AN ORDINANCE OF THE COUNCIL OF THE CITY OF NORMAN, OKLAHOMA AMENDING ARTICLE XII, SECTION 431.6 AND ARTICLE XIV, SECTION 450(51) OF THE CODE OF THE CITY OF NORMAN TO MODIFY COMMERCIAL OUTDOOR LIGHTING STANDARDS; AND PROVIDING FOR THE SEVERABILITY THEREOF.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORMAN, OKLAHOMA:

§ 1. That Section 431.6 of Article XII of the Zoning Ordinance of the Code of the City of Norman shall be and is hereby amended as follows:

SEC. 431.6 -- COMMERCIAL OUTDOOR LIGHTING STANDARDS

(Established by Ord. No. O-1011-44 – June 21, 2011)

- 1. Purpose and Intent. It is the intent of this Section to define practical and effective measures by which the obtrusive aspects of commercial outdoor light usage can be minimized, while preserving safety, security, and the nighttime use and enjoyment of property. These measures are intended to reduce light spillover, minimize glare, and decrease resource waste.
- 2. Conformance with Applicable Codes. All new commercial outdoor lighting shall be installed in conformance with the provisions of this Ordinance, as well as the currently adopted versions of the Building Code, the Electrical Code, and the Sign Code of the City of Norman as applicable and under appropriate permit and inspection, whichever is the more restrictive.

3. Applicability.

- (a) Building Construction. For all public or private commercial, industrial, institutional, and multi-family land uses, developments, buildings, and structures that require a permit subsequent to the effective date of this Section (July 22, 2011), all new outdoor lighting fixtures shall meet the requirements of this Section of the Code.
- (b) These lighting regulations do not apply to properties zoned or used for single-family or two-family dwellings.
- (c) Exempt Lighting. The following luminaires and lighting systems are exempt from these requirements:
 - (1) Internally illuminated signs.
 - (2) Temporary lighting for theatrical, television, and performance areas.
 - (3) Lighting for non-commercial public or private athletic fields and recreational facilities, although any such lighting should be mounted, aimed, and shielded so that lighting primarily falls within the boundaries of such athletic fields and recreational facilities and lights are extinguished when not in use.
 - (4) Lighting in swimming pools and other water features governed by the most recently adopted National Electrical Code.
 - (5) Lighting for police, fire, and other emergency services, or required by any state or federal agency, such as the FAA.
 - (6) Interior lighting.
 - (7) Temporary holiday lighting.

- (8) Low-voltage landscape lighting.
- (9) Exterior lights that are mounted within interior courtyards or other areas of the building that are not visible from any abutting residential property.
- (10) Decorative and architectural lighting of bridges, public monuments, or public art, although all luminaires should be installed to minimize glare and be shielded such that no glare is visible from any abutting property.
- (11) New street lights installed within public rights-of-way.
- (12) New lighting to be placed on historic properties such that it is important that the new lighting be in harmony with the period lighting of the property.
- (13) Luminaires that are used exclusively to provide emergency power illumination at exit discharge locations that operate only from an emergency power source in the event of a normal power failure.
- (d) Prohibited Lighting. The following luminaires and lighting systems may not be used or installed within the City of Norman:
 - (1) The use of laser source light or any similar high-intensity light for outdoor advertising or entertainment.
 - (2) The operation of searchlights for advertising purposes.

4. Compliance.

- (a) Whenever a complaint about existing-lighting is received, it shall be investigated to determine if corrective action is warranted in accordance with the standards and requirements listed in Tables 1 and 2 of this section of the Code. Corrective action is warranted when a Code Enforcement or Police Officer finds evidence of glare; light spillover onto property zoned or used for single or two-family dwellings located either adjacent to or across the street from the subject property; or a visible bulb from an adjacent single or two-family property. Corrective action includes: shielding, re-aiming, or replacement of a fixture with a full cutoff fixture.
- (b) A one-time hardship extension may be administratively granted for up to 180 days, but the applicant must agree in writing to comply with this section of the Code and submit a plan for compliance.
- (c) If the administrative exception is denied, that decision may be appealed to the Board of Adjustment, who may grant the extension as a Special Exception.
- (d) An additional one year extension above the six month administrative extension may be granted as a Special Exception by the Board of Adjustment provided (a) lights within twenty-five feet of any residential boundary have been modified to comply with this section, and (b) the extent of the renovation is large enough to require additional time based on the difficulty in finding compatible lights or the cost of the retrofit must be amortized over a longer timeframe. Property owners may re-apply to the Board for an additional one year extension, provided that a specific plan of compliance has been provided to the Board demonstrating extreme hardship.

