

WRITTEN TESTIMONY - (SB 835) County and Municipal Street Lighting Investment Act

March 4, 2020 - SB 835

Testimony Delivered by: Kristy Daphnis, Montgomery County Resident and Pedestrian Safety Advocate

Bill Position: Support

I support Senate Bill 835/House Bill 1034, 'County and Municipal Street Lighting Investment Act.' SB 835/HB 1034 would allow Counties and Municipalities across the State of Maryland greater control over purchasing and managing street lighting, resulting in more modern, safer, and more efficient streetlight systems.

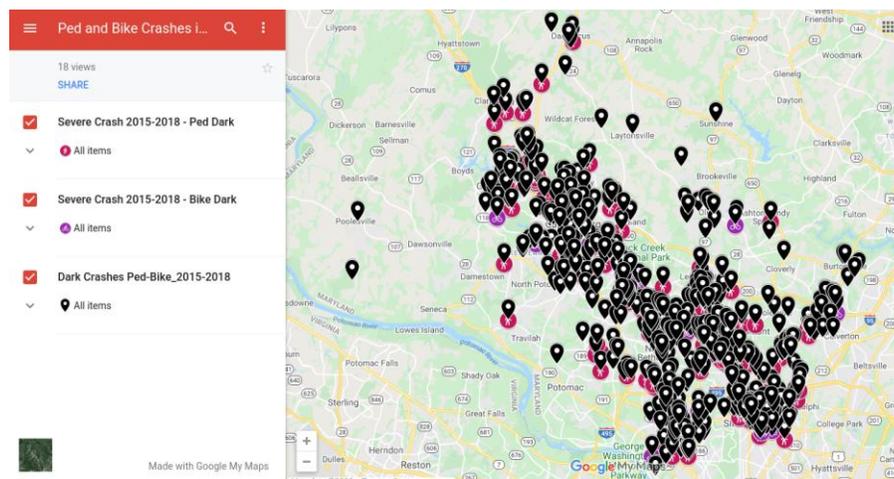
Currently, Montgomery County has about 28,000 utility-owned & maintained streetlights in the Pepco territory alone. The vast majority of these utility-owned and maintained streetlights are operated using 1960s and 1970s technology of mercury vapor and high pressure sodium. Since the '60s and '70s, drastic improvements have been made in lighting technology. These technologies, including light emitting diode (LED) lights, improve reliability, efficiency, lighting effect, and resulting safety. Yet, there is virtually no incentive for utility companies to invest in and install these newer, safer, more modern lighting technologies. Utility companies benefit from the need for frequent maintenance and the increased utility/energy costs to operate the older infrastructure.

Under the current structure, poor lighting creates hazardous and dangerous conditions for pedestrians.

In Montgomery County, Maryland alone:

- About 60% of all pedestrian crashes occur in Montgomery County occur in the darkest 6 months of the year from October to March.
- Overall, pedestrian crashes occurring in the dark are twice as likely to be severe than daylight crashes; Montgomery County, MD crash statistics have similar elevated crash severity during darkness.

This map shows Montgomery County, MD pedestrian & bicycle crashes that occurred in dark conditions (2015-2018):



Link: <https://www.google.com/maps/d/u/0/viewer?amp%3Bll=39.03690218839923%2C-77.03842137437209&%3Bz=15&mid=172omilmGOwag9IWv8M6McdNhOPcDp-XI&ll=39.12563163431129%2C-77.1568502508594&z=11>

While we can not prevent darkness altogether - we need to enable Counties and Municipalities to take more control of their lighting infrastructure. This will encourage improved illumination of our roadway infrastructure under dark conditions, and will result in improved safety for all road users. These bills would help achieve this objective.

Why are streetlights an important safety countermeasure? According to the National Highway Traffic Safety Administration, the highest percentage of pedestrian fatalities in 2018 (26%) occurred between 6PM-8:59PM. (When it is dark outside.) Further examination of pedestrian fatality data shows that about two-thirds of pedestrian fatalities in the U.S. occur at night or under presumed low-light conditions. A paper published in the American Journal of Public Health highlighted studies showing that increased intensity of roadway lighting reduced nighttime pedestrian collisions by over half (Retting, 2003). Improving lighting is much more effective in reducing vehicle/pedestrian collisions than advising pedestrians to wear “bright colors,” and provides much higher overall system safety.

How would these bills help? These bills would allow municipalities and Counties a path to more easily acquire and operate better and more modern street light technologies. For example, under this proposed legislation, a County would be able to more easily replace conventional streetlights with newer LED streetlights or other technologies as they are developed - including lighting configurations that improve vertical illuminance, relative visual performance, and pedestrian level lighting. These bills would provide additional flexibilities as Counties and municipalities update their infrastructure, allowing for seamless integration of more modern and safer lighting systems along the roadway itself and areas around the roadway (e.g., sidewalks, bike paths, and parking lot adjacent areas).

Why are newer streetlight technologies better? According to MobilityLab.org “At least 221 cities worldwide are switching their street lighting to LEDs, including a full 30 percent of outdoor lights in the United States, according to 2016 numbers from the U.S. Department of Energy.”

- LED lights offer better illumination of the roadway overall, while reducing maintenance and power costs. If properly installed and calibrated, illumination of pedestrians along the side of the road is increased, improving safety.
- In Montgomery County, utilities tend to be slow in replacing existing burned out bulbs - resulting in dark areas and hurting visibility. LED streetlights last far longer than conventional bulbs, requiring less maintenance and a much longer replacement schedule. Conventional bulbs burn out, and must be periodically replaced - whereas the projected life of a newer LED streetlight is approximately 50,000 hours (or, 15 to 20 years; the estimated lifespan of LED is 3X longer than high-pressure sodium).
- A review of studies in 2008 concluded that improved street lighting also significantly reduces crime (Welsh and Farrington, 2008).

For all of the reasons stated above, I urge you to consider supporting SB835/HB1034. Thank you for considering a vote in support of these bills.

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