



**INVITATION TO BID
REPLACEMENT OF LIGHTING FIXTURES
LEE COUNTY FIRE STATIONS
RFP #1004**

The Lee County Board of Commissioners is accepting sealed written bids from qualified vendors for **the replacement of interior and exterior lighting fixtures, as needed and in accordance with the attached schedule “Exhibit A”**. This bid is for the following Lee County Fire Stations, located at 342 Leslie Highway, 934 US Highway 19 South, 1169 US Highway 82, and 1289 Grave Springs Road, Leesburg, Georgia 31763 with energy efficient LED lighting. A bid form, project completion form, specifications, and non-collusion forms are included in this bid.

There will be a **pre-bid meeting on Tuesday, September 20, 2022 at 2:00pm** in the Opal Cannon Auditorium of the T. Page Tharp Building located at 102 Starksville Avenue North, Leesburg, Georgia 31763. **You must attend the pre-bid meeting in order to submit a bid.** Further details on the project will be provided at the pre-bid meeting.

If you choose to submit a written bid on the lighting project, your sealed bid must be marked **“2022 Lee County Fire Stations Lighting Replacement”** and delivered to the Lee County Board of Commissioners at 102 Starksville Avenue North, Leesburg, GA 31763 **no later than 2:00pm on Tuesday, October 4, 2022**. All bids will be opened during a **public bid opening at 2:05pm on Tuesday, October 4, 2022** in the Opal Cannon Auditorium of the T. Page Tharp Building at 102 Starksville Avenue North. All persons submitting a bid must possess the minimum required state license, the requisite liability, workman’s compensation insurance, and a current Lee County Business License. The public is invited to attend this bid opening. No bids shall be withdrawn within a period of 60 days after the bid opening.

Bidders are required to examine all maps, plans, drawings, specifications and data mentioned in the specifications, contracts, or proposals on file with Lee County at 102 Starksville Avenue North Leesburg, Georgia, or at such other location or locations established by Lee County from time to time with respect to such proposed project. No plea of ignorance of conditions that exist or that may exist after the date of these instructions, or of any conditions or difficulties that may be encountered in the execution of the work under any contract issued hereunder, resulting from the bidders failure to make the necessary examinations and investigations, shall be accepted as an excuse for any failure or omission on the part of the successful bidder to fulfill in every detail all requirements of any contract issued hereunder. Nor will such reasons be accepted as a basis for any claims whatsoever for extra compensation, change orders, or an extension of time to complete the required work under the contract issued hereunder.

Any bid submitted unsealed, unsigned, fax transmissions, email transmissions, or received subsequent to the aforementioned date and time, will be disqualified. Contractors are responsible for informing any commercial delivery service, if used, of all delivery requirements and for ensuring that the required address information appears on the outer wrapper or envelope used by such service. The submittal must be signed by a company officer who is legally authorized to enter into a contractual relationship in the name of the contractor. Failure

to comply with the written requirements for this project may result in disqualification of the submittal by the Lee County Board of Commissioners.

The Board of County Commissioners reserves the right to accept or reject any or all bids received and/or disregard informalities or irregularities in the bids received. **There will be no addendums to the contract once the contract has been accepted and signed, unless initiated by the County.** If additional information is needed, please contact Christi Dockery, County Manager, at (229)759-6000 or cdockery@lee.ga.us or David Forrester, Fire Chief, at (229) 759-2369 or dforrester@lee.ga.us. The Lee County Board of Commissioners is an Equal Opportunity Employer.

In the event that any corrections or amendments to this Invitation to Bid are deemed necessary or appropriate, such corrections or amendments shall be issued by the Lee County Board of Commissioners in written addenda issued prior to the due date for proposals. Potential Bidders should not rely on any representations, statements or explanations other than those made in this document or in any addenda to this document. Where there appears to be a conflict between this Invitation to Bid and any addenda issued, the last addenda issued will prevail. Addenda will be published on the Lee County Board of Commissioners' website at www.lee.ga.us. Potential Bidders are encouraged to check such website regularly for immediate access to issued addenda.

All expenses involved with the preparation and submission of the Invitation to Bid to the Lee County Board of Commissioners, or any work performed in connection therewith is the responsibility of the Bidder(s). Submission of any proposal indicates acceptance of the conditions contained in this document unless clearly and specifically noted otherwise in the proposal.

The Lee County Board of Commissioners operates with a five (5) member County Commission. It is anticipated that Bidder(s) may need to make one or more appearances at County Commission meetings to answer questions or present results. The documentation provided herein is intended to provide a common methodology of development and basic technical skills for proposal purposes.

Your written and sealed bid must include at a minimum:

- Completed attached bid form with a total cost of services including energy efficient lighting, materials, installation, and labor
- Written oath stating that the contractor has not restricted competitive bidding with an authorized signature

In addition, the successful contractor shall submit the following items within ten calendar days of written notification from the county of the bid award:

- Proof of workers' compensation insurance
- Proof of general liability insurance in the amount of at least \$1,000,000.00 naming the Lee County Board of Commissioners as an additional insured
- Proof of automobile liability insurance in the amount of at least \$1,000,000.00 naming the Lee County Board of Commissioners as an additional insured
- Written certification that the contractor operates a drug free workplace in accordance with O.C.G.A 50-24-1 through 50-24-6
- Completed SAVE Affidavit
- Completed Contractor's Affidavit
- Completed Sub-Contractor's Affidavit, if applicable
- Signed contract (prepared by the County)

BID SPECIFICATIONS
REPLACEMENT OF LIGHTING FIXTURES
LEE COUNTY FIRE STATIONS
RFP #1004

Bid for the removal and replacement of all existing interior and exterior lighting fixtures at Lee County Fire Stations located at 342 Leslie Highway, 934 US Highway 19 South, 1169 US Highway 82, 2345 Highway 19 North, and 1289 Graves Springs Road. All existing lighting fixtures are to be replaced with energy efficient LED lighting.

Lighting must comply with all building, fire, electrical, plumbing, mechanical, accessibility, and energy codes, as currently adopted and amended by the State of Georgia and as administered by the Georgia Department of Community Affairs and rules and regulations of the safety fire division of the State Fire Marshal's Office.

The Contractor shall furnish and install all of the necessary materials and components required to provide complete the lighting project for the Lee County Fire Stations. Further described as, but not necessarily limited to, the following:

1. Retrofit exterior wall packs, with direct line voltage
2. Retrofit fixtures in with new LED lighting utilizing the existing fixtures; change lamps only
3. Must include a five year warranty at minimum
 - a. To include mechanical, electrical components, and labor
4. Install new LED exit fixtures

***Please see attached Exhibits for additional information.**

Contract Information

The Contractor Shall:

- 1) Verify the quantities of materials needed.
- 2) Include the cost for all time and materials required to purchase and complete the installation of the replacement of interior and exterior lighting throughout the Lee County Fire Stations with energy efficient LED fixtures, including any necessary signage.
- 3) Begin work on this project within 30 calendar days of written notification from the County to proceed.
- 4) Perform all work on this project in accordance with County standards.
- 5) Maintain all aspects of the project including the purchase of materials, all prep work, lighting installation, cleanup, and disposal until the Board of Commissioners accepts the project.
- 6) Repair any damage done to walls or building structure created during the course of work.
- 7) Use only the attached bid form and plans.
- 8) Complete all work on this project by 5:00pm 30 days from the time the contractor begins work or liquidated damages of \$100.00 per day will be assessed against the contractor. **An extension of time may be granted by Lee County, in its sole and absolute discretion, beyond the deadline for project completion, in the event that, during the course of the performance of the contract, the work required by the contract cannot be performed as a direct result of inclement weather. No liquidated damages will be charged or payable with respect to any day that Lee County determines that the contract work cannot be performed due to inclement weather, and the date for completion shall be extended day for day for each day that it is determined that the contractor is unable to perform due to inclement weather.**

**BID FORM
REPLACEMENT OF LIGHTING FIXTURES
LEE COUNTY FIRE STATIONS
RFP #1004**

Name of Bidder/ Vendor: _____

Contact Person: _____

Mailing Address: _____

Telephone: _____

Email: _____

It is agreed by the undersigned bidder that the signature and submission of this bid represents the bidder's acceptance of all terms, conditions, and requirements of the bid specifications and, if awarded, the bid will represent the agreement between the parties. No addendums will be allowed unless initiated by the County.

