

## Emergency Lights

	# of Bulbs	Watts	Useage	
Current Fixture	2	25	50	Watts
Replacement LED Fixture	2	15	30	Watts
Watts Savings / Hour			20	Watts
Kilowatt Savings / Hour			0.02	kwh

	Hours per Day Used	# Days Used	Annual kwh Savings/ Fixture	Rate/ kwh	Annual Savings
On-Peak	12	365	87.6	\$0.07446	\$6.52
Off-Peak	12	365	87.6	\$0.04863	\$4.26

Annual Peak Demand Surcharge	Kilowatt Savings / Hour	Annual Savings on Demand Surcharge
\$1.50 / kwh	0.02 kwh	\$0.36

Monthly Excess Control Surcharge	Kilowatt Savings / Hour	Annual Savings on Excess Surcharge
\$6.65 / kwh	0.02 kwh	\$1.60

Total Annual Savings Per Fixture \$12.74

## Project Cost and Savings Calculation

Total Number of Fixtures	40
Cost per Bulb	\$25.33
Cost per Fixture (2 bulbs)	\$50.66
Project Cost	\$2,026.40
Total Annual Project Savings	\$509.55
Payback in years	4.0

### Emergency Lights

	# of Bulbs	Watts	Useage		
Current Fixture	1	25	25		Watts
Replacement LED Fixture	1	15	15		Watts
Watts Savings / Hour			10		Watts
Kilowatt Savings / Hour			0.01		kwh
	Hours per Day Used	# Days Used	Annual kwh Savings/ Fixture	Rate/ kwh	Annual Savings
On-Peak	7	180	12.6	\$0.07235	\$0.91
Off-Peak	0	180	0	\$0.04730	\$0.00
Annual Peak Demand Surcharge		Kilowatt Savings / Hour			
\$1.48 / kwh		0.01 kwh		Annual Savings on Demand Surcharge	\$0.18
Monthly Excess Control Surcharge		Kilowatt Savings / Hour			
\$6.26 / kwh		0.01 kwh		Annual Savings on Excess Surcharge	\$0.75
				Total Annual Savings Per Fixture	\$1.84

### Project Cost and Savings Calculation

Total Number of Fixtures	135
Cost per Bulb	\$25.33
Cost per Bulb	\$25.33
Project Cost	\$3,419.55
Total Annual Project Savings	\$248.46
Payback in years	13.8

## Classroom Lights

	# of Bulbs	Watts	Useage		
Current Fixture	4	25	100		Watts
Replacement LED Fixture	4	15	60		Watts
Watts Savings / Hour			40		Watts
Kilowatt Savings / Hour			0.04		kwh
	Hours per Day Used	# Days Used	Annual kwh Savings/ Fixture	Rate/ kwh	Annual Savings
On-Peak	8	190	60.8	\$0.07235	\$4.40
Off-Peak	0	0	0	\$0.04730	\$0.00
Annual Peak Demand Surcharge		Kilowatt Savings / Hour			Annual Savings on Demand Surcharge
\$1.48 / kwh		0.04 kwh			\$0.71
Monthly Excess Control Surcharge		Kilowatt Savings / Hour			Annual Savings on Excess Surcharge
\$6.26 / kwh		0.04 kwh			\$2.50
Total Annual Savings Per Fixture					\$7.61

## Project Cost and Savings Calculation

	<b>One Room</b>	<b>All School</b>
Total Number of Fixtures	12	1,020
Cost per Bulb	\$5.72	\$5.72
Cost per Fixture (4 bulbs)	\$22.88	\$22.88
Project Cost	\$274.56	\$23,337.60
Total Annual Project Savings	\$91.36	\$7,765.55
Payback in years	3.0	3.0

Assumes 85 Classrooms / 4,080 LED Bulbs  
 Assumes \$10.72 Bulb Cost  
 Assumes \$4.00 FOE Rebate  
 Assumes \$1.00 Tax Incentive

## Administration Lights

	# of Bulbs	Watts	Useage	
Current Fixture	4	25	100	Watts
Replacement LED Fixture	4	15	60	Watts
Watts Savings / Hour			40	Watts
Kilowatt Savings / Hour			0.04	kwh

  

	Hours per Day Used	# Days Used	Annual kwh Savings/ Fixture	Rate/ kwh	Annual Savings
On-Peak	9	240	86.4	\$0.07235	\$6.25
Off-Peak	0	365	0	\$0.04730	\$0.00

  

Annual Peak Demand Surcharge	Kilowatt Savings / Hour	Annual Savings on Demand Surcharge
\$1.48 / kwh	0.04 kwh	\$0.71

  

Monthly Excess Control Surcharge	Kilowatt Savings / Hour	Annual Savings on Excess Surcharge
\$6.26 / kwh	0.04 kwh	\$3.00

  

