



## Lighting improvements

### Definition

Street lighting includes roadway and pedestrian-scale lighting in the public ROW near high pedestrian and bicycle activity locations, conflict areas, transit stops, etc.

### Objective

To illuminate pedestrians, improve their safety and comfort, and enhance security by providing levels of lighting that are oriented toward pedestrian and bicyclist activity.

### Advantage

Improves safety for pedestrians, bicyclists, and other roadway users at intersections and along roadways by improving visibility during nighttime, dawn, and dusk hours.

Lighting fixtures and illumination can contribute to urban design, streetscape, and placemaking goals.

Can improve security and deter crime.

### Challenge

Installation and maintenance costs, especially if permitting agencies require extending the (enhanced) lighting beyond a specific spot, intersection, or crossing.

ROW constraints may not allow installation of lighting.

### Resources

American National Standards Institute RP-8-00—Roadway Lighting <http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI%2FIESNA+RP-8-00>.

Design and Evaluation of Effective Crosswalk Illumination <http://www.state.nj.us/transportation/refdata/research/reports/FHWA-NJ-2009-003.pdf>.

City of San Francisco Better Streets Guide — Street Lighting <http://www.sfbetterstreets.org/find-project-types/streetscape-elements/street-lighting/>.

Effects of Roadway Lighting Level on the Traffic and Pedestrian Safety <http://www.ce.siue.edu/faculty/hzhou/publication/Effects%20of%20Roadway%20Lighting%20on%20Night-Time%20Crashes%20.pdf>.

Pedestrian and Bicycle Information Center—Roadway Lighting Improvements <http://www.walkinginfo.org/engineering/roadway-lighting.cfm>.

Informational Report on Lighting Design for Midblock Crosswalks <http://www.fhwa.dot.gov/publications/research/safety/o8053/index.cfm>.

FHWA Pedestrian Facilities Users Guide — Providing Safety and Mobility <http://ntl.bts.gov/lib/18000/18900/18916/PB2002103024.pdf> (Page 48ff).

*Images (clockwise from main image):*

Example of lighting improvement.  
Source: Ron Bloomquist, pedbikeimages.org.

Additional examples:  
Source: Dan Burden, pedbikeimages.org.