

## **Summary of the LED Webinar - October 16, 2020**

Dominion Energy (Stan Blackwell)

- Great progress with the conversion process. Over 21 percent of the 94,00 streetlights in the Northern Virginia region have been converted to LEDs over the past 24 months.
- The work has been a model of local governmental cooperation and partnership with Dominion Energy.
- A lesson that has emerged has been the importance of addressing customer concerns with lighting, especially in residential subdivisions, with demand for illumination of areas such as arterials and sidewalks.

Comments from Arlington County (Hui Wang)

- Arlington County has mixed ownership of streetlights - there are approximately 11,000 streetlights owned by Dominion and 7,600 owned by Arlington County. Dominion has converted 500 of its streetlights to LEDs.
- The COVID-19 pandemic has slowed the conversion process down, but the County still aspires to have all streetlights converted within the next five years.

Comments from the Town of Leesburg (Calvin Crow)

- Despite the COVID-19 pandemic, the Town of Leesburg has sustained its conversion programs and converted 315 LEDs and budgeted \$20,000 per year.
- An important lesson that the Town has had to address has focused on the brightness concerns which has resulted in re-changing the lights, especially in sub-divisions.
- Design considerations also factor into the conversion process with preferences for “full cut-off” lacking appeal for many residents.

Fairfax City (Stephanie Kupka)

- The City of Fairfax has 2,600 streetlights that require conversion – and 60 have been converted already with the “full cut-off” design. But the COVID-19 pandemic has constrained staff and budgets resulted in delays. The City hopes to accelerate the conversion process by the end of 2020.

Loudoun County (Dennis Crumbie)

- There is very little to report. The Loudoun County board has not yet taken up the issues of converting the 1,000 County-owned streetlights. Though approximately 1/3 of all County-owned streetlights are LED.

City of Falls Church (Kate Walker)

- The City of Falls Church is utilizing CIP funding to operationalize its LED conversion. The work with Dominion Energy has been exceptional. There are some minor concerns about dark-sky compliance issues.

Fairfax County (no update)

City of Alexandria (Matt Melkerson)

- There are 10,000 Dominion-owned fixtures and 3,000 have been converted to LEDs in Alexandria.
- The City of Alexandria has faced similar challenges with the tension between lighting of streets and sidewalks and concerns about brightness of residents and is looking into experimenting with shielding issues and lower wattages for the bulbs.

On-bill Financing (Steve Morgan and Nora Barger – Clean Energy Solutions)

- Long-term implementation period (5-10 years at times) complicates financing and therefore the conversion process. On-bill financing offers an alternative that might reduce conversion period to 1-2 years, which might be relevant given the COVID-19 pandemic.
- However there are legal questions (especially at the state level) about how on-bill financing might be applied in the Commonwealth of Virginia, especially in the context of CIP planning efforts.
- An inspiring best practice may be the experiences of New England states.

Other Issues:

- There is a need to improve understanding of how smart meters and “smart technologies’ fuse with the broader LED conversion process.
- Dominion pointed out that 2-4 months is the standard turnaround period for orders of LED lights.

In summary, local governments identified three issues or challenges with their recent LED streetlight conversions:

- o 1) Excessive lighting levels in some residential neighborhoods;
- o 2) Kelvin color issues that affect dark-skies (4,000K installed, 3,000 K retrofitted; and,
- o 3) Directional lighting controls and the shining of lights into houses when lens or shield is not present. All of these challenges offered straightforward resolutions.