Purchase and installation of the replacement of interior and exterior lighting fixtures throughout the Lee County Fire Stations with energy efficient LED lighting.

Labor (inclusive of removal of old lighting and installation of new): _____

Materials (inclusive of all required electrical components): _____

Warranties: _____

Total Bid Amount = _____

Project will be completed in an estimated _____ days of receipt of the official Notice to Proceed from Lee County.

Authorized Signature: _____ **Title:** _____

Name Printed: _____ **Date:** _____

**Lee County, Georgia
Non-Collusion Certification**

The undersigned bidder certifies the following: I have not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this submitted bid.

Authorized Signature: _____

Name Printed: _____

Name of Company: _____

Date: _____

**EXHIBIT A
REPLACEMENT OF LIGHTING FIXTURES
LEE COUNTY FIRE STATIONS
RFP #1004**

Station 1 342 Leslie Highway	
4' 4-Bulb Fluorescents	19
2' 1-Bulb Fluorescents	2
4' 2-Bulb Fluorescents	3
2' 4-Bulb Fluorescents	8
Interior Can Lights	22
Hallway Scone Lights	6
Interior Bay Lights	12
Exterior Flood Lights	9
1' x 1' Front Porch Recessed Lights	11
Back Porch & Training Area Rear	4
Emergency Exit Signs with Lights	6

Station 2 934 US Highway 19 South	
4' 4-Bulb Fluorescents	16
2' 1-Bulb Fluorescents	2
4' 2-Bulb Fluorescents	7
Interior Can Lights	30
Hallway Scone Lights	5
Interior Bay Lights	12
Exterior Flood Lights	8
1' x 1' Front Porch Recessed Lights	10
Back Porch	2
Flag Pole Light	1
Emergency Exit Signs with Lights	5

Station 3 1169 US Highway 82	
4' 4-Bulb Fluorescents	3
Exterior Flood Lights	3
Front Porch Light	1
Standard Bulb Lights	2

Station 4 2345 Highway 19 South	
4' 4-Bulb Fluorescents	7
4' 2-Bulb Fluorescents	37
Round Bathroom Fluorescent	4
Can Lights	20
Dimmable Can Lights	8
Shower Can Lights	2
Flood Light	1
Porch Can Lights	5
Flag Pole Lights	2
Emergency Exit Signs with Lights	3

Station 5 1289 Graves Springs Road	
4' 4-Bulb Fluorescents	17
2' 1-Bulb Fluorescents	2
4' 2-Bulb Fluorescents	2
Interior Can Lights	32
Hallway Scone Lights	6
Bedroom Ceiling Fans	4
Interior Bay Lights	12
Exterior Flood Lights	9
1' x 1' Front Porch Recessed Lights	11
Back Porch	4
Flag Pole Light	1
Front Door Lights	2
Back Door Lights	2
Backyard Flood Light	1
Emergency Exit Signs with Lights	1

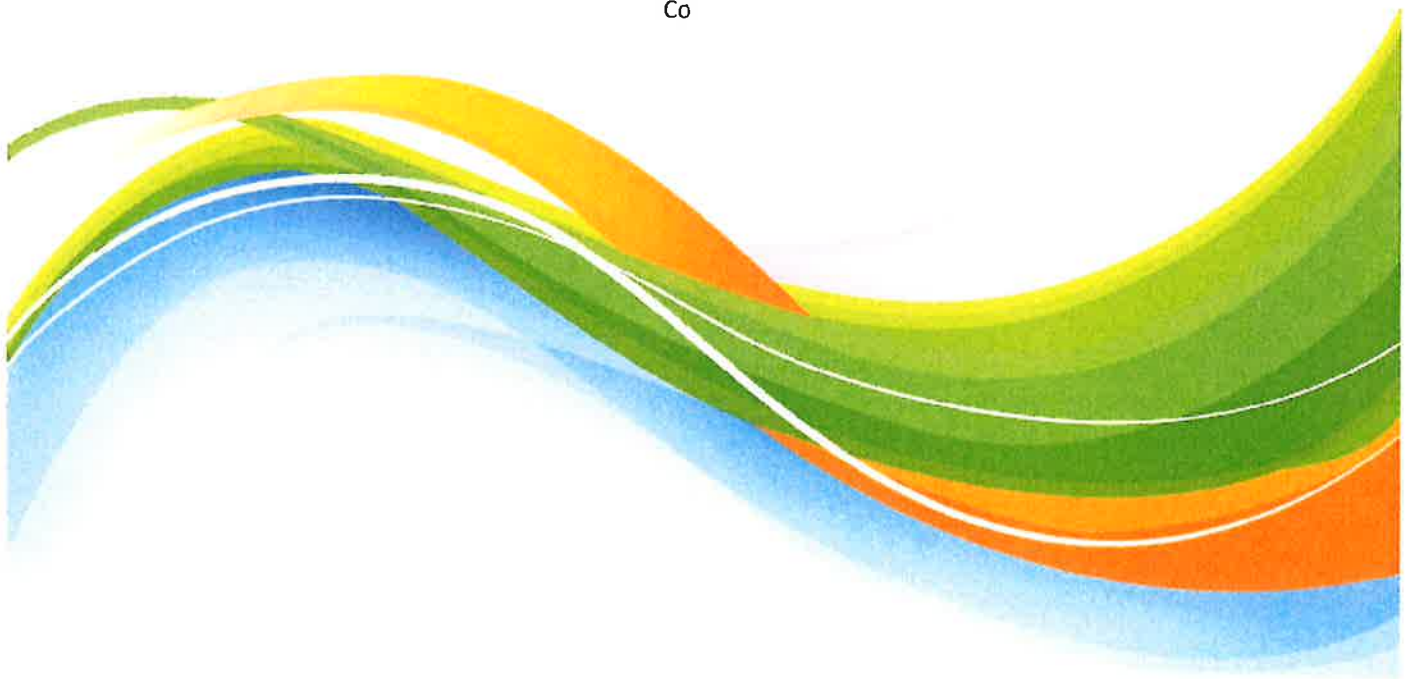


Lee County Lighting Audit & ROI REV01

County-Wide LED Lighting Retrofit

8/29/2021

For	Christi Dockery - County Manager	Company	Lee County
Prepared By	Russ Korte	Phone	404-580-9730
Company	McNaughton-McKay Electric Co	Email	korter@mc-mc.com



Executive Summary

Initial Costs

	Baseline	Design #2
Luminaires	\$10,364	\$53,427
Install	\$1	\$89,425
Sales Tax	\$622	\$3,206
Total	\$10,987	\$146,057

