

Laser Request

John Dubelko, Scott Silvers and Jesse Maloney



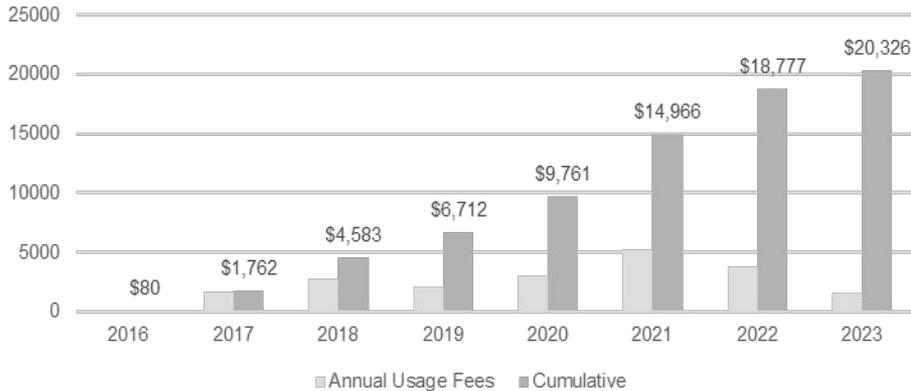
Executive Summary

For less than the cost of replacing the old ULS laser with a current ULS, can put lasers at both Purcellville and Leesburg and recoup the costs in approximately 4 years

- The laser is one of the most popular tools at Makersmiths and is used by individuals and as part of make and take classes
- The current laser is aging to the point it will need either significant investment or replacement, yet it has a good resale value
- Recommendation is to evolve to lasers at both locations, starting with a smaller used Thunder in Purcellville and then a larger Thunder in Leesburg
- Common platform sized to each locations needs and limitations
- Allows a gradual transition to the Thunder platform and the sale of existing ULS to reduce cash outlay.

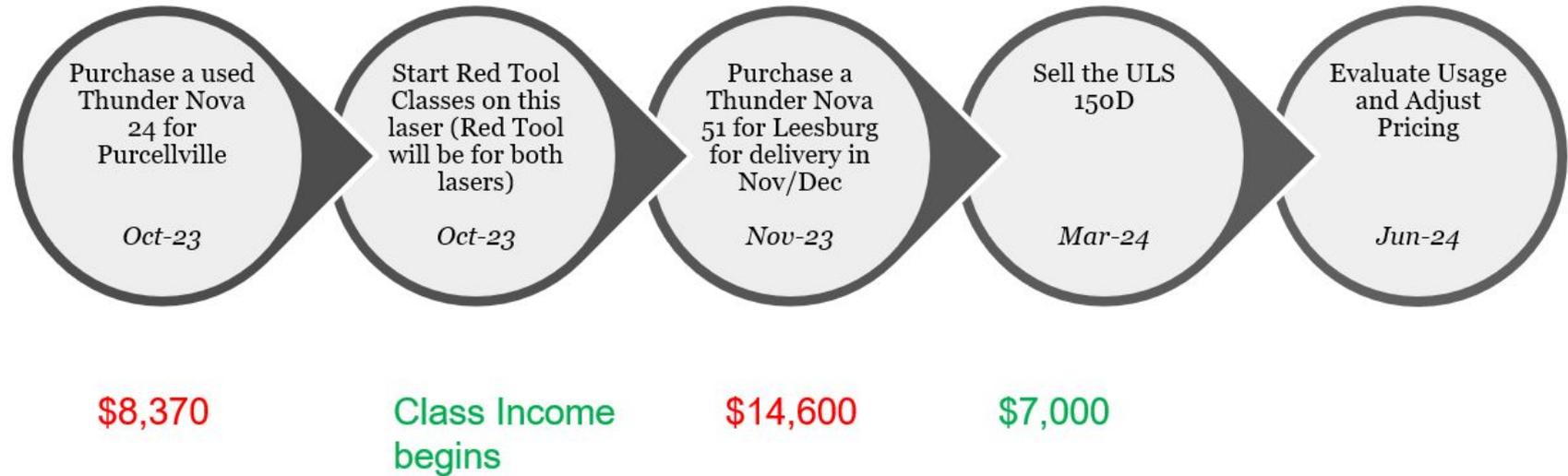
Current Laser

- ULS 150D with 100 watts
- Original Price \$21K
- Leased in Nov 2015 (almost 8 years ago)
- Fees: \$6 an hour, 1 hour free a month



*Current Laser has generated more than **\$32k** in combined usage and class fees since 2016, not including make-n-take classes*

Laser Replacement Plan



Laser for Purcellville (Lower Building)

