

**Capital Improvement Plan
Project Development and Proposal
2015/2016 -2016/2017**

Project Title: City Streetlights LED Retrofit **Project Number:**
Project Category: Street and Transportation
Project Location:
Project Description: The City owns 240 street lights, including park lights. Of these, 91 have already been retrofitted with LED lights, leaving 149 available for possible retrofit. Within six years, the City would recoup the costs of this project through electricity bill savings. Photometric analysis is included in the cost of the lamps and conducted by the chosen lamp manufacturer.

A cost-saving analysis is available at - O:\Climate Action Program\Streetlights\2015 Project Proposal Replace City LEDs 2015\Proposed 2015 LED Cost-Savings Analysis.xls

Additional proposal information is available at - O:\Climate Action Program\Streetlights\2015 Project Proposal Replace City LEDs 2015\Draft Proposal Memo.docx

Project Justification: In summer 2015, PG& E plans to initiate a LED retrofit program for PG&E owned streetlights and intends to focus initial retrofits in cities that have already retrofitted city-owned lights. If the City retrofits its own LEDs it can advocate that PG&E retrofit PG&E lights in the City, which will ultimately reduce electric bills paid by the City.

1. LEDs require less energy for an equal output of light, thereby reducing electricity costs. While there is an upfront capital investment, after approximately 6 years, the City will enjoy approximately \$10,000 in savings annually.
2. Second, greenhouse gas reductions will be approximately 26,778 lbs. annually after the City is served by Marin Clean Energy.
3. Last, LEDs can offer more directed illumination of the City's streets. See for example these before and after photos from the City of Walnut Creek.
http://www.pge.com/includes/docs/pdfs/mybusiness/energysavingsrebates/rebatesincentives/ref/lighting/beforafter_walnutcreek.pdf

Climate Action Plan - Municipal Strategy S1.1 (p.46)

PG&E offers a 10-year no-interest loan. For labor and materials (not design). The California Energy Commission offers a 1% interest loan to CA cities for up to a 17 year term.

PROJECT COST ESTIMATE	Notes	Amount	PROJECT FUNDING	Notes	Amount
Expenditure Category:			Grants:		
Environmental:					
Design/Plan Review:		12,000.00			
Administration:					
Right of Way:					
Construction:		51,000.00			
Inspection + Management :					
Contingency:		5,000.00			
Total Cost:		\$68,000.00	Economic Devel. Corp.		
Funding Notes:			Rule 20A:		
			Measure C/J:		
			Measure WW:		
PG&E offers a 10-year no interest loan. For labor and Materials (not design). The California Energy Commission offers a 1% interest loan to CA cities for up to a 17-year term.			General Fund:	001	18,500.00
			City of Richmond:		
			Contra Costa County:		
			Other:	Loan	49,500.00
			Total Funding:		\$68,000.00
			Future:		

