

**Spring Branch Independent School District
Agenda Item Information**

Date of Board Meeting: May 21, 2007

Subject: Energy Quarterly Update: January – March 2007

Administrator Responsible:

Name: Ruben Reyes

Position: Associate Superintendent for Operations

Purpose of Agenda Item:

Information only **Action needed** **Report**

Additional Information and/or Backup:

Quarterly Energy Report for the months of January through March 2007.

A decorative graphic consisting of a large, light gray bracket shape on the left side, a thin gray vertical bar in the center, and a thin gray circle on the right side. The text 'Quarterly Energy Report' is centered within the vertical bar.

Quarterly Energy Report

January – March 2007

*Presented by
Rebecca Cordeiro de Peredo*

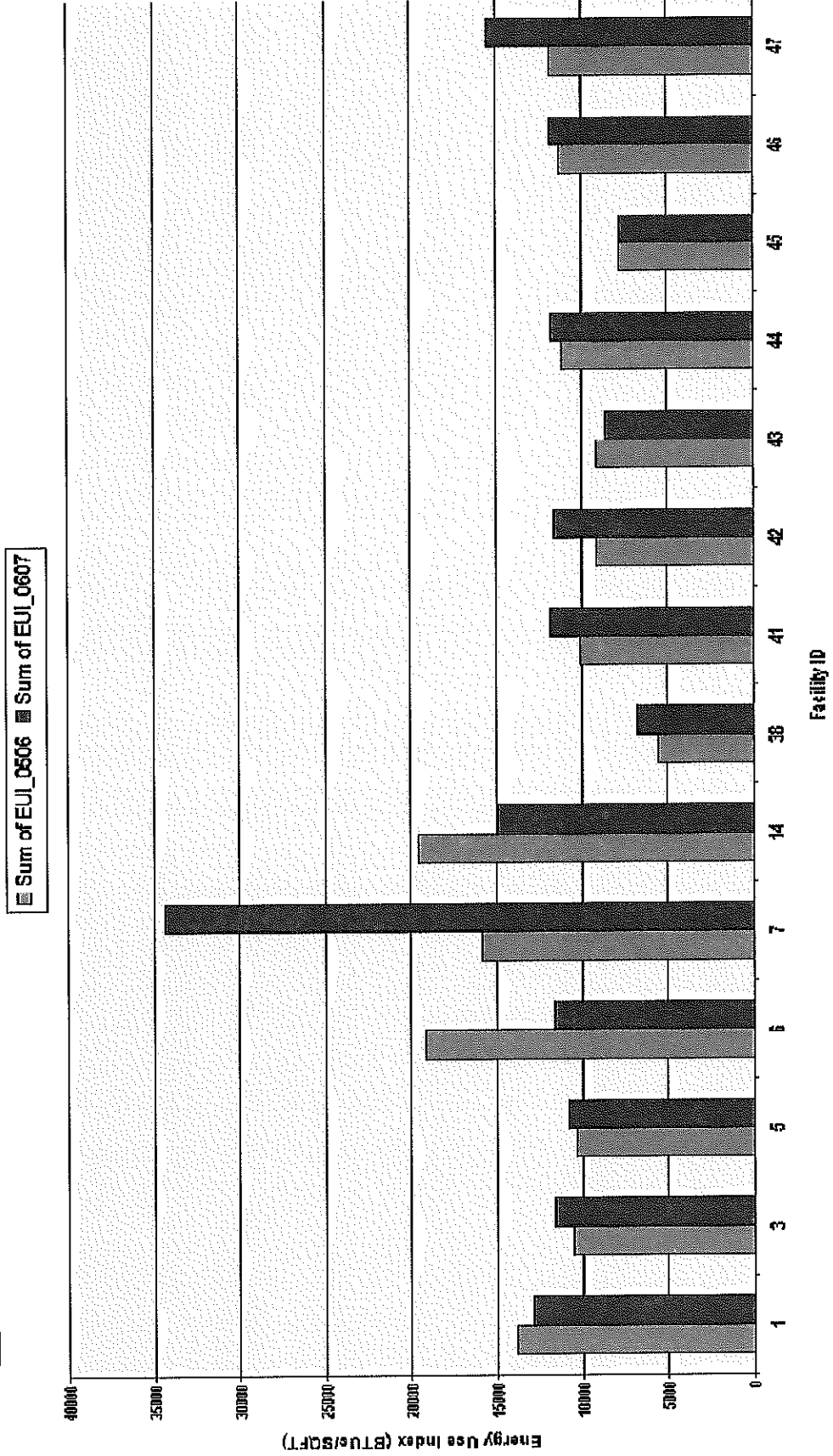
District Cost Summary: Jan-Mar

School Type	Cost 2005-2006	Cost 2006-2007	Difference
High	\$584,510	\$607,093	\$22,584
Middle	\$337,514	\$328,240	(\$9,274)
Elementary	\$555,774	\$561,695	\$5,921
Pre-K	\$58,393	\$56,478	(\$1,916)
Support	\$107,238	\$102,100	(\$5,138)
Total	\$1,643,428	\$1,655,606	\$12,178

