

Henderson County Schools

Maintenance Department Energy Savings Projects

LED Lighting replacement projects at the following schools were completed the summer of 2017 and early fall.

Cost Avoided (July-Dec. 2016 to July – Dec. 2017)

<u>School</u>	<u>2016 KWH</u>	<u>2017 KWH</u>	<u>Reduced KWH</u> (x cost perKWH)	<u>Savings</u>
ABC	373,154	258,644	114,510 x.133 =	\$15,229
Cairo	356,800	295,600	61,200 x.140 =	\$8,568
E. Hts	522,000	436,800	85,200 x.092 =	\$7,837
Nia	402,800	320,600	82,200 x.138 =	\$11,343
NMS	933,120	785,750	147,370 x.070 =	\$10,315
SMS	806,320	680,800	125,520 x.074 =	\$9,288
HCHS	1,888,400	1,680,400	<u>208,000</u> x.071 =	<u>\$14,768</u>
Total KWH saved			824,000	Total= \$ 77,348 less

Actual bill comparison

<u>School</u>	<u>2016 Cost July/Dec.</u>	<u>2017 Cost July/Dec.</u>	<u>Savings</u>
ABC	\$38,046	\$32,025 =	\$6,021 less
Cairo	\$38,048	\$35,799 =	\$2,249 less
E Hts	\$54,714	\$46,409 =	\$8,305 less
Nia	\$43,863	\$38,953 =	\$4,910 less
NMS	\$65,297	\$58,090 =	\$7,207 less
SMS	\$58,881	\$52,766 =	\$6,115 less
HCHS	\$134,251	\$126,186 =	<u>\$8,065 less</u>
			Total= \$42,872 less

KWH compared

KWH used July-Dec 2017 = 4,458,594 or Avg. per month 636,942

Reduced KWH usage from July - Dec. 2016 to July - Dec. 2017 by 743,099 KWH

*Over one month's Avg. usage has been saved so far in 2017-2018 school year

Cost for all work materials and summer work assistance

\$162,507 + \$24,492 = \$186,999 minus \$17,000 rebates = \$169,999 total cost.

A. Savings avoided for 6 months

\$77,348 divided by 6 months = \$12,891

B. Cost to Cost for 6 months

2016 total for July to Dec = \$433,100 divided by 6 months = \$72,183 avg.

2017 total for July to Dec = \$390,228 divided by 6 months = \$65,038 avg.

2016 avg. \$866,196 cost projected for full year

2017 avg. \$780,456 cost projected for full year

Total saved \$85,740 for projected for full year or \$7,145 month.

\$169,999 divided by monthly avg. savings \$7,145 = **23.7 month pay back**