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# Corey Auditorium

## Keeping the Lights On

Jeremy Behrle

47 Hart Farm Rd

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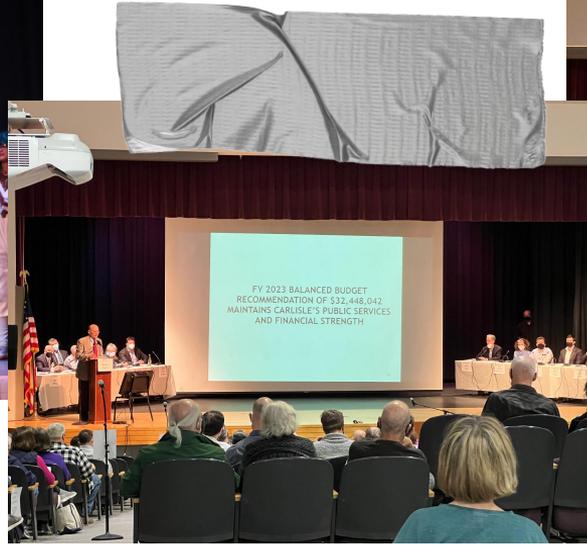
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How many different  
groups use  
Corey Auditorium?

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**All of us!**

# School, Town, Community!





## Meet David.

He volunteers

To replace “light bulbs” in Corey

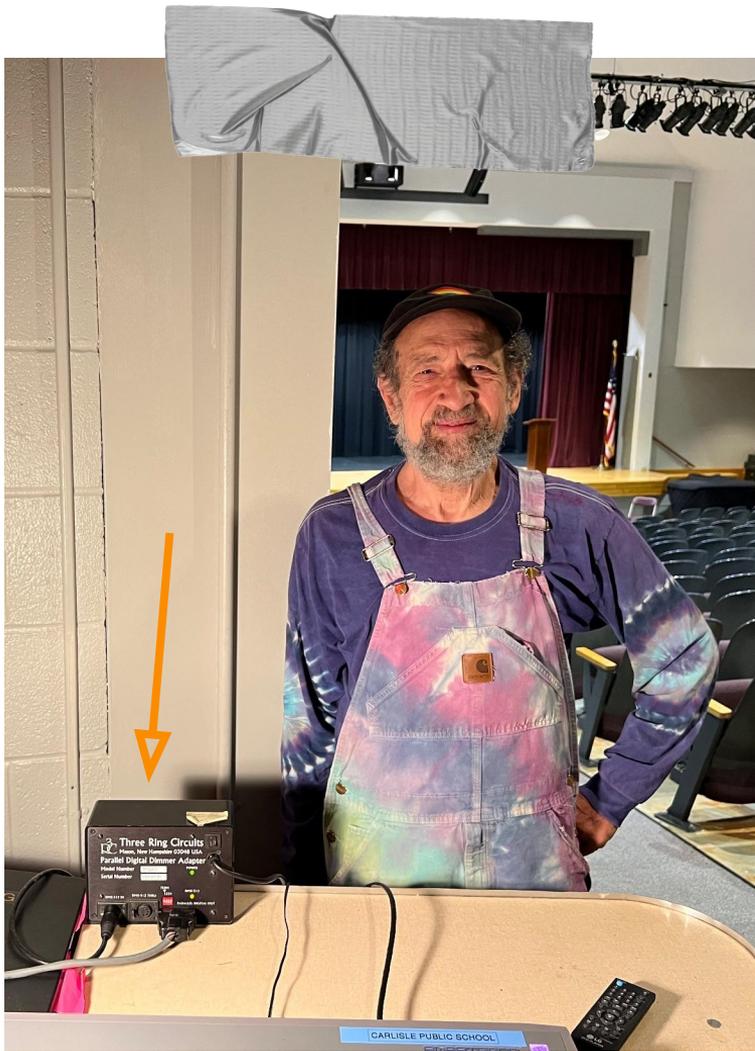
On a ladder, wearing no shoes.



## It's a tall Ladder

20% of the bulbs David replaces...

Fail again before the show even starts.