<u>TABLE 1</u>					
<u>POLE MOUNTED LIGHTS</u>					
Criteria	Trigger(s)	Compliance	Amortization Period		
Commercial, Industrial, Institutional, or Multi-Family Property adjacent or across an alley from property which is zoned or used as a single or two-family dwelling.	 Complaint of light spillover, and evidence that bulb is visible from a residential property boundary, OR Replacement of luminaire 	 Install shield, AND/OR Re aim to minimize glare, OR Replace with full cut off luminaire 	180 days after notification		
Commercial, Industrial, Institutional, or Multi-Family Property within 350 feet of property which is zoned or used as a single or two-family dwelling.	Complaint of light spillover, and evidence that bulb is visible from a residential property boundary, OR Major remodel of parking area where sixty percent of lights are replaced.	Install shield, AND/OR Re aim to minimize glare, OR Replace with full cut off luminaire	180 days after notification, OR at the time a CO is issued for remodel		
All other complaints regarding Commercial, Industrial, Institutional, or Multi Family outdoor lighting	 Complaint of light spillover, and evidence that bulb is visible at the property boundary and, after inspection by staff**, evidence of glare as defined by this Ordinance, OR Replacement of luminaire, OR Major remodel of parking area where sixty percent of lights are replaced. 	Install shield, AND/OR Re aim to minimize glare, OR Replace with full cut off luminaire	180 days after notification, OR at the time a CO is issued for remodel		

^{**}Complaints of glare that interfere with a driver's visual performance may be reviewed by the Police Department.

TABLE 2					
Criteria	Trigger	Compliance	Amortization Period		
Commercial, Industrial, Institutional, or Multi-Family Property adjacent or across an alley from property which is zoned or used as a single or two family dwelling.	Complaint of light spillover, and evidence that bulb is visible from residential property boundary, OR Replacement of luminaire	Install shield, OR Replace with full cut-off luminaire	180 days after notification		
Commercial, Industrial, Institutional, or Multi-Family Property within 150 feet of property which is zoned or used as a single or two family dwelling.	Complaint of light spillover, and evidence that bulb is visible from residential property boundary, OR Replacement of luminaire, OR Building expansion exceeding 1500 square feet.	Install shield, OR Replace with full cut-off luminaire	180 days after notification, OR at the time a CO is issued for the expansion		
Commercial, Industrial, Institutional, or Multi-Family Property within 350 feet of property which is zoned or used as a single or two family dwelling.	 Complaint of light spillover, and evidence that bulb is visible from residential property boundary, OR Replacement of luminaire, OR Building expansion exceeding 5000 square feet. 	Install shield, OR Replace with full cut-off luminaire	180 days after notification, OR at the time a CO is issued for expansion		
All other complaints regarding Commercial, Industrial, Institutional, or Multi Family outdoor lighting	 Complaint of light spillover, and evidence that bulb is visible at the property boundary and, after inspection by staff**, evidence of glare as defined by this Ordinance, OR Replacement of luminaire, OR Building expansion exceeding 5000 square feet. 	Install shield, AND/OR Replace with full cut-off luminaire	180 days after notification, OR at the time a CO is issued for expansion		

^{**}Complaints of glare that interfere with a driver's visual performance may be reviewed by the Police Department.

5. General Outdoor Lighting Standards.

(a) Fixture Standards.

- (1) Except as otherwise provided, all new nonexempt outdoor lighting fixtures shall be full cut-off fixtures mounted horizontally to the ground that prevent excessive light from going upward; outdoor luminous tube lighting does not require shielding but total output from all lighting is subject to the limits set forth in Section 5(f).
- (2) Ordinary maintenance of existing fixtures, including replacement of lamps, is specifically allowed provided the new lamps are not increased in lumens. If existing fixtures are removed in order to upgrade, redesign, or reconfigure the lighting design on the property, then such fixtures must conform to the requirements of this section.

