

## **09-25-2019 Town Council Meeting**

### **Responses to Council Questions**

#### **ITEM #9: Authorize the Town Manager to Enter into an Agreement with Duke Energy to Convert All Chapel Hill Street Lights to Energy-Saving LED Fixtures**

**Council Question:**

Which street light type is the least energy efficient?

**Staff Response:**

*The least energy efficient street light is Mercury Vapor. In fact, this lighting type has been phased out of circulation because of high energy use and a low lamp life. Duke Energy now replaces all burned out Mercury Vapor bulbs with a high efficiency, long lasting LED (light emitting diode) of equivalent brightness.*

**Council Question:**

How many decorative street lamps do we have versus standard street lamps?

**Staff Response:**

*The ratio of decorative street lights to standard street lights is approximately 1:2, with nearly 1200 decorative street lights out of the total 3,605 street lights in Chapel Hill.*

**Council Question:**

Given that we have had complaints from residents because the LED lights are brighter than incandescents and interfere with sleep, would staff address whether Duke Energy has responded to this problem with any special light shield, or what residents can do to mitigate irritation caused by the bright lights?

**Staff Response:**

*We raised similar questions with Duke Energy as part of our background research for this project proposal. As part of those discussions, we learned that Duke Energy offers a 3000 Kelvin correlate color temperature (CCT) LED fixture. This color temperature is warmer than the standard 4000 Kelvin LED street light and falls within the spectrum recommended by an American Medical Association report. The Town of Carrboro selected 3000 Kelvin for the same reason. Also, the brightness of street lights will vary by location, with lower levels in the neighborhoods and higher levels along major streets. If we receive reports from residents about the need to address a brightness issue, Duke Energy has the ability to do things like adjust the direction of the light and add shielding to the fixture.*