



CITY OF CONCORD

New Hampshire's Main Street™

Finance

Brian G. LeBrun
Deputy City Manager
Finance

DATE: November 13, 2020

TO: Honorable Mayor and Members of the City Council

FROM: Brian LeBrun, Deputy City Manager – Finance

SUBJECT: \$718,000 Supplemental Resolution Appropriating funds for the light-emitting diode (LED) Street Light project and authorizing the City Manager to enter into an agreement with Unitil for this program.

Recommendation:

Accept this report and approve the attached resolution.

Discussion:

The City of Concord has been in discussion with Unitil for several years about replacing existing streetlights throughout the City with LED lights. Both parties have worked on an agreement for the execution of the LED streetlight conversion project which includes direct financial incentives from Unitil for a portion of the project (50% of the project or \$325,000 whichever is lower) and on-bill financing for the remaining \$325,000 balance of the overall project cost, plus on-bill financing for the undepreciated cost of the existing lights in the amount of \$68,000.

Conclusion:

The attached resolution authorizes funding for the City Manager to replace approximately 2100 current streetlights with LED lights and enter into an agreement with Unitil for the execution of an LED Street Light program.

The remaining section of this report again details the economics of the LED streetlight replacement program.

As part of the Public Utilities Commission (PUC) approval, the repayment period for on-bill financing is limited to no more than sixty months.

Beacon Integrated Solutions was engaged to conduct a cost-benefit analysis of the LED streetlight conversion project contemplated by the City. Table 1 below presents the project implementation costs, along with offsetting incentives expected from Unitil.

Table 1: Project Costs and Incentives:

Cost RackUp	
Indicative Pricing	\$613,785
City Contingency [3]	\$21,482
Total Cost	\$635,267
Estimated Unutil Incentives	(\$317,634)
Net Cost to City	\$317,634
City Purchase of Existing Unutil Lights	\$68,000

Table 2: Net Benefit Over 5-Year Financing Term

PERIOD	ESTIMATED BENEFITS			ESTIMATED COSTS			ESTIMATED NET BENEFIT
	BASELINE COST [1]	ESTIMATED COST [1]	ESTIMATED SAVINGS	UNITIL LOAN PAYMENT-NEW EQUIPMENT	UNITIL LOAN PAYMENT-BUYOUT	ESTIMATED O&M [2]	
YEAR 1	\$487,615	\$384,287	\$103,328	\$63,527	\$13,600	\$0	\$26,201
YEAR 2	\$492,491	\$388,130	\$104,361	\$63,527	\$13,600	\$0	\$27,235
YEAR 3	\$497,416	\$392,011	\$105,405	\$63,527	\$13,600	\$9,207	\$19,072
YEAR 4	\$502,390	\$395,931	\$106,459	\$63,527	\$13,600	\$9,391	\$19,941
YEAR 5	\$507,414	\$399,890	\$107,524	\$63,527	\$13,600	\$9,579	\$20,818
YEAR 6	\$512,488	\$403,889	\$108,599	\$0	\$0	\$9,770	\$98,829
YEAR 7	\$517,613	\$407,928	\$109,685	\$0	\$0	\$9,966	\$99,719
YEAR 8	\$522,789	\$412,007	\$110,782	\$0	\$0	\$10,165	\$100,617
YEAR 9	\$528,017	\$416,127	\$111,890	\$0	\$0	\$10,368	\$101,521
YEAR 10	\$533,297	\$420,289	\$113,008	\$0	\$0	\$10,576	\$102,433
TOTAL	\$5,101,530	\$4,020,489	\$1,081,041	\$317,634	\$68,000	\$79,021	\$616,386

NOTES:

[1]. Baseline and Estimated Costs use lower contracted 3-year supply rate of \$0.0614/kWh and current Unutil LED tariff effective 1/1/2020. Costs escalated annually at 1%.

[2]. Estimated Operations and Maintenance costs assume a 2-year labor warranty, plus 10-year fixture warranty. In Year 3, O&M costs are estimated at 1.5% of indicative capital cost, escalated annually at 2%. Unutil tariff charge per-fixture per-visit charge is \$115.00 plus material cost.

[3]. Contingency estimated at 3.5% of the Indicative Pricing.

As shown in the analysis, the City will be responsible for ongoing maintenance and replacement of the streetlights after warranty period has expired. While the City has accounted for annual costs in excess of \$9,000, escalating at 2% per year, it is understood that such expenses would occur on a per-outage basis. LED streetlights generally do not require a substantial amount of maintenance over their ten to fifteen year life span.

Unutil has received the proper approval from the PUC to waive the limitations in the tariff of the total amount of on-bill financing available to the City, all agreements have been finalized, and the appropriate supplemental resolution has been approved by City Council that provides funding entirely from Unutil cash incentive and on-bill financing.

Due to the length of time that was required to secure approval from the PUC, it is anticipated that this project will be complete before June 30, 2021. The Request for Proposal (RFP) is completed and ready to be advertised after the City Council approves the supplemental appropriation request.