

Maintenance & HVAC Savings

Estimated Annual Maintenance Savings					
	Incandescent Lamps	HID Lamps	4'-Fluorescent Lamps	8'-Fluorescent Lamps	Ballasts
Quantity	31	62	50	31	576
Failure Rates / Year *	50%	5%	15%	20%	5%
Number of Failures / Year	16	3	8	6	29
Material Cost	\$15.50	\$102.30	\$20.93	\$49.60	\$418.18
Labor Cost	<u>\$31.00</u>	<u>\$31.00</u>	<u>\$37.50</u>	<u>\$62.00</u>	<u>\$432.00</u>
Total Cost	\$46.50	\$133.30	\$58.43	\$111.60	\$850.18
* Maintenance Savings based on industry average failure rates.					
	Mat. Avoided	Yearly	Warranty	\$ Saved	
Lamp material savings / year		\$188.33	2	\$376.65	
Avoided lamps saved - delamp	88	\$25.52	1	\$25.52	
Ballast material savings / year		\$418.18	5	\$2,090.88	
Avoided ballast - post retrofit	4	\$3.20	1	\$3.20	
Total estimated material savings per warranty period (While under material warranty):					\$2,496.25
Total estimated labor savings per warranty period (Labor):					\$593.50
Total estimated maintenance savings / warranty period (Material, Avoided Material & Labor):					\$3,089.75
Maintenance Savings are estimated based on new electronic ballasts and T8 lamps requiring little or no maintenance immediately after the lighting retrofit. The estimated cost of materials and labor for these savings are listed below:					
	Incandescent Costs	HID Lamps	4'-Fluorescent Lamps	8'-Fluorescent Lamps	Ballasts
Material Cost (per item)	\$1.00	\$33.00	\$2.79	\$8.00	\$14.52
Labor Cost (per item)	\$2.00	\$10.00	\$5.00	\$10.00	\$15.00

Estimated Annual HVAC Savings	
HVAC Savings are calculated to show the effect less wattage with this new lighting system will have] on your HVAC operational cost. Lower wattage means less heat produced, thus less energy needed to cool your building. The HVAC factor includes the associated heat loss during the heating season. HVAC calculations are based on 5 months of HVAC cooling operation.	
.33 Watts are used by HVAC to cool the heat generated	
Total Annual Kilowatt-hours Saved from the retrofit	0
Kilowatt-hours saved to Cooling Savings / Year *	
(.33 Watts x 5 months / (12month per year)	0
(.1375 x 46,512 Kwh saved /year)	
* HVAC Savings based on percentages accepted in most industry and commercial settings.	
Utility Rate / KWH = #REF!	
Total Annual HVAC Savings:	\$0.00
Potential Utility Rebates	
Utility rebates vary by service territory but are commonly based on any of several potential criteria: (kW) saved, kilowatt-hours (kWh) saved, per fixture rebates, and/or standard allocations based on client type, size, or service class.	
For this project, The local utility offers an allocated rebate amount:	\$0.00

