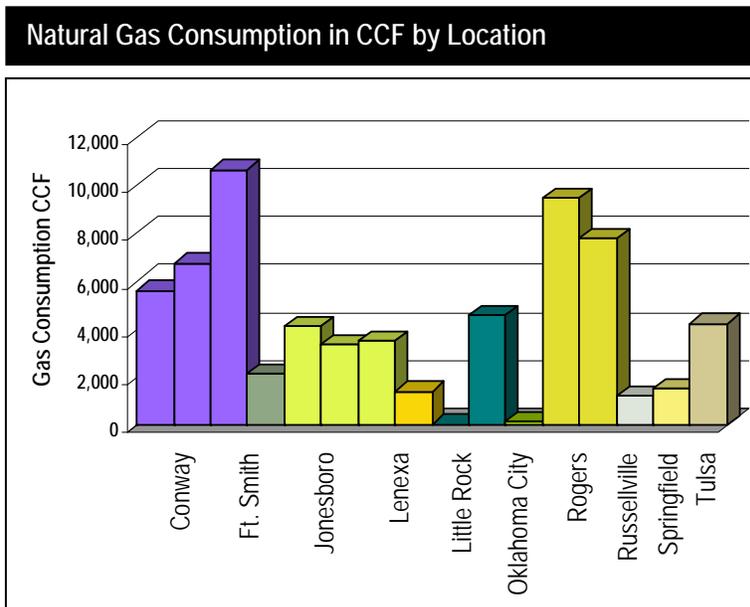
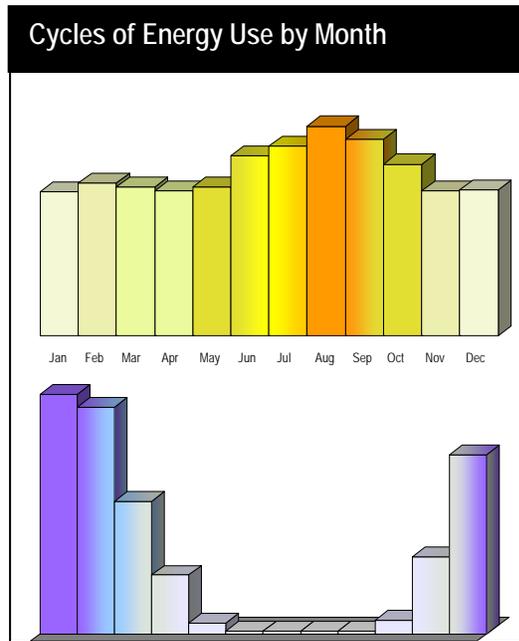
Natural gas is the cleanest of the fossil fuels, and although it still generates dioxides, monoxides, and oxides, the release of these pollutants is significantly less than its carbon-based cousins. And, it produces no mercury as the result of combustion.

All Nabholz facilities with the exception of Little Rock West and Oklahoma City locations depend on gas for heating. The greatest consumer of natural gas was the Custom Millwork/Industrial Services/Nabco Properties group in Conway.

Heating for both wood and metal shops contributed to use of 10, 661 ccf during 2008 at a cost of \$13, 707.63. Rogers Industrial Services followed with consumption of 9,488 ccf at a cost of \$10, 447.15. Third in gas usage was the main Rogers complex at 7,818 ccf.

There is a reduced field of competitors supplying natural gas. Centerpoint Energy is the dominant provider representing 79 percent of all natural gas supplied to Nabholz locations in the four states. OneOK, a gas supplier, is expanding and has purchased franchises in Kansas and parts of Oklahoma. For that reason OneOK is listed instead of the independent providers that may or may not retain their names.

Average costs of natural gas per square foot are closer in spread across locations than those of electricity. Average price per square foot ranged from 16 to 63 cents and cost per CCF were 93 cents to \$1.34. Within this group is an anomaly presented by Little Rock West and Oklahoma City offices due to their low consumption and resulting high costs of \$10.66 and \$12.99 respectively.



Costs

The price of natural gas has two primary components: transmission / distribution costs, and the cost of the gas itself. Like electricity, it is subject to a varying number of taxes, fees and other charges that vary by location. Distribution is an important part, in that the further from pipelines, the more expensive the gas.

Size Comparison/Usage by Location

The same breakdown by square footage used for electricity is used to track natural gas consumption across Nabholz. Conway pays the most in total for natural gas spending \$29,936.23. This is due in part to heating of the wood and metal shops. Rogers purchases the second most amount of natural gas for a total cost of \$19,251.94, and Jonesboro closes out the field of large offices with annual expenditures of \$14,294.55.

