

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
"Los Angeles County: Ahead of the Curve"

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):
NAME OF PROJECT: LIGHT BY LIGHT AUDIT PROGRAM

DATE OF IMPLEMENTATION/ADOPTION: APRIL 16, 2012
(Must have been implemented at least one year - on or before June 30, 2013)

PROJECT STATUS: Ongoing One-time only

HAS YOUR DEPARTMENT PREVIOUSLY SUBMITTED THIS PROJECT? Yes No

EXECUTIVE SUMMARY: Describe the project in 15 lines or less using Arial 12 point font. Summarize the problem, solution, and benefits of the project in a clear and direct manner.

The Los Angeles County Department of Public Works (Public Works) initiated an audit of its 97,033 street lights in 20 Los Angeles County Lighting Maintenance Districts (CLD's) using a Global Positioning System. The audit revealed that many of the street lights in the CLD's were nonexistent, outside the lighting district, in the wrong lighting district, or billed for the wrong lamp size. As a result, the County was being over billed by Southern California Edison (SCE). To date, Public Works has completed auditing 31,055 street lights and received \$514,255 in reimbursements from SCE and anticipates \$171,418 in annual cost savings in operation and maintenance costs. The program is expected to generate over \$1.6 million in reimbursements from SCE when the audit is completed with an on-going annual cost savings of approximately \$539,000 in operation and maintenance charges.

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(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) = TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$	\$539,000	\$	\$ 539,000	<input type="checkbox"/>

ANNUAL = 12 MONTHS ONLY

SUBMITTING DEPARTMENT NAME AND COMPLETE ADDRESS Public Works 900 S. Fremont Ave Alhambra, CA 91803	TELEPHONE NUMBER
PROGRAM MANAGER'S NAME James Chon	TELEPHONE NUMBER (626) 300-4754 EMAIL JChon@dpw.lacounty.gov
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE <small>(PLEASE CALL (213) 893-0322 IF YOU DO NOT KNOW YOUR PRODUCTIVITY MANAGER'S NAME)</small> Kathy Salama <i>Kathy Salama</i>	DATE 7/3/14 TELEPHONE NUMBER (626) 458-2521 EMAIL ksalama@dpw.lacounty.gov
DEPARTMENT HEAD'S NAME AND SIGNATURE Gail Farber <i>Gail Farber</i>	DATE 7-7-14 TELEPHONE NUMBER (626) 458-4002

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1st FACT SHEET – LIMITED TO 3 PAGES ONLY: Describe the Challenge, Solution, and Benefits of the project.

Challenge:

The Los Angeles County Department of Public Works (Public Works) administers 97,033 street lights in 20 County Lighting Maintenance Districts (CLDs) within the County of Los Angeles (County). The records of the street light location and type are in the County's Street Light Geographical Information System (GIS) inventory. During the course of routine review of the street lights, it was discovered that many of the street lights in the CLDs were non-existing, outside the lighting district, in the wrong lighting district, or billed for the wrong lamp size. As a result, the County was being overbilled by Southern California Edison (SCE).

Solution:

Public Works initiated the Light by Light Audit program, which is an audit of its 97,033 street lights utilizing Global Positioning System (GPS) technology. The objectives of the program are to conduct an audit of the entire street light inventory in the CLDs for accuracy, and to correct billing for street lights that are non-existing, outside the lighting district, or have inaccurate lamp wattage. Field employees obtain GPS information of each street light including, but not limited to, the pole location, lamp type and wattage, a unique pole number, pole type, length of mast arm, and any discrepancies noted in the field. The data is uploaded to the computer via GPS Pathfinder software, checked and corrected for errors, and loaded into ArcGIS software. Once a field audit for a lighting district or an area is completed, the information is used to check against the SCE's billing records for any discrepancies. The audit is considered complete for a district or area upon notification from SCE on the corrective actions to the billing discrepancies and Public Works and SCE both agree to the billing changes. There is no deadline for Public Works to complete this program; however, since the County is paying for the operation and maintenance of the street lights that are being billed inaccurately, there is an urgency to complete this program in a timely manner. Due to the large number of street lights to be audited, Public Works' Traffic and Lighting Division, Street Lighting Section, purchased an additional handheld GPS unit and increased staffing resources to complete this street lights audit within 3-4 years. The program will benefit the residents in the County lighting districts as the cost savings from the reimbursements and future billing from SCE will be used to keep the CLDs assessment fee at the lowest rates possible.

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Benefits:

The primary benefit from the program is a substantial cost savings to the County's lighting districts. Public Works has completed 31,055 street lights to date and received \$514,255 in fee credit from reimbursements from SCE for non-existing street lights, street lights that are outside the lighting district, and incorrect lamp wattage. Public Works also anticipates additional cost savings of \$171,418 in future annual operation and maintenance costs. When completed, Public Works can potentially save more than \$1.6 million in reimbursements from SCE and additional savings of \$539,000 annually in future billing due to the street light inventory corrections.

The project has positively affected the community as the cost savings from the audit will keep the lighting district assessment rates as low as possible and will provide much needed capital funds to upgrade the streetlights to a more energy-efficient system. In addition to the substantial cost savings, the program has been very beneficial from a work productivity stand point. The engineers are able to conduct their research and review much quicker and more accurately using the updated street light GIS maps resulting in staff resource cost savings.

LINKAGE TO THE COUNTY STRATEGIC PLAN (DETAIL IS REQUIRED FOR COUNTY DEPARTMENTS):

This program promotes the County's goal of Operational Effectiveness (Goal 1) by maximizing the effectiveness of the process, structure, and operations to support timely delivery of customer-oriented and efficient public service. This program is also in alignment with Fiscal Sustainability (Goal 2) as it will provide additional funding necessary to keep the assessment rates in the CLDs at their current rates.

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COST AVOIDANCE, COST SAVINGS, AND REVENUE GENERATED (ESTIMATED BENEFIT): If you are claiming cost benefits, include a calculation on this page. You must include an explanation of the County cost savings, cost avoidance or new revenue that matches the numbers in the box. Remember to keep your supporting documentation.

Cost Avoidance: Costs that are eliminated or not incurred as a result of program outcomes.

Cost Savings: A reduction or lessening of expenditures as a result of program outcomes.

Revenue: Increases in existing revenue streams or new revenue sources to the County as a result of program outcomes.

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\$	\$539,000	\$	\$539,000	<input type="checkbox"/>

ANNUAL= 12 MONTHS ONLY

To date, Public Works has completed the audit process for 31,055 street lights and received \$486,986 in fee credit reimbursements from SCE for non-existing street lights and street lights that are outside the lighting district. Public Works also anticipates an additional cost savings of \$171,418 in future annual operation and maintenance costs. When completed, Public Works can potentially save more than \$1.6 million in reimbursements from SCE and an additional savings of \$539,000 annually in future billing due to the street light inventory corrections.

STREET LIGHT AUDIT SUMMARY

STREET LIGHTS COMPLETED	% DISCREPANT	3 YEAR REIMBURSEMENT FROM SCE *	ANNUAL SAVINGS **
Actual as of June 2014			
31,055	11%	\$514,255.00	\$171,418.33
Projected when audit is completed			
97,033	11%	\$1,616,817.00	\$538,939.00

* Actual 3 year reimbursement a/o June 2014.

** Annual saving is estimated based on 3 year reimbursement divided by 3 years.