

**Municipal Building/Public Library**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
Retrofit fixtures with LED lamps	yes	119,657	30.5	\$ 14,654.69	\$ 58,922.77	\$ 3,295.00	\$ 55,217.77	3.8	120,494
Install Occupancy Sensor Lighting Controls	yes	7,837	2.8	\$ 959.87	\$ 7,880.00	\$ 1,220.00	\$ 6,660.00	6.9	7,892
<i>Premium Efficiency Motors</i>	<i>no</i>	762	0.2	\$ 93.30	\$ 5,424.99	\$ -	\$ 5,424.99	58.1	767
<u>Install High Efficiency Electric A/C</u>	<u>yes</u>	<u>55,171</u>	<u>17.5</u>	<u>\$ 6,756.87</u>	<u>\$ 130,171.14</u>	<u>\$ 8,004.00</u>	<u>\$ 122,167.14</u>	<u>18.1</u>	<u>55,556</u>
Total (All ECMs)		183,427	51	\$ 22,464.73	\$ 202,398.90	\$ 12,519.00	\$ 189,879.90	8.5	184,710
Total (All Cost Effective ECMs)		182,665	50.8	\$ 22,371.43	\$ 196,973.91	\$ 12,519.00	\$ 184,454.91	8.2	183,943

**Overall 23.5% savings  
45% electric reduction  
8.3 years to recoup cost**

**Police Station**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
Install LED Fixtures	yes	10,062	1.4	\$ 1,290.35	\$ 2,826.28	\$ 40.00	\$ 2,786.28	2.2	10,132
Retrofit Fluorescent Fixtures with LED lamps & drivers	yes	48,941	8.7	\$ 6,276.12	\$ 14,430.63	\$ 1,620.00	\$ 12,810.63	2.0	49,283
Retrofit fixtures with LED lamps	yes	7,759	1.3	\$ 994.99	\$ 801.29	\$ 130.00	\$ 671.29	0.7	7,813
Install LED Exit Signs	yes	208	0	\$ 26.66	\$ 322.67	\$ -	\$ 322.67	12.1	209
Install Occupancy Sensor Lighting Controls	yes	4,418	0	\$ 566.81	\$ 5,250.00	\$ 655.00	\$ 4,595.00	8.1	4,449
<u>Install High Efficiency hot Water Boilers</u>	<u>no</u>	<u>-</u>	<u>0</u>	<u>\$ 165.68</u>	<u>\$ 7,436.60</u>	<u>\$ 1,000.00</u>	<u>\$ 6,436.60</u>	<u>38.9</u>	<u>1,946</u>
Total (All ECMs)		71,388	12.4	\$ 9,320.40	\$ 31,069.47	\$ 3,445.00	\$ 27,624.47	3.0	73,833
Total (All Cost Effective ECMs)		71,388	12.4	\$ 9,154.73	\$ 23,632.87	\$ 2,445.00	\$ 21,187.87	2.3	71,888

**Overall 35% savings  
50% electric reduction  
2.3 years to recoup cost**

**Public Works**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
Install LED Fixtures	yes	17,519	4.9	\$ 2,141.10	\$ 11,847.26	\$ 4,605.00	\$ 7,242.26	3.4	17,641
Retrofit Fluorescent Fixtures with LED lamps & drivers	yes	1,237	0.6	\$ 151.24	\$ 1,818.00	\$ -	\$ 1,818.00	12.0	1,246
Retrofit fixtures with LED lamps	yes	1,245	0.6	\$ 152.13	\$ 1,640.55	\$ 125.00	\$ 1,515.55	10.0	1,253
Install LED Exit Signs	yes	130	0	\$ 15.89	\$ 215.11	\$ -	\$ 215.11	13.5	131
<i>Install Occupancy Sensor Lighting Controls</i>	<i>no</i>	<i>253</i>	<i>0.1</i>	<i>\$ 30.95</i>	<i>\$ 926.00</i>	<i>\$ 125.00</i>	<i>\$ 801.00</i>	<i>25.9</i>	<i>255</i>
<u>Install High/Low Lighting Controls</u>	<u>yes</u>	<u>98</u>	<u>0</u>	<u>\$ 12.00</u>	<u>\$ 200.00</u>	<u>\$ -</u>	<u>\$ 200.00</u>	<u>16.7</u>	<u>9</u>
Total (All ECMs)		20,229	6.1	\$ 2,472.37	\$ 15,720.92	\$ 4,730.00	\$ 10,990.92	4.4	20,371
Total (All Cost Effective ECMs)		20,834	6.4	\$ 2,546.26	\$ 17,772.92	\$ 4,980.00	\$ 12,792.92	5.0	20,980