(b) Pole Mounted Lights.

- (1) The maximum light level at any point on an abutting residential a property line of a parcel zoned or used for single or two-family dwellings, located either adjacent to or across the street from the subject property, shall not exceed 0.2 footcandles. When the abutting property is non-residential or public right of way, the maximum light level at any point ten feet beyond the property boundary shall not exceed 0.2 footcandles.
- (2) Shielding must be permanently installed to ensure continued compliance with this requirement.
- (3) Parking lots should be illuminated to a minimum level of 0.2 footcandles, with a uniformity ratio of 20/1 or less.
- (4) Light poles installed within twenty-five (25) feet of any residential property line or public right-of-way may not exceed twenty (20) feet in height. All other light poles—may not exceed thirty (30) feet in height except in instances of the expansion of a development, pole height may correspond with the height of existing poles. Height is measured to the underside of the lens, and includes any concrete base.

(c) Lights Mounted to Walls of Buildings or Structures.

- (1) All wall mounted lighting on buildings or structures shall be full cut-off fixtures.
- (2) When such new lights are installed on a wall, the lights may not exceed a mounting height above the roof line of the building or structure.
- (3) New lights mounted on the underside of any roof overhang shall be fully recessed so that the lens cover is flush with the bottom surface of the overhang.

(d) Accent Lighting.

- (1) Except as allowed under 5(d)(2) below, new fixtures used for accent lighting shall be full cut-off, or directionally shielded lighting fixtures that are aimed and controlled so that the directed light is substantially confined to the object intended to be illuminated. All such lights shall be aimed and shielded to prevent excessive light from going upward.
- (2) Fixture types may include floodlights, wall sconces, lanterns, recessed can lights, architectural or decorative lights, or any other fixture that meets the intent of this section. Decorative architectural wall mounted fixtures are not required to be

- cut-off, semi cut-off, or full cut-off fixtures, so long as such fixtures do not result in any glare as later defined or light spillover of greater than 0.2 footcandles onto any abutting residential property zoned or used for single or two-family dwellings located either adjacent to or across the street from the subject property greater than 0.2 footcandles when the property is zoned or used as single or two-family residential.
- (3) The maximum illumination of any vertical surface or angular roof surface shall not exceed 2.0 lumens per square foot of building façade on the side that is illuminated.
- (4) (3) Lighting required for the night-time display of the American flag may be of any type or intensity, but if directed up towards the flag, the light fixtures shall be installed to minimize glare and shielded such that the light source is not visible from any abutting single family or two family property zoned or used for single or two-family dwellings located either adjacent to or across the street from the subject property.
- (e) Canopy Lighting. New lighting under canopies shall be adequate to facilitate the activities taking place in such locations (a minimum of 0.2 footcandles). Any facility utilizing a drive-through area such as banks, service stations, convenience stores, car washes, etc., shall comply with the following requirements:
 - (1) New light fixtures mounted in canopies or soffits for drive-through locations shall be installed so that the bulb is fully recessed and the lens is flush with the bottom surface of the canopy, soffit, or overhang.
 - (2) Fuel dispensing locations shall be illuminated so that the minimum lighting level is at least ten (10) lumens per square foot but no more than sixty (60) lumens per square foot of the canopy area.
 - (3) Automated Teller Machines (ATMs) shall be illuminated so that the minimum lighting level is at least five (5) lumens per square foot, but not more than sixty (60) lumens per square foot, measured within a ten foot radius of the ATM.
- (f) Total Outdoor Light Output. The total amount of light output on the entire property, measured in initial rated lamp lumens, from all new lamps used in outdoor light fixtures, including all new lights and luminous tubes and new lights used for external illumination of signs, but not including lights used to illuminate internally illuminated signs, luminous tubes used in neon signs, or temporary seasonal lighting from typical low output lamps, shall not exceed the following limits:
 - (1) Four (4) lumens per square foot of hardscape area (paved areas not including any building footprint area), plus,
 - (2) Five thousand (5000) lumens per each three-foot building entrance or exit, plus,
 - (3) Outdoor Sales Areas: 12 lumens per square foot, plus,
 - (4) Drive up windows: 6,000 lumens per drive up window, plus,
 - (5) Service Stations: 12,000 lumens per pump

