Bay County Energy Efficiency Grant Calculated Savings

(Current Cost and Calculated Grant Savings)

Building	Bay County Current Energy Cost Per Year	Bay County Anticipated Energy Cost Per Year After Installation of Fixtures	Bay County Energy Cost Savings Per Year After Installation of Fixtures	Total Cost of New LED Fixtures (Now only 90% Grant Funded)	Bay County's Total Cash Match 10% of Equipment Costs	Bay County's Pay Back in Months
Animal Control	\$793.00	\$70.10	\$772.90	\$3,960.00		
Civic Arena Concourse (indoors)	\$1,521.00	\$228.48	\$1,292.52	\$18,942.00		
Civic Arena Parking Lot and Building Lights	\$2,752.82	\$656.58	\$2,096.24	\$23,168.00		
Civic Arena Road Sign	\$3,920.32	\$536.12	\$3,384.20	\$13,555.00		
Community Center	\$1,728.99	\$452.38	\$1,276.61	\$12,074.00		
LEC	\$4,382.80	\$1,268.64	\$3,114.16	\$57,660.00		
Health, Courts, 911 Front Lot and Building Lights	\$1,388.71	\$398.73	\$989.98	\$12,548.00		
Judge's Lot and 1 st Street Exterior	\$2,118.46	\$243.45	\$1,875.01	\$13,627.00		
Pere Marquette Parking Lot	\$2,361.84	\$992.16	\$1,369.68	\$28,860.00		
County Building	\$634.39	\$101.27	\$533.12	\$4,186.00		
Fair Grounds	\$3,330.24	\$952.19	\$2,378.05	\$28,569.00		
Recreation Barn Outside Lighting	\$126.00	\$35.50	\$90.50	\$1,980.00		
Mosquito Control Outside Lighting	\$1,766.20	\$213.42	\$1,552.78	\$11,170.00		_
TOTAL	\$26,824.77	\$6,149.02	\$20,675.75	\$230,299.00	\$25,700.00*	14.91602481
Average Total Payback for Complete Project						14.9 Months

^{*} This number is higher than 10% but it is based upon information in the Bay County grant Proposal submitted. Actual costs are anticipated to be lower.

Example: We have in place a 175w metal halide wall pack that operates at 213 watts. If operated from dusk to dawn it would be lit for 4,380 hours per year. The annual energy cost for that one fixture would be **\$79.30** (kw x hours x cost per kwh = total cost).

As proposed in the grant, replacing the above light (lamp) with an equivalent fixture in an LED, and letting it run for the same number of hours (4,380) it would only consume $\underline{20 \text{ watts}}$. The annual energy cost for that one LED fixture would be only **\$7.01** (kw x hours x cost per kwh = total cost).

Bay County will experience:

- Total Energy Utility Cost Savings Per Year After LED Grant Equipment Installation: \$20,675.75
- Total Energy Savings Per Year After LED Grant Equipment Installation: 258,447 Kilowatts
- If needed, General Fund Pay off (\$25,700) in 14.9 months