



Judson ISD Energy Management Department

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- Our philosophy is simple; nothing we do under the banner of energy reduction, will negatively impact the Indoor Environmental Quality for our students, educators and staff.
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- The goal of the Energy Management Department is to help set the district on a clear path towards significant energy reduction and resource conservation that will have a positive impact on the students, educators, staff and taxpayers of the Judson Independent School District.
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JUDSON INDEPENDENT SCHOOL DISTRICT

- Enrollment Count in 2015-2016 -23,340
- We are 1 out of 19 school Districts in Bexar County
- District encompasses 55.87 Square Miles
- Serves Incorporated cities of Converse, Kirby and Selma as well as portions of Live Oak, Universal City, San Antonio and Schertz
- 4.3 million Square Feet of campus and support facilities

JUDSON ISD UTILITY FACTS

Utilities Servicing JISD

- CPS Energy – Electric/Gas
- Center Point – Gas
- San Antonio Water System – Water/Sewer
- City of Universal City - Water/Sewer
- City of Converse – Water/Sewer
- City of Kirby – Water/Sewer
- City of Live Oak - Water/Sewer

UTILITY BUDGET 2016-2016

- Electricity \$4,100,070
 - Natural Gas \$340,910
 - Water and Sewer 581,170
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JISD Energy Management History Report

2011- 2012

- 37 Campuses 3,699,010 Sq. Ft
- Total Electrical Cost
\$4,149,157.00 46,101,753 KWH
- Total Gas Cost
- \$279,748.02
- Total Water Cost
- \$285,147.48
- EUI 58.83
- Electrical Cost Sq ft \$1.12

2015-2016

- 39 Campuses 4,300,657 Sq. Ft
- Total Electrical Cost
\$4,017,523.68 44,639,152 KWH
- Total Gas Cost
- \$228,504.39
- Total Water Cost
- \$278,272.26
- EUI 47.45
- Electrical Cost Sq ft \$0.93

JISD Energy Management Report

2011- 2012

- No Standard Normal Schedules
- No Standard Set points left up to Maintenance
- Event Schedule was run the entire school mentality
- Field devices went unchecked or left in hand
- No Consistency of monitoring of BAS systems
- Let system call the plants when ever equipment called to run

2015-2016

- Schedule Guidelines maintained for all campuses
- Set point Guidelines maintained and monitored through Energy Mgmt.
- Established Online event request for campuses with approval process
- Onsite and online monitoring of equipment in hand
- Setup monitoring and reporting process to maintenance
- Programed systems to let schedule and requests dictate when plant runs

JISD ENERGY MANAGEMENT PROGRAM ELEMENTS

- People
 - Mechanical Systems
 - Building Automation Control Systems
 - Utility Companies
 - Software Applications
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PEOPLE



ENERGY CONSERVATION COMMITTEE

- Each Campus has a designated Energy Captain to assist us on Vampire Walk Audits before every break
- We meet regularly to share utility data on their campus and help report any issues we need to address on their campus.



ENERGY CONSERVATION ORGANIZATIONAL SUPPORT

- TEMA, AASMOCA, AUSTIN-SAN ANTONIO ASSOCIATION OF ENERGY ENGINEERS, US BUILDING GREEN COUNCIL
- With some we meet regularly networking and collaborating on ideas with Energy Conservation.



CUSTODIAL AND MAINTENANCE

- Projects
- Preventative maintenance
- On Site Monitoring of potential Energy waste
- IAQ issues



Before



After

MECHANICAL SYSTEMS



preventive
maintenance



JISD Energy Management Report

2015-2016

- Calibration of Sensors throughout District
 - Establish Energy Committee representative at all campuses and meet with them regularly to give them utility updates
 - Establish Incentive program to reduce Energy Sept- Dec and pay campuses back per reduction percentage
 - Prior to all breaks perform Vampire Power Audits to make sure all residual loads are curtailed. And score campuses and award winners after break
 - First 2 hours of every morning monitors entire BAS system and report problems to maintenance and contact campus administrators
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BUILDING AUTOMATION CONTROL SYSTEMS



BUILDING AUTOMATION CONTROL SYSTEMS

- Routinely Monitoring and Trending of Systems
- Calibration of Sensors
- Scheduling Standards
- Set points Standard



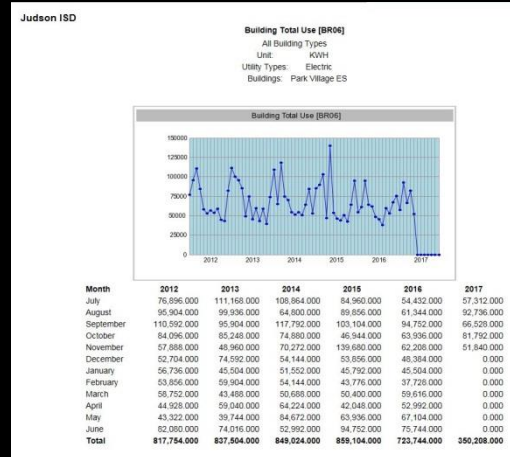
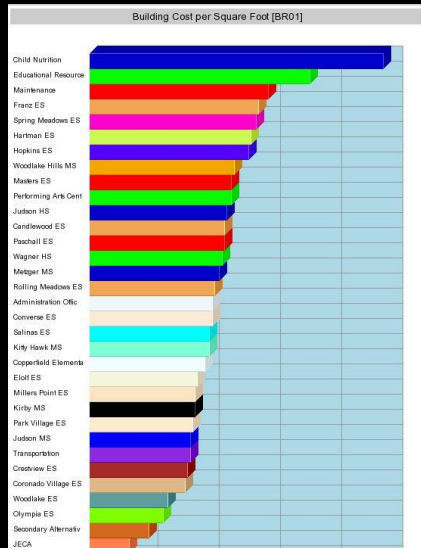
UTILITY COMPANIES

- Know Your Account Representative
- Keep Updated on Incentive Programs that are offered
- Know your Rates
- Watch for anomalies



SOFTWARE APPLICATIONS

- Monitor and track your bills
- Trend your results
- Print Reports
- Watch for problems and errors routinely



QUESTIONS????

