

Capturing the Daylight Dividends

This multi-sponsored program pools funds into a cooperative effort to:

- Build market demand for daylighting
- Overcome technical barriers
- Inform and assist state and regional organizations in the development and implementation of daylighting programs

Project Goals

Research goals are set to:

- Clarify the benefits of daylighting
- Advance the technological components needed to make daylighting acceptable

Before undertaking any research to further the use of daylighting, the Lighting Research Center (LRC) and the program sponsors conducted a series of focus groups with non-residential building owners, developers, managers and designers to gauge their interest and concerns. As an additional effort, the project team reviewed existing research literature regarding the impact of daylight on human performance and workplace productivity, human health, and financial return on daylighting investments.

Research Needs

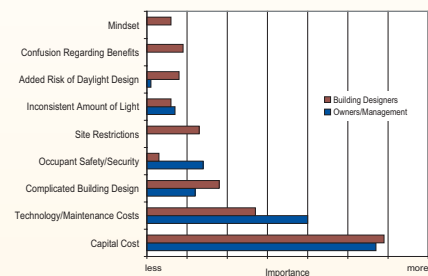
The literature review and focus group results identified research needs in the following areas:

- Developing cost-effective daylighting control technologies
- Reducing the likelihood of discomfort from windows, thus minimizing behaviors that limit the admission of daylight
- Quantifying the financial return on windows in terms of what people are prepared to pay for them, regardless of the reasons
- Exploring the impact of daylight operating through the human circadian system on task performance
- Testing the biophilia hypothesis; i.e., that humans have an innate need to be in contact with nature. This is important because it is the main reason why windows are inherently superior to electric lighting.

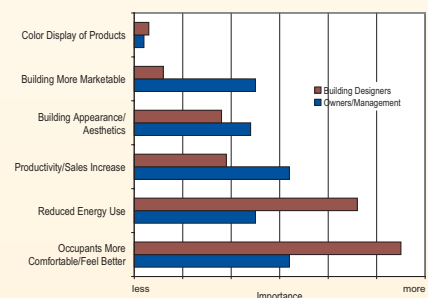
Full focus group and literature review reports are available on the LRC web site and www.DaylightDividends.org.

Sponsors

U.S. Department of Energy	Iowa Energy Center
New York State Energy Research and Development Authority	North Carolina Daylighting Consortium
California Energy Commission	Northwest Energy Efficiency Alliance
Connecticut Light and Power Company	Lighting Research Center



Greatest Barriers to Daylighting Use



Perceived Most Important Benefits of Daylighting

Lighting
Research Center