H-0170.2		

## HOUSE BILL 1069

State of Washington 61st Legislature 2009 Regular Session

By Representatives Hunt, Kagi, Nelson, VanDeWege, Hasegawa, Williams, Dunshee, McCoy, Appleton, Liias, Takko, Simpson, Darneille, Rolfes, Dickerson, Kenney, White, and Chase

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- 1 AN ACT Relating to light pollution; amending RCW 19.27.020,
- 2 19.27.031, and 47.42.062; adding a new section to chapter 70.95M RCW;
- 3 and adding a new chapter to Title 70 RCW.
- 4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:
- NEW SECTION. Sec. 1. The increased use of ineffective and inefficient exterior lighting in Washington has generated unnecessary light pollution and wasteful energy consumption. With the application of the best technology available, Washington will be able to reduce sky glow, create substantial reductions in energy consumption, and protect the nighttime environment.
- Light pollution may be greatly reduced by using properly designed 11 light fixtures that direct light downward, are properly installed, and 12 This lighting is known as fully 13 avoid glare and light trespass. 14 shielded luminaires. With improved optical control and reflector 15 design, modern fully shielded luminaires deliver the same amount of 16 light to the ground as older wasteful designs but use less power, thus reducing the amount of energy used, which saves money and reduces the 17 18 quantity of greenhouse gases released into the environment.

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Therefore, it is the intent of the legislature to require the best technology available in all exterior lighting in order to reduce energy consumption and protect our night sky.

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Sec. 2. RCW 19.27.020 and 1985 c 360 s 6 are each amended to read as follows:

The purpose of this chapter is to promote the health, safety, and welfare of the occupants or users of buildings and structures and the general public by the provision of building codes throughout the state. Accordingly, this chapter is designed to effectuate the following purposes, objectives, and standards:

- (1) To require minimum performance standards and requirements for construction and construction materials, consistent with accepted standards of engineering, fire, and life safety.
- 14 (2) To require standards and requirements in terms of performance 15 and nationally accepted standards.
- 16 (3) To permit the use of modern technical methods, devices, and improvements.
  - (4) To eliminate restrictive, obsolete, conflicting, duplicating, and unnecessary regulations and requirements which could unnecessarily increase construction costs or retard the use of new materials and methods of installation or provide unwarranted preferential treatment to types or classes of materials or products or methods of construction.
  - (5) To provide for standards and specifications for making buildings and facilities accessible to and usable by ((physically disabled persons)) individuals with disabilities.
  - (6) To provide for standards and specifications for requiring the best technology available in all exterior lighting in order to reduce energy consumption and reduce light pollution.
- 30 <u>(7)</u> To consolidate within each authorized enforcement jurisdiction, 31 the administration and enforcement of building codes.
- 32 **Sec. 3.** RCW 19.27.031 and 2003 c 291 s 2 are each amended to read as follows:

Except as otherwise provided in this chapter, there shall be in effect in all counties and cities the state building code which shall consist of the following codes which are hereby adopted by reference:

- 1 (1)(a) The International Building Code, published by the 2 International Code Council((<del>[,]</del>)), Inc.;
- 3 (b) The International Residential Code, published by the 4 International Code Council, Inc.;
- 5 (2) The International Mechanical Code, published by the International Code Council((<del>[,]</del>)), Inc., except that the standards for liquified petroleum gas installations shall be NFPA 58 (Storage and Handling of Liquified Petroleum Gases) and ANSI Z223.1/NFPA 54 (National Fuel Gas Code);

- (3) The International Fire Code, published by the International Code Council(({-,})), Inc., including those standards of the National Fire Protection Association specifically referenced in the International Fire Code: PROVIDED, That, notwithstanding any wording in this code, participants in religious ceremonies shall not be precluded from carrying hand-held candles;
- (4) Except as provided in RCW 19.27.170, the Uniform Plumbing Code and Uniform Plumbing Code Standards, published by the International Association of Plumbing and Mechanical Officials: PROVIDED, That any provisions of such code affecting sewers or fuel gas piping are not adopted; ((and))
- (5) The rules adopted by the council establishing standards for making buildings and facilities accessible to and usable by ((the physically disabled)) individuals with disabilities or elderly persons as provided in RCW 70.92.100 through 70.92.160; and
- (6) The rules adopted by the state building code council establishing standards for requiring the best technology available in all exterior lighting in order to reduce energy consumption and reduce light pollution as provided in sections 4 through 12 of this act.
- In case of conflict among the codes enumerated in subsections (1), (2), (3), and (4) of this section, the first named code shall govern over those following.
  - The codes enumerated in this section shall be adopted by the council as provided in RCW 19.27.074. The council shall solicit input from first responders to ensure that firefighter safety issues are addressed during the code adoption process.
- The council may issue opinions relating to the codes at the request of a local official charged with the duty to enforce the enumerated codes.