**Overall 47% savings**  
**47% electric reduction**  
**4.4 years to recoup cost**

**Parks & Recreation Areas**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
Install LED Fixtures	yes	24,318	12.7	\$ 4,204.92	\$ 107,822.67	\$ 6,350.00	\$ 101,472.67	24.1	24,488
Retrofit Fluorescent Fixtures with LED lamps & drivers	yes	279	0.3	\$ 48.26	\$ 755.00	\$ 20.00	\$ 735.00	15.2	281
<u>Retrofit fixtures with LED lamps</u>	<u>yes</u>	<u>3,261</u>	<u>0.7</u>	<u>\$ 563.94</u>	<u>\$ 628.75</u>	<u>\$ 65.00</u>	<u>\$ 563.75</u>	<u>1.0</u>	<u>3,284</u>
Total (All ECMs)		247,859	13.7	\$ 4,817.14	\$ 109,206.42	\$ 6,435.00	\$ 102,771.42	21.3	28,054

**Overall 57% savings**  
**57% electric reduction**  
**21.3 years to recoup cost**

**Old Millington Schoolhouse**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
Install LED Fixtures	yes	3,148	0.5	\$ 460.10	\$ 1,311.46	\$ 220.00	\$ 1,091.46	2.4	3,170
Retrofit fixtures with LED lamps	yes	3,650	0.8	\$ 533.46	\$ 1,084.15	\$ 90.00	\$ 994.15	1.9	3,675
Install Occupancy Sensor Lighting Controls	yes	149	0.1	\$ 21.80	\$ 540.00	\$ -	\$ 540.00	24.8	150
<u>Install Programmable Thermostats</u>	<u>yes</u>	<u>559</u>	<u>0</u>	<u>\$ 199.44</u>	<u>\$ 659.74</u>	<u>\$ -</u>	<u>\$ 659.74</u>	<u>3.3</u>	<u>1,924</u>
Total (All ECMs)		7,505	1.4	\$ 1,214.80	\$ 3,595.35	\$ 310.00	\$ 3,285.35	2.7	8,919

**Overall 16% savings**

**42% electric reduction & 7% gas reduction**

**2.7 years to recoup cost**

**Eight (8) Pumping Stations**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
Retrofit Fluorescent Fixtures with LED lamps & drivers		524	0.8	\$ 72.55	\$ 1,926.67	\$ -	\$ 1,926.67	26.6	527
Retrofit fixtures with LED lamps		1,225	0.5	\$ 169.75	\$ 650.75	\$ 130.00	\$ 520.75	3.1	1,233
Premium Efficiency Motors		1,737	0.6	\$ 240.70	\$ 8,999.84	\$ -	\$ 8,999.84	37.4	1,749
<u>Install VFDs on Pump Motors</u>		<u>172,070</u>	<u>39.1</u>	<u>\$ 23,845.83</u>	<u>\$ 89,763.97</u>	<u>\$ 14,400.00</u>	<u>\$ 75,363.97</u>	<u>3.2</u>	<u>173,273</u>
Total (All ECMs)		175,555.0	41	\$ 24,328.84	\$ 101,341.23	\$ 14,530.00	\$ 86,811.23	3.6	176,782