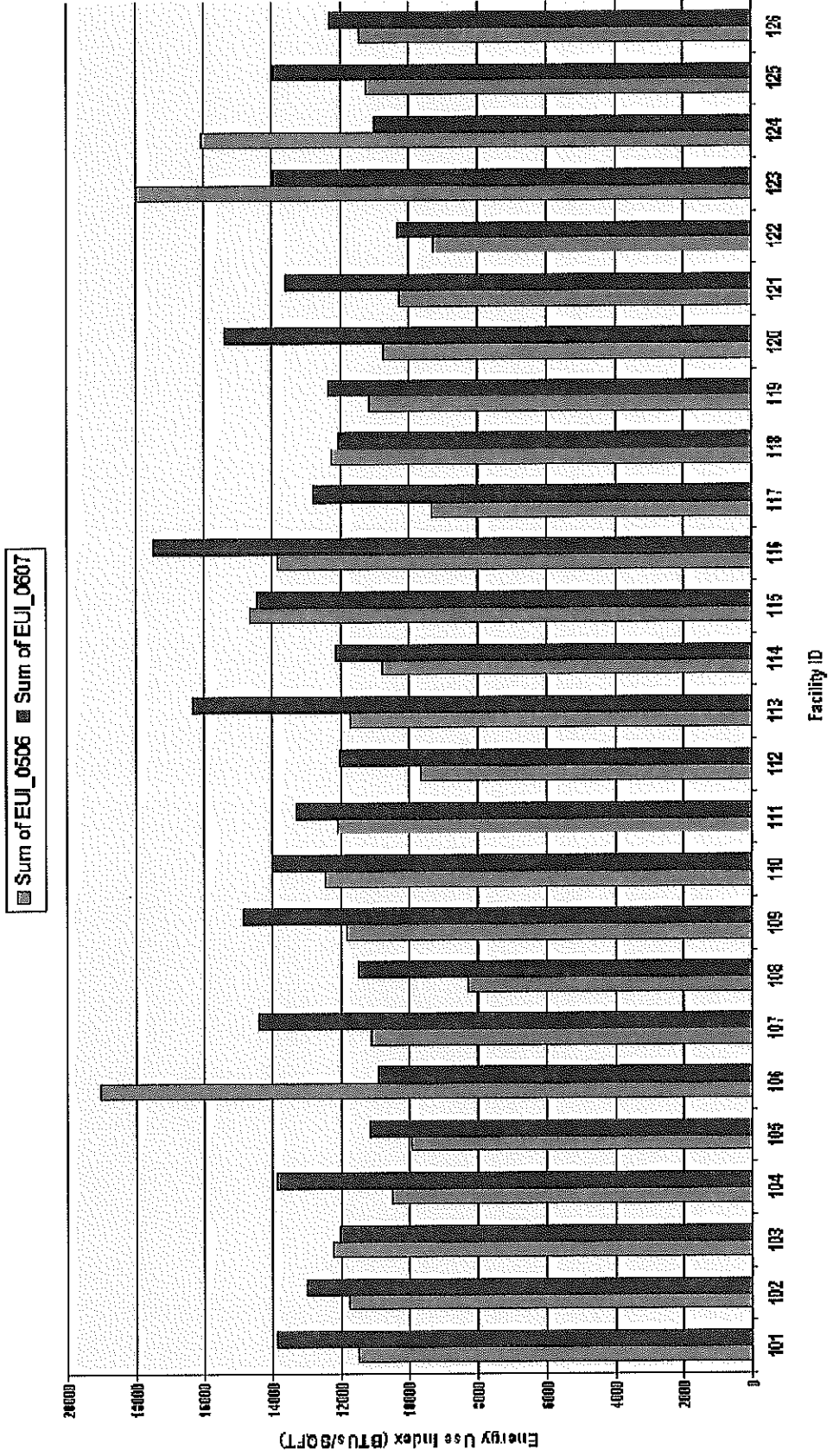
[Utilities Summary: Jan-Mar]

