

Lighting Design

Features

Identifies energy-saving retrofits and upgrades

Establishes lighting standards for new construction

\$5,000

Director of Energy Sustainability: Keith Marchando. keith.marchando@ sonoma.edu 707.664.3494

Lighting Consultant: **Lighting Wizards** Stan Walerczyk, stan@lightingwizards. 925.944.9481

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www.lightingwizards.

www.buildingsdatabook. eere.energy.gov

Sonoma State University **Campus Lighting Study**

Sonoma State commissioned a campus lighting report to take advantage of the extensive energy and cost-savings that are available through efficient lighting solutions. The report assesses the potential for energy-efficient retrofits in existing buildings and establishes campus standards for new construction.

he 2006 Buildings Energy Data Book published by the U.S. Department of Energy reports that 20 percent of the energy consumed in educational facilities is used for lighting. This figure reveals a significant opportunity for universities to cut operating costs by making energy-efficient lighting choices. Sonoma State has begun to capitalize on this opportunity by commissioning a report that will inform lighting selections in both existing buildings and new construction on its campus.

Sonoma State's lighting report is divided into two sections. The Lighting Feasibility Study identifies specific opportunities for retrofits in major campus buildings. The Generic Best Practice Lighting Report provides a roadmap to standardize and optimize lighting installations across campus.

Sonoma State plans to invest over one million dollars in lighting retrofits and upgrades over the next several years.

The Lighting Feasibility Study inventories the existing fixtures in seven campus buildings and details opportunities to install energyefficient alternatives. The document includes cost estimates, potential energy savings, lighting quality improvements, and control system recommendations. Having this document prepared in advance of major remodeling or maintenance projects will help expedite the selection of cost-effective and energy-efficient lighting.

The Generic Best Practice Lighting Report is a general guide with recommendations to help the campus choose visually pleasing, long-lasting, and energy-efficient lighting. It provides the university with a single reference document for all projects, making it a convenient resource for architects, engineers, lighting design firms, and facility managers.



Stevenson Hall is slated to receive extensive lighting retrofits. Photo: Trista Little.

Sonoma State is currently planning over one million dollars worth of lighting retrofits and upgrades. Nearly half of the funding will be provided by the UC/CSU/IOU Energy Efficiency Partnership Program. The university will target this money at projects that have a payback of roughly three years, allowing it to recover its investment quickly.

Seven buildings, six of which were covered in the Lighting Feasibility Study, will receive the extensive retrofits. Investing in energy-efficient lighting technology in these buildings will save the university \$239,000 annually. The campus estimates that the new lighting will reduce its green house gas emissions by 647 metric tons each year.

Best Practices is written and produced by the Green Building Research Center, at the University of California, Berkeley.

The Best Practices Competition showcases successful projects on UC and CSU campuses to assist campuses in achieving energy efficiency and sustainability goals. Funding for Best Practices is provided by the UC/CSU/IOU Energy Efficiency Partnership.