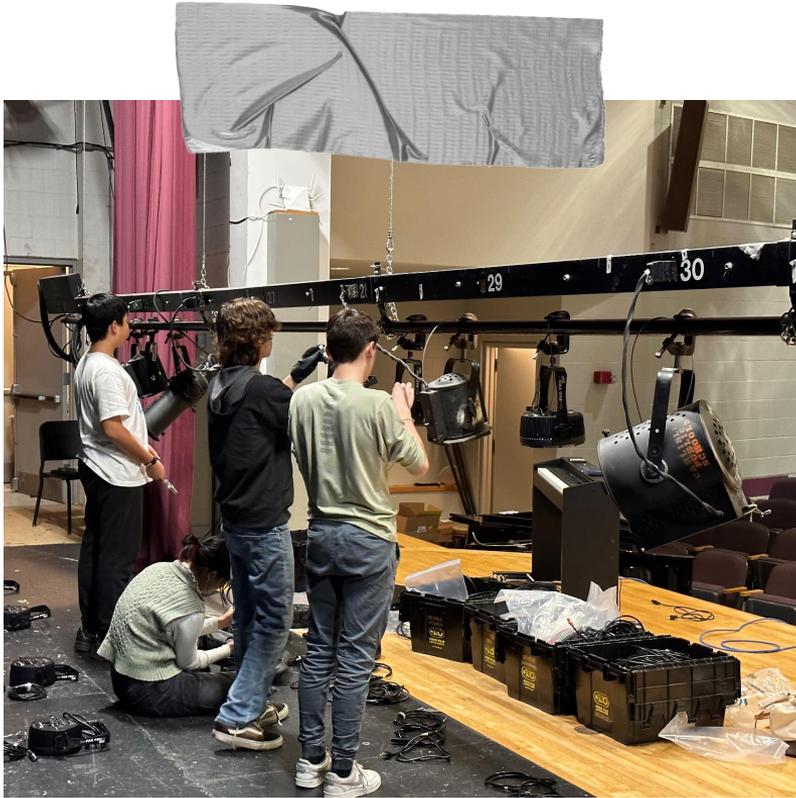


## Meet Mike.

He volunteered

He invented a box, that lets us control Corey's lights

We haven't needed to make any significant investments in 20 years, because of his box.



## Meet our Students

They volunteer

They install borrowed lights

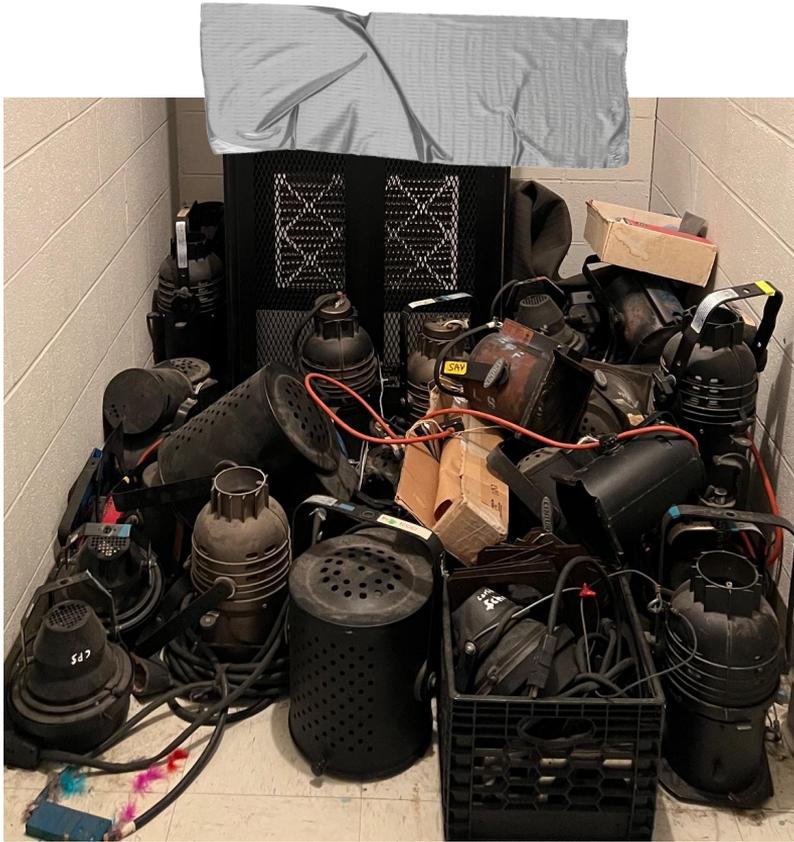
They design the lighting cues

They run the show with a borrowed light board.