Average Year Operation Cost

	Baseline	Design #2
Electricity Use	980,013 kWh	324,361 kWh
Electricity	\$123,582	\$40,903
Maintenance	\$32,107	\$1,078
HVAC	\$21,709	\$7,632
Taxes	\$79	(\$1,870)
Total	\$177,478	\$47,743
Savings	--	(73 %) \$129,735

10 Year Operating Cost (Present Value)

	Baseline	Design #2
Electricity Use	9,800,126 kWh	3,243,606 kWh
Electricity	\$943,003	\$312,111
Maintenance	\$247,925	\$8,098
HVAC	\$166,099	\$58,401
Taxes	\$607	(\$14,439)
Total	\$1,357,634	\$364,171
Savings	--	(73 %) \$993,463

Comparison Metrics

Life Cycle Cost	\$1,368,620	\$510,228
Net Present Value	--	\$858,392
Simple Payback	--	1.13 Years
Discounted Payback	--	1.20 Years
Internal Rate of Return	--	89.53 %
Modified Internal Rate of Return	--	32.39 %
Cost of Waiting	--	\$10,811/Month

Assumptions

Discount Rate		5.00 %
Electricity Rate		\$0.11/KWh
Electricity Escalation Rate		3.00 %
Reinvestment Rate		12.00 %
Sales Tax		6.00 %
Depreciation		10 years, 35.00 % Income Tax Rate
AC Initial Cost	\$1,500/ton	\$1,500/ton
AC Efficacy	1.25 kWh/ton	1.25 kWh/ton
AC Maintenance	\$165/ton	\$165/ton
Heating Maintenance	\$0.2/thm	\$0.2/thm



Definitions of Terms

Discount Rate sometimes called the 'Owner's Cost of Money' is used to determine the 'Time value of Money'. This is the discount rate used to determine the value today of a future sum.

The IES recommends using a rate that reflects the business owner's average cost of using other peoples money, or the owners cost of capital (borrowing). If you have enough information about the owners finances you could calculate the 'weighted average cost of capital'. However, since this information is generally not available, the IES also allows you to use more commonly available information like the 'prime rate' currently charged by major lenders. Typical values for Opportunity rate range between 3-12%. If you enter an Opportunity rate of 0% future cash flows will not be discounted (not recommended).

Depreciation reduces the owners income tax liability by depreciating the value of lighting equipment linearly over time. Depreciation is only calculated if the owners income tax rate (35 %) and depreciation years (10) are greater than zero.

Life Cycle Cost is the total present value of initial costs (eg new luminaires, new controls, installation labor) as well as recurring annual costs (eg electricity, maintenance).

Net Present Value (NPV) is a value in today's dollar of making a decision of one system over another. NPV sums the discounted annual cash flows over the life cycle of the system. This is the difference between life cycle costs. The design option with the highest NPV should be preferred, although any option with a positive NPV should be considered.

Simple Payback refers to the period of time required to recoup the funds expended in an investment, or to reach the break-even point. The time value of money is not taken into account. Payback period measures how long something takes to 'pay for itself'. All else being equal, shorter payback periods are preferable to longer payback periods. Simple payback does not answer the question 'is a certain investment profitable?' Simple payback doesn't consider what happens after the investment is repaid.

Discounted Payback takes into account the discount rate and uses the present value cash flows instead of the future value cash flows used in Simple Payback.

Internal Rate of Return is an indicator of the efficiency, quality, or yield of an investment. This is in contrast with the Net Present Value, which is an indicator of the value or magnitude of an investment. IRR cannot be calculated for some cash flows.

Modified Internal Rate of Return is an improved version of the internal rate of return (IRR) approach to capital budgeting decisions. It does not require the assumption that the project cash flows are reinvested at the IRR; rather, it factors in a discrete reinvestment rate (12.00 %) into the model. The design option with a higher MIRR should be preferred.

Cost of Waiting is the average annual operational savings divided by 12. If a new lower cost system was installed this is how much it would reduce monthly operating costs.

HVAC Cooling costs are the cost of cooling to offset the heat added to a building by lighting equipment. New cooling systems may or may not have additional savings due to reduced initial sizing of the air conditioning system. Operational costs are determined using the cooling hours, tons of cooling needed to offset lighting wattage, AC kwh/ton efficacy, and the electricity rate. AC maintenance cost are based on the tons of cooling figure and a per ton maintenance cost.

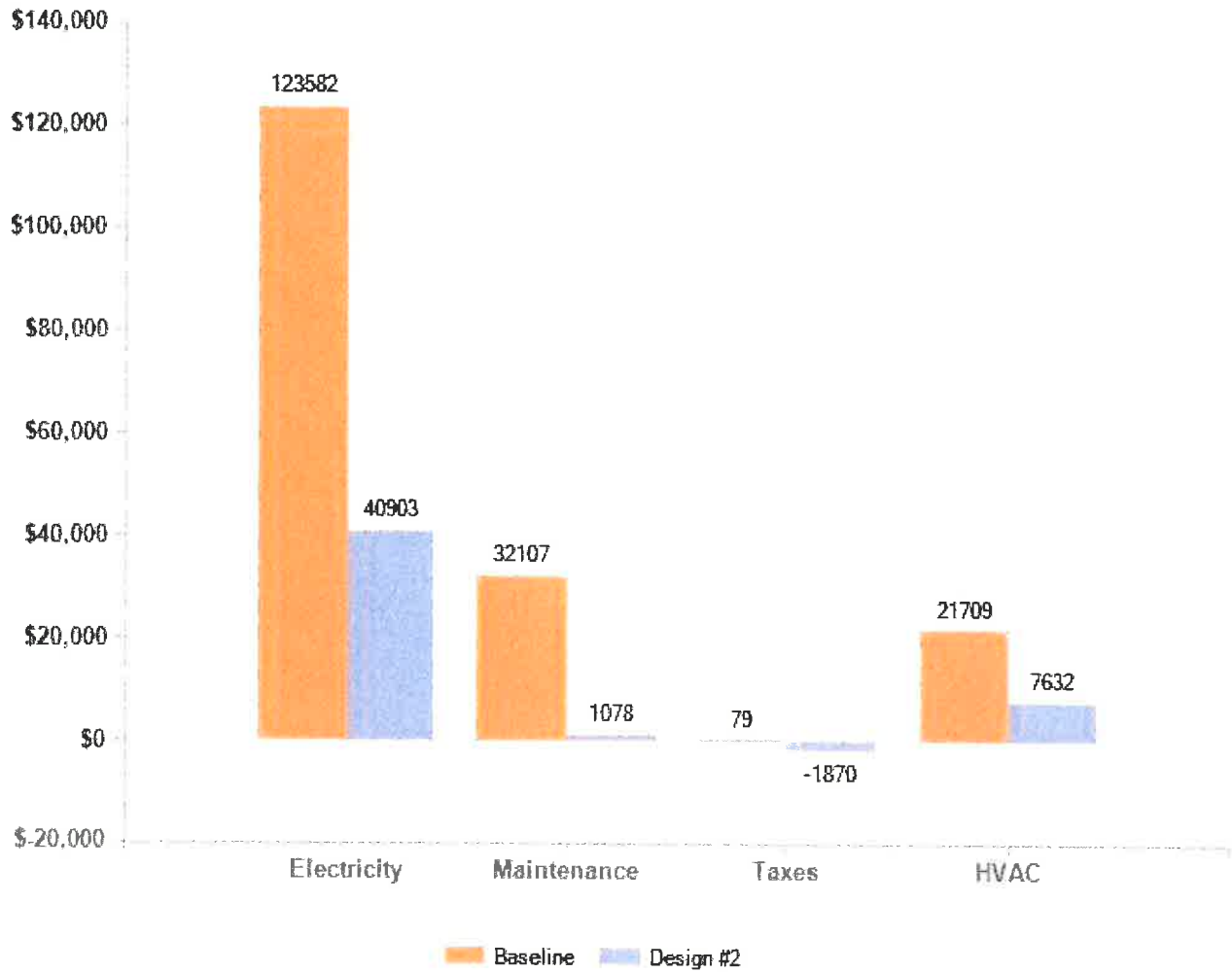
HVAC Heating savings are the savings in heating cost due to the heat from lighting equipment. The heating supplied by lighting is calculated using the space heating hours and lighting wattage. New systems may or may not be reduced in size based on the heat from lighting. This savings is calculated from lighting wattage and the efficacy of the heating unit \$/therm. Heating use savings are dependent on the wattage of the lighting system and the heating unit efficacy. Heating maintenance savings are based on therm from lighting and a heating maintenance rate \$/therm.

