

DELORES RUBIN Chair

Jesse Bodine District Manager

June 7, 2016

Mayor de Blasio City Hall New York, NY 10007

Re LED Street Lights

CITY OF NEW YORK MANHATTAN COMMUNITY BOARD FOUR

330 West 42nd Street, 26th floor New York, NY 10036 tel: 212-736-4536 fax: 212-947-9512 www.nyc.gov/mcb4

Manhattan Community Board 4 (CB4) has received a number of complaints related to the few LED street lights installed in our neighborhood. The public has found serious deficiencies and health side effects with the new lights. We are pleased you have declared publicly (on the radio) you will investigate and correct the problems where warranted.

We ask that you go further and prevent health issues and costly repairs by putting the rollout of this program on hold until the solutions have been identified and the negative impacts have been minimized.

DOT operates 262,000 street lights and intends to convert all of them to LED by 2017 to generate \$ 14 million in savings. It is worth noting that the project was originally tested on highways and parks. It is not clear what tests – if any - have been conducted in residential environments.¹

LED lights have many advantages: they save energy and are ecologically sustainable. However, as with many rapidly developing new technologies, a lack of careful calibration to the context can present a threat to public health.

According to a neurologist at Einstein/Montefiore Hospital who is a Chelsea resident, intense, misdirected light intrudes into homes, disturbs sleep, adversely affects health and can cause sleep disruption, migraines, and agitation, especially in vulnerable populations like children, elderly and the chronically ill². Numerous studies have documented the adverse effects of light pollution on the environment³ and on human health. The worst

¹ <u>http://www.nyc.gov/html/dot/downloads/pdf/sustainablestreetlighting.pdf</u>

² <u>http://www.health.harvard.edu/staying-healthy/blue-light-has-a-dark-side</u>

³ <u>http://darksky.org/light-pollution/energy-waste/</u>

offender appears to be blue spectrum light, which is used for the new NYC LED streetlights.

Numerous 311 complaints from residents have led DOT to replace some 78-watt lamps with 64-watt lamps, forcing the city to deploy extensive resources for a retrofit. This is a good start but not enough.

The lighting industry and health researchers have recommended:

- Using warm lights with color temperature no greater than 2,700 Kelvin instead of the current 4,000 Kelvin lamps.
- Using shades or lenses to prevent unwelcome light seepage and lateral glare.
- Adjusting the lamp wattage to the context, for example, by using a lower wattage and possibly shorter poles on residential streets.

LED lights hold the promise of great savings and technological advances for the future. NYC should follow the example of other cities that have chosen to install LEDs on the warm side of the spectrum, which are much less likely to disrupt health than the blue-rich LEDs⁴. As the lighting technology has made significant advances since 2007, when this project started, it would behoove the city to evaluate if the balance of the rollout should take these new advances into account in order to deliver a healthier and better system. It is particularly urgent to act now, since each new LED lamp is expected to last 20 years and the current plan is to change all streetlights in the city to LED by the end of 2017.

We are pleased to see that Intro 822 -2015 intends to tackle this problem. The law mandates the use of 3,000 Kelvin lamps, which yield a warmer light.

We ask that you to put on hold the rollout of this program until the issues have been resolved and the negative health and comfort impacts have been minimized. This will prevent costly retrofits in the future.

Sincerely,

Delores Rubin Chair

(the The

Christine Berthet Co-Chair, Transportation Planning Committee

Ernest Modarelli Co-Chair, Transportation Planning Committee

Cc Mayor's Office, Community Affairs Unit Department of Transportation Council Member Corey Johnson Assemblymember Richard Gottfried State Senator Brad Hoylman Manhattan Borough President Gale Brewer