# Three Problems

- Old Fixtures
- Failing Dimmer Packs
- Controlling the System



## Problem #1:

The fixtures in Corey are 40 years old, power-hungry, and failing.

- Replacement “lamps” (lightbulbs) cost \$1,500/yr.
- 3 rows of seats need to be removed and reinstalled to re-lamp (+ facilities labor).
- Liability of having a volunteer on a 20’ ladder 2-3x year.
- The lights consume ~12 households of electricity, not including HVAC.

# Problem #2

## Dimmer packs are failing

- Dimmer packs power the lights
- The manufacturer went defunct in 2011
- Volunteers scavenged a few dimmer packs to help keep Corey going
- Dimmer packs continue to fail.



# Problem #3:

## Unreliable & Unsupported Control System

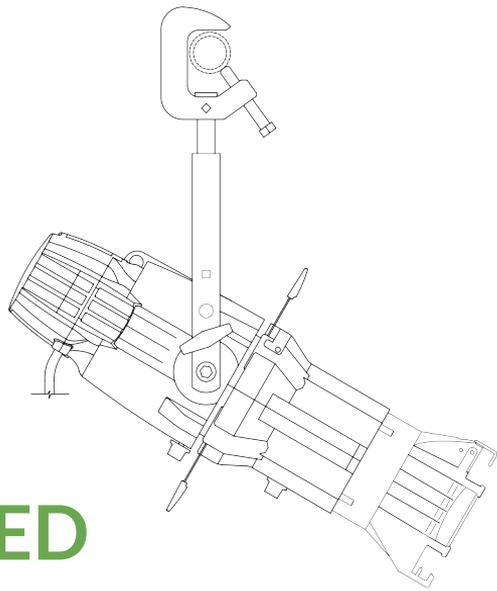
- Home-grown translator box needed to talk to our lighting system.
- Volunteers have repaired the control system 4 times in 10 months.
- Teachers & students find it difficult to learn & run.





# Proposals

- Stop most pressing pain point + save some electricity
- Think towards future (stop more pain + buy some time + save more electricity)
- Invest in Corey's Future (Reliability, Energy Savings, Ease of Use)



**LED**

## Front Fixtures

**Cost: \$75K**

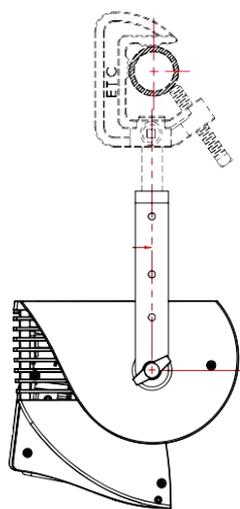
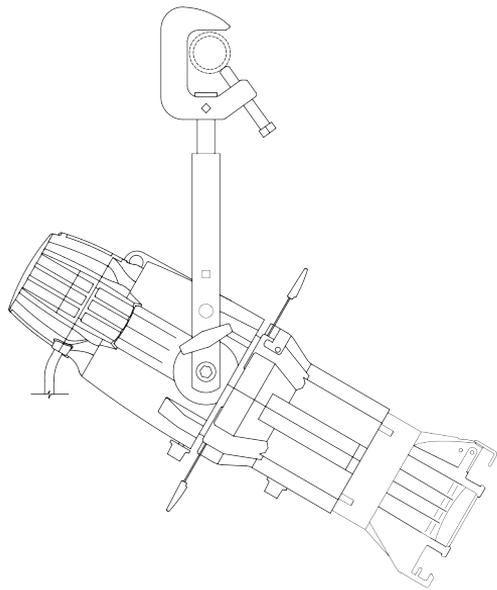
## New Front Fixtures + Lightboard

### Pros:

- LED = Power savings
  - 54,000W to 40,000W (26%)
- No more bulb costs for 32 fixtures
- Less frequent ladder climbs
- Some improved FOH Reliability
- Easier to run lightboard

### Cons:

- Ladder still needed to gel, focus, & clean
- Other major system issues not addressed, locked in, will always need to gel FOH



