

COST ANALYSIS

Northland Towers Office Center Plaza Building

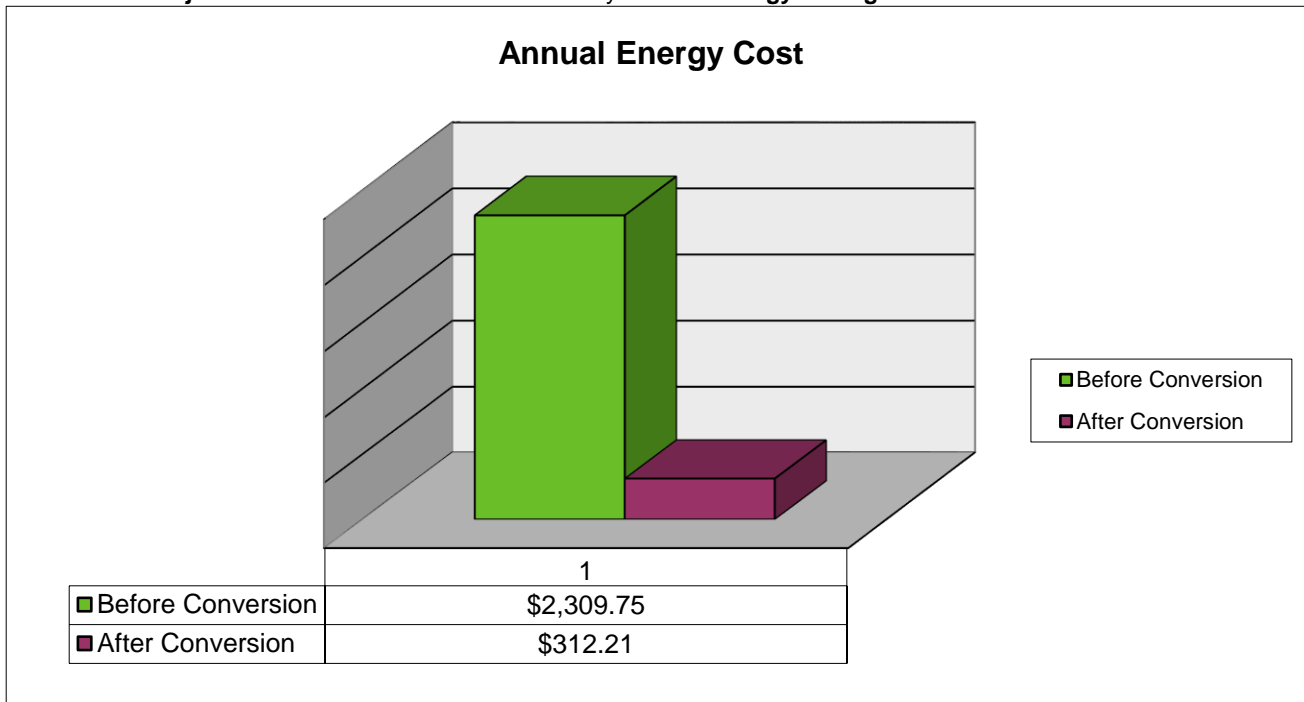
Stairwells

Project Cost	\$3,433.20
DTE Incentive	\$732.77
Retrofit Costs (With Rebates)	\$2,700.43
Annual Energy Savings	\$1,997.54
Project Pay Back Period	16 Months
Return on Investment Thru 5 years	238.77%

7/2/2014

Project pay back period equal to $\frac{\text{Project Cost} - \text{DTE Incentive}}{\text{Annual Energy Savings}}$

Project Cost less DTE Incentive divided by Annual Energy Savings



Reduction in energy cost 86%



Before
 F48T12 3500k



After
 12 watt LED 5000k



Northland Towers Office Center

Power Usage Sheet

Plaza Building

5/30/2014

Stairwells

DTE
rate/kw

0.11

Presently installed lighting plant

REF	QTY	DESCRIPTION	Watts Per	DTE watts per	Watts Used	DTE watts Used	Annual Hours	Annual KWH	DTE Annual KWH	Annual energy cost	Data Reference	Page
27-1	51	F48T12 Lamp/ballast B260IUNVHP Universal One lamp bi pin fixture	47	31	2397	1581	8760	20,998	13,850	\$2,309.75	F48T12CW.pdf B260IUNVHP.pdf	
	51	Units				1.581						
							Totals	20,998	13,850	\$2,309.75		

Proposed lighting plant

LINE	QTY	DESCRIPTION	Watts Per	DTE watts per	Watts Used	DTE watts Used	Annual Hours	Annual KWH	DTE Annual KWH	Annual energy cost	Data Reference	Page
27-1	27	(1) 4' LED 12W R1-41250K-85-fB2-V1 Frosted	12	12	324	324	8760	2,838	2,838	\$312.21	4' LED tube spec 3.12.13.pdf	
	27	Units				0.386						
							Totals	2,838	2,838	\$312.21		

Measure cost
\$3,433.20

Proposed Custom lighting plant

DTE KWH Savings
11011

Actual Kw savings	18,159
Total Annual Savings	\$1,997.54



M.N.C.
"Professional Services"

Northland Towers Office Center

Project Notes

Plaza Building

North Stairwell

Qty (25) 1 x 4 F48T12 1 lamp fixture

Qty (13) retrofitted to 1 4' 5000k LED lamp Frosted

Qty (12) removed

South Stairwell

Qty (26) 1 x 4 F48T12 1 lamp fixture

Qty (14) retrofitted to 1 4' 5000k LED lamp Frosted

Qty (12) removed