

## **OICF Grant Catalogue Proposal**

### **Actors Theater Theatrical Lighting Replacement Project**

#### **Project Description:**

New Theater Lighting for Actors Theater- This project will replace the current lights with new multi-purpose, energy efficient lights. The project will accomplish the following goals:

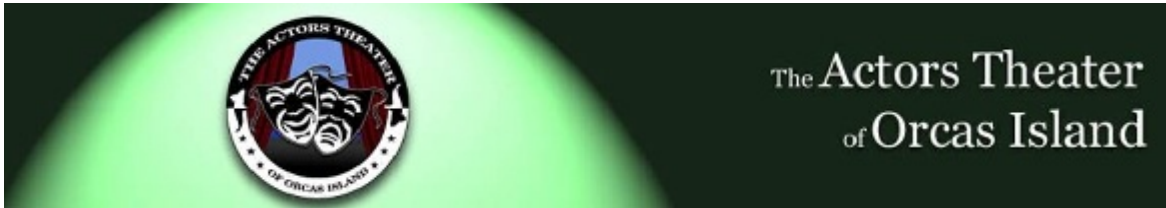
- 1) Improve Safety
- 2) Energy Savings (up to 90%)
- 3) Enhancement of productions
- 4) Upgrade technology

We have tested the proposed new system to be sure we can accomplish to stated goals with this grant. Thanks to a donor, we were able to purchase and install a few of the proposed lights to test them in the theater. We used the new lights in Barefoot in the Park. This clearly validated that the new lights will work with current electrical and computer systems while providing the functionality to enhance performances. Actors Theater is a tenant at the Grange. While the Grange is technically responsible for building and site, Actors Theater has funded and installed several upgrades for the Grange. This project continues that effort. Actors Theater prides itself in keeping our ticket prices at \$10. This grant will ensure that we can upgrade the lights without upgrading the ticket prices!

#### **Problem: )**

Safety: The configuration of the theater require ladders to make changes to the current lights, which is done multiple times for each play. This poses a safety risk. Besides climbing and lifting heavy equipment, the ladder has to straddle the seating. The new light system will eliminate this hazard. Everything we do on the ladder will be controlled by the computer. Once up, changes and adjustments will be made on the computer instead of the ladder.

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Energy Efficiency: Energy wise, fewer lights are needed because 1 of the new lights does the work of 5 older lights. Plus each of the new lights use less energy- **almost 90%** less than the current lights. Because of this, OPALCO has agreed to assist with a submission of this project to the BPA rebate program. The rebate will be used by Actors Theater to upgrade the computers.

Not just for Actors Theater: This is the last step in Actors Theater funded energy projects for the Grange. ATOI believes that helping the Grange by reduce operating costs keeps the building available for the community. Actors Theater has completed other upgrades- the parking lot lights, building lights and a new heating system to name a few.

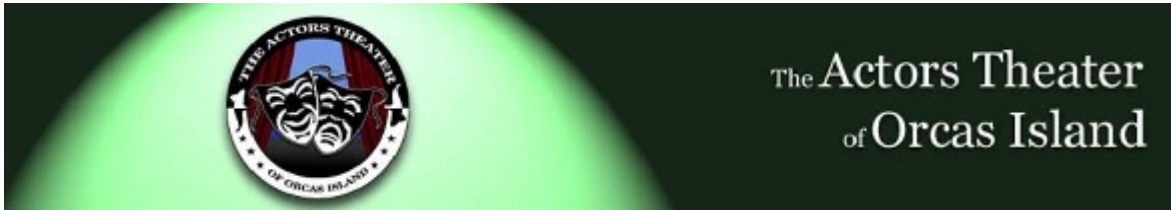
## **Project Outcomes:**

In addition to the stated goals (which we are very confident will be meet) this project has other benefits. Actors Theater prides itself in serving a broad spectrum of the community. From performances, socializing and teaching, Actors Theater is a true community theater. A good front stage, however, requires a great back stage. This system technical upgrades will give a platform for budding new technicians to learn the lighting craft.

