
Local Government & Housing Committee

HB 1069

Brief Description: Restricting light pollution.

Sponsors: Representatives Hunt, Kagi, Nelson, Van De Wege, Hasegawa, Williams, Dunshee, McCoy, Appleton, Liias, Takko, Simpson, Darneille, Rolfes, Dickerson, Kenney, White and Chase.

Brief Summary of Bill

- Declares an intent to require the best technology available in all exterior lighting in order to reduce energy consumption and protect the nighttime environment.
- Specifies standards for exterior lighting, to be incorporated into the state building code.
- Requires all new outdoor lighting installed after July 2010 to conform to standards.
- Requires all replacement outdoor lighting to conform to standards by July 2020.
- Requires outdoor lighting used at or on existing recreational facilities, existing outdoor display lots, and existing advertising signs to conform to standards by July 2020.
- Prohibits the sale or purchase of mercury vapor lamps or fixtures, and requires their removal by July 2010.

Hearing Date: 1/15/09

Staff: Sara del Moral (786-7291)

Background:

State Building Code Council.

The State Building Code Advisory Council (Council) was created by statute in 1974 to provide analysis and advice to the Legislature and the Office of the Governor on state building code

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

issues. The Council establishes the minimum building, mechanical, fire, plumbing, and energy code requirements in Washington by reviewing, developing, and adopting the state building code. The State Building Code Act (Act) sets forth requirements through the provision of building codes to promote the health, safety, and welfare of the occupants or users of buildings and structures throughout the state.

State Building Code.

The Act consists of regulations adopted by reference from the International Building Code, the International Residential Code, the International Mechanical Code, the National Fuel Gas Code, the International Fire Code, and the Uniform Plumbing Code and Uniform Plumbing Code Standards. In maintaining the Act, the Council must regularly review updated versions of the codes and other pertinent information and amend the Act as deemed appropriate by the Council. The Council may also issue opinions relating to the codes at the request of a local official charged with the duty to enforce the Act.

Outdoor Lighting Regulations.

The administrative code specifies standards for exterior lighting to conserve energy in new and altered buildings.

Statute prohibits:

1. signs within commercial and industrial areas which are illuminated by any flashing or moving lights; and
2. signs which cause glare or impair the vision of the driver of any motor vehicle.

Lumens.

The lumen (lm) is a measure of the perceived power of light. A standard 100-watt incandescent light bulb emits 1500-1700 lm.

Mercury Vapor Ballasts.

Federal guidelines state that mercury vapor lamp ballasts (a part inside the lamp used for current stabilization) cannot be manufactured or imported after January 1, 2008.

Type 3 Signs.

Type 3 signs are defined under the administrative code as on-premise advertisement signs located on private property.

Summary of Bill:

The State Building Code is amended to create a statutory scheme regulating outdoor lighting in order to reduce energy consumption and reduce light pollution.

Definitions:

The following definitions are included:

1. "luminaire" means a complete lighting system, which includes a lamp or lamps and a fixture;
2. "fully shielded" means an outdoor lighting fixture in which all light rays are projected below a horizontal plane running through the lowest point on the fixture where light is emitted;
3. "mercury vapor lamp" means a high intensity discharge lamp in which the major portion of the light is produced by radiation from mercury operating at a partial pressure in excess of 100,000 Pa (approximately 1 atm); and
4. "outdoor lighting fixture" means outdoor electrically powered illuminating devices, outdoor lighting or reflective surfaces, lamps, and similar devices used for illumination, decoration, or advertisement. These devices include search, spot, and floodlights at or on the following:
 - (a) buildings and structures;
 - (b) recreational areas;
 - (c) parking and display lot lighting;
 - (d) landscape lighting;
 - (e) billboards and other signs;
 - (f) street lighting;
 - (g) product display area lighting; and
 - (h) building overhangs and open canopies.

Shielding and Other Technical Requirements.

New public and private outdoor lighting that has output greater than 1,800 lumens and is installed after July 1, 2010 must be fully shielded, and where practicable, have timers, dimmers and sensors.

Beginning July 1, 2020, all replacement lighting with output greater than 1,800 lumens must be fully shielded, and where practicable, lights must have timers, dimmers, and sensors to reduce energy consumption.