Utility	Use 05-06	Use 06-07	Use Difference	Cost 05-06	Cost 06-07	Cost Difference
Electricity	14,989,800	14,374,165	-4.11%	\$1,312,181	\$1,251,643	-4.61%
Natural Gas	190,538	272,096	42.80%	\$196,920	\$263,332	33.73%
Water	20,635	20,745	0.53%	\$134,327	\$140,631	4.69%
Total Cost				\$1,643,428	\$1,655,606	0.74%

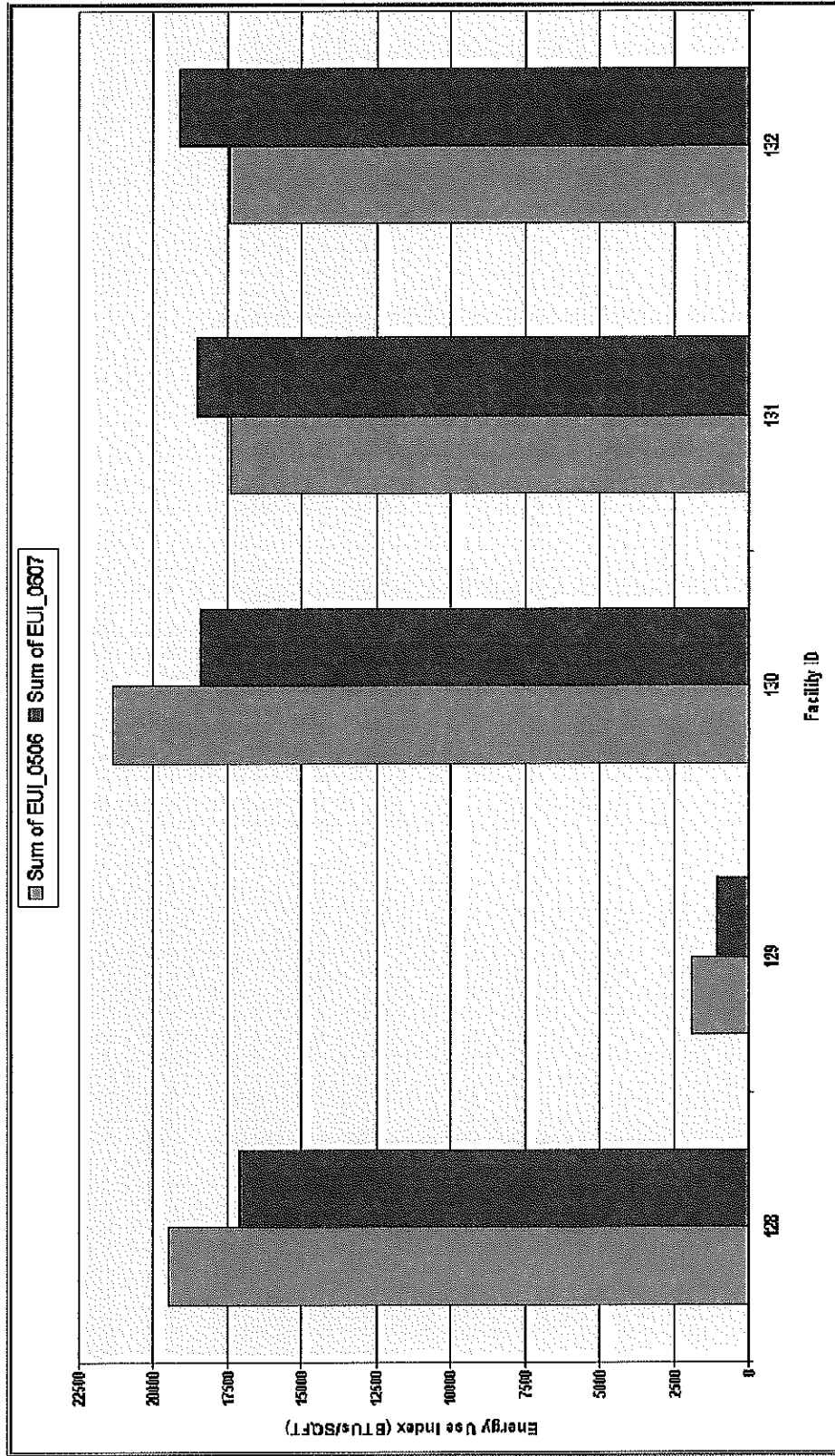
Energy Use Index - Secondary



Energy Use Index-Elementary



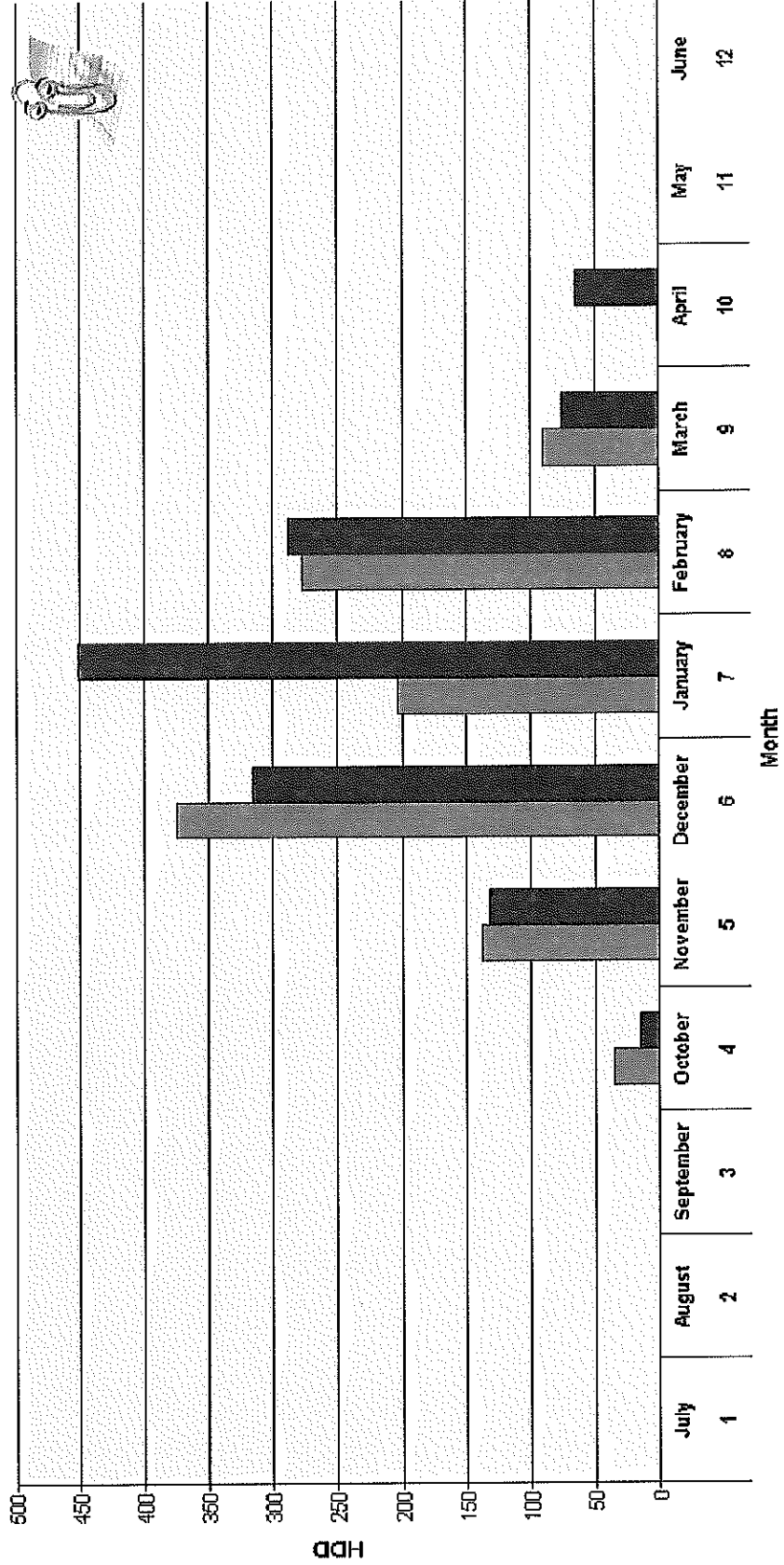
[Energy Use Index – Pre K]



