# Watsonville Streetlight Survey 2024

Jaime Rodriguez, Consultant Traffic Engineer
Public Works Department
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# Today's Topics

### **Background**

- History of Current LED Streetlight Program
- Operations & Maintenance

## **Streetlight Survey Tasks**

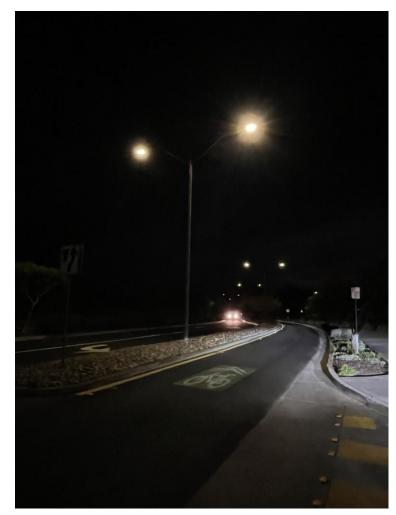
- Daytime Streetlight Pole Verification
- Nighttime Streetlight Survey
- Future Streetlight Vendor Analysis
- Final Report

### **CREE LED Streetlight Evaluation**

Field Installations

### **Next Steps**

Future CIP Project Recommendations



Ohlone Pkwy, Council Districts 1 and 4 Border

# Streetlights – Existing Conditions Citywide

### **Streetlight Age:**

- Limited Records Available
- Installed 15+ Years Ago
- Current Manufacturer: LeoTek
- Expected Lifecycle: 50,000 Hours | 10-15 Years

### **Operations & Maintenance:**

- Complaint Driven Inspection & Repair
- \$100,000 Annual Budget
- City Contractor: Bear Electrical Services

### **Streetlight Field Inventory:**

- Streetlights on PG&E Poles
- City Owned Poles
- Decorative Poles
  - Downtown: LED
  - All Others: HPS or Incandescent Bulbs



Decorative Acorn Pedestrian-Scale Pole High-Pressure Sodium (HPS) Vista Montana Dr Council District 7

# **Streetlights Survey 2024**

Citywide

### **Task 1 – Streetlight Inventory:**

- Google GPS Coordinate
- Excel Database
- Pole Numbers
- Pole Ownership (PG&E, City, Caltrans, Private HOA)
- Day Burning Streetlights

### **Task 2 – Nighttime Survey:**

- Measure Percentage of LED String Failures
- Identify 100% Failed Streetlights
- Identify DARK Spots

### Task 3 – Survey Report:

- GIS Layer with MetaData
- Cost Estimate for Future CIP Program
- Demonstration Products



Decorative Pedestrian-Scale Pole
Daylight Incandescent Bulbs
Brewington Avenue
Council District 6

## **Streetlights Survey 2024**

## Citywide

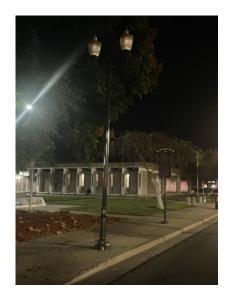
#### Watsonville Streetlight Inventory 2024 – Summary Findings

|   | City Council District |          |          |          |          |          |           |            |
|---|-----------------------|----------|----------|----------|----------|----------|-----------|------------|
|   | 1                     | 2        | 3        | 4        | 5        | 6        | 7         | Total      |
| Total No. of Streetlights:  | 515                   | 223      | 469      | 326      | 223      | 286      | 394       | 2,437      |
| <sup>1</sup> Total No. of Streetlight Fixtures:                     | 530                   | 255      | 469      | 358      | 223      | 286      | 396       | 2,516      |
| 100% Failed Streetlights:<br>50% or More Failed LED Lights Strings: | 73<br>53              | 18<br>24 | 15<br>18 | 26<br>19 | 10<br>21 | 14<br>30 | 15<br>101 | 171<br>266 |
| Day Burner Streetlights:  | 15                    | 8        | 3        | 23       | 13       | 14       | 0         | 76         |
| Proposed New Streetlights:  | 0                     | 0        | 4        | 0        | 2        | 5        | 11        | 22         |

#### Footnotes:

#### **Caltrans:**

- Estimate: 300 Lights Caltrans
- ~2,200 City Owned or Maintained Streetlights



Failed Downtown
Double Electrolier Streetlight



Typical
Day Burning Streetlight

<sup>1</sup> Accounts for a single pole with two streetlights.

## **CREE LED Streetlights**

**Product Evaluation** 

### **Recommend Two to Three City Standard Streetlights:**

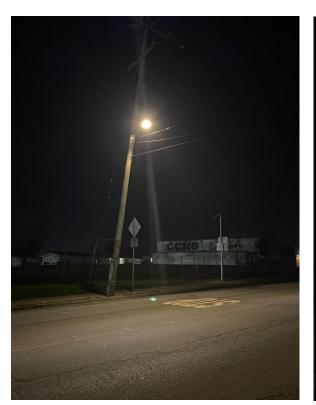
- Arterials, 100-Watt
- Collectors, 60-Watt
- Residential, 40-Watt

### **CREE Collector Street Installation, 60-Watt:**

Auto Center Dr & San Benito Dr

#### **CREE Residential Street Installation, 40-Watt:**

Coolidge Ave



60-Watt CREE Streetlight Auto Center Dr & San Benito Dr



40-Watt CREE Streetlight Coolidge Ave

## **Streetlights Survey 2024**

**CIP Program Recommendations** 

### 7-Year CIP Project:

Year 1: \$300,000 Repair: 100% Failed, 50%+ Failed, Day Burners, Main St Bridge w/County of Monterey

Year 2: \$300,000 Retrofit: Citywide Decorative Poles with LED Streetlights

Year 3-7: \$260,000 Replace: All other Streetlights and Design/Build Dark Spots

\$3,000,000 Total Program Cost

### **On-Going Operations & Maintenance:**

- Maintain \$100,000 Contract Maintenance for As-Needed Repairs
- Assign Regular Inspection to DPW Maintenance Staff Person, Two Nights per Month per Council District
- For CIP Projects, Procure Streetlight Materials to Eliminate Contractor Mark-Ups
- Decorative Streetlight Poles with Require Measurement for LED Retrofits

# Questions