Rating Criteria	High		Medium		Low		
SCALE	5	4	3	2	1	0	Rank
Public Health	The project eliminates a current and present public health.	Reduces a current and present public health.	Mitigates a potential public health.	Has little impact on public health.	Has no impact on public health.	Degrades public health.	5
Public Safety	The project eliminates a current and present public safety.	Reduces a current and present public safety.	Mitigates a potential public safety.	Has little impact on public safety.	Has no impact on public safety.	Degrades public safety.	5
Environmental Impact	The project substantially improves the city's environment.	Alleviates an ongoing degradation to the environment.	Cleans up past degradation or prevents future degradation.	Has little impact on environment which is mitigated.	Has no impact on environment which is mitigated.	Has negative impacts on the environment that cannot be mitigated.	3
Federal or State Mandates	The project is required to meet a state or federal permit or other enforceable requirement.	Is needed to bring a system component up to federal or state standards.	Supports state or federal standards that apply to this project.	Provides little progress toward meeting state or federal standards.	Does not make any progress toward meeting state or federal standards.	Moves the system further away from state or federal requirements.	3
Livability/Vitality Enhancements	The project improves city wide livability/vitality for all segments.	Improves city wide livability/vitality for most segments.	Improves livability/vitality for some segments.	Improves livability/vitality for few segments.	Does not improve livability/vitality for few segments.	Decreases livability/vitality.	5
Council Goals or interest	The project is listed specifically as a Council goal.	Is needed to reach at least one Council goal.	Indirectly relates to reaching one Council goal.	Indirectly related to a Council Goal.	Does not relate to any Council goals.	Is contrary to a Council goal.	3
Community Interest	The project has wide community support.	Project has mixed reaction with most of the community in support.	Project has mixed support with an even split of support and opposition.	Project has little support and opposition.	People do not have a opinion (do not care) about the project.	Many people oppose the project.	5
Cost Effectiveness	The project will pay for its self over less than five years in reduced cost to the city	Will pay for its self in less than five years in reduced cost to citizens	Adds to operational cost but is the least life cycle cost alternative.	Adds operational cost but the cost is paid for with increased operational revenue.	Adds to operational cost without revenue offset.	Adverse impact to operational cost.	5
System Reliability	Alleviates a risk that threatens life or would result in irreparable harm	Alleviates a risk that results in severe property loss.	Alleviates a risk that results in minor loss of property.	Has no impact on system failure	Alleviates a risk of system failure but causes inconvenience to the city staff	Results in some system failure.	2
Implements a Master Plan	The project fully implements at more than one recommendation in an adopted master plan.	Fully implements at least one recommendation in an adopted master plan.	Makes progress toward meeting master plan goals.	Makes slight progress toward meeting master plan goals.	Does not implement a recommendation in an adopted plan or is not anticipated in a master plan.	Is not consistent with any adopted system plan.	3
Economic Development	The project provides significant incentive for economic development.	The project provides substantial incentive for economic development.	The project provides same incentive for economic development.	The project provides little incentive for economic development.	The project provides no incentives for economic development.	The project adversely impacts incentives for economic development.	0
Maintenance / Facility Utilization	The project significantly reduces long term operating cost, alleviates standard condition or extends useful life.	The project substantially reduces long term operating cost, alleviates standard condition or extends useful life.	The project reduces some long term operating cost, alleviates standard condition or extends useful life.	The project slightly reduces long term operating cost, alleviates standard condition or extends useful life.	The project has no impact on long term operating cost, substandard condition or extends useful life.	The project adversely impacts long term operating cost and useful life.	3
Litigation	The project addresses pending or noticed lawsuits. > \$250,000	The project addresses pending or noticed lawsuits. < \$250,000	The project addresses possible future lawsuits. > \$250,000	The project addresses possible future lawsuits. < \$250,000	The project has no impact overall liability.	The project adversely impacts overall liability.	0
Damage to Public or Private Property	The project adverts high probability of severe damage. > \$250,000	The project adverts high probability of moderate damage. < \$250,000	The project adverts potential probability of severe damage. > \$250,000	The project adverts potential probability of moderate damage. < \$250,000	The project provides no impact of overall damage.	The project adversely impacts overall damage.	0
Legal Requirement	The project implements non-deferrable legal requirements (e.g. ADA, NPDES).	The project implements deferrable (short term < 5 years) legal requirements.	The project implements deferrable (long term > 5 years) legal requirements.	The project implements locally adopted codes or ordinances.	The project implements local standards or General plan objectives.	The project adversely impacts ability to implement local standards and General Plan goals.	0
STATUS							
Readiness to Proceed	The project is fully funded, CEQA is completed, design is done, permits and right of way have been secured.	The project is funded but has little if any initial work has been completed.	Is partially funded, CEQA completed, design is done, permits and right of way have been secured.	Has no funding, CEQA completed and design is done but no permits or right of way have been secured.	Has no funding and is in the beginning phases of CEQA or design	Has no funding and no initial work has been completed.	0
Funding Partnerships	The project has grant funds awarded and will lose them if it does not proceed.	Is listed for a grant and is likely to receive funding during the budget cycle.	Is funded by a low interest loan that are time sensitive, or is eligible for a future grant.	Has multiple funding sources which are not time sensitive.	Is only funded from city resources.	N/A	0

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