Total Annual Savings Per Fixture	\$9.97
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## Project Cost and Savings Calculation

Total Number of Fixtures	40
Cost per Bulb	\$5.72
Cost per Fixture (4 bulbs)	\$22.88
Project Cost	\$915.20
Total Annual Project Savings	\$398.65
Payback in years	2.3

Assumes 160 LED Bulbs  
 Assumes \$10.72 Bulb Cost  
 Assumes \$4.00 FOE Rebate  
 Assumes \$1.00 Tax Incentive

## Hallways

	# of Bulbs	Watts	Useage		
Current Fixture	2	25	50		Watts
Replacement LED Fixture	2	15	19		Watts
Watts Savings / Hour			31		Watts
Kilowatt Savings / Hour			0.031		kwh
	Hours per Day Used	# Days Used	Annual kwh Savings/ Fixture	Rate/ kwh	Annual Savings
On-Peak	12	260	96.72	\$0.07235	\$7.00
Off-Peak	0	365	0	\$0.04730	\$0.00
Annual Peak Demand Surcharge		Kilowatt Savings / Hour			Annual Savings on Demand Surcharge
\$1.48 / kwh		0.031 kwh			\$0.55
Monthly Excess Control Surcharge		Kilowatt Savings / Hour			Annual Savings on Excess Surcharge
\$6.26 / kwh		0.031 kwh			\$2.33
Total Annual Savings Per Fixture					\$9.88

## Project Cost and Savings Calculation

	<b>One Fixture</b>	<b>All School</b>	
Total Number of Fixtures	1	275	
Cost per Bulb	\$5.72	\$5.72	
Cost per Fixture (2 bulb)	\$11.44	\$11.44	
Project Cost	\$11.44	\$3,146.00	
Total Annual Project Savings	\$9.88	\$2,716.17	
Payback in years	1.16	1.16	

## High School Gym

	# of Bulbs	Watts	Useage		
Current Bulbs	216	25	5400		Watts
Replacement LED Bulbs	216	15	3240		Watts
Watts Savings / Hour			2160		Watts
Kilowatt Savings / Hour			2.16		kwh
	Hours per Day Used	# Days Used	Annual kwh Savings/ Fixture	Rate/ kwh	Annual Savings
On-Peak	12	240	6220.8	\$0.07235	\$450.07
Off-Peak	0	365	0	\$0.04730	\$0.00
Annual Peak Demand Surcharge		Kilowatt Savings / Hour			Annual Savings on Demand Surcharge
\$1.48 / kwh		2.16 kwh			\$38.36
Monthly Excess Control Surcharge		Kilowatt Savings / Hour			Annual Savings on Excess Surcharge
\$6.26 / kwh		2.16 kwh			\$162.26
Total Annual Savings					\$650.70

## Project Cost and Savings Calculation

	<b>One Fixture</b>	<b>All School</b>
Total Number of Bulbs	1	216
Cost per Bulb	\$5.72	\$5.72
Project Cost	\$5.72	\$1,235.52
Total Annual Project Savings	\$3.01	\$650.70
Payback in years	1.90	1.90

## Elementary Gym

	# of Bulbs	Watts	Useage		
Current Bulbs	144	25	3600		Watts
Replacement LED Bulbs	144	15	2160		Watts
Watts Savings / Hour			1440		Watts
Kilowatt Savings / Hour			1.44		kwh
	Hours per Day Used	# Days Used	Annual kwh Savings/ Fixture	Rate/ kwh	Annual Savings
On-Peak	8	240	2764.8	\$0.07235	\$200.03
Off-Peak	0	365	0	\$0.04730	\$0.00
Annual Peak Demand Surcharge		Kilowatt Savings / Hour			Annual Savings on Demand Surcharge
\$1.48 / kwh		1.44 kwh			\$25.57
Monthly Excess Control Surcharge		Kilowatt Savings / Hour			Annual Savings on Excess Surcharge
\$6.26 / kwh		1.44 kwh			\$108.17
Total Annual Savings					\$333.78

## Project Cost and Savings Calculation

	<b>One Fixture</b>	<b>All School</b>
Total Number of Bulbs	1	144
Cost per Bulb	\$5.72	\$5.72
Project Cost	\$5.72	\$823.68
Total Annual Project Savings	\$2.32	\$333.78
Payback in years	2.47	2.47

## Project Summary

	# of Bulbs	Project Cost	Project Savings	Payback In Years
Hallways	275	\$3,146.00	\$2,716.17	1.2
H.S. Gym	216	\$1,235.52	\$650.70	1.9
Offices	160	\$915.20	\$398.65	2.3
Elementary Gym	144	\$823.68	\$333.78	2.5
Classrooms	<u>4,080</u>	<u>\$23,337.60</u>	<u>\$7,765.55</u>	3
Totals	4,875	\$29,458.00	\$11,864.85	