



## **McLean Citizens Association Resolution**

### **Streetlight Conversions**

**December 5, 2018**

**Whereas**, updates to the 2003 Outdoor Lighting Ordinance of Fairfax County were recently discussed with County Staff and stakeholders in a May 1, 2018 work group; and

**Whereas**, in August 2018, Fairfax County entered a regional agreement with Dominion Energy for conversion of existing streetlights to Light Emitting Diodes (LEDs) to reduce energy usage and costs (affecting approximately 58,000 streetlights in Fairfax County); and

**Whereas**, the current, as well as proposed amendments to the Public Facilities Manual of Fairfax County do not currently provide lighting level standards for LED conversions (including spacing, height, lumens, and blue light emissions); and

**Whereas**, in 2016, the American Medical Association (AMA) adopted recommendations for LED color temperatures of 3,000 Kelvin or lower, based on studies indicating that blue light emissions from LEDs at higher color temperatures can create glare, impact human sleep patterns, and disorient animal species; and

**Whereas**, in addition to the AMA, the National Institutes of Health (NIH), the International Dark Sky Association (IDS), and the National Optic Astronomy Observatory (NOAO) have adopted guidance encouraging communities to minimize blue emissions from LEDs; and

**Whereas**, LED streetlight color temperature ratings above 3,000 Kelvin produce significantly more blue light than traditional Mercury Vapor and High Pressure Sodium streetlights; and

**Whereas**, a number of communities (e.g., Phoenix, AZ; Davis, CA; and Los Angeles, CA) are either converting public street lighting or considering conversion to LEDs (Takoma Park, MD) at the warmer color temperature of 2,700 Kelvin for reduction in the amount of intense blue light and increase in the amount of light towards the red portion of the visible spectrum, typically associated with natural nighttime colors.

**Now, therefore be it resolved that** the MCA supports Fairfax County streetlight conversions to LEDs with lower blue light emissions at 2,700 Kelvin; and

**Be it further resolved that** the MCA requests, that in the updating of the Public Facilities Manual and the Outdoor Lighting Ordinance, lighting industry best practices are encouraged, including: warmer color temperatures; shielded fixtures to prevent upward light; adaptive controls such as dimmers, timers, and motion sensors where applicable, and installations that ensure that lighting is minimized to specific needs and applications; and

**Be it further resolved that** MCA requests that Fairfax County continue to monitor research on artificial blue light emissions from LEDs, and the possible impacts upon ocular health, circadian systems, and animal species for consideration of installation requirements in both outdoor and indoor environments.

*Approved by MCA Board of Directors  
December 5, 2018*

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McLean Citizens Association, PO Box 273, McLean, Virginia 22101

cc: Sharon Bulova, Chairman, Board of Supervisors  
John Foust, Dranesville District Supervisor