



**KING COUNTY**

1200 King County Courthouse  
516 Third Avenue  
Seattle, WA 98104

**Signature Report**

**March 9, 2010**

**Ordinance 16769**

**Proposed No. 2010-0001.2**

**Sponsors Phillips, Hague and Gossett**

1           AN ORDINANCE relating to energy efficient lighting and  
2           the reduction of outdoor light pollution; and adding a new  
3           section to K.C.C. chapter 2.95.

4           STATEMENT OF FACTS:

- 5           1. Energy-efficient lighting can result in a significant conservation of  
6           energy thus reducing the quantity of greenhouse gases released into the  
7           environment.
- 8           2. Energy used for lighting accounts for about seventeen percent of all  
9           United States electricity use.
- 10          3. K.C.C. chapter 10.16 reflects a long-term commitment to the purchase  
11          of "environmentally preferable" materials.
- 12          4. There are several different types of lighting that offer substantial  
13          energy savings compared to standard incandescent bulbs.
- 14          5. Federal regulations, 10 CFR Sec. 430.32 (2009), establish new higher  
15          efficiency standards for the manufacture of light bulbs due to take effect in  
16          2012.
- 17          6. The United States Department of Energy reports that the newly  
18          established federal energy efficient standards for lighting will result in  
19          financial benefits for residential and commercial consumers..

20 7. There are many financial incentives available to consumers to  
21 encourage the purchase of energy efficient lighting.

22 8. Improperly directed outdoor lighting generates unnecessary light  
23 pollution and wasteful energy consumption.

24 9. Outdoor night lighting can have damaging effects on the natural  
25 nocturnal environment and has been linked to various human  
26 physiological issues.

27 10. Light pollution can be greatly reduced by using properly designed  
28 light fixtures that direct light downward, are properly installed and avoid  
29 glare and light trespass.

30 11. Properly designed exterior light fixtures can deliver the same amount  
31 of light to the ground as older wasteful designs, but use less power.

32 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

33 NEW SECTION. SECTION 1. There is hereby added to K.C.C. chapter 2.95 a new  
34 section to read as follows:

35 A. King County shall purchase the most cost-effective and energy-efficient  
36 lighting feasible and seek available financial incentives from appropriate entities,  
37 including but not limited to utilities.

38 B. All lighting purchases for the county for which there is a federal efficiency  
39 standard established in 10 CFR Sec. 430.32 (2009) shall meet or exceed those energy  
40 efficiency standards to the maximum extent feasible. The department director or designee  
41 shall make the determination as to whether it is feasible to meet these standards. In

42 making a determination concerning the feasibility of installing lighting that complies with  
43 the federal efficiency standards, the department director or designee shall consider:

- 44 1. The life-cycle cost effectiveness of the lighting
- 45 2. The compatibility of the lighting with existing equipment;
- 46 3. Whether use of the lighting could result in interference with productivity or  
47 safety, and
- 48 4. The aesthetics relating to the use of the lighting.

49 C. Any new outdoor lighting installed on a county facility, that has output greater  
50 than one thousand eight hundred lumens must be fully shielded, except as exempted in  
51 subsection E. of this section. For the purposes of this section, "fully shielded" means the  
52 outdoor lighting fixture is one in which all light rays are projected below a horizontal  
53 plane running through the lowest point on the fixture where light is emitted.

54 D. Beginning July 1, 2015, all replacement lighting with output greater than one  
55 thousand eight hundred lumens on county facilities must be fully shielded, except as  
56 exempted in subsection E. of this section.

57 E. An action for reducing light pollution shall not be implemented if it is  
58 determined by the department director or designee that the action will reduce lighting  
59 deemed necessary for public safety. Further, the following lighting categories are  
60 exempted from this section:

- 61 1. Temporary lighting for construction projects;
- 62 2. Temporary emergency lighting used by police, fire departments or other  
63 emergency services;
- 64 3. Hazard warning lights required by federal law and regulatory agencies;

- 65 4. Seasonal and decorative lighting displays that use multiple low wattage bulbs
- 66 5. Navigation lights used for marine and aviation safety;
- 67 6. Historical buildings that meet the requirements of RCW 19.27.120
- 68 7. Road lighting if shielded lighting is in conflict with state or federal
- 69 requirements;
- 70 8. Ball field lights, but only if the department of natural resources and parks has
- 71 taken steps to minimize glare and light trespass; and
- 72 9. Exit signs, lighting for stairs and ramps.

73 SECTION 2. A. The executive shall develop a lighting plan to reduce King  
74 County's use of inefficient lighting and the occurrence of evening light pollution from  
75 county operations. The plan shall be incorporated into an update of the King County  
76 Energy Plan, required by Motion 12362. The lighting plan shall include at a minimum  
77 the following components:

- 78 1. An implementation plan for the cost effective replacement of lighting in  
79 county facilities that do not meet federal energy efficiency standards established in 10  
80 CFR Part 430 (2009). The implementation plan shall include guidelines for when  
81 noncompliant lighting should be replaced and address the proper disposal of spent  
82 lighting;
- 83 2. New procurement standards requiring the procurement of lighting, which at a  
84 minimum meet the new federal energy efficiency standards established in 10 CFR  
85 Sec.430.32 (2009);

86           3. A summary of the current and planned activities of the solid waste division  
87 related to educating citizens on the proper disposal of spent compact fluorescent light  
88 bulbs and linear tubes;

89           4. An analysis of a policy to establish mercury and lead content standards for all  
90 new lighting products purchased by King County; including a recommended content  
91 standard and a financial analysis of the costs to the county of such a standard;

92           5. A summary of activities related to working with the state to solicit vendors  
93 for the state lamp and ballast contract who will take back spent lamps, preferably at no  
94 additional cost; and

95           6. An implementation plan to reduce the light pollution from outdoor lighting on  
96 county facilities that is that is misdirected, excessive or unnecessary, while maintaining  
97 the lighting essential for public safety.

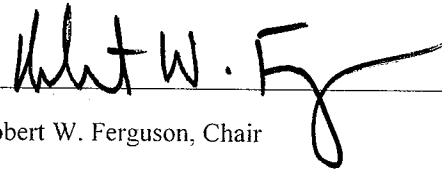
98           B. The plan shall be transmitted to the council by July 1, 2010, in the form of a  
99 paper original and an electronic copy filed with the clerk of the council, who shall retain

100 the original and provide an electronic copy to all councilmembers and to the committee  
101 coordinator for the environment and transportation committee or its successor.

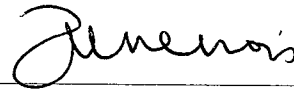
Ordinance 16769 was introduced on 1/4/2010 and passed by the Metropolitan King County Council on 3/8/2010, by the following vote:

Yes: 9 - Ms. Drago, Mr. Phillips, Mr. von Reichbauer, Mr. Gossett,  
Ms. Hague, Ms. Patterson, Ms. Lambert, Mr. Ferguson and Mr. Dunn  
No: 0  
Excused: 0


KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON

  
Robert W. Ferguson, Chair

ATTEST:

  
Anne Noris, Clerk of the Council

APPROVED this 17<sup>th</sup> day of March, 2010.

  
Dow Constantine, County Executive

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CLERK  
KING COUNTY COUNCIL

Attachments: None