



# Northern Kentucky University

- Located in Campbell County, Kentucky
- Founded in 1968
- Enrollment is 15,738 students

## Major Issues

- Did not think they were a candidate for ESPC
- Had self-installed a majority of its new lighting prior to its ESPC project
- Outdated HVAC controls
- NKU was spending \$2.9 million on utilities in 2002-03

## Solution

- Guaranteed Energy Savings Performance Contract / 2004
- ESCO: Siemens Industry, Inc.
- \$4.53 million contract / 12 year guarantee term
- \$592,000 of annual energy and operational savings guaranteed



# Project Scope

- Facilities upgrades to many campus HVAC systems
- Digital control upgrades with graphical display
- VAV box DDC control
- VAV air handler conversion
- Demand control ventilation
- Steam trap replacement
- Boiler plant / chiller plant optimization
- Motors and variable frequency drives
- New lighting and occupancy sensors
- Water conservation
- Retro-commissioning





# Environmental Overview

## Reduced Greenhouse Gas Emissions

- 25,113 metric tons per year

## Equivalent Reductions

- Removing 5,998 cars from the road each year
- Preserving 231 acres of trees annually