Impact of Weather – Heating Degree Days

Heating Degree Days

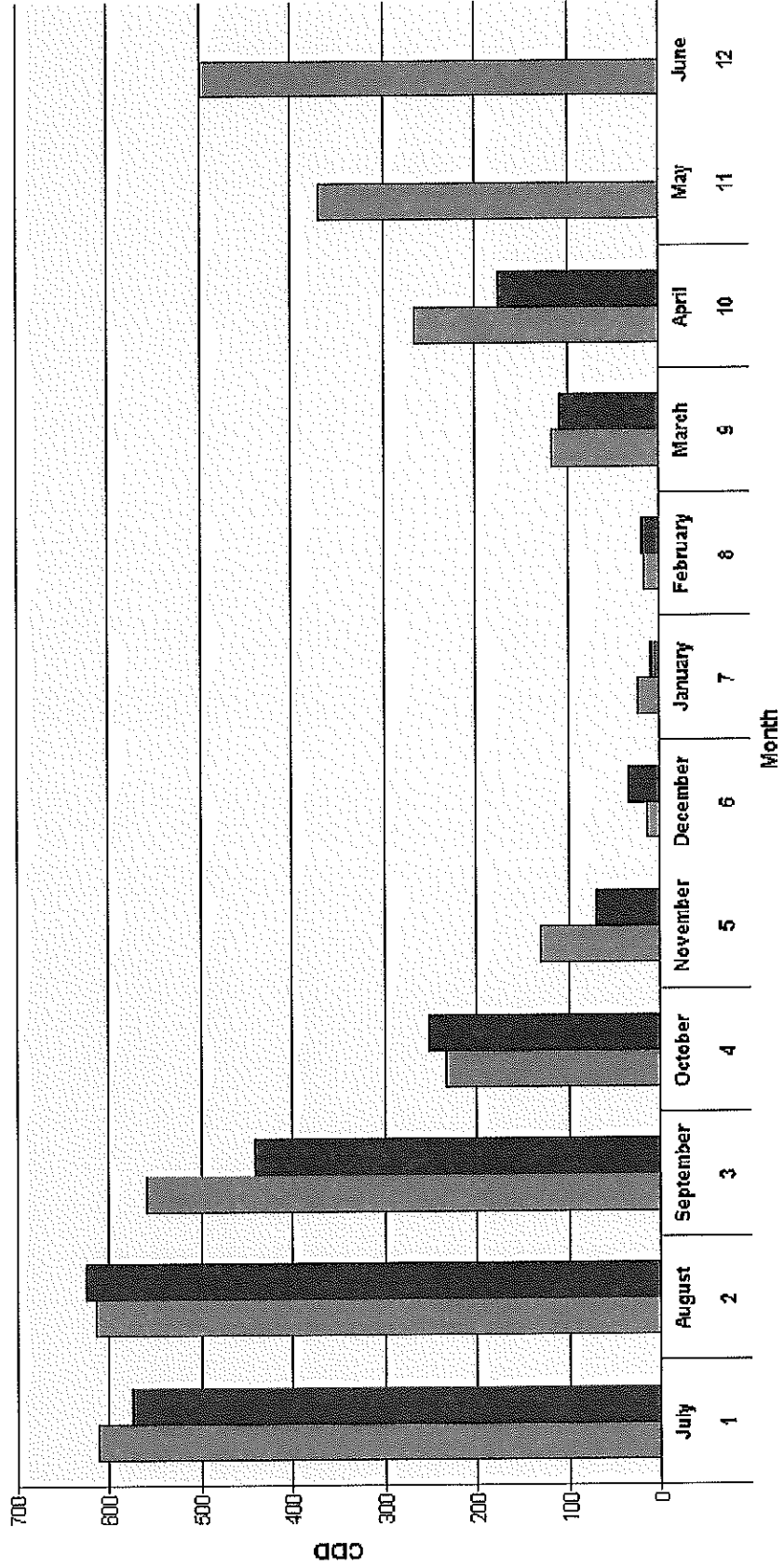
Sum of Weather2005.HDD Sum of Weather2006.HDD



Impact of Weather –Cooling Degree Days

Cooling Degree Days

Sum of Weather2005.CDD Sum of Weather2006.CDD



[EUI Notes – Quarter 3]

- Higher by 1150 BTUs per square foot
- Attributed to high heating load in January 2007, compared to January 2006

[Important Notes

- Major change in Electric Rates
 - Takes effect May 2007
 - 2.649 cents/KWH increase
 - About \$2M increase annually

[Energy Management Duties]

