

# Central High School Saves Energy with State of the Art LED Lighting

In September of 2009, the City of Manchester Central High School became the State of New Hampshire's first major installation of a new solid state LED lighting system for the parking garage and the campus plaza deck. A total 128 metal halide fixtures were removed and replaced with 118 new solid state LED lighting fixtures. The new LED parking garage and area lighting fixtures with integrated occupancy controls are now providing a better quality of light while using 85% less power.



The project was funded by PSNH's SMARTSTART Program, which applied the utility rebates toward the installation cost, directly compensates the contractor, and then the remaining capital cost are added to Central High Schools monthly utility bills and paid back over time maintaining a net savings benefit to the Manchester School District. The new lighting system was estimated to provide the school district with annual savings exceeding \$20,000 with an estimated return on investment of 3 years. With the installation of the new LED lighting Central High School has taken the environmentally responsible step to reduce its carbon footprint with an estimated reduction of 58 Tons of CO<sub>2</sub> annually.

Since the LED lighting installation in 2009 the City of Manchester Facilities Division has continued to reduce Central High Schools energy consumption with the installation of HVAC controls and thru improved energy management. The overall impact of these energy efficiency projects has been realized by the school district with an approximate annual savings of \$39,000.00 during 2010.

Annual Kilowatt Hour Reduction Tracking