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- NEW SECTION. Sec. 4. The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.
- 3 (1) "Council" means the state building code council established in RCW 19.27.070.
  - (2) "Fully shielded" means an outdoor lighting fixture that is installed and shielded in such a manner that all light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted.
- 10 (3) "Lamp" means the component of a luminaire that produces actual light.
  - (4) "LED" means light emitting diodes.
- 13 (5) "Luminaire" means a complete lighting system, which includes a 14 lamp or lamps and a fixture.
- 15 (6) "Mercury vapor lamp" means a high intensity discharge lamp in 16 which the major portion of the light is produced by radiation from 17 mercury operating at a partial pressure in excess of 100,000 Pa 18 (approximately 1 atm).
- 19 (7) "Outdoor lighting" means nighttime illumination of an outside 20 area or object by any human-made device located outdoors that produces 21 light by any means.
  - (8) "Outdoor lighting fixture" means outdoor electrically powered illuminating devices, outdoor lighting or reflective surfaces, lamps, and similar devices that are permanently installed or portable and used for illumination, decoration, or advertisement. These devices include search, spot, and floodlights at or on the following:
    - (a) Buildings and structures;
- 28 (b) Recreational areas;
  - (c) Parking and display lot lighting;
- 30 (d) Landscape lighting;
- 31 (e) Billboards and other signs;
- 32 (f) Street lighting;

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- (g) Product display area lighting; and
- 34 (h) Building overhangs and open canopies.
- 35 (9) "Person" means an individual, a tenant, a lessee, an owner, or 36 any commercial entity, including a firm, business, partnership, joint 37 venture, government entity, or corporation.

(10) "Temporary outdoor lighting" means the specific illumination of an outside area of objects by any human-made device located outdoors that produces light by any means for a period of less than thirty days, with at least one hundred eighty days passing before it is used again.

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- NEW SECTION. Sec. 5. The council, in consultation with the department of ecology, shall adopt by rule minimum standards for requiring the best technology available in all exterior lighting in order to reduce energy consumption and reduce light pollution. The council shall incorporate sections 6 through 12 of this act as part of the minimum standards adopted.
- NEW SECTION. Sec. 6. (1) All new public and private outdoor lighting installed after July 1, 2010, in Washington must conform to the requirements of this chapter. All other public and private outdoor lighting must conform to the requirements of this chapter by July 1, 2020.
- 16 (2) Nothing in this chapter prevents the application or adoption of 17 local regulations restricting light pollution that are equal to or more 18 stringent than the requirements of this chapter.
- 19 <u>NEW SECTION.</u> **Sec. 7.** The provisions of this chapter do not apply 20 to:
  - (1) Temporary lighting required for construction projects and related to road construction and repair, installation of sewer and water facilities, and other public infrastructure;
- 24 (2) Temporary emergency lighting used by police, fire departments, 25 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 for the task under federal law;
- 29 (4) Seasonal and decorative lighting displays that use multiple low 30 wattage bulbs;
  - (5) Navigation lights used for marine and aviation safety;
- 32 (6) Historical buildings that meet the requirements of RCW 33 19.27.120.

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- 1 <u>NEW SECTION.</u> **Sec. 8.** (1) Any new or replacement outdoor lighting
- 2 fixture must be a fully shielded luminaire if the rated output of the
- 3 outdoor lighting fixture is greater than one thousand eight hundred
- 4 lumens.
- 5 (2) Where practicable, lighting must include timers, dimmers, and
- 6 sensors to reduce overall energy consumption.
- 7 <u>NEW SECTION.</u> **Sec. 9.** (1) Outdoor lighting may not be used for
- 8 public or private outdoor recreational facilities, including but not
- 9 limited to football fields, soccer fields, baseball fields, softball
- 10 fields, tennis courts, race tracks, ski slopes, or show areas unless
- 11 the following conditions are met:
- 12 (a) Lighting for parking lots and other areas surrounding the
- 13 recreational facility comply with this chapter;
- 14 (b) The fixtures used for event lighting are fully shielded; and
- 15 (c) The event is scheduled to complete all activity before or as
- 16 near to 10:00 p.m. as practical.
- 17 (2) A person may not illuminate a playing field, court, slope, or
- 18 track after 11:00 p.m. except to conclude a scheduled event that was in
- 19 progress before 11:00 p.m. and if circumstances prevented the event
- 20 from concluding before 11:00 p.m.
- 21 <u>NEW SECTION.</u> **Sec. 10.** (1) Outdoor lighting may not be used for
- 22 lighting outdoor display lots, including automobile sales or rentals,
- 23 recreational vehicle sales, or building material sales unless the
- 24 following conditions are met:
- 25 (a) Lighting of parking lots and other areas surrounding the
- 26 display lot comply with this chapter;
- 27 (b) Fixtures used for display lighting are fully shielded; and
- 28 (c) Display lot lighting is turned off within thirty minutes after
- 29 closing the business.
- 30 (2) A person may not fully illuminate a display lot after 10:00
- 31 p.m., but security lighting may be used after 10:00 p.m.
- 32 <u>NEW SECTION.</u> **Sec. 11.** A new section is added to chapter 70.95M
- 33 RCW to read as follows:
- 34 (1) A person may not install, sell, offer to sell, lease, or