The new lights provide effects that enhance tone and texture of the play. Putting our hard working actors in the best light while getting our technicians off the ladders is a win-win! Just with test system we have enhanced the performances to great effect.

This project will be installed and running within 3 months of funding. Installation and set up will be provided by volunteers. The Grange leases the space to Actors Theater and many other groups. This project will reduce the operating costs of the Grange to help maintain the building for the entire community. Theater lighting equipment made surplus by this project will be donated to other local non-profit organizations such as The Funhouse, the schools and Orcas Center.

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## Before and after proof of concept

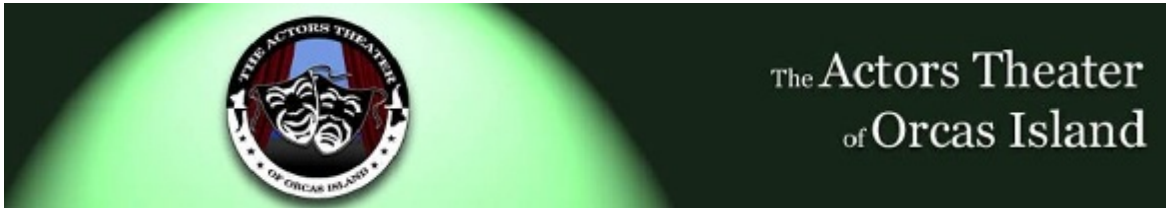
**Before: flat white, limited dimension:**



**After: Addition of new lights test project:**



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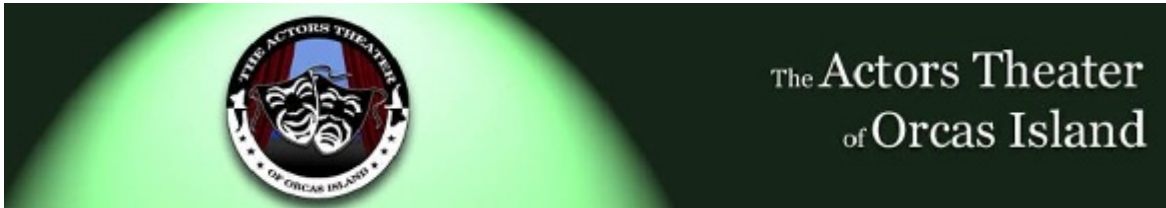
The Actors Theater  
of Orcas Island

## Cost/Budget

Actors Theater Lighting Upgrade Budget OICF Grant Program				
Item	Colors	Unit Cost	Quantity	Total Cost
Blizzard Zoom Light	RGBAW	\$500	12	\$6,000
Chauvet Light	RGBAWUV	\$300	12	\$3,600
Source 4 Fixture retrofit-upgrade	W	\$600	4	\$2,400
Side light mounting pipes		\$500	2	\$1,000
Wireless Control (TX)		\$100	1	\$100
Wireless Control (RX)		\$90	8	\$720
Laptop External Monitor		\$350	1	\$350
Misc cables and accessories		\$300	1	\$300
Freight and shipping		\$500	1	\$500
	Total			\$14,970
	Less ATOI proof of concept			<b>-\$3,000</b>
	<b>Grant Application</b>			<b>\$11,970</b>
Note: All fixture prices include Edison plug, Clamp and Safety cable				

OPALCO participation the project is not currently included in the budget. The rebate will be used to purchase new computers.

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The Actors Theater  
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### **Current board members:**

Doug Bechtel, President, Treasurer

Kate Hansen, Vice President

Lynda Sanders, Secretary

Melinda Milligan

Tom Fiscus

Aimee Johnson

Thelma McTavish

Tony Lee

Annual budget and current financial statement (balance sheet and P&L)

