LIVERMORE
ASSET MANAGEMENT PROGRAM
INVEST • MAINTAIN • SHINE

SPOTLIGHT ON: STREET LIGHTS

The City currently owns and operates approximately 8,000 street lights. Street lights improve pedestrian visibility, assist drivers navigating at night, and deter theft by illuminating neighborhood streets. In addition, decorative street lights enhance the city's overall aesthetic. All together, the City's street lights and related components are worth over **$51 million**.

Currently, street lights have an **Asset Health grade of B.** This tells us that most street lights are in decent condition. However, budget projections indicate that we will face funding shortages of $1.3M/year (on average) for repair and replacement activities over time.

Quick Facts

Number of Street Lights **8,000**

Asset Components: **14,040**

Total Asset Value: **$51.2M**

Asset Health Grade: .... **B**

Funding Gap: **$1.33M/year**

Street Light Classifications

The City classifies street lights based on the function the street light serves, as well as the functional classification of the adjacent roadway.

Street lights are typically located on four different pole types: ornamental, street, traffic signal, and utility. For lights installed on utility poles, the City is only responsible for the fixture itself; the pole is maintained by the utility company. Street light components include concrete support bases, poles, light fixtures, photocells, electrical components, and some additional features like license plate readers.

The City is transitioning all street lights to more efficient LEDs in line with sustainability goals.

Ornamental

Street

Traffic Signal

Utility

Asset Health

The many different **components** that make up a street light need to be regularly monitored and maintained. Over time, these components must be repaired or replaced as they age.

The City assigns an overall **Asset Health Grade** for all street lights using the following process:

1 LEVEL OF RISK

First, we routinely inspect every component to determine its level of risk based on the following:

Probability of Failure:
How soon will the component need to be replaced?

Consequence of Failure: What would happen if the component failed? We consider both the role of the component as well as the type and location of the street light.

Components with high probability and high consequence of failure are considered **high risk**.

High Probability

High Risk

High Consequence

2 REPLACEMENT COSTS

Next, we calculate the one-time **cost to replace** all components in each risk category, including High Probability and High Risk (shown below).

High Risk: $1.7M

High Probability: $7.9M

Total Replacement Cost: $51.2M
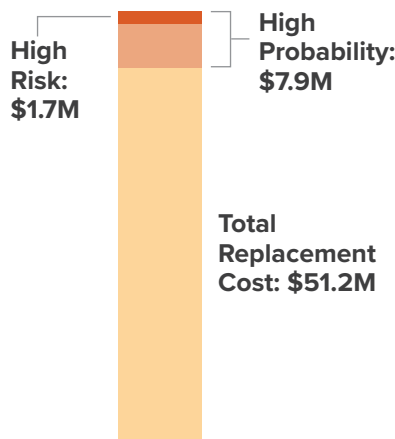
More components will move to the High Risk category as they age.

3 HEALTH GRADES

Finally, we compare the replacement cost of High Probability components versus the total replacement cost of ALL components, and then we do the same for High Risk components only. This gives us the **Asset Health grades** shown below.

High Probability: C

High Risk: A

These grades show us that most of our street lights are in good condition, with relatively few high risk components.

Asset Health Grade: B

The Road Ahead

Based on 30-year projections, City street lights are underfunded by an average of $1.3M/year. If this persists, street lights may begin to fail, which will impact vehicle and pedestrian mobility and safety.

Available Funding: $170K/year

Funding Gap: $1.33M/year

TOTAL Needed: $1.5M/year