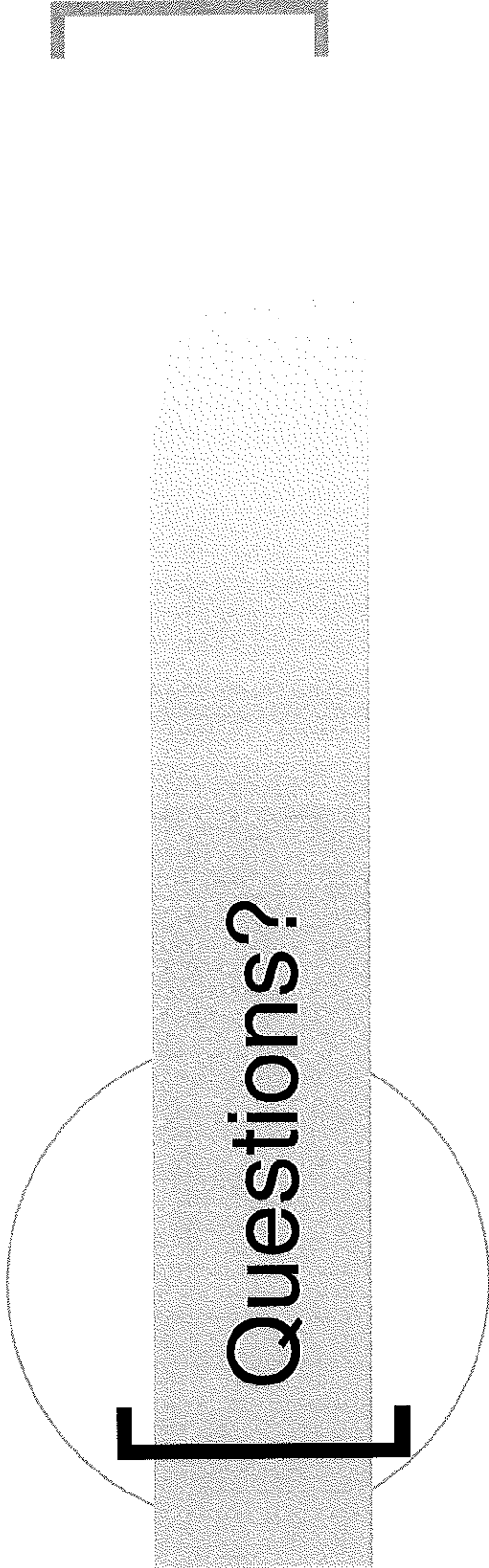
- Utility Bill Analysis
 - Rate verification
 - Billing Error Notification and Recollection
 - Load Analysis
- HVAC Optimization
- Scheduling to maximize efficiencies
- Classroom Environment Management

[New Developments]

- Facility Inspection Criteria and Schedule
- Online Use and Cost tracking for campuses (Intranet)
- Energy Reduction Projects with attractive paybacks

[Summary]

- Higher EUI and cost this quarter due to colder weather – however, we are still under budget for the year
- Great participation from campuses and departments
- Expecting a significant rate increase
- Need to consider retrofits to lower the impact of the increased rates



Q3 Energy Use Index Comparison

		<i>SQFT</i>	<i>EUI_0506</i>	<i>EUI_0607</i>	<i>Difference</i>
<i>High School</i>					
1	Memorial High	311115	13,842	12,921	-921
3	Spring Woods High	336366	10,515	11,591	1,076
5	Northbrook High	394609	10,398	10,826	428
6	Stratford High	320000	20,488	25,937	5,449
7	Guthrie Center	83614	15,840	34,349	18,509
14	Westchester Academy	294963	19,563	14,895	-4,668
38	Spring Branch Education Center	268780	5,606	6,802	1,196
<i>High School Aggregate</i>		2,009,447	13,488	14,723	1,234

<i>Middle School</i>					
41	Landrum Middle	177665	10,071	11,821	1,750
42	Memorial Middle	188852	9,122	11,601	2,479
43	Spring Branch Middle	226208	9,118	8,617	-501
44	Spring Woods Middle	200616	11,141	11,737	596
45	Spring Forest Middle	192559	7,839	7,806	-33
46	Spring Oaks Middle	189660	11,281	11,804	523
47	Northbrook Middle	203020	11,858	15,544	3,686
<i>Middle School Aggregate</i>		1,378,580	10,058	11,238	1,180

<i>Elementary</i>					
101	Bendwood	38830	11,473	13,889	2,416
102	Bunker Hill Elementary	58385	11,756	13,011	1,255
103	Edgewood Elementary	68978	12,209	12,039	-170
104	Frostwood Elementary	60625	10,535	13,892	3,357
105	Hollibrook Elementary	95043	9,941	11,144	1,203
106	Housman Elementary	76895	19,036	10,919	-8,117
107	Hunters Creek Elementary	61937	11,099	14,433	3,334
108	Meadow Wood Elementary	72722	8,265	11,471	3,206
109	Memorial Drive Elementary	58965	11,832	14,857	3,025
110	Pine Shadows Elementary	86910	12,457	14,016	1,559
111	Ridgecrest Elementary	88853	12,096	13,320	1,224
112	Rummel Creek Elementary	72615	9,688	12,027	2,339
113	Shadow Oaks Elementary	84558	11,734	16,309	4,575
114	Spring Branch Elementary	77352	10,807	12,151	1,344

