



Marion School District LED Lighting Upgrade

LED Lighting Upgrade for Marion

In 2016, Marion School Districts partnered with Excel Energy Group to upgrade their existing fluorescent lighting systems to a new LED high efficiency system. The projects involved replacing or upgrading over 7,100 total fixtures and sensors, reducing those facilities' lighting and maintenance costs by over **60%**—an

annual savings of over **\$180,000**. Before this project, Marion School District spent over **\$260,000** a year on lighting and maintenance costs—now, they spend approximately **\$100,000** annually.

Excel designs and installs their own lighting projects to insure the customer is receiving the project that best meets their needs. Marion School District had a project designed around their existing fixtures being in good quality for retrofit. Each existing fixtures was assessed on its proposed replacement parts and given an efficient LED replacement.

All T8/T12 fluorescent tubes were replaced with T8 LED linear tubes. The new LED tubes have the ability to be self-driven, so the old ballasts were taken out to reduce maintenance costs further. All lighting fixtures at Marion Schools were able to be upgraded to LED. From HID pole lighting to the T5 fixtures in the Elementary classrooms. Each retrofit reducing

the total watt load and energy consumption.

Some lights were not just retrofitted by upgraded with a new fixture. The exterior wall packs and flood lighting had been replaced with new LED fixtures. The existing high bays in the gymnasiums and shops were primarily existing HID but now are upgrade to a new LED fixture. Where the lights used to take minutes to warm up, they now turn on to full brightness instantly!

With a project designed around the customer's needs and preferences, Excel was able to upgrade the existing lighting system and provide a project with under a 3 years payback.



MARION SCHOOL DISTRICT

Project Quick Facts:

Total Facilities:	13
Total Light Fixtures:	7,000
Total Sensors:	150
Total Cost:	\$653,000
Total Incentives:	\$173,000
Annual Savings:	\$183,000
Payback:	2.7 years

THE BOTTOM LINE:

Excel was able to reduce the District's electricity by **1,419,300** kwh annually. That means Marion will eliminate over **2.2 million pounds** of carbon dioxide from the atmosphere **every year**—the equivalent of removing the emissions from burning **1,064,374** pounds of coal or **112,237** gallons of gasoline annually.

Decreased light
wattage by an
Average of
63% in
each area!

