

Lighting Efficiency

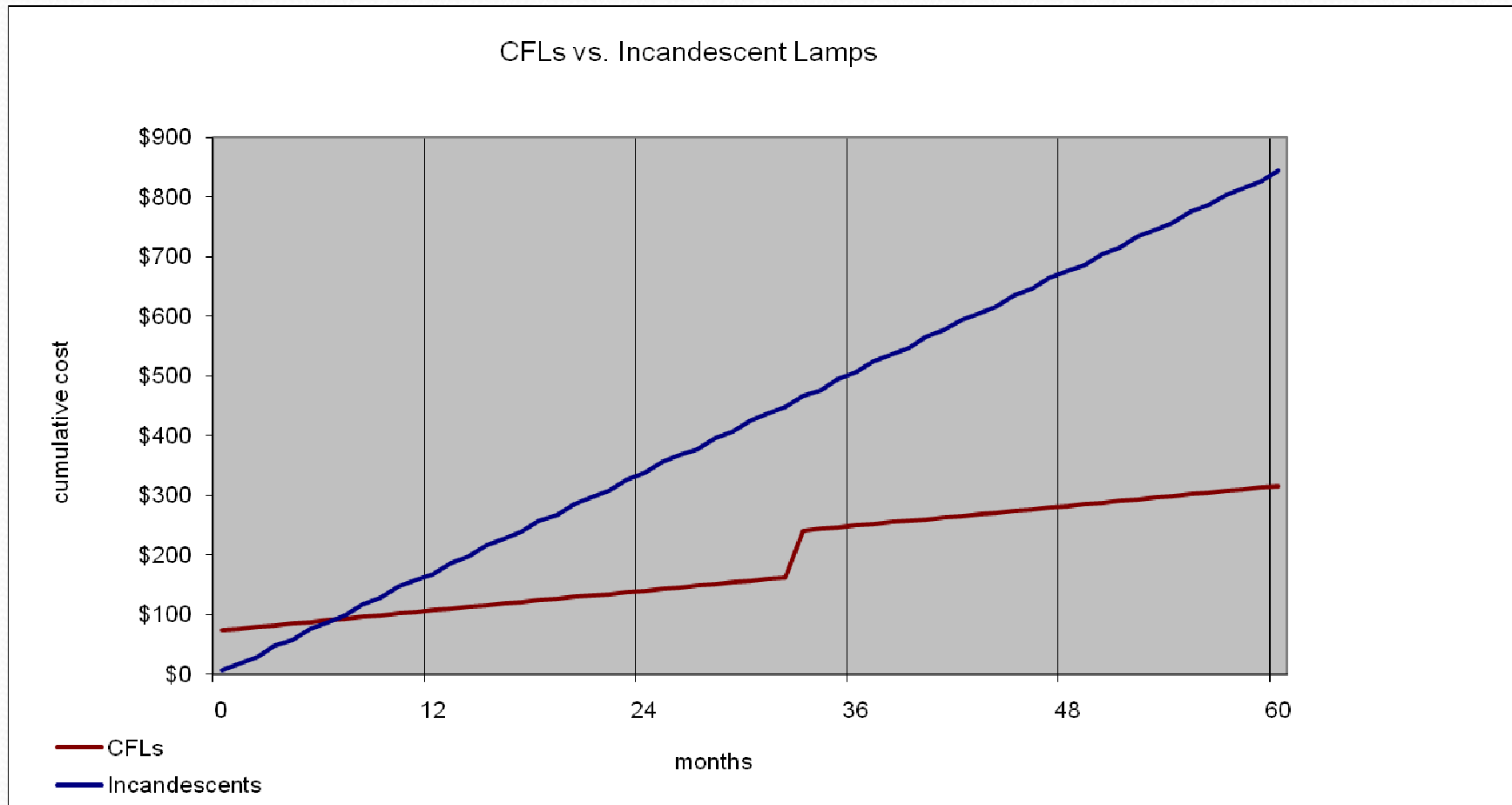
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Compact Fluorescent Lights

- Our research shows that there are a total of 142 incandescent light fixtures in the school system, 84 of them are in the housing units.
- The CFL's run on 15 watts rather than 60 watts.
- The rated life of a CFL is 8 to 15 times greater than an incandescent. CFL's have a rated life between 6,000 and 15,000hrs. while the incandescent bulb is 750 to 1,000hrs.

Savings after five year period





Exit Signs

- There are 15 exit signs around the school that have incandescent lamps.
- These signs draw 25 watts each.
- If these were replaced with Light Emitting Diode signs it would save the school 20 watts per sign.
- Each sign would cost about \$25.00(dependent on manufacturer). Efficiency Maine gives a \$10.00 incentive for each sign replaced.



Lighting Controls

- Through our research we discovered that the classrooms were checked with a light data logger and found that the lights were shut off when the classes were not in use.
- These lighting controls would be beneficial in bathrooms, stairwells, and hallways.
- Efficiency Maine offers a cash incentive, but a criteria must be followed, each unit must control 125 watts or more, and it can't be wall mounted. They will give \$50.00 for every occupancy sensor installed.



T8 Lights

- If you were to replace your existing T12 lights with T8 lights and magnetic ballasts with electronic ballasts you would increase the energy efficiency and lower operating costs.
- Electronic ballasts take incoming 60 Hz. power, either 120 or 277 volts and convert it to high frequency AC, usually between 20 and 40KHz.

T8 Lights Continued

- There are 381 T12 lights the could be replaced with T8's.
- There are 171 high intensity fluorescent lights that Efficiency Maine gives a \$65.00 incentive for each light.
- For the remaining 210 T12 lights Efficiency Maine gives a \$35.00 incentive for each light replaced.



Maintenance and Education

- The average lamp life for a T8 lamp is 28,000 hours which means that that lamp will only need to be changed every 3-4 years.
- Money could be saved on installation by making some of these changes a class project for the Electrical Construction Program and it would give the students knowledge for real world situations.



The End