SEE ADDENDUM #1

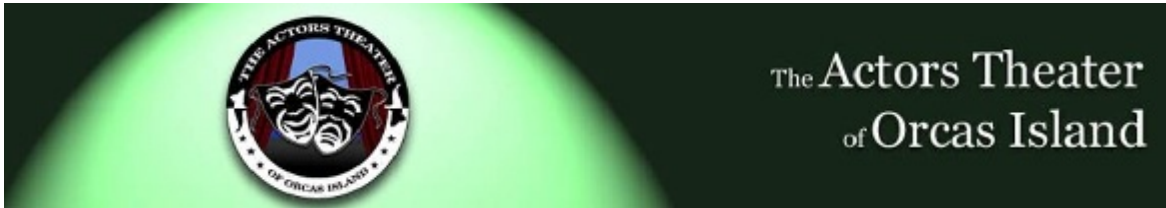
### **Mission Statement and History**

The Actors Theater of Orcas Island (ATOI) is an all volunteer organization that focuses on training individuals involved in the theater. The only people who are compensated are instructors in our training programs and the occasional traveling theatrical production.

The Actors Theater evolved out of a Readers Theater program operated by Orcas Center in the mid 1990's. Between 1996 and 2002, when the initial renovation of the Grange was completed, the Readers Theater program, with an occasional full production, moved from venue to venue each night. The Actors Theater has presented productions at the Olga Community Club, Rosario, The Deer Harbor conference room, outdoors at the Deer Harbor Resort, the West Sound Community Club and many locations in the Eastsound area. Occasionally our productions have been presented on Lopez, Shaw and San Juan Islands. During this period ticket prices were set at \$5 for adults and lesser amounts for children.

In 1999, the founders of The Actors Theater saw that the theatrical and training programs were becoming an integral part of the Orcas Island arts community and decided to incorporate as a non-profit corporation. Shortly thereafter, the 501(c)(3) designation was granted by the IRS. A few years later, The Actors Theater was designated as a 509(a)(2) publicly supported organization.

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In its early years, The Actors Theater received two grants from OICF – one for portable sound equipment and one for portable lighting equipment.

In 2002, The Actors Theater joined with a few Grange members to undertake a complete renovation of the interior of Grange building with the goal of turning it into a performance space. When the renovation was completed, ticket prices were raised to \$10 for adults to cover the additional operating expenses. Sixteen years later, our ticket prices remain at \$10.

No one is ever turned away from a performance due to an inability to pay the \$10. (We would rather have them see the show for free than not see it at all – ATOI is not going to receive any revenue either way.) We have a maximum of \$30 for a family to see a performance. We have a “One Ticket” rule for families of people involved with the show: If they buy one ticket per person, they can see the show every night.

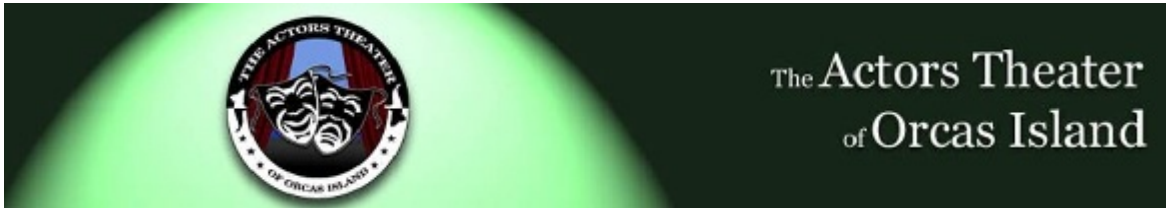
The Actors Theater continues to work closely with Orcas Center, frequently sharing personnel, costumes and equipment. ATOI has presented several productions at Orcas Center, as a rental, joint productions and supporting an Orcas Center Production.

With the exception of our new seats at the Grange, The Actors Theater does not do fundraising. Ticket sales meet almost all of our operating expenses. Unsolicited donations are normally used for capital expenses such as renovating older light fixtures, replacing lighting and sound equipment that has reached the end of its life.

It has been 16 years since the Actors Theater moved into the Grange. The cost of everything has increased. The single biggest increase has been the cost of electricity. Electric costs are now the single largest operating cost of the Grange, exceeding oil heating costs, insurance and property taxes. Electric costs now amount to almost  $\frac{1}{4}$  of the total annual expenses of the Grange. Last fall, we received an unsolicited donation to replace the electric heat in the Grange kitchen. This project is underway. Several years ago we received a small grant from OPALCO to replace some of the building fluorescent lighting fixtures.