The provisions of this act do not apply to:

1. temporary lighting for construction projects;
2. temporary emergency lighting used by police, fire departments, or other emergency services;
3. hazard warning luminaires required by federal law and federal regulatory agencies, if the luminaires are red and as close as possible to the minimum required lumen output under federal law;
4. seasonal and decorative lighting displays that use multiple low wattage bulbs;
5. navigation lights used for marine and aviation safety; and
6. historical buildings that meet the requirements of RCW 19.27.120.

Mercury Vapor Fixtures.

Mercury vapor fixtures or lamps may not be installed, sold, leased, or purchased. All mercury lamps or fixtures must be removed by July 1, 2010.

Outdoor Recreational Facilities:

Existing Facilities.

Beginning July 1, 2010, new outdoor lighting with an output greater than 1,800 lumens must be fully shielded, and where practicable, have timers, dimmers and sensors.

Beginning July 1, 2020, existing outdoor recreational facilities may not use outdoor lighting unless they meet the following conditions:

1. lighting for parking lots and surrounding areas are fully shielded and have timers, dimmers and sensors;
2. event lighting fixtures are fully shielded; and
3. the event is scheduled to complete all activity before or as near to 10:00 p.m. as practical.

Playing fields, courts, slopes, and tracks may not be illuminated after 11:00 p.m., except to conclude a scheduled event already in progress before 11:00 p.m., and if circumstances prevent the event from concluding before 11:00 p.m.

New Facilities.

Beginning July 1, 2010, new outdoor lighting with an output greater than 1,800 lumens must be fully shielded, and where practicable, have timers, dimmers and sensors.

Beginning July 1, 2010, new outdoor recreational facilities may not use outdoor lighting unless they meet the following conditions:

1. lighting for parking lots and surrounding areas are fully shielded and have timers, dimmers and sensors;
2. event lighting fixtures are fully shielded; and
3. the event is scheduled to complete all activity before or as near to 10:00 p.m. as practical.

Playing fields, courts, slopes, and tracks may not be illuminated after 11:00 p.m., except to conclude a scheduled event already in progress before 11:00 p.m., and if circumstances prevent the event from concluding before 11:00 p.m.

Outdoor Display Lots:

Existing Facilities.

Beginning July 1, 2010, new outdoor lighting with an output greater than 1,800 lumens must be fully shielded, and where practicable, have timers, dimmers and sensors.

Beginning July 1, 2020, existing outdoor display lots (e.g. automobile sales lots) may not use outdoor lighting unless they meet the following conditions:

1. lighting for parking lots and surrounding areas are fully shielded and have timers, dimmers and sensors;

2. display lighting fixtures are fully shielded; and
3. beginning July 1, 2010, new outdoor display lots (e.g. automobile sales lots) may not use outdoor lighting unless they meet the following conditions:
4. lighting for parking lots and surrounding areas are fully shielded and have timers, dimmers and sensors;
5. display lighting fixtures are fully shielded; and
6. display lot lighting is turned off within thirty minutes after closing the business.

After 10:00 p.m., display lots may not be fully illuminated, but security lighting may be used.

Outdoor Advertising Signs:

Existing Signs.

Beginning the effective date of this act, lights used to illuminate existing outdoor advertising signs must be fully shielded and be mounted on top of the sign structure.

Beginning July 1, 2020, lights used to illuminate existing outdoor advertising signs must include timers, dimmers, and sensors, where practicable.

New Signs.

Beginning July 1, 2010, lights used to illuminate new outdoor advertising signs must be fully shielded, be mounted on top of the sign structure, and where practicable, include timers, dimmers, and sensors.

Other Facilities:

Existing Facilities.

Beginning July 1, 2010, new outdoor lighting with an output greater than 1,800 lumens must be fully shielded, and where practicable, have timers, dimmers and sensors.

Beginning July 1, 2020, all outdoor lighting must, where practicable, include timers, dimmers, and sensors.

New Facilities.

Beginning July 1, 2010, all outdoor lighting with an output greater than 1,800 lumens must be fully shielded, and where practicable, have timers, dimmers and sensors.

Appropriation: None.

Fiscal Note: Not requested.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.