HVAC The reported HVAC value is the combination of cooling cost reduced by any heating savings.



Average Operating Year Comparison

Average Year Cost (Future Value)



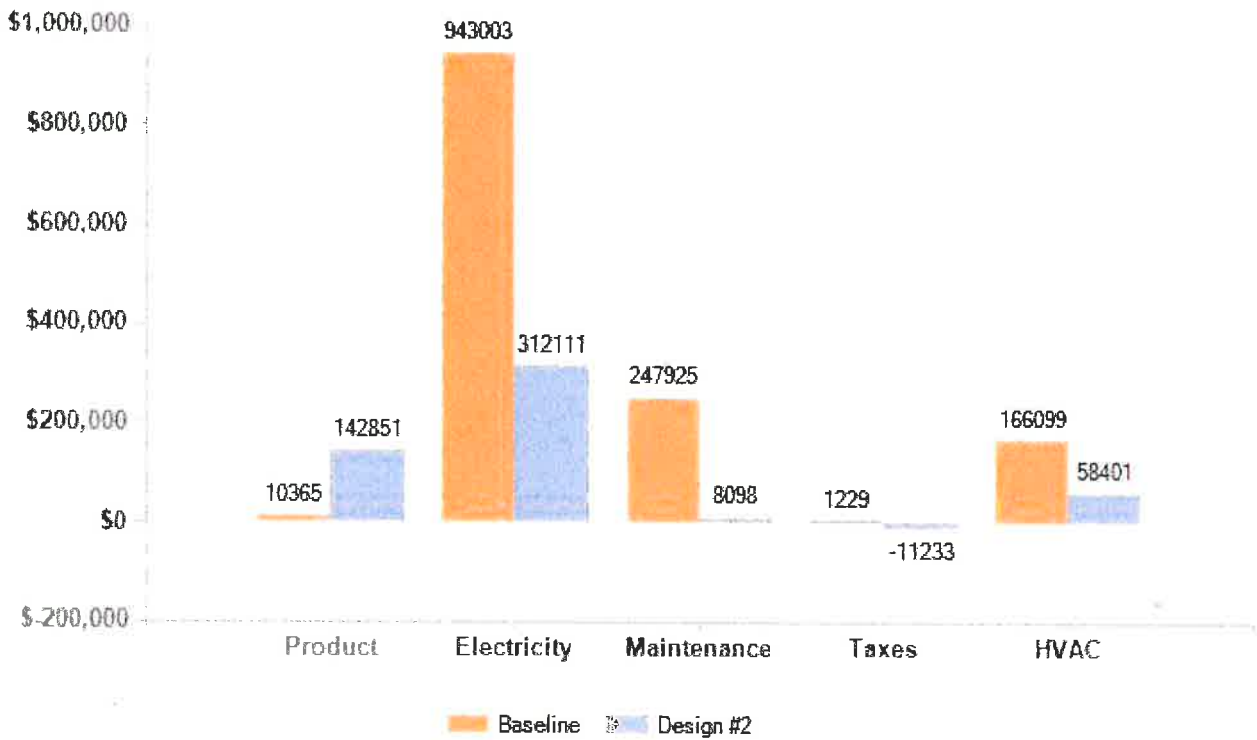
Average Year Cost Details

	Baseline	Design #2
Electricity Use	980,013 kWh	324,361 kWh
Electricity	\$123,582	\$40,903
Maintenance	\$32,107	\$1,078
HVAC	\$21,709	\$7,632
Taxes	\$79	(\$1,870)
Total	\$177,478	\$47,743
Savings	--	(73 %) \$129,735



Lifecycle Comparison

Lifecycle Comparison (Present Value)



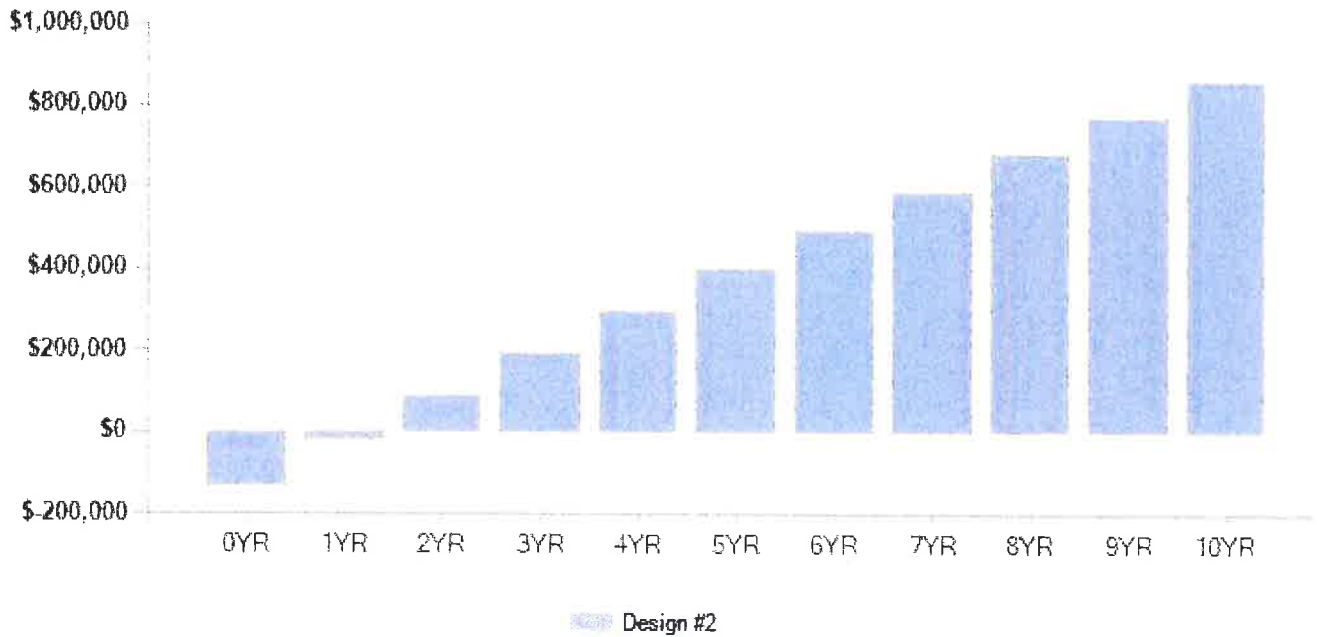
Lifecycle Comparison Details

	Baseline	Design #2
Luminaires	\$10,364	\$53,427
Install	\$1	\$89,425
Sales Tax	\$622	\$3,206
Electricity Use	9,800,126 kWh	3,243,606 kWh
Electricity	\$943,003	\$312,111
Maintenance	\$247,925	\$8,098
HVAC	\$166,099	\$58,401
Taxes	\$607	(\$14,439)
Total	\$1,368,620	\$510,228
Savings	--	(63 %) \$858,392