**Overall 54% savings**

**54% electric reduction**

**3.7 years to recoup cost**

**Sewage Treatment Plant**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
Install LED Fixtures	yes	27,422	4.5	\$ 3,010.28	\$ 21,212.10	\$ 185.00	\$ 21,027.10	7.0	27,614
Retrofit Fluorescent Fixtures with LED lamps & drivers	yes	9,044	3.1	\$ 992.85	\$ 8,248.00	\$ 530.00	\$ 7,718.00	7.8	9,108
Retrofit fixtures with LED lamps	yes	8,064	2.8	\$ 885.18	\$ 4,600.00	\$ -	\$ 4,600.00	5.2	8,120
<i>Install Occupancy Sensor Lighting Controls</i>	<i>no</i>	<i>612</i>	<i>0.2</i>	<i>\$ 67.19</i>	<i>\$ 1,620.00</i>	<i>\$ 210.00</i>	<i>\$ 1,410.00</i>	<i>21.0</i>	<i>616</i>
<i>Install High/Low Lighting Controls</i>	<i>no</i>	<i>116</i>	<i>0</i>	<i>\$ 12.77</i>	<i>\$ 200.00</i>	<i>\$ -</i>	<i>\$ 200.00</i>	<i>15.7</i>	<i>117</i>
<u>Install High Efficiency Hot Water Boilers</u>	<u>yes</u>	<u>-</u>	<u>0</u>	<u>\$ 836.37</u>	<u>\$ 13,249.89</u>	<u>\$ 1,214.40</u>	<u>\$ 12,035.49</u>	<u>14.4</u>	<u>10,513</u>
Total (All ECMs)		45,258	10.7	\$ 5,804.63	\$ 49,129.99	\$ 2,193.40	\$ 46,990.59	8.1	56,088
Total (All Recommended ECMs)		44,530	10.4	\$ 5,724.67	\$ 47,309.99	\$ 1,929.40	\$ 45,380.59	7.9	55,355

**Overall 4% savings**

**3% electric reduction & 10% gas reduction**

**7.9 years to recoup cost**

**Street Lighting**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
Install LED Fixtures	yes	231,172	0	\$ 8,478.42	\$ -	\$ -	\$ -	0.0	232,789
Total (All ECMs)		231,172	0	\$ 8,478.48	\$ -	\$ -	\$ -	0.0	232,789

**Overall 11% savings**

**11% electric reduction**

**Immediately recoup cost**

ECMs = Energy Conservation Measures	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)	Estimated Net Cost (\$)	Simple Payback Period (yrs.)	CO <sub>2</sub> e Emission Reduction (lbs.)
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Mun. Building/Library Total all recommended ECMs	182,665	50.8	\$ 22,371.43	\$ 196,973.91	\$ 12,519.00	\$ 184,454.91	8.2	183,943
Police Station Total all recommended ECMs	71,388	12.4	\$ 9,154.73	\$ 23,632.87	\$ 2,445.00	\$ 21,187.87	2.3	71,888
Public Works Total all recommended ECMs	20,834	6.4	\$ 2,546.26	\$ 17,772.92	\$ 4,980.00	\$ 12,792.92	5.0	20,980
Parks & Recreation Total all recommended ECMs	247,859	13.7	\$ 4,817.14	\$ 109,206.42	\$ 6,435.00	\$ 102,771.42	21.3	28,054
Old Millington School Total all recommended ECMs	7,505	1.4	\$ 1,214.80	\$ 3,595.35	\$ 310.00	\$ 3,285.35	2.7	8,919
Pumping Stations Total all recommended ECMs	175,555.0	41	\$ 24,328.84	\$ 101,341.23	\$ 14,530.00	\$ 86,811.23	3.6	176,782
Sewage Treatment Plant Total all recommended ECMs	44,530	10.4	\$ 5,724.67	\$ 47,309.99	\$ 1,929.40	\$ 45,380.59	7.9	55,355
Street Lighting Total all recommended ECMs	231,172	0	\$ 8,478.48	\$ -	\$ -	\$ -	0.0	232,789
TOTALS	981,508	136.1	\$ 78,636.35	\$ 499,832.69	\$ 43,148.40	\$ 456,684.29	6.4 (average)	778,710