		<i>SQFT</i>	<i>EUI_0506</i>	<i>EUI_0607</i>	<i>Difference</i>
115	Valley Oaks Elementary	75697	14,676	14,473	-203
116	Westwood Elementary	56409	13,854	17,494	3,640
117	Woodview Elementary	70508	9,334	12,805	3,471
118	Wilchester Elementary	71798	12,267	12,078	-189
119	Sherwood Elementary	69371	11,146	12,377	1,231
120	Spring Shadows Elementary	83904	10,750	15,389	4,639
121	Nottingham Elementary	66393	10,280	13,598	3,318
122	Terrace Elementary	74349	9,269	10,344	1,075
123	Thornwood Elementary	69038	17,955	13,946	-4,009
124	Cedar Brook Elementary	82179	16,038	11,022	-5,016
125	Treasure Forest Elementary	82149	11,245	13,947	2,702
126	Buffalo Creek Elementary	82179	11,451	12,332	881
<i>Elementary Aggregate</i>		1,886,642	11,977	13,129	1,152

PK School

128	Wildcat Way School	26000	19,489	17,088	-2,401
129	Panda Path School	15618	1,933	1,078	-855
130	Lion Lane School	26000	21,390	18,401	-2,989
131	Bear Blvd. School	26000	17,402	18,554	1,152
132	Tiger Trail School	26000	17,444	19,113	1,669
<i>PK School Aggregate</i>		119,618	16,712	16,042	-670

<i>District EUI</i>	5,394,287	12,155	13,304	1,149
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Quarterly Energy Cost Comparison

