



CITYWIDE LED STREETLIGHT RETROFIT PROJECT

Public Works Dept
June 21, 2018

Our Streetlight Inventory

- Approximately 43,000 street lights
- Varying wattage – 70W, 150W, 200W...
- \$3.2 million annual energy bill
- All new lights are LED per City standards, but our older lights (~97%) are less efficient high-pressure sodium (HPS) fixtures
- LED fixtures provide a significant savings opportunity

Recent & Upcoming LED Streetlight Projects

- Recent LED Conversion Projects
 - On-Bill Financing Phase 1 - \$294,100, 887 lights converted throughout the City, highest wattage lights addressed
 - CFD 11 Streetlight Retrofit - \$139,800, 360 lights
 - Implemented on numerous capital improvement projects – i.e. Peach Avenue, Fulton Street, etc.
- Upcoming Projects
 - CDBG Neighborhood Lighting Improvements
 - Federal grant for 8 arterial corridors (3,000 lights)

The Opportunity with PG&E

- 35,400 cobra-head HPS streetlights
- \$1.6m per year of savings with LED fixtures
- 0% on-bill financing offered by PG&E with a turnkey contracting approach – project management, procurement, hiring construction contractors
- Savings pays for the capital project “debt service”
- New \$1.6m expense in Measure “C” for the loan repayment, corresponding savings in gas tax built into the budget
- \$10.2m conversion cost to LED fixtures
- 6.5 year return on investment
- Provides a \$3.4m savings versus the City’s cost to deliver without PG&E’s assistance
- Starting in FY2026, provides an ongoing annual gas tax savings of \$1.6m.

Citywide LED Project – Benefits & Challenges

BENEFITS

- Improved lighting – illumination & quality
- Public safety
- Replacement of 35,400 HPS lights, with the vast majority being past their service life
- 15 year estimated life for LED v. 7 year for HPS

CHALLENGES

- Addressing locations without power
- Future project for post top decorative street lights