

## Can Enhanced LED Street Lighting Contribute to Reduce Nighttime Violent Crime? Our Answer is Yes.

## **PROJECT**

The NPSC partnered with PSE&G in a project to prioritize LED light installations in areas experiencing chronic violence during nighttime hours in Newark, New Jersey. This study supports the utility of improved lighting conditions in violent crime-prone areas as an effective strategy to reduce crime opportunities and improve overall safety.

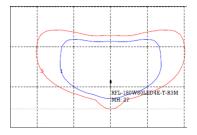
A visual relationship illustrating the optical differences between an HPS cobra fixture and its LED equivalent.

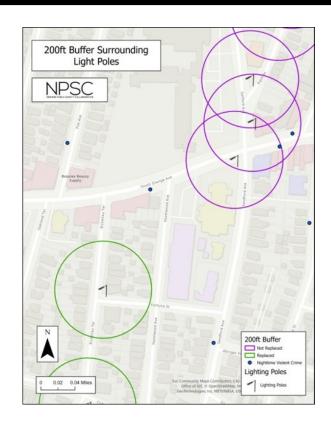




## **DATA AND METHODOLOGY**

- This study compared the evolution between nighttime violent crime around replaced and unreplaced streetlight poles to identify the effect of the new LED lighting.
- in 2019, PSE&G launched a program to replace over 2,600 obsolete halogen lights with new and brighter LED light installations across the City of Newark.
- Violent crime data was matched with PSE&G's data to identify streetlight poles to be prioritized for light replacement.
- A 200 ft. buffer was created around each streetlight pole based on PSEG's projections on light coverage.





## **RESULTS**

Pre-post analyses suggest the number of violent crime incidents decreased by 35% (from 60 to 39) in the treatment areas (within 200ft of enhanced streetlight poles), as compared to the control area (untreated poles) for which no decrease was observed. We find that the new LED fixtures helped reduce nighttime aggravated assaults by 30% (from 34 to 24) and nighttime robberies by 35% (from 23 to 15). Notably, no homicides were observed within 200ft of enhanced streetlight poles.



