

SUU Exterior Lighting Standard

Revised: 4/11/18

Objective: To provide guidelines for a consistent approach to outdoor campus lighting solutions which address safety, energy conservation, and aesthetics.

Southern Utah University recognizes that exterior building and site lighting is necessary to satisfy the personal safety requirements of students, faculty, staff, and campus visitors without significantly diminishing the nighttime aesthetic qualities of campus, the surrounding neighborhood, and to be responsive to concerns for energy conservation.

Purpose

The purpose of this standard is to establish a consistent and effective approach to addressing the key issues and concerns surrounding the subject of outdoor lighting on campus.

This standard defines lighting parameters for entrances, pedestrian walkways, sporting venues, and parking lots on campus. Issues beyond physical design, such as safety concerns and operations, are not within the purview of these standards and would be addressed by the SUU Police department and Facilities Management.

This proposed standard is consistent with practices at other institutions of higher education and local regulations.

Background

Students and others in the area of SUU have expressed concerns about night safety on campus. This standard is one component addressing those concerns, which will be a concerted priority moving forward. Adequate lighting is one part of the safety solution; it does not imply, however, that a lit area is guaranteed to be safe. The university is committed to continuing a program of maintenance, rehabilitation, and addition of campus lighting on a systematic basis and will continue to seek adequate funding for these activities.

Review/Approval Requirements

The following departments are responsible for the design, review, and installation of outdoor lighting fixtures on campus:

Facilities Management: Coordinates all installations, including design, and maintains all fixtures. All proposed campus standard fixtures within approved outdoor lighting walkways,

sporting areas, or in parking lots are coordinated by Facilities Management and are not subject to review by other campus entities.

SUU Police: Provides input to proposed lighting designs and installations on safety aspects.

General Lighting Guidelines

The following general guidelines apply to the selection, design, and placement of all campus outdoor lighting:

1. Adequately address the personal safety requirements of students, faculty, staff and campus visitors as recommended by the SUU Police Department.
2. Consider energy conservation.
3. Preserve the campus nighttime aesthetic qualities.
4. Restrict light trespass. In particular, unusual applications, such as illuminating outdoor recreation fields or facilities, need to be designed with the specific activity in mind while protecting adjacent spaces and uses from spillover light to the maximum extent possible.
5. Ensure that main entrances, major walkways and adjacent spaces are well lit.
6. Minimize the difference between lighting levels in adjacent areas to prevent strong contrasts and shadows.
7. Eliminate glare to the greatest extent possible.
8. Recognize the relationship between lighting and other landscape features such as vegetation. The placement and design of outdoor lighting need to be carefully coordinated with sensitive management of campus vegetation. When possible, lighting engineers and landscape architects should work collaboratively in designing nighttime illumination improvements. Minimize the need to substantially trim landscaping while recognizing the need to minimize shadows and provide surroundings which are able to be surveyed by individuals to ensure safety.
9. Recognize that uniform lighting is often more important than the amount of lighting when establishing the sense of a safe, well-lit area.
10. Recognize that lighting serves as an architectural design element in the landscape setting in addition to its functional qualities.

Light Fixture Designs

Consistent landscape design features, such as light fixtures, benches, and trash receptacles, are important components in defining the overall campus character. These design features create a visual connection throughout campus, helping to integrate the variously styled buildings and landscapes.

Criteria for selecting light fixtures include:

1. All general lighting guidelines.
2. Visual appearance - compatibility with existing fixtures, campus character, and pedestrian scale

3. Initial cost
4. Maintenance costs and requirements
5. Operations and energy efficiency
6. Light cut-off angle
7. Quality and color of light/type of light
8. Availability of parts over a long period of time.
9. Compatibility with the existing poles
10. Free-standing design - avoid building-mounted fixtures.

Campus-standard Fixtures:

Campus-standard light fixtures shall be used whenever possible to maintain consistency throughout the campus landscape. Deviations from these standard fixtures must be approved by Facilities Management. It is particularly important to use campus-standard fixtures for entrances, pedestrian walkway, small/medium auto parking and bike parking areas. Exact specifications and manufacturer information for campus-standard light fixtures is available from Facilities Management.

All Other Applications:

Although campus-standard light fixtures should be used whenever possible, a non-standard fixture design may be appropriate to meet special lighting needs, for example in large parking lots and playing fields. Also, a non-standard fixture may be appropriate to ensure design compatibility with the historic or architectural character of a particular building. In some cases, building mounted fixtures are acceptable for building entry lighting but should be avoided for general area lighting whenever possible.

Parking Lots:

Alternative designs for large parking lot fixtures should only be considered for the interior portions of large parking lots. The standard pedestrian-scale walkway fixture should be used in transition areas, which include the outer edges of the lot, walks adjacent to or bisecting the lot, and campus drives and streets. The standard walkway fixture should also be used in locations where a taller, contemporary parking-lot fixture would detract from the character of the adjacent area or adjacent buildings. This is particularly true for areas designated as a significant open space or one possessing historic significance.

Lighting Levels and Ratios

Consideration is to be given to the perceptions of the relationship between light and safety as well as the actual measured light conditions. In consideration of this, the University does not subscribe to a specific quantitative illuminance standard. Similarly, the University recognizes the need for uniform light distribution, but does not subscribe to a specific ratio standard.

The general guidelines should be followed when determining appropriate light levels and ratios.

In particular, uniformity and quality of light are encouraged over quantity. In all cases, International Dark-Sky Association standards and local regulations shall be met for errant light emission.

Prioritized Plan for Outdoor Lighting Walkways

The creation of a prioritized plan for outdoor lighting walkways will help achieve the general lighting goals described above by helping to provide a sense of a safe night environment on campus while conserving energy to the greatest degree possible and preserving the landscaped, park-like character of campus. The premise behind this network of walkways is that it is of primary importance of encouraging people to use well-traveled paths as supported by the SUU Campus Police. Lighting these walkways identifies them and encourages pedestrians to use them.

In general a walkway, plus about 20 feet on either side, should be adequately lit as appropriate. The network of walkways includes corresponding main entrances and parking areas. Identifying these outdoor lighting walkways does not preclude the possible need to light other areas of campus; rather, it helps determine where to focus lighting efforts as resources become available.

To be designated as outdoor lighting walkways, the routes will:

1. Follow all general lighting guidelines (see above).
2. Link major building entrances to each other and to primary auto/bike parking areas (pay particular attention to buildings that have high levels of nighttime use).
3. Add to a sense of a safe night environment.
4. Encourage the use of well-traveled areas.
5. Correspond with ADA access routes.
6. Preserve the landscaped, park-like character of campus.
7. Protect significant landscape features.
8. Conserve energy to the greatest degree possible.
9. Correspond with emergency call box locations.

This plan recognizes that City-owned streets are a component of the outdoor lighting walkway network for the campus. Although the university does not have jurisdiction over these public rights-of-way, the City should be encouraged to make lighting improvements where necessary.