



City of Northampton

MASSACHUSETTS

In the City Council, September 3, 2020

Upon the Recommendation of: Councilor Karen Foster
 Councilor Alex Jarrett
 Councilor Rachel Maiore

R-20.112

A RESOLUTION IN SUPPORT OF “AN ACT IMPROVING OUTDOOR LIGHTING AND INCREASING DARK-SKY VISIBILITY”

WHEREAS, More than two decades of scientific studies demonstrate a strong link between excessive light at night and serious human health risks including elevated rates of breast and prostate cancer, melatonin suppression, sleep disruption, diabetes, obesity, and depression; and

WHEREAS, A 2016 report¹ by the American Medical Association concludes that glare and excessive light from LEDs at night, especially light bluer than 3000K CCT, are harmful both to human health and wildlife; and

WHEREAS, The Federal Highway Administration states in a 2012 report² that “disability glare is one of the most important elements to control in a lighting system. It affects your ability to adequately see, particularly for older drivers”; and

WHEREAS, Virtually all species of animal studied scientifically including birds, mammals, insects, amphibians, fish, and coral are negatively affected by light pollution; and

WHEREAS, The City of Northampton supports the development of foraging areas and habitat for pollinating insects, which according to a 2017 scientific study³ make 62% fewer visits to flowers in the presence of light pollution; and

¹ CSAPH Report 2-A-16

https://www.darksky.org/wp-content/uploads/bsk-pdf-manager/AMA_Report_2016_60.pdf

² FHWA-SA-11-22

https://safety.fhwa.dot.gov/roadway_dept/night_visib/lighting_handbook/

³ Knop et al 2017, Nature, 548, pp. 206–209

<https://www.nature.com/articles/nature23288>

- WHEREAS, An estimated 100 million to 1 billion birds die in the US every year due to light pollution, according to a 2019 scientific study⁴; and
- WHEREAS, Light pollution causes the night sky to be at least 6-10 times brighter than naturally dark skies in the City of Northampton, and as much as 50 times brighter in some other parts of Massachusetts; and
- WHEREAS, Light pollution, as measured in a 2017 scientific study,⁵ is growing worse at 2% per year globally and up to 10% per year in some parts of Massachusetts, many times faster than population growth; and
- WHEREAS, Light pollution represents wasted energy and resources, since light that shines into the sky or is brighter than needed provides no benefit; and
- WHEREAS, The City of Northampton is committed to reducing greenhouse gas emissions as demonstrated by its Sustainable Northampton Comprehensive Plan, its Office of Planning and Sustainability, its Energy and Sustainability Commission, and its 5-STAR Community Rating, and has written Dark Skies standards into municipal building codes; and
- WHEREAS, Curbing light pollution at night by installing only well-shielded, appropriately bright, warm-colored lighting will cost cities and towns of Massachusetts no more than installing poorly shielded, excessively bright and blue lighting, and will use less electrical power; and
- WHEREAS, The starry sky and the Milky Way have led countless generations to ponder profound questions about the Universe, to incorporate planets, sun, and moon into their religions, and to create innumerable works of art and literature, and the ability to see a naturally dark starry sky is a human right espoused by the US National Park Service, the International Dark-Sky Association, the United Nations, and other national and world organizations; and
- WHEREAS, The identical bills H.2858 and S.1937, “An Act improving outdoor lighting and

⁴ Loss et al 2014, *The Condor*, Vol. 116, Issue 1, pp. 8–23
<https://doi.org/10.1650/CONDOR-13-090.1>

⁵ Kyba et al 2017, *Science Advances*, Vol. 3, no. 11
<https://advances.sciencemag.org/content/3/11/e1701528>

