



City of Gainesville

Department of Sustainable
Development

TO: City Plan Board

DATE: September 22nd, 2022

FROM: Department of Sustainable Development

SUBJECT: City of Gainesville. Update the urban lighting standards ordinance to include FDOT lighting standards

Applicant: City of Gainesville

Discussion

Outdoor lighting has been an issue raised by our city neighbors and city staff in the past. At a previous General Policy Committee meeting, the commission voted to update its urban lighting ordinance, #200737. Roadway lighting is a proven safety countermeasure and has been documented to be a significant contribution to the reduction in the number of crashes. There are a number of benefits that may arise from improving lighting, most notably including an increase in safety on the part of neighbors. However, if not carefully implemented, the benefits of increased lighting can have neutral or negative effects on public safety and may raise environmental concerns.

To address the concerns stated above, staff is proposing amending the existing lighting ordinance according to FDOT lighting standards. This petition is initiated by the City of Gainesville and proposes several amendments which are outlined below:

Sec. 30-2.1. - Definitions.

Pedestrian means a person who travels by foot, especially along a road or developed area, or any other mode of travel permitted to utilize sidewalks or multi-use paths/trails.

Pedestrian area means an area in which vehicular traffic is not permitted and is so designated by signs or obstructions as pedestrian walkways or access areas; refer also to sidewalk.



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Sidewalk means an area on public or private property where pedestrians walk or stand, generally parallel to the edge of a street, roadway or curb.

Sec. 30-6.12. Outdoor lighting.

A. *Purpose.* To provide regulations for outdoor lighting that will:

1. Protect and promote the public health, safety, and welfare;
2. Promote safety and security in vehicular use and pedestrian use areas;
3. Protect adjacent properties, the environment and wildlife, and the night sky from adverse lighting impacts such as light pollution, light trespass, glare, excessive lighting, and offensive light sources;
4. Promote energy and resource efficient lighting; ~~and~~
5. Encourage the use of crime prevention through environmental design (CPTED) fundamentals in the design of lighting installations; and
6. Promote the safety and security of pedestrians and motorists, especially at intersections, street crossings and mid-block crossings.

C. *Exemptions.*

1. Properties with a single-family or two-family dwelling.
2. ~~Lighting for public rights-of-way, public streets, and approved private streets.~~
3. Lighting necessary for emergency equipment and work conducted in the interests of law enforcement, fire rescue, storm debris clean-up or other similar public safety efforts.
4. Lighting for construction, renovation, or repair of roads and utilities.
5. Temporary general construction lighting, which shall be regulated in accordance with building construction standards and shall be valid during the active period of a building permit.
6. Sign lighting, which is regulated in Article IX elsewhere in this Land Development Code.
7. Lighting required by federal or state laws or regulations.
8. Luminaires with fully shielded light sources, provided the total output of the fixture does not exceed 1800 lumens.-



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9. Luminaires with diffuse lensing, provided the total output of the fixture does not exceed 900 lumens.-
10. Point source, or other types of unshielded fixtures, provided the total output of the fixture does not exceed 600 lumens.-
11. Low-voltage landscape lighting, provided the lighting is shielded in such a way as to eliminate glare and light trespass.-
12. Other roadway lighting for public rights-of-way, public streets, and approved private streets that are specifically regulated by separate ordinances or other state and federal regulations.

E. *Specific illumination requirements.* In addition to the general requirements applicable to all outdoor lighting uses, the following requirements for specific outdoor lighting uses or areas shall apply. If provisions in this subsection conflict with any of the general requirements, the provisions in this subsection shall prevail.

1. *Recreational lighting.* Lighting for outdoor recreational uses (including mounting heights above 30 feet, where appropriate) may be designed in accordance with the published standards of the Illuminating Engineering Society of North America (IESNA).
2. *Nature parks.* Buildings shall not be externally illuminated on any vertical faces fronting a nature park.
3. *Building entrances, exteriors and site security.* Lighting shall be provided for the general security of areas, including building entrances, stairways, ramps, main walkways, dumpsters, other site accessory structures, pedestrian entrance/exit points, and vehicular use areas.
 - a. Lighting levels at building entrances/exits and around buildings shall not exceed an average horizontal illuminance of 5.0 footcandles at ground level, a uniformity ratio of 6:1 and a maximum uniformity ratio of 10:1.
 - b. Lighting levels on pedestrian walkways and at pedestrian entrances/exits of vehicular use areas of multi-family developments shall maintain a minimum horizontal illuminance of 1.0 footcandles at ground level.
 - c. Pedestrian walkways greater than 30 feet from the edge of a building or vehicular use area shall maintain a minimum horizontal illuminance of 0.2 footcandles at ground level.



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- d. There shall be a minimum horizontal illuminance of 1.0 footcandles at ground level within five feet of dumpsters, site accessory structures and areas that are of the type known to be prone to illicit behavior or victimization.
- e. Unimproved areas of a site may be so defined and excluded from the lighting plan.

4. *Pedestrian areas*

- a. Lighting levels in the transects zone U1 to U3 and any residential development shall maintain an average horizontal illuminance of 1.8 footcandles at ground level, with an average illuminance uniformity ratio of 6:1, and a maximum to minimum uniformity ratio of 10:1 shall not be exceeded.
- b. Lighting levels in the transects zone U4 to U7 and any mixed-use development shall maintain an average horizontal illuminance of 2.4 footcandles at ground level, with an average illuminance uniformity ratio of 4:1, and a maximum to minimum uniformity ratio of 10:1 shall not be exceeded.
- c. Lighting levels in the transects zone U8 to DT and any commercial development shall maintain an average horizontal illuminance of 2.5 footcandles at ground level, with an average illuminance uniformity ratio of 4:1, and a maximum to minimum uniformity ratio of 10:1 shall not be exceeded.

5. *Alley lighting*

- a. Alley lighting in the residential development shall maintain an average horizontal illuminance of 1.2 footcandles at ground level, with an average illuminance uniformity ratio of 6:1.
- b. Alley lighting in the mixed-use development shall maintain an average horizontal illuminance of 1.8 footcandles at ground level, with an average illuminance uniformity ratio of 6:1.
- c. Alley lighting in the commercial development shall maintain an average horizontal illuminance of 2.4 footcandles at ground level, with an average illuminance uniformity ratio of 6:1.



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Respectfully submitted,

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