

Municipal Role

New Jersey counties provide limited support in pedestrian-scale lighting. Primary responsibility lies with municipalities.

Responsible Agencies

- Municipal planning and zoning boards
- Subdivision ordinances and site plan review
- Can require developments of certain size to install pedestrian lighting
- Can require lighting goals in comprehensive master plan



Funding

- Various agencies provide funding for pedestrian-scale lighting



Crime Prevention Through Environmental Design (CPTED)

- Arizona State University's Center for Problem-Oriented Policing described CPTED as "an approach to problem solving that asks, what is it about this location that places people at risk, or that results in opportunities for crime? In other words, why here?"



A 2016 report from *Sustainability Journal* reported a highly significant correlation between feelings of pedestrian safety and presence of pedestrian-scale lighting.

Key Resources

Numerous agencies and organizations have published research and guidance concerning pedestrian-scale lighting best practices. Some are listed below:

New Jersey Department of Transportation
Pedestrian Compatible Planning and Design Guidelines

<https://www.state.nj.us/transportation/about/publications/PedComp/pedintro.pdf>

New Jersey Outdoor Lighting Ordinance Guide

https://www.nj.gov/dep/opsc/docs/Sample_Lighting_Ordinance.PDF

Voorhees Transportation Center Report on Pedestrian Lighting in New Jersey: A Means to Improve Pedestrian Safety

http://vtc.rutgers.edu/wp-content/uploads/2014/07/Pedestrian_Lighting_NJ_Final_Report.pdf

Pedestrian and Bicycle Information Center

http://www.pedbikeinfo.org/webinars/webinar_details.cfm?id=13

FHWA Informational Report on Lighting Design for Midblock Crosswalks

<https://www.fhwa.dot.gov/publications/research/safety/08053/>

U.S. Department of Energy Report on Pedestrian Friendly Outdoor Lighting

https://www1.eere.energy.gov/buildings/publications/pdfs/ssl/2013_gateway_pedestrian.pdf

Seattle Pedestrian Lighting Citywide Plan

<http://www.seattle.gov/Assets/Documents/Departments/SDOT/About/DocumentLibrary/PedMasterPlan/PedLightingFINAL.pdf>

Chandler (AZ) Report on Crime Prevention Through Environmental Design

<http://www.chandlerpd.com/wp-content/uploads/2010/12/CPTED-Handbook-v4-20170627.pdf>



Pedestrian-Scale Lighting Guide for New Jersey

Importance

Pedestrian-scale lighting does more than make a neighborhood look good. Most street lighting in New Jersey was designed with motorists' in mind; assuring there was proper lighting to navigate roads at high speeds. This lighting does not take into account pedestrians. Pedestrian-scale lighting is first and foremost a safety concern, helping to improve pedestrian safety, security and comfort.



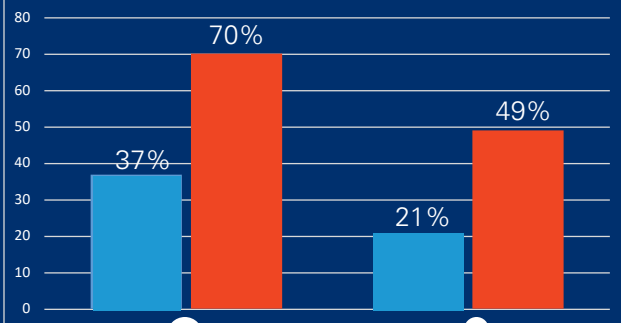
The presence of adequate pedestrian lighting helps promote visibility between motorists and pedestrians, reducing the frequency of crashes

