

Madison Metropolitan School District

Energy and the Environment

Energy Conservation

- Performance Contracting
 - Saving \$542,452 annually, 4,140,649 KWH, 464,016 therms
 - New roof top units
 - Adjustable frequency controllers
 - District wide Building Automation System
 - TOD scheduling
 - VAV conversions
 - Lighting retrofits
 - Flush valve controls – 5,319,000 gal/yr

More Savings

■ Focus On Energy Grants

- Steam Traps – saving 280,000 therms/yr
- Expand building automation
- Geo-Thermal study at Sprecher
- Vend-Miser
- Case study -
<http://www.focusonenergy.com/page.jsp?pageId=1073>
- CESA Surveys

More Savings

■ Maintenance Referendum

- Lighting replacements – electronic ballasts, T-8, motion sensors
- Roof replacements – R-18-20
- Hot water heaters, Chillers, Boilers
- Window replacement – Randall, Allis, Emerson, Lowell, Lapham, Crestwood, East, Marquette/Okeeffe, Mendota, Sherman/Shabazz, Whitehorse/Schenk, Cherokee
 - Savings approximately 8,000-50,000 therms/bldg/yr

DATA

Year	Natural Gas	Electricity	Notes
1997	3,093,656	28,578,169	Wright + 55,150
1998	2,959,374	28,261,753	
1999	2,793,625	29,978,128	
2000	2,630,356	26,461,019	Allied, Pflaum, Lincoln + 37,000
2001	2,731,325	26,254,464	Chavez, Hawthorn + 99,308
2002	3,002,229	25,832,160	Lussier, Leopold +16,000

5800 pcs

9000 pcs

What Does This Mean?

- Had we continued to consume, at 1997 consumption rates, our utility expenditures would have been :

\$795,336 MORE

or

15% Reduction

Energy Star Buildings

- Energy Star Partner
- Allied Drive – Energy Star Building
- Participate in benchmarking study
- 1999 Honor Society
- Track energy consumption with Energywatchdog.com

LEED (Leadership in Energy & Environmental Design)

- Preliminary study done at East
- RFP

Environment

- Recycling Program
 - Cardboard
 - Mixed office paper – 801 tons since 2000, \$9,673, purchased 220 tons last year, 32,040 trees.
 - Metals
 - Voluntary aluminum
- Clean Air Coalition – Transportation RFP incl. bio-diesel, decrease bus idling times
- Standard specifications modified
 - Low/no VOC, formaldehydes
 - Mold prevention
 - Improved IAQ
 - Green products

Future

- Energy Conservation and Management Committee
 - Energy Star Certification
 - Consumption Reduction
 - Website
 - Education Programs (KEEP, HEAT), March 30
 - New Policy – with 10% reduction, school keeps 50% of savings, West - \$10,000, Falk - \$1,200
 - Solar for pools
 - P/C Phase IV
 - Educational software
- Goal - National Award Energy Star

BUILDING CONDITION = STUDENT ACHEIVEMENT