

LIGHTING

Purpose

Increase visibility for all road users at dusk and darkness, especially at crossings.

Description

Well-placed lighting improves visibility for all road users. Pedestrian-scale lighting illuminates sidewalks and crossings and light fixtures are shorter than roadway-scale light fixtures.

Estimated Cost



Applicable Locations

- Controlled and uncontrolled intersections.
- On crossing approaches.
- Along sidewalks.
- Beneficial at intersections in areas with high volumes of pedestrians, such as commercial or retail areas.
- Near schools, parks, and recreation centers.
- On both sides of arterial streets.

Applicable Street Types

All street types.

Safety Benefits

- Improves visibility for all parties.
- May reduce crashes and injuries for all road users.
- May increase yielding and compliance with traffic control devices.
- Improves comfort levels.

Expected Crash Reduction

23 percent for injury crashes.³²

Design Guidance

- Use 3000K shielded LED lights wherever possible.
- Lighting should be consistent and uniform.
- Consider placement of existing buildings and trees to reduce spillover.
- Install lighting to Illuminating Engineering Society and DarkSky guidelines.

Considerations

- Uniform lighting can suggest pedestrian use and create a sense of enclosure.
- Lighting should be provided on crosswalk approaches.

If a crossing has a crossing island, additional lighting may be provided.

- Consider energy usage and environmental impacts.
- Consider quality and color of light.

Systemic Safety Potential

Potential for systemic safety application at all controlled and uncontrolled crossings.

Additional Information

- FHWA Lighting Handbook
- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations
- ANSI/IES RP-8 Standard Practice for Roadway Lighting
- International DarkSky Association Outdoor Lighting Guidelines