Cash Flow

Accumulated Cash Flow

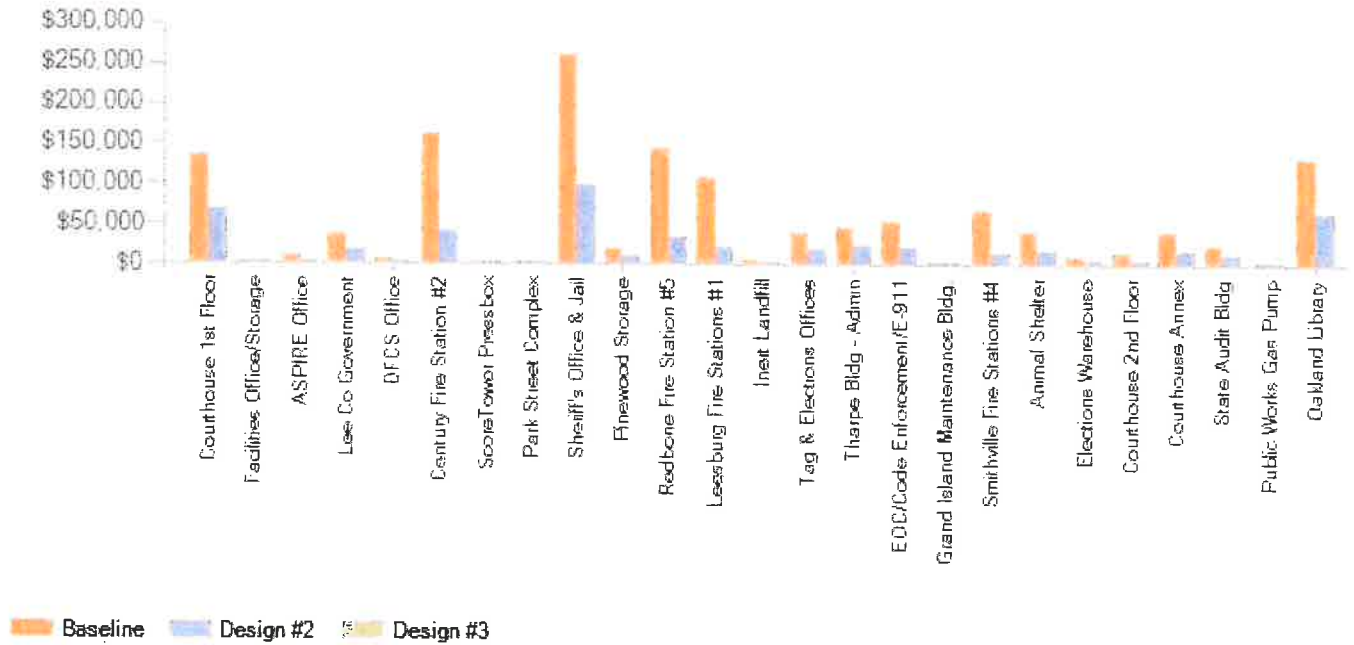


Cash Flow Details

Years of Analysis	Baseline Cost	Design #2 Cost	Design #2 Net Cash Flow
Initial	\$10,987	\$146,057	(\$135,071)
Year 1	\$151,948	\$38,780	(\$21,903)
Year 2	\$148,046	\$38,043	\$88,100
Year 3	\$144,266	\$39,816	\$192,550
Year 4	\$140,603	\$36,610	\$296,543
Year 5	\$137,054	\$35,914	\$397,684
Year 6	\$133,615	\$38,796	\$492,502
Year 7	\$130,280	\$34,561	\$588,221
Year 8	\$127,046	\$33,904	\$681,363
Year 9	\$123,909	\$35,122	\$770,151
Year 10	\$120,867	\$32,626	\$858,392



Space Comparison (Present Value)



Space Life Cycle Cost Comparison

Name	Group	Description	Baseline	Design #2
Courthouse 1st Floor	Project		\$133,289.72	\$66,927.62
Facilities Office/Storage	Project		\$2,950.78	\$1,286.30
ASPIRE Office	Project		\$10,202.35	\$3,381.84
Lee Co Government	Project		\$36,127.43	\$18,256.14
DFCS Office	Project		\$5,744.51	\$2,960.82
Century Fire Station #2	Project		\$161,815.12	\$41,231.01
ScoreTower Pressbox	Project		\$437.03	\$394.79
Park Street Complex	Project		\$1,058.11	\$597.09
Sheriff's Office & Jail	Project		\$261,753.93	\$99,448.40
Pinewood Storage	Project		\$20,314.83	\$9,483.71
Redbone Fire Station #5	Project		\$143,326.89	\$35,019.99
Leesburg Fire Stations #1	Project		\$107,981.35	\$22,495.93
Inert Landfill	Project		\$5,604.65	\$1,297.53
Tag & Elections Offices	Project		\$39,905.83	\$18,834.65
Tharpe Bldg - Admin	Project		\$47,099.77	\$24,140.16
EOC/Code Enforcement/E-911	Project		\$53,529.64	\$22,070.08
Grand Island Maintenance Bldg.	Project		\$3,188.43	\$986.76
Smithville Fire Stations #4	Project		\$68,121.95	\$16,252.94
Animal Shelter	Project		\$41,599.47	\$17,406.74
Elections Warehouse	Project		\$10,246.90	\$5,092.44
Courthouse 2nd Floor	Project		\$15,332.99	\$6,072.87
Courthouse Annex	Project		\$40,414.98	\$18,179.09
State Audit Bldg	Project		\$24,405.93	\$11,656.71
Public Works Gas Pump	Project		\$2,913.85	\$1,562.80
Oakland Library	Project		\$131,253.76	\$65,121.66



Century Fire Station #2 Summary

Lee County Lighting Audit & ROI REV01

Information

Name	Century Fire Station #2	Ceiling Type	
Group	Project	HVAC	Existing
Area	0.00	Description	

Assumptions

Hours of Operation		Labor Rates		HVAC	
Weekday	24 hours	Install	\$50.00	Cooling Hours	1,986 hours
Weekend	24 hours	Ballast	\$30.00	Heating Hours	5,460 hours
Annual	8,760 hours	Lamp	\$25.00	Cost per Therm	\$0.07
		Cleaning	\$15.00	Heat Initial Savings	\$2.00 \$/thm

Initial Costs

	Baseline	Design #2
Luminaires	\$276	\$4,023
Install	\$0	\$3,283
Sales Tax	\$17	\$241
Total	\$293	\$7,548

Average Year Operation Cost

	Baseline	Design #2
Electricity Use	113,670 kWh	33,043 kWh
Electricity	\$14,334	\$4,167
Maintenance	\$5,580	\$69
HVAC	\$1,110	\$323
Taxes	\$76	(\$141)
Total	\$21,101	\$4,417
Savings	--	(79 %) \$16,683

10 Year Operating Cost (Present Value)

	Baseline	Design #2
Electricity Use	1,136,698 kWh	330,427 kWh
Electricity	\$109,377	\$31,795
Maintenance	\$43,086	\$514
HVAC	\$8,469	\$2,462
Taxes	\$590	(\$1,087)
Total	\$161,522	\$33,683
Savings	--	(79 %) \$127,839