**COLOR LED**

## Front & Cyc Fixtures

**Cost: \$150K**

## Front & Cyc Fixtures + Lightboard

### Pros:

- LED = Power savings
  - 54,000W to 26,000W (52%)
- No more bulb costs for 90+ fixtures
- Ladder climbs every 2-3 years
- Improved FOH & Cyc Reliability
- Easier to run lightboard
- Buy more time, reuse some dimmer packs
- Color on front & cyc, no more gels

### Cons:

- Other major system issues not addressed
- Kicking dimmer & control issues until later



## New Corey System

**Cost: \$280K**

## Full Corey Lighting Refresh

### Pros:

- LED = Power savings
  - 54,000W to <9,000W (83%)
  - Smart breakers save fixture life
- No more bulb costs (120 fixtures)
- Ladder climbs every 2-3 years
- Reliability - think in decades
- Touch presets for band, chorus, etc
- Color everywhere

### Cons:

- Ladder still needed for maintenance
- Spotlights not addressed



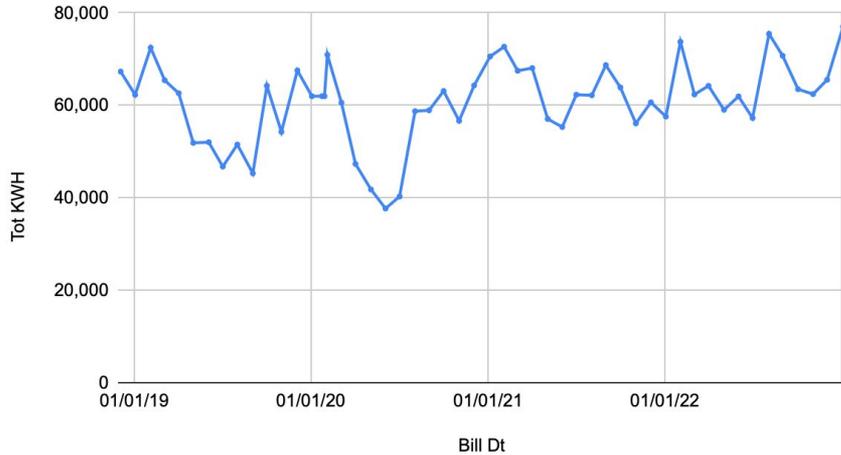
# Drama, Music, Chorus, and Theatre Tech = Vital Enrichment

Developing self-confidence,  
collaboration, problem-solving,  
communication skills, social  
interaction, technical skills, and  
talents.

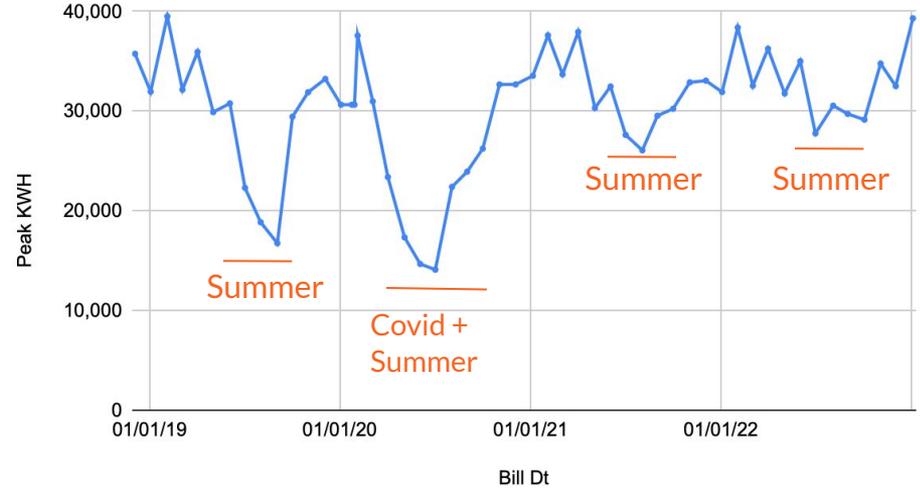
# Thank You!

# Back-up: Corey Building Power Rebates?

Total Corey KWH vs. Bill Date



Peak KWH vs. Bill Date



**Inconclusive? Corey Building uses a lot of power ALL THE TIME in 2021 & 2022???**