

CAPITAL PROFILE REPORT

PROFILE NAME: **LED STREETLIGHT CONVERSION**
 PROFILE NUMBER: **CM-66-2566**
 DEPARTMENT: **City Operations**
 LEAD BRANCH: **Parks & Roads Services**
 PROGRAM NAME:
 PARTNER:
 BUDGET CYCLE: **2019-2022**

FUNDED

PROFILE STAGE:	Approved
PROFILE TYPE:	Composite
LEAD MANAGER:	Gord Cebryk
PARTNER MANAGER:	Gord Cebryk
ESTIMATED START:	January, 2019
ESTIMATED COMPLETION:	December, 2022

Service Category: **Roads**

Major Initiative:

GROWTH
100

RENEWAL

PREVIOUSLY APPROVED: **20,000**BUDGET REQUEST: **-**TOTAL PROFILE BUDGET: **20,000**

PROFILE DESCRIPTION

LED conversion program was recognized with the Charles Labatiuk Award for its contribution to environmental stewardship in 2014, and nominated 2012. This project seeks to replace 46,000 high pressure sodium luminaires, low hanging fruit, with LED in order to contribute to environmental stewardship (lower greenhouse gas emission), financial savings (maintenance and power), and innovation (use of technologies). The profile contributes to the overall City's GHG Management Plan.

PROFILE BACKGROUND

The City has approximately 117,000 streetlights. Starting in 2010, the City began installing LED luminaires in coordination with neighbourhood renewal projects. In 2013, LED installations were also being used on arterial roadway construction projects, and walkway projects. As such, there have been approximately 38% of the City's luminaires converted to LED technology, translating into cost savings for maintenance and power. This project seeks to replace additional 46,000 high pressure sodium luminaires, low hanging fruit, with LED in order to contribute to environmental stewardship (lower greenhouse gas emission), financial savings (maintenance and power), and innovation (use of technologies).

PROFILE JUSTIFICATION

COE streetlight energy reduction consumption by an average of up to 40%;
 Reducing green house gasses by approximately 208 tonnes per year per 1,000 luminaires upgraded;
 Reduced light pollution and light trespass;
 Proposed funding identified is an internally funded option.

STRATEGIC ALIGNMENT

This profile will impact the following objectives:
 Service: The profile primarily supports maintaining or improving service levels

The capital profile also advances Council's principle of "connected": We care about the impact of our actions on our environmental systems.

ALTERNATIVES CONSIDERED

Alternative is to provide partial funding, no funding.

COST BENEFITS

LED technology has improved, prices have dropped. Opportunity to replace all the City's streetlights with LED luminaires at current prices, estimated simple payback of approx. 10 years. Tangible benefits: cost savings from energy and maintenance. Intangible benefits: environmental stewardship, reduction of greenhouse gas emissions, social cost due to GHG emission reduction.

KEY RISKS & MITIGATING STRATEGY

Risk is that the financial estimates upon which this project has been based upon, can change which will affect the payback period and cost savings provided.

RESOURCES

Resources will be required to either manage the project or implement the project, depending on the alternative that is chosen.

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Profile Page 2

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CAPITAL BUDGET AND FUNDING SOURCES (000's)

APPROVED BUDGET		Prior Years	2018	2019	2020	2021	2022	2023	2024	2025	2026	Beyond 2026	Total
	Approved Budget												
	Original Budget Approved	-	-	6,680	6,670	6,650	-	-	-	-	-	-	20,000
	Current Approved Budget	-	-	6,680	6,670	6,650	-	-	-	-	-	-	20,000
	Approved Funding Sources												
	Tax-Supported Debt	-	-	6,680	6,670	6,650	-	-	-	-	-	-	20,000
	Current Approved Funding Sources	-	-	6,680	6,670	6,650	-	-	-	-	-	-	20,000

BUDGET REQUEST	Budget Request	-	-	-	-	-	-	-	-	-	-	-	-
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REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	-	-	6,680	6,670	6,650	-	-	-	-	-	-	20,000
	Requested Funding Source												
	Tax-Supported Debt	-	-	6,680	6,670	6,650	-	-	-	-	-	-	20,000
	Requested Funding Source	-	-	6,680	6,670	6,650	-	-	-	-	-	-	20,000

CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2018	2019	2020	2021	2022	2023	2024	2025	2026	Beyond 2026	Total
	Construction	-	-	6,580	6,670	6,650	-	-	-	-	-	-	19,900
	Design	-	-	100	-	-	-	-	-	-	-	-	100
	Total	-	-	6,680	6,670	6,650	-	-	-	-	-	-	20,000

OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-