Comparison Metrics

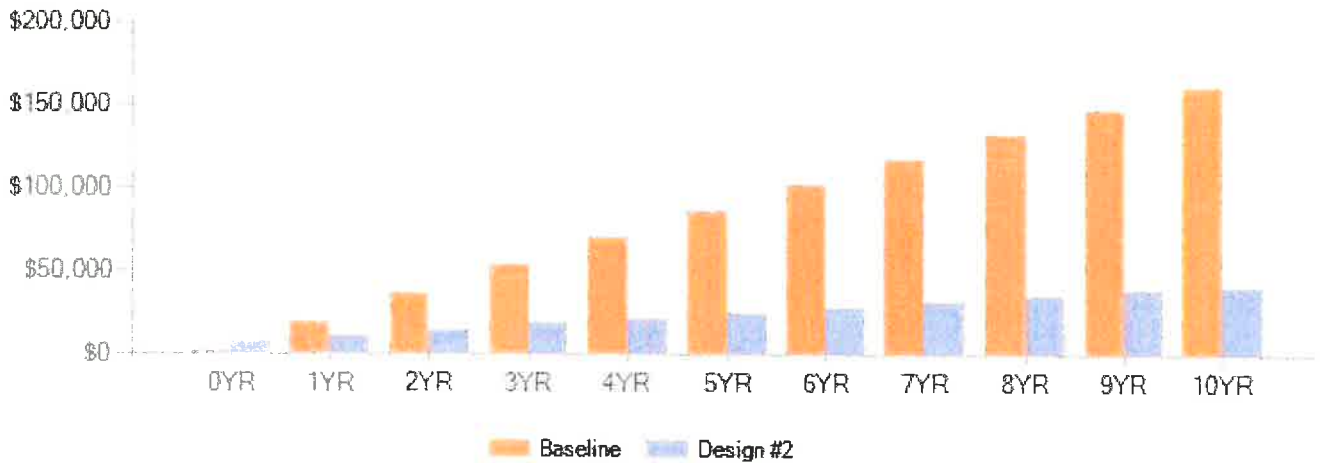
	Baseline	Design #2
Life Cycle Cost	\$161,815	\$41,231
Net Present Value	--	\$120,584
Simple Payback	--	0.47 Years
Discounted Payback	--	0.50 Years
Internal Rate of Return	--	213.34 %
Modified Internal Rate of Return	--	44.49 %
Cost of Waiting	--	\$1,390/Month



Century Fire Station #2 Life Cycle Cost

Lee County Lighting Audit & ROI REV01

Accumulated Century Fire Station #2 Life Cycle Cost



Century Fire Station #2 Life Cycle Cost Details

	Baseline	Design #2
Electricity		
Electricity Use	1,136,697.60 kWh	330,427.20 kWh
Electricity Cost	\$109,377.09	\$31,794.88
Luminaires		
Fixture Cost	\$276.30	\$4,023.00
Fixture Installation	\$0.00	\$3,283.33
Maintenance		
Lamp Changes	3,454.36	30.00
Lamp Cost	\$9,328.45	\$0.00
Ballast Changes	49.64	0.00
Ballast Cost	\$1,756.45	\$0.00
Disposal Cost	\$881.61	\$0.00
Maintenance Labor	\$31,119.02	\$513.75
HVAC		
AC Cost	\$8,808.15	\$2,560.45
AC Maintenance	\$4,698.00	\$1,365.66
Heating Reduction	(\$1,305.87)	(\$379.60)
Heating Maintenance Savings	(\$3,731.06)	(\$1,084.59)
Taxes		
Sales Tax	\$681.67	\$241.38
Income Tax Effect	(\$74.67)	(\$1,087.26)
Total		
Total Cost	\$161,815.12	\$41,231.01



Century Fire Station #2

Luminaire Comparison

Baseline		Design #2		Design #3	
Luminaire	Watts	Count	Luminaire	Watts	Count
2LT8	64	6	2TLEDT8	24	6
2LT8 TROFFER			83887		
4LT8	128	23	4LTLEDT8	48	23
4LT8 TROFFER			83887		
2LT8U	64	12	2LTEDT8U	22	12
2LT8U TROFFER			84075		
60A19	60	12	60ALEDA19	9	12
60W A19 LAMP			83974		
60BR30FL	60	14	60BRTLED	8	14
60w BR30 LAMP			84986		
400w High Bay	458	12	400WTLED HIGH BAY	150	12
TH 400M A16GL (LEG 3, SC=1.8)			84115		
400w Wall Pack	456	4	400WTLED WALL PACL	60	4
TWH 400M (PULSE)			84030		



Redbone Fire Station #5 Summary

Lee County Lighting Audit & ROI REV01

Information

Name	Redbone Fire Station #5	Ceiling Type	
Group	Project	HVAC	Existing
Area	0.00	Description	

Assumptions

Hours of Operation		Labor Rates		HVAC	
Weekday	24 hours	Install	\$50.00	Cooling Hours	1,986 hours
Weekend	24 hours	Ballast	\$30.00	Heating Hours	5,460 hours
Annual	8,760 hours	Lamp	\$25.00	Cost per Therm	\$0.07
		Cleaning	\$15.00	Heat Initial Savings	\$2.00 \$/thm

Initial Costs

	Baseline	Design #2
Luminaires	\$235	\$3,489
Install	\$0	\$2,067
Sales Tax	\$14	\$209
Total	\$249	\$5,765

Average Year Operation Cost

	Baseline	Design #2
Electricity Use	93,224 kWh	28,680 kWh
Electricity	\$11,756	\$3,617
Maintenance	\$5,912	\$62
HVAC	\$911	\$280
Taxes	\$101	(\$122)
Total	\$18,679	\$3,837
Savings	--	(79 %) \$14,842

10 Year Operating Cost (Present Value)

	Baseline	Design #2
Electricity Use	932,239 kWh	286,802 kWh
Electricity	\$89,703	\$27,597
Maintenance	\$45,650	\$464
HVAC	\$6,946	\$2,137
Taxes	\$778	(\$943)
Total	\$143,078	\$29,255
Savings	--	(80 %) \$113,823

Comparison Metrics

	Baseline	Design #2
Life Cycle Cost	\$143,327	\$35,020
Net Present Value	--	\$108,307
Simple Payback	--	0.40 Years
Discounted Payback	--	0.42 Years
Internal Rate of Return	--	251.44 %
Modified Internal Rate of Return	--	46.80 %
Cost of Waiting	--	\$1,237/Month

