# TOWN OF STOCKBRIDGE

# 50 MAIN STREET, STOCKBRIDGE, MASSACHUSETTS 01262

LED Streetlights Are Coming!

This fall, Stockbridge will replace the hodge-podge of incandescent, mercury vapor, and high pressure sodium streetlights with LEDs. This upgrade will take place in the residential areas only, not the downtown.

## WHY ARE WE DOING THIS?

In 2015, Stockbridge became a designated Massachusetts Green Community with a goal of reducing energy consumption by 20% within 5 years. To date, we have implemented several aspects of the plan – weatherizing Town Offices, Central Fire Station and retrofit of lighting at all of the above and the Waste Water Treatment Plant with more than \$235,000 grants from Green Communities Grants from the Ma Department of Energy Resources.

In fall 2020, a Streetlighting Sub-Committee was formed to focus on reducing the costs related to streetlighting in Town. Current members include: Laura Dubester, Michael Canales, Darrell Fennelly, Patricia Flinn, Miles Moffat, Starbuck Smith and Mike Buffoni.

# WHAT ARE THE BENEFITS OF LED (Light Emitting Diode) STREETLIGHTS?

LED's will provide significant energy and cost savings over the life of this measure. The new streetlights will be safer, provide more lighting, and be more aesthetically pleasing due to uniformity. Additional environmental benefits include 'dark skies' friendly and part night dimming further reducing energy consumption and impact on wildlife. They last much longer and require less maintenance.

## HOW DID WE GET TO WHERE WE ARE TODAY?

The Committee learned a lot about our streetlights including the energy and rental costs paid to National Grid. In 2020, National Grid conducted a lighting audit and found that approximately half of the 207 streetlights owned by National Grid are incandescent. NGRID offered incentives to retrofit streetlights and estimated a rebate of about \$20,000 along with \$10,000 savings in our annual electric bill (assuming the streetlights would still be owned by National Grid).

# WHY ARE WE PURCHASING THE STREELIGHTS FROM NATIONAL GRID?

Most communities prefer the warmer color 3,000 Kelvin (temperature) especially in residential areas because the appearance is much more acceptable to the public and "dark skies" friendly without impacting public safety. However, National Grid did not offer these lower temperature lamps at the time. The only way to install these lamps would be to purchase the streetlights from NGRID. Additionally, by owning the streetlights, the Town would save even more money. Currently the town pays "rent" for each streetlight. In 1998 a law was passed allowing towns to acquire and maintain their streetlights from the utility company. For Stockbridge, the primary concern was whether the Town would be able to maintain the streetlights. Like most cities and towns Stockbridge will contract with a vendor for maintenance

services. The conversion work will be done by Pine Ridge Technology, an experienced firm in this type work.

In anticipation of moving forward with this plan, at the June 12, 2022 Town meeting, the Selectmen proposed and citizens approved \$15,000 for technical assistance and procurement. After a thorough vetting process, LightSmart, a small family-owned consulting firm, (George Woodbury owner/president) was selected to assist Stockbridge. LightSmart has worked with 120 MA cities and towns and Mr. Woodbury wrote the Massachusetts legislation when he was the public works director in Lexington MA. LightSmart performed a lighting audit and designed a streetlight retrofit plan for Stockbridge with guidance from the Committee.

# WILL STOCKBRIDGE OWN ALL THE STREETLIGHTS?

The Town decided to only purchase above ground fed streetlights at this time. This decision was based on concerns about risk and potential costs (time and money) with repairs or upgrades of the streetlights with the aged underground wiring system in the downtown area. The most inefficient incandescent streetlights are NOT downtown.

# WILL THEY ALL BE RETROFITTED NOW?

The decorative fixtures on Church Street as well as those on Ice Glen Road will be looked at more closely after this phase is complete. The Town still needs to address downtown lighting as a follow-up project.

#### WHAT ARE LED STREETLIGHTS?

Light Emitting Diodes (LED) is a technology that has been used in small electronic devices, such as calculators and digital clocks for decades. More recently LED technology has advanced to streetlight applications. LED streetlights are very energy efficient, have long life spans, lower maintenance costs and produce better quality light than our existing streetlights.

# WHAT COLOR OF LIGHT DO LED STREETLIGHT FIXTURES PRODUCE?

In contrast to existing fixtures, LED streetlight fixtures produce a cooler, more neutral-colored light under which it is easier to see true colors. We have selected one of the warmest LED lights for Stockbridge, 3000K. These lights are approved by the International Dark Sky Association and were recommended by the AMA.

## **HOW MUCH WILL STOCKBRIDGE SAVE?**

By replacing the above ground-serviced streetlights, this project is expected to reduce energy consumption by approximately 80% with approximately \$25,000 savings annually including energy, lease and maintenance costs. This represents a payback of approximately 2+ years (<u>before</u> the DOER grant and National Grid rebates).

## **HOW IS THE RETROFIT BEING FUNDED?**

In 2021, the Town applied for and received a grant of \$62,569 from DOER and anticipates incentives of approximately \$13,000 from National Grid to procure and install LED streetlights on the existing overground wired Streetlights.

# WHAT ARE THE REPLACEMENT LIGHTS?

The replacement LED cobra head streetlight fixtures will be the Cree Traveyo fixture that offers internal adjustability, light trespass shields, clean uniform distribution pattern and a high level of reliability. You already see 'cobra head' fixtures throughout Town. Dimulator controls will dim the streetlights at night providing additional financial and 'dark sky' benefits without compromising public safety.

# WILL THE LIGHTING BE DIFFERENT THAN WHAT YOU ARE USED TO?

YES! The lighting levels are equivalent, the 'kelvin temperature' is lower and the new streetlights will be more "dark skies friendly". Existing fixtures tend to produce a bright spot directly underneath the fixture while LED streetlights are designed to evenly distribute light. This dispersion of light improves visibility by decreasing sudden contrast between light and dark areas. Nevertheless, the streetlights may appear brighter. We hope that the adjustment will be easy.

#### WHO DO I CALL?

For more information or if you think a streetlight is shining in a window or onto your property or interfering with night-time activities, please call Michael Canales, Town Administrator at 298-4170 ext. 100.