6. Photometric-Lighting Plan Requirements.

(a) Site Plan Required. All applications for building permits subject to this Section which involve the installation of new outdoor lighting shall include an accurate site plan of the proposed development indicating the location of property lines, and all existing and proposed land improvements, including but not limited to buildings, parking lots, aisles and driveways, streets, sidewalks and walkways, landscaped areas, and accessory structures and the location and type of all exterior lighting fixtures.

- (b) In addition to the requirements in 6 (a) above, all applications for building permits subject to this section which exceed 7,500 square feet of new construction in an Office category, or 5,000 square feet of new construction for all other categories of use within this section, and involve the installation of new outdoor lighting shall include the following information:
 - (1) A photometric plan, prepared by a professional engineer, electricial contractor, or representative of the lighting industry, at a scale no smaller than one inch equals sixty (60) feet when the subject property is adjacent to or across the street from property zoned or used for single or two family dwellings. When such a plan is submitted, it shall be accompanied by a written opinion from a professional engineer, electrical contractor, or representative of the lighting industry that the lighting plan complies with the standards of this section.
 - (2) The estimated footcandles at ground level across the entire site including all property boundaries, at minimum intervals of ten feet, plus the estimated footcandles at ten feet beyond all property boundaries that abut are adjacent to or are across the street from single or two family residential zones or uses;
 - (3) To the extent that such information is readily available from the supplier of each light source, a table indicating the type, light source, wattage, initial output in lumens, light loss ratio, height of luminaires above grade, and the maximum to minimum ratio. The maximum to minimum ratio shall be calculated using all of the on-premise data point sources; and
 - (4) A written opinion by a professional engineer or representative of the lighting industry that the lighting plan complies with the standards of this section.
 - (5) (4) To the extent that such information is readily available from the supplier of each light source, manufacturer's catalogue specifications of all luminaires to be used, indicating the design, refractor (lens) type, cut-off angle (cut-off, semi cut-off or full cut-off), and any special features affecting the performance of the light.
 - (5) An applicant may submit a photometric plan, prepared by a professional engineer, electrical contractor, or representative of the lighting industry, at a scale no smaller than one inch equals (60) feet that demonstrates compliance with this ordinance. If such a plan is submitted, it shall create a legal presumption that the subject property is in compliance with this ordinance.
- (c) Additional Submission Requirements. The above required plans, descriptions and data shall be sufficiently complete to enable the designated official to readily determine whether compliance with the requirements of this Section will be met. If such plans, descriptions and data are not reasonably sufficient, the applicant shall submit such additional evidence as reasonably requested by the City of Norman.
- (d) Lamp or Fixture Substitution. After any permit has been issued, manufacturer's specifications showing the substitute is equivalent to the approved fixture must be submitted to the City before any new outdoor light fixture or the type of light source therein is changed, together with adequate information to assure compliance with this Section.
- (e) Certification of Installation. For projects using 200,000 lumens or more a registered professional engineer shall certify in writing to the City that all lighting was installed in accordance with the approved plans.

- § 2. That Section 450(51) of Article XIV of the Zoning Ordinance of the Code of the City of Norman shall be and is hereby amended as follows:
 - (51) GLARE. The sensation produced by luminance <u>directed or reflected</u> within the visual field that is sufficiently greater than the luminance to which the eyes are adapted which causes annoyance, discomfort, or loss in visual performance and visibility to a reasonable person. (O-1011-44)
- § 3. <u>Severability.</u> If any section, subsection, sentence, clause, phrase, or portion of this ordinance is, for any reason, held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of this ordinance, except that the effective date provision shall not be severable from the operative provisions of the ordinance.

ADOPTED this day		NOT ADOPTED this day		
of	, 2013.	of	, 2013.	
Cindy Rosenthal, Mayor		Cindy Rosenthal, Mayor		
ATTEST:				
Brenda Hall, City Clerk				