- 1 purchase a mercury vapor fixture, lamp, or other device for outdoor 2 lighting use.
- 3 (2) Mercury vapor lamps or fixtures used for outdoor lighting must 4 be removed by July 1, 2010.
- NEW SECTION. Sec. 12. In addition to the restrictions under RCW 47.42.062(4), an outdoor lighting fixture used to illuminate outdoor advertising signs, including street signs and directive signs, must be fully shielded and mounted on top of the sign structure.
  - Sec. 13. RCW 47.42.062 and 1975 1st ex.s. c 271 s 3 are each amended to read as follows:

Signs within six hundred and sixty feet of the nearest edge of the right-of-way which are visible from the main traveled way of the primary system within commercial and industrial areas and whose size, lighting, and spacing are consistent with the customary use of property for the effective display of outdoor advertising as set forth in this section may be erected and maintained: PROVIDED, That this section shall not serve to restrict type 3 signs located along any portion of the primary system within an incorporated city or town or within any commercial or industrial area.

- (1) General: Signs shall not be erected or maintained which (a) imitate or resemble any official traffic sign, signal, or device; (b) are erected or maintained upon trees or painted or drawn upon rocks or other natural features and which are structurally unsafe or in disrepair; or (c) have any visible moving parts.
  - (2) Size of signs:

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- (a) The maximum area for any one sign shall be six hundred seventy-two square feet with a maximum height of twenty-five feet and maximum length of fifty feet inclusive of any border and trim but excluding the base or apron, supports and other structural members: PROVIDED, That cut-outs and extensions may add up to twenty percent of additional sign area.
- 32 (b) For the purposes of this subsection, double-faced, back-to-33 back, or V-type signs shall be considered as two signs.
- 34 (c) Signs which exceed three hundred twenty-five square feet in 35 area may not be double-faced (abutting and facing the same direction).
  - (3) Spacing of signs:

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(a) Signs may not be located in such a manner as to obscure, or otherwise physically interfere with the effectiveness of an official traffic sign, signal, or device, obstruct or physically interfere with the driver's view of approaching, merging, or intersecting traffic.

- (b) On limited access highways established pursuant to chapter 47.52 RCW no two signs shall be spaced less than one thousand feet apart, and no sign may be located within three thousand feet of the center of an interchange, a safety rest area, or information center, or within one thousand feet of an intersection at grade. Double-faced signs shall be prohibited. Not more than a total of five sign structures shall be permitted on both sides of the highway per mile.
- (c) On noncontrolled access highways inside the boundaries of incorporated cities and towns not more than a total of four sign structures on both sides of the highway within a space of six hundred sixty feet shall be permitted with a minimum of one hundred feet between sign structures. In no event, however, shall more than four sign structures be permitted between platted intersecting streets or highways. On noncontrolled access highways outside the boundaries of incorporated cities and towns minimum spacing between sign structures on each side of the highway shall be five hundred feet.
- (d) For the purposes of this subsection, a back-to-back sign and a V-type sign shall be considered one sign structure.
- (e) Official signs, and signs advertising activities conducted on the property on which they are located shall not be considered in determining compliance with the above spacing requirements. The minimum space between structures shall be measured along the nearest edge of the pavement between points directly opposite the signs along each side of the highway and shall apply to signs located on the same side of the highway.
- 30 (4) Lighting: Signs may be illuminated, subject to the following 31 restrictions:
  - (a) Signs which contain, include, or are illuminated by any flashing, intermittent, or moving light or lights are prohibited, except those giving public service information such as time, date, temperature, weather, or similar information.
  - (b) Signs which are not effectively shielded as to prevent beams or rays of light from being directed at any portion of the traveled ways of the highway and which are of such intensity or brilliance as to

cause glare or to impair the vision of the driver of any motor vehicle, or which otherwise interfere with any driver's operation of a motor vehicle are prohibited.

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- (c) No sign shall be so illuminated that it interferes with the effectiveness of, or obscures an official traffic sign, device, or signal.
- 7 (d) <u>Signs must be fully shielded and mounted on top of the sign</u> 8 structure.
- 9 <u>(e)</u> All such lighting shall be subject to any other provisions 10 relating to lighting of signs presently applicable to all highways 11 under the jurisdiction of the state.
- NEW SECTION. Sec. 14. Sections 1, 4 through 10, and 12 of this act constitute a new chapter in Title 70 RCW.

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