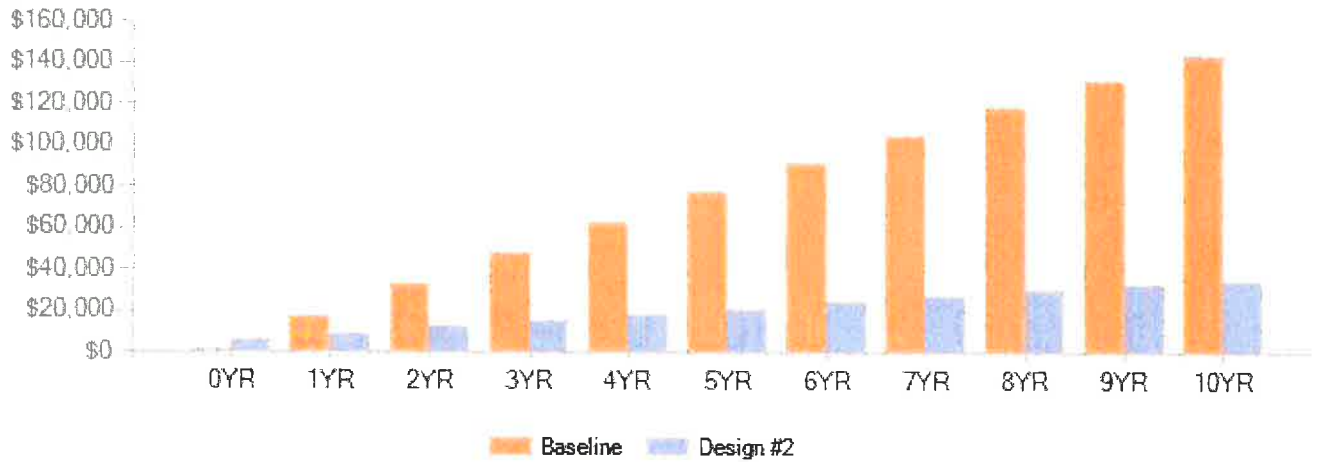
www.Visual-3D.com



Copyright 2021, Acuity Brands Lighting, Inc. Visual Economic Tool version: 2.0.0.3. While an attempt was made to insure that all calculations were correct Acuity Brands makes no warranty or guarantee on these results. All calculations based on user provided data.

Redbone Fire Station #5 Life Cycle Cost

Accumulated Redbone Fire Station #5 Life Cycle Cost



Redbone Fire Station #5 Life Cycle Cost Details

	Baseline	Design #2
Electricity		
Electricity Use	932,239.20 kWh	286,802.40 kWh
Electricity Cost	\$89,703.37	\$27,597.15
Luminaires		
Fixture Cost	\$235.15	\$3,489.00
Fixture Installation	\$0.00	\$2,066.67
Maintenance		
Lamp Changes	3,340.97	31.00
Lamp Cost	\$12,595.30	\$0.00
Ballast Changes	21.90	0.00
Ballast Cost	\$1,437.40	\$0.00
Disposal Cost	\$607.65	\$0.00
Maintenance Labor	\$31,009.65	\$463.89
HVAC		
AC Cost	\$7,223.82	\$2,222.40
AC Maintenance	\$3,852.97	\$1,185.36
Heating Reduction	(\$1,070.98)	(\$329.49)
Heating Maintenance Savings	(\$3,059.96)	(\$941.39)
Taxes		
Sales Tax	\$856.07	\$209.34
Income Tax Effect	(\$63.55)	(\$942.94)
Total		
Total Cost	\$143,326.89	\$35,019.99



Redbone Fire Station #5

Lee County Lighting Audit & ROI REV01

Luminaire Comparison

Baseline		Design #2		Design #3
Luminaire	Watts	Luminaire	Watts	Count
4LT8	128 16	4LTLEDT8	48	16
4LT8 TROFFER		83887		
26wCFL	26 4	26LEDPLUGIN	10	4
26w CFL LAMP		81145		
60BR30FL	60 27	60BRTLED	8	27
60w BR30 LAMP		84986		
400w High Bay	458 15	400WTLED HIGH BAY	150	15
TH 400M A16GL (LEG 3, SC=1.8)		84115		



Leesburg Fire Stations #1 Summary

Lee County Lighting Audit & ROI REV01

Information

Name	Leesburg Fire Stations #1	Ceiling Type	
Group	Project	HVAC	Existing
Area	0.00	Description	

Assumptions

Hours of Operation		Labor Rates		HVAC	
Weekday	24 hours	Install	\$50.00	Cooling Hours	1,986 hours
Weekend	24 hours	Ballast	\$30.00	Heating Hours	5,460 hours
Annual	8,760 hours	Lamp	\$25.00	Cost per Therm	\$0.07
		Cleaning	\$15.00	Heat Initial Savings	\$2.00 \$/thm

Initial Costs

	Baseline	Design #2
Luminaires	\$223	\$1,394
Install	\$0	\$2,267
Sales Tax	\$13	\$84
Total	\$237	\$3,744

Average Year Operation Cost

Electricity Use	72,288 kWh	17,949 kWh
Electricity	\$9,116	\$2,263
Maintenance	\$4,226	\$70
HVAC	\$706	\$175
Taxes	\$22	(\$49)
Total	\$14,070	\$2,460
Savings	--	(83 %) \$11,610

10 Year Operating Cost (Present Value)

Electricity Use	722,875 kWh	179,492 kWh
Electricity	\$69,558	\$17,271
Maintenance	\$32,629	\$520
HVAC	\$5,386	\$1,337
Taxes	\$172	(\$377)
Total	\$107,744	\$18,752
Savings	--	(83 %) \$88,993

Comparison Metrics

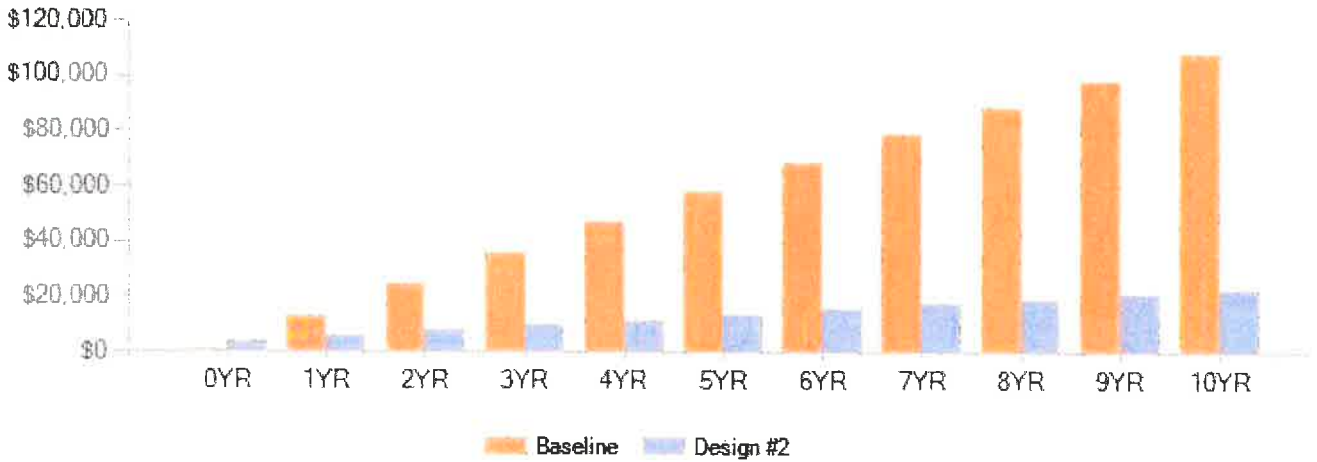
Life Cycle Cost	\$107,981	\$22,496
Net Present Value	--	\$85,485
Simple Payback	--	0.33 Years
Discounted Payback	--	0.34 Years
Internal Rate of Return	--	307.76 %
Modified Internal Rate of Return	--	49.86 %
Cost of Waiting	--	\$968/Month



