Problem Statement

A pedestrian’s feeling of safety is highly dependent on the quality of lighting on a given road.

Level of illuminance is an important factor in perceived pedestrian safety, as is the color and consistency of lighting.

Concerns over light pollution make it important to find luminaire styles that both promote feelings of safety without disturbing other members of a community.

Dewey Beach lighting is placed to accommodate automobiles, not pedestrians. Lighting is also unevenly distributed.

Scope of Project

- Assess the quality of lighting along Dewey Beach’s State Route 1 from Saulsbury Street to Vandyke Street on both sides of the road.
- Measure individual luminaire light levels for every 5 paces.
- Gauge how safe a pedestrian might feel walking along Route 1 at night.
- Note the effect of commercial lighting on street level lighting quality.
- Determine the successful components of this pilot study and ascertain possible improvements for future assessment.

Possible Conclusions

Based on research outcomes, consider:

- Eliminating reliance on commercial lighting by ensuring public lighting sufficiently meets pedestrian needs.
- Installing luminaires on residential roads.
- Prioritizing properly illuminating pedestrian paths instead of focusing on automobile convenience.
- Evaluating the impact of seasonal variations in lighting on perceived pedestrian safety.
- Using future studies to measure the effects of glare and light color on pedestrian feelings of safety.

Expand the pilot study methodology to other areas of Delaware to determine how to best improve pedestrian lighting throughout the state.