Crashes

- bike/ped fatalities in New Jersey disproportionately occur at night



Nighttime Crashes



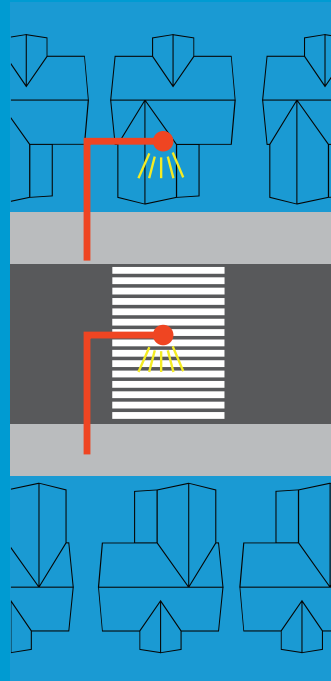
Crashes

Fatalities

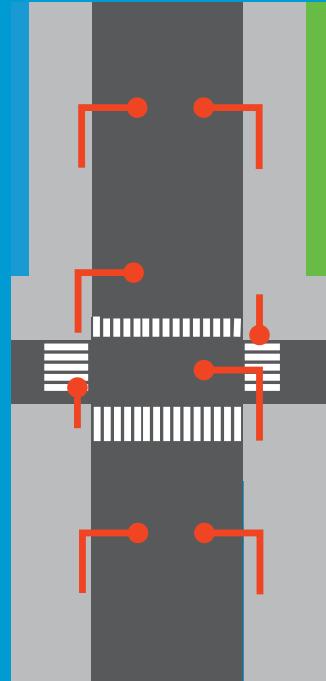


Pedestrian-scale lighting helps illuminate sidewalks and improve pedestrian safety, security and comfort. Properly designed and installed pedestrian-scale lighting can both help define a streetscape and create a sense of place in a community.

Mid-Block

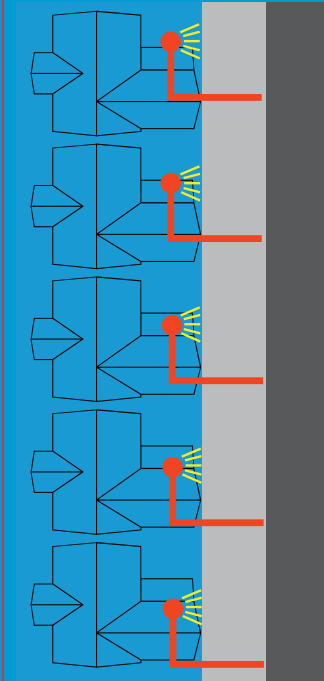


Intersection

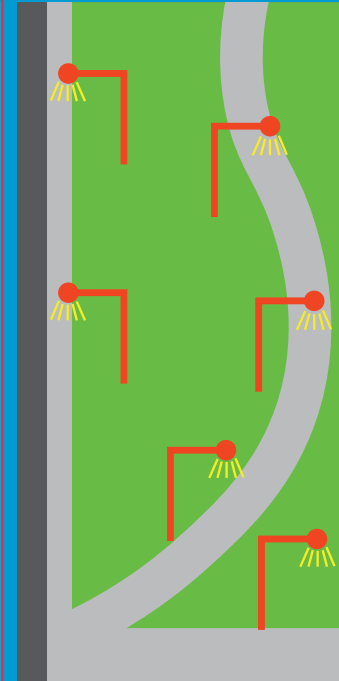


Siting

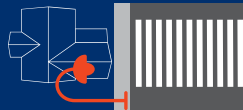
Corridor



Parks/Institutions



Factors to Consider



Proximity

should light sidewalks and crosswalks without blocking them



Spacing

evenly distributed approximately 60 feet apart



Brightness

20 lux measured at a height of five feet from the road surface



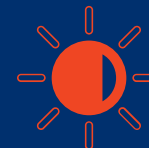
Direction

fixtures faced downward to direct light onto pedestrians and avoid causing nuisance



Height

Poles should be shorter than street lights; 12-16 feet



Glare

brighter is not always better; glare factors include fixture and background luminance, and size and angle of the fixture



Energy Efficiency

due to light depreciation, initial light levels should be above what is required; adaptive technology can allow to operate at maintained level for longer times