

Retrofit Business Case Analysis

Parkland County Centre, County Services Building and Tomahawk Workshop

Potential measures and facilities combined as per discussion

Retrofit Details



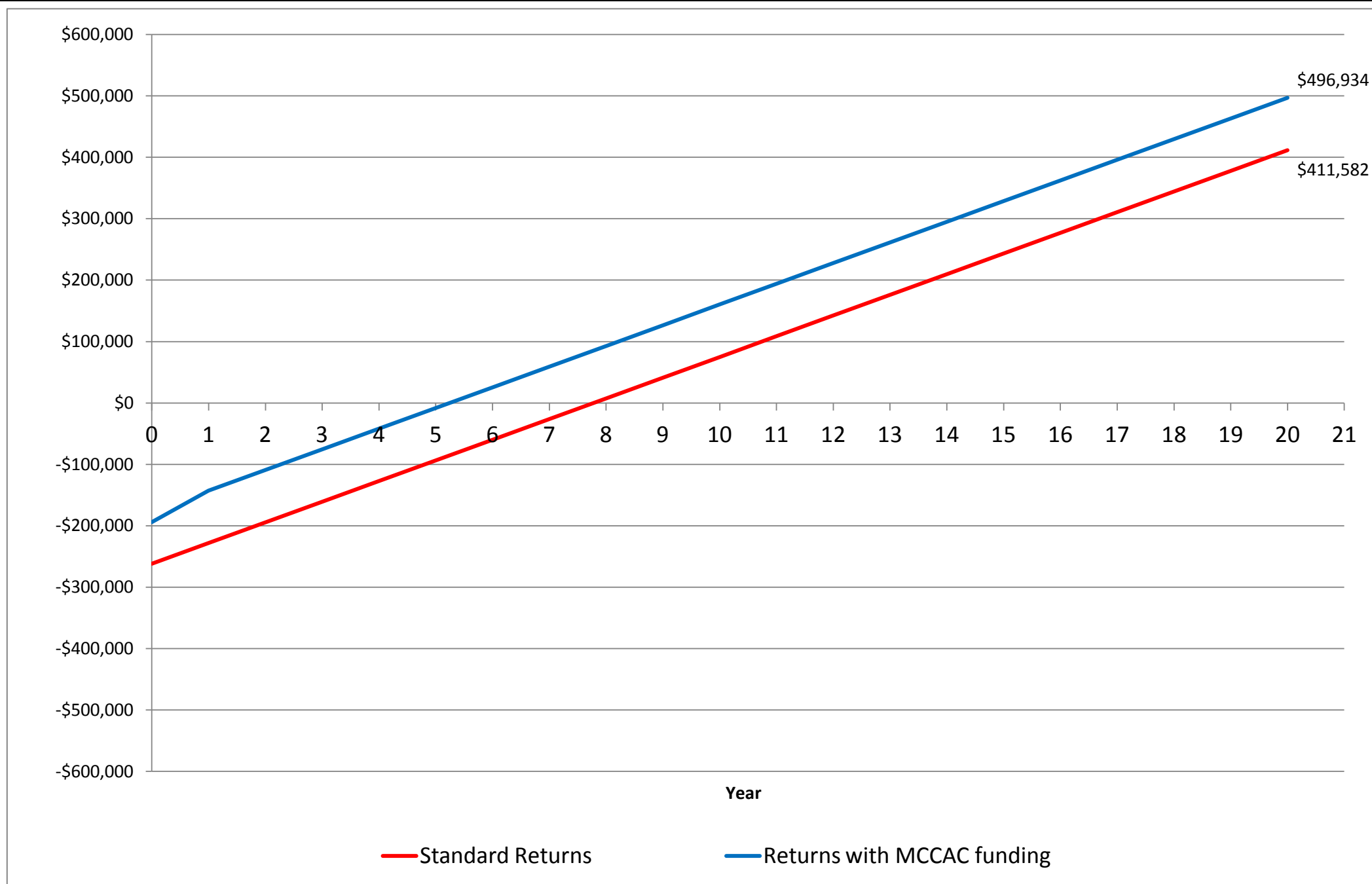
	Retrofit Option	Cost (\$)	Annual savings(\$)	MCCAC Contribution (\$)	Return on Investment (RoI,%)	Simple Payback (years)	Energy Consumption Reduction	GHG Reduction (tCO2e)	GHG Bonus (\$)
Tomahawk Workshop	Weather-Stripping / Seal	\$878	\$228		26%	3.9	3.2%	2.2	198
	Lighting Retrofit	\$24,358	\$2,193		9%	11.1	5.1%	12.9	1161
	Sub-Total	\$ 25,236	\$ 2,421		9.6%	10.4	8.3%	15.1	1,359
County Service Bldg	Building Management (Automation) System (BMS)	\$173,000	\$19,827		11%	8.7	18.7	121.2	10,908
	Weather-Stripping / Seal	\$2,244	\$918		41%	2.4	0.9%	5.6	504
	Lighting Retrofit	\$43,450	\$6,450		15%	6.7	1.5%	34.1	3,069
	Sub-Total	\$218,694	\$27,195		12%	8.0	22.8%	160.9	14,481
County Centre	New High Efficiency Motors & Variable Frequency Drives (VFD) for P1 & P3	\$14,000	\$2,069		15%	6.8	2.3%	10.5	945
	Weather-Stripping / Seal	\$744	\$355		48%	2.1	0.6%	1.9	171
	Lighting Retrofit	\$3,124	\$1,629		52%	1.9	0.7%	8.0	720
	Sub-Total	\$17,868	\$4,053		23%	8.4	1.3%	20.4	891
Project Grand Totals		\$261,798	\$33,669	\$ 50,000	12.9%	7.8	32.4%	196	17,676

Assumptions:

- 1) Avoided Costs are not included
- 2) Equipment replacement costs are not
- 3) Electricity = \$0.096/KWh
- 4) Natural Gas = \$5.18/GJ
- 5) No inflation applied to energy costs over

MCCAC Funding Impact	
MCCAC Rebate Funding	\$ 50,000
Potential GHG Bonus funding	\$ 17,676
Total potential MCCAC funding	\$ 67,676
Project Cost with MCCAC Funding	\$ 194,122
% of Project Cost Covered by MCCAC	25.9%
ROI with MCCAC Funding	17.3%
Payback with MCCAC funding (Yr)	5.8

+4.5%
-2.0 years



Note: The numbers stated here are the values calculated using estimated data and while they are believed to be reliable they can not be guaranteed and are intended for illustrative purposes only. Energy prices stated here are representative estimates meant for illustrative purposes only and may vary from market prices