Leesburg Fire Stations #1 Life Cycle Cost

Lee County Lighting Audit & ROI REV01

Accumulated Leesburg Fire Stations #1 Life Cycle Cost



Leesburg Fire Stations #1 Life Cycle Cost Details

	Baseline	Design #2
Electricity		
Electricity Use	722,875.20 kWh	179,492.40 kWh
Electricity Cost	\$69,557.62	\$17,271.40
Luminaires		
Fixture Cost	\$223.40	\$1,393.70
Fixture Installation	\$0.07	\$2,266.67
Maintenance		
Lamp Changes	3,254.34	61.00
Lamp Cost	\$3,385.50	\$0.00
Ballast Changes	17.52	0.00
Ballast Cost	\$482.52	\$0.00
Disposal Cost	\$435.17	\$0.00
Maintenance Labor	\$28,326.03	\$519.86
HVAC		
AC Cost	\$5,601.48	\$1,390.87
AC Maintenance	\$2,987.66	\$741.85
Heating Reduction	(\$830.46)	(\$206.21)
Heating Maintenance Savings	(\$2,372.75)	(\$589.16)
Taxes		
Sales Tax	\$245.49	\$83.62
Income Tax Effect	(\$60.38)	(\$376.66)
Total		
Total Cost	\$107,981.35	\$22,495.93



Leesburg Fire Stations #1

Lee County Lighting Audit & ROI REV01

Luminaire Comparison

Baseline			Design #2			Design #3		
Luminaire	Watts	Count	Luminaire	Watts	Count	Luminaire	Watts	Count
4LT8	128	25	4LTLEDT8	48	25			
4LT8 TROFFER			83887					
8FT2LT8	216	8	8FT 4LTLED	48	8			
8ft 4LT8 STRIP			83887					
60A19	60	25	60ALEDA19	9	25			
60W A19 LAMP			83974					
400w Wall Pack	456	4	400WTLED WALL PACL	60	4			
TWH 400M (PULSE)			84030					



Smithville Fire Stations #4 Summary

Lee County Lighting Audit & ROI REV01

Information

Name	Smithville Fire Stations #4	Ceiling Type	
Group	Project	HVAC	Existing
Area	0.00	Description	

Assumptions

Hours of Operation		Labor Rates		HVAC	
Weekday	24 hours	Install	\$50.00	Cooling Hours	1,986 hours
Weekend	24 hours	Ballast	\$30.00	Heating Hours	5,460 hours
Annual	8,760 hours	Lamp	\$25.00	Cost per Therm	\$0.07
		Cleaning	\$15.00	Heat Initial Savings	\$2.00 \$/thm

Initial Costs

	Baseline	Design #2
Luminaires	\$223	\$1,010
Install	\$0	\$1,800
Sales Tax	\$13	\$61
Total	\$236	\$2,870

Average Year Operation Cost

Electricity Use	48,881 kWh	12,614 kWh
Electricity	\$6,164	\$1,591
Maintenance	\$2,221	\$77
HVAC	\$478	\$123
Taxes	\$8	(\$35)
Total	\$8,870	\$1,756
-Savings	--	(80 %) \$7,114

10 Year Operating Cost (Present Value)

Electricity Use	488,808 kWh	126,144 kWh
Electricity	\$47,035	\$12,138
Maintenance	\$17,150	\$578
HVAC	\$3,642	\$940
Taxes	\$59	(\$273)
Total	\$67,886	\$13,383
Savings	--	(80 %) \$54,503

Comparison Metrics

Life Cycle Cost	\$68,122	\$16,253
Net Present Value	--	\$51,869
Simple Payback	--	0.40 Years
Discounted Payback	--	0.42 Years
Internal Rate of Return	--	250.83 %
Modified Internal Rate of Return	--	46.82 %
Cost of Waiting	--	\$593/Month

www.Visual-3D.com

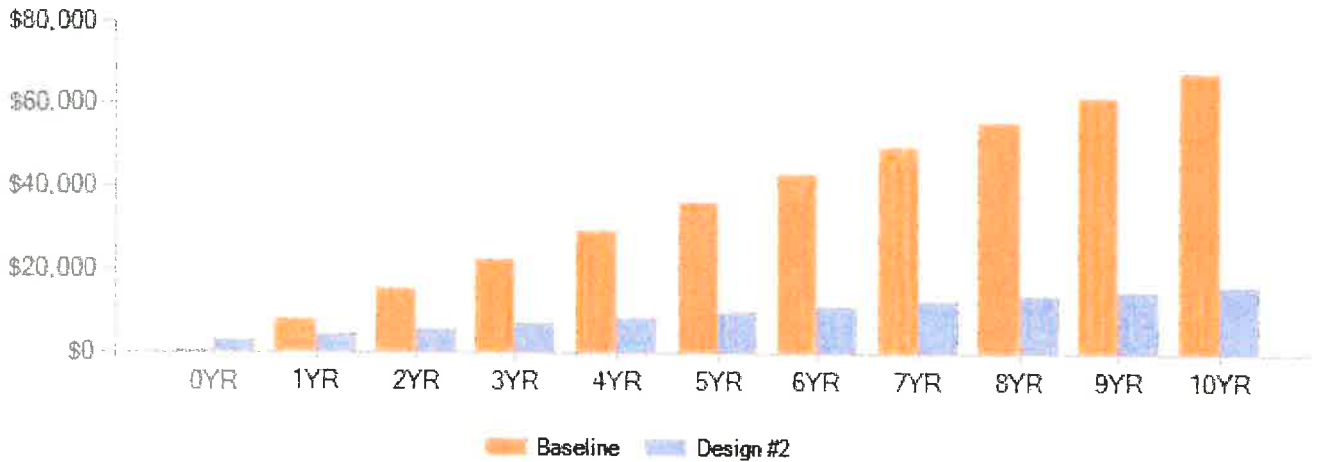


Copyright 2021, Acuity Brands Lighting, Inc. Visual Economic Tool version: 2.0.0.3. While an attempt was made to insure that all calculations were correct Acuity Brands makes no warranty or guarantee on these results. All calculations based on user provided data.

Smithville Fire Stations #4 Life Cycle Cost

Lee County Lighting Audit & ROI REV01

Accumulated Smithville Fire Stations #4 Life Cycle Cost



Smithville Fire Stations #4 Life Cycle Cost Details

	Baseline	Design #2
Electricity		
Electricity Use	488,808.00 kWh	126,144.00 kWh
Electricity Cost	\$47,034.84	\$12,138.02
Luminaires		
Fixture Cost	\$222.60	\$1,009.80
Fixture Installation	\$0.13	\$1,800.00
Maintenance		
Lamp Changes	1,752.00	90.00
Lamp Cost	\$1,751.94	\$0.00
Ballast Changes	27.74	0.00
Ballast Cost	\$235.62	\$0.00
Disposal Cost	\$216.46	\$0.00
Maintenance Labor	\$14,945.95	\$577.57
HVAC		
AC Cost	\$3,787.72	\$977.48
AC Maintenance	\$2,020.25	\$521.36
Heating Reduction	(\$561.56)	(\$144.92)
Heating Maintenance Savings	(\$1,604.45)	(\$414.05)
Taxes		
Sales Tax	\$132.61	\$60.59
Income Tax Effect	(\$60.16)	(\$272.91)
Total		
Total Cost	\$68,121.95	\$16,252.94



Smithville Fire Stations #4

Luminaire Comparison

Baseline			Design #2			Design #3		
Luminaire	Watts	Count	Luminaire	Watts	Count	Luminaire	Watts	Count
2LT8	64	4	2TLEDT8 83887	24	4			
2LT8 TROFFER								
4LT8	128	7	4LTLEDT8 83887	48	7			
4LT8 TROFFER								
8FT2LT8	216	15	8FT 4LTLED 83887	48	15			
8ft 4LT8 STRIP								
60A19	60	12	60ALEDA19 83974	9	12			
60W A19 LAMP								
26wCFL	26	18	26LEDPLUGIN 81145	10	18			
26w CFL LAMP								

