

PROJECT CASE STUDY

National Institutes of Health Street Lighting Project

ENVOCORE SOLUTIONS

- 1,360 Energy Conservation Measures (ECM's) upgraded Street Lights, Parking Lot Fixtures, and Path Lights across the entire National Institutes of Health (NIH) Campus.
- Replaced internal pole wiring and fuses.
- Lighting was removed in areas where there was a significant decrease in usability.
- Parking Lot Fixtures included motion detection dimming to reduce energy consumption & lower the lighting levels after hours & when the space was not occupied, all while maintaining a safely lit space.
- New Pathway Lighting and Street Light Poles were added to address underlit areas around the campus.
- Pole Tags were incorporated to inventory and identify the fixture specifications and pole locations to support an efficient maintenance plan.
- Almost 10% of the project cost was offset with Utility Rebate Incentives.
- Multiple Change Orders were issued to add additional scope e.g., Entrance Signs, Rooftop Lighting, Garages, Security Tents, etc. All following the design intent incorporated with the base scope.

PROJECT BACKGROUND

The bulk of this project consisted of installing over 2,323 new exterior fixtures throughout the Bethesda, MD NIH Campus. The customer wished to maximize savings, including at night when there is little traffic. As a result, Envocore designed the parking lot fixtures to contain controls which cut nighttime light levels by 80% when the space is unoccupied.

BY THE NUMBERS

Lighting

Electrical Savings: 1,333,294.2 kWh / 302.98 kWd

Cost Savings: \$188,366.55

1 Year Estimated O&M Savings: \$21,874.13

Controls

Total Control Savings: 8,462.5 kWh

Total Cost Savings: \$1,184.75.

<https://www.nih.gov/>