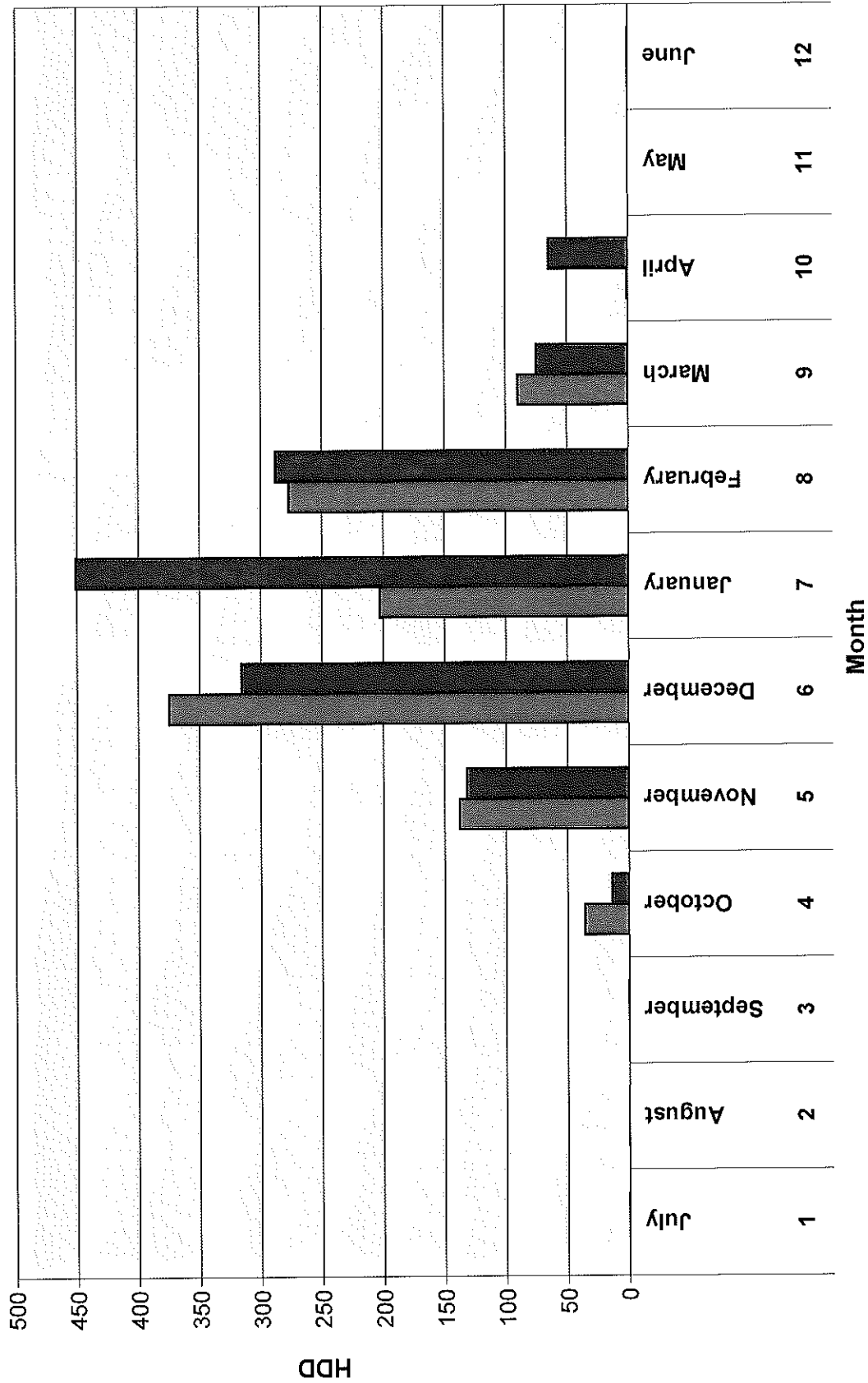
	<i>Facility Type</i>	<i>2005-2006 Cost</i>	<i>2006-2007 Cost</i>	<i>Difference</i>
Quarter 1				
1	High	\$752,832	\$690,814	(\$62,018)
2	Middle	\$421,400	\$393,258	(\$28,143)
3	Elementary	\$665,945	\$629,341	(\$36,604)
4	Pre-K	\$77,609	\$65,665	(\$11,945)
5	Support	\$119,596	\$116,937	(\$2,659)
Total		\$2,037,382	\$1,896,014	(\$141,368)
Quarter 2				
1	High	\$711,480	\$657,701	(\$53,779)
2	Middle	\$401,577	\$355,527	(\$46,050)
3	Elementary	\$635,703	\$597,229	(\$38,475)
4	Pre-K	\$63,173	\$54,957	(\$8,216)
5	Support	\$140,435	\$124,515	(\$15,920)
Total		\$1,952,368	\$1,789,928	(\$162,440)
Quarter 3				
1	High	\$584,510	\$607,093	\$22,584
2	Middle	\$337,514	\$328,240	(\$9,274)
3	Elementary	\$555,774	\$561,695	\$5,921
4	Pre-K	\$58,393	\$56,478	(\$1,916)
5	Support	\$107,238	\$102,100	(\$5,138)
Total		\$1,643,428	\$1,655,606	\$12,178
Quarter 4				
1	High			
2	Middle			
3	Elementary			
4	Pre-K			
5	Support			
Total				
Year to Date Total		\$5,633,179	\$5,341,549	(\$291,630)

Utilities by Quarter

<i>Quarter</i>	<i>2005-2006 Use</i>	<i>2006-2007 Use</i>	<i>2005-2006 Cost</i>	<i>2006-2007 Cost</i>
Q1				
<i>Electricity</i>	23,810,499	19,934,095	\$1,776,378	\$1,657,663
<i>Natural Gas</i>	43,108	47,856	\$65,667	\$65,920
<i>Water</i>	31,161	27,665	\$195,338	\$172,432
<i>Quarter Cost Summary</i>			\$2,037,382	\$1,896,014
Q2				
<i>Electricity</i>	18,913,866	16,519,841	\$1,522,939	\$1,427,166
<i>Natural Gas</i>	167,687	195,921	\$241,473	\$189,892
<i>Water</i>	30,069	25,733	\$187,956	\$172,871
<i>Quarter Cost Summary</i>			\$1,952,368	\$1,789,928
Q3				
<i>Electricity</i>	14,989,800	14,374,165	\$1,312,181	\$1,251,643
<i>Natural Gas</i>	190,538	272,096	\$196,920	\$263,332
<i>Water</i>	20,635	20,745	\$134,327	\$140,631
<i>Quarter Cost Summary</i>			\$1,643,428	\$1,655,606
<i>Year to date Cost Summary</i>			\$5,633,179	\$5,341,549
<i>Year to date Cost Savings</i>				\$291,630

Heating Degree Days

Sum of Weather2005.HDD
 Sum of Weather2006.HDD



Cooling Degree Days

Sum of Weather2005.CDD
 Sum of Weather2006.CDD

