Memorandum of Support

A.5632 (Fahy)/S.583 (HoyIman)

**Purpose:** Requires most non-essential upward-facing outdoor lighting to be extinguished after 11 p.m., motion-activated, or covered by an external shield:

**Statement of Support:** The unimpeded nighttime sky was once a basic human resource for that for millenia helped mark the passage of time and season with spectacular starlight clarity. With the advent of electricity and the ability to illuminate the human built environment, light pollution has dulled the blackness of night and washed out the sharpness of starlight to the point that most urban communities rarely see stars at all. Because of the glare of outdoor lighting, one-fifth of the world’s population has lost access entirely to seeing the Milky Way and dozens of other fainter constellations.

But beyond the cultural hardship of losing the nightly presence of the cosmos to everyday society, artificial illumination of the night sky can impact human health and ecosystem function. Medical evidence demonstrates that human circadian rhythms (the internal, twenty-four-hour bio clock that guides day and night activities and affects physiological processes in nearly all living organisms) are disrupted by light pollution, lowering melatonin production, which results in sleep deprivation, fatigue, headaches, stress, anxiety, and other health problems. Recent studies also show a connection between reduced melatonin levels and cancer.

Studies also show that light pollution is also impacting animal behaviors, such as migration patterns, wake-sleep habits, prey/predator interactions and habitat relationships. Because of light pollution, sea turtles, fish and birds guided by moonlight during migration get confused, lose their way, and can often die. Large numbers of insects, a primary food source for birds and other animals, are drawn to artificial lights and are instantly killed upon contact with light sources. Each year, hundreds of thousands of migratory birds are killed in New York City from striking building glass because of disorientation resulting from light pollution. A.5632 will mandate measures to eliminate the most invasive forms of night time illumination, especially lighting that casts upward to the sky or does not actually present real value to safety, security or enhance the human experience. It is time that New York lead the nation in restoring the night time sky.

**The Sierra Club Atlantic Chapter Urges Your Support of A.5632**