In early 2017, The Actors Theater received a significant, unsolicited anonymous donation. We have used a portion of that grant to test several available LED lighting fixtures. Some of the fixtures were returned to the supplier as unsuitable for our needs. We ultimately settled on two fixtures styles and

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purchased a few of each along with the necessary ancillary equipment for approximately \$3,000. We used these new light fixtures, along with the existing incandescent light fixtures as a "Proof of Concept" on our current production of "Barefoot In The Park". These LED lights have exceeded our initial expectations. We are now prepared to go forward and replace the remaining large incandescent light fixtures with state-of-the-art LED lighting fixtures.

### **Selection of LED Fixtures:**

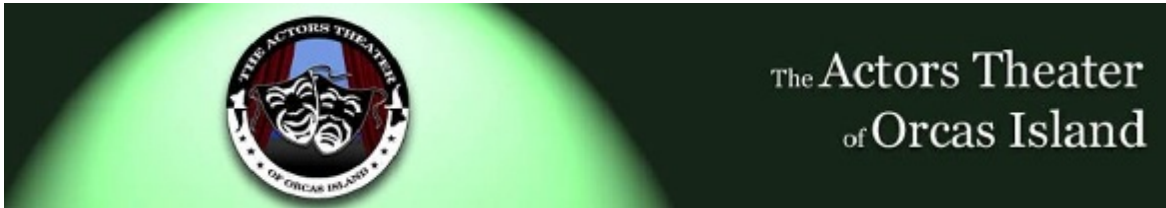
The Actors Theater has been involved with the emerging LED Theater Light effort since 2009 when we bought our first LED light for routine use in our productions. Our purchase of a "Mega-Bar-Pro" for \$450 showed us that the state of the art in theater lighting was not ready for widespread use. The Mega Bar had 27 1 Watt LED's - 9 each of red, green and blue LED's. In theory these three colors were all that was needed to make any color. In practice, white light is made up of many colors not just the three primary colors. The white generated by the Mega Bar always had a gray tinge. The light was also advertised as "dimnable" which was just partly true. It would dim down to about 20% of rated power then abruptly went to zero light. On the positive side, this fixture had internal dimmer technology which eliminated the need for the external high power dimmer needed for the 500 watt halogen light fixtures which had formed the backbone of theater lighting for decades. Having the dimmer built into the fixture meant that the lighting signal from the computer had to be wired directly into the light requiring the addition of signal wiring into the ceiling of the Grange.

Our next exploration of LED lighting came in late 2015 and early 2016 when we purchased two white LED lights. These lights used 92 Watts far below the 500 Watts used by the then current lights. These lights were remotely dimmed by small dimmers located at the source of the power. We determined that this generation of LED lights was not appropriate for lighting our shows but the energy savings were significant and we ultimately replaced the 1,000 Watts of rehearsal lighting with 184 Watts of LED lighting.

During 2016, we also replaced 900 Watts of house lighting with 120 watts of LED lighting providing brighter and more even lighting of the audience area.

Late 2016 and early 2017 saw two major advances in LED lighting: Multiple colors in a single LED and wireless communications between the controlling computer and the light fixture. 2017 also saw

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several new companies making and selling LED Lights and existing companies adding LED lights to their equipment line-up. In early 2017, we received a major (for us) donation from an anonymous donor that enabled us to purchase several LED light fixtures specifically made for theatrical use. Several were returned to the supplier because they were not suitable for our use. For example, two fixture types had internal fans that would be heard by the audience.

In the summer of 2017, we found a fixture that met our needs and was affordable. We tested the single fixture we had purchased in our production of "The Other Place" with very good results. In early 2018, we purchased several other fixtures for our "Proof of Concept" to see how they would work under actual performance conditions. The Proof of Concept allowed us to replace 1/4 of our Halogen lights. The results far exceeded our expectations. The Proof of Concept also allowed us to calculate energy savings. We expect to save a minimum of 80% of the theatrical electric usage and possibly as much as 90% savings.

A spreadsheet summarizing the savings is available upon request.

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