- Used Thunder NOVA 24 with 60 watt source
 - Bed size is 23.6" x 15.7" x 6.1" includes a bypass door
 - 1.5" and 2" lens
 - Water chiller, air compressor and exhaust
 - Two 120W circuits
 - 100 hrs on the machine, less than a year old
 - Asking \$5,500
- Additional Equipment
 - Rotary Tool (\$1,400)
 - Camera (\$400)
 - 4" optics (\$300)
 - Lightburn Controller (Software) (\$120)
 - Corel Draw (\$150)
 - Miscellaneous (\$500) (wiring, table, vent hookup)
- Total \$8,370



This is a time sensitive opportunity as a lightly used machine has recently come onto the market



Leesburg Laser Replacement (Main Room)

- Thunder NOVA 51
 - 130W
 - Bed size 51.2" x 35.4" x 9.1"
 - Two pass through doors to support a 4"x 8" sheet
 - Two 120W circuits
 - Water Chiller
 - Price \$13,400 usually includes shipping
- Additional Items
 - High definition lens (\$300)
 - Camera (\$400)
 - Misc (\$500) (Ventilation, Power, other)
- Total \$14,600



New laser meets or exceeds all current capabilities, but includes a camera and ability to support up to a 4'x8' sheet instead of the current 18"x32" limitation

Total costs

Purcellville	Price	Subtotal
Thunder NOVA 24	\$5,500	
Additional Items	\$2,870	\$8,370
Leesburg		
Thunder NOVA 51	\$13,400	
Additional Items	\$1,200	\$14,600
	Total	\$22,970

Fees - Option 1 Full Investment Recoup

Year	Revenue	Usage Per month	Average
2023	\$1,549	43.03	
2022	\$3,811	52.93	52.65
2021	\$5,205	72.29	
2020	\$3,049	42.35	
2019	\$2,129	29.57	
2018	\$2,821	39.18	
2017	\$1,682	23.36	

- Average Monthly Usage was 53 times between 2023 (July) and 2020
- Payback over 4 yrs would be charging **\$9-\$10** an hour
- Classes: \$30 members, \$40 non-members

\$ 22,970.00	1yr	2yr	3yr	4yr	5yr
1 hr cost	\$1,914.17	\$957.08	\$638.06	\$478.54	\$382.83
\$3.00	638.1	319.0	212.7	159.5	127.6
\$4.00	478.5	239.3	159.5	119.6	95.7
\$5.00	382.8	191.4	127.6	95.7	76.6
\$6.00	319.0	159.5	106.3	79.8	63.8
\$7.00	273.5	136.7	91.2	68.4	54.7
\$8.00	239.3	119.6	79.8	59.8	47.9
\$9.00	212.7	106.3	70.9	53.2	42.5
\$10.00	191.4	95.7	63.8	47.9	38.3
\$11.00	174.0	87.0	58.0	43.5	34.8
\$12.00	159.5	79.8	53.2	39.9	31.9
\$13.00	147.2	73.6	49.1	36.8	29.4
\$14.00	136.7	68.4	45.6	34.2	27.3
\$15.00	127.6	63.8	42.5	31.9	25.5
\$20.00	95.7	47.9	31.9	23.9	19.1
\$25.00	76.6	38.3	25.5	19.1	15.3
\$30.00	63.8	31.9	21.3	16.0	12.8

Fees - Option 2 Selling the Old Laser

Year	Revenue	Usage Per month	Average
2023	\$1,549	43.03	
2022	\$3,811	52.93	52.65
2021	\$5,205	72.29	
2020	\$3,049	42.35	
2019	\$2,129	29.57	
2018	\$2,821	39.18	
2017	\$1,682	23.36	

- Average Monthly Usage was 53 times between 2023 (July) and 2020
- \$7,000 from old laser
- Payback over 4 yrs would be charging **\$6-\$7** an hour
- Classes: \$30 members, \$40 non-members

\$ 15,970.00	1yr	2yr	3yr	4yr	5yr
1 hr cost	\$1,330.83	\$665.42	\$443.61	\$332.71	\$266.17
\$3.00	443.6	221.8	147.9	110.9	88.7
\$4.00	332.7	166.4	110.9	83.2	66.5
\$5.00	266.2	133.1	88.7	66.5	53.2
\$6.00	221.8	110.9	73.9	55.5	44.4
\$7.00	190.1	95.1	63.4	47.5	38.0
\$8.00	166.4	83.2	55.5	41.6	33.3
\$9.00	147.9	73.9	49.3	37.0	29.6
\$10.00	133.1	66.5	44.4	33.3	26.6
\$11.00	121.0	60.5	40.3	30.2	24.2
\$12.00	110.9	55.5	37.0	27.7	22.2
\$13.00	102.4	51.2	34.1	25.6	20.5
\$14.00	95.1	47.5	31.7	23.8	19.0
\$15.00	88.7	44.4	29.6	22.2	17.7
\$20.00	66.5	33.3	22.2	16.6	13.3
\$25.00	53.2	26.6	17.7	13.3	10.6
\$30.00	44.4	22.2	14.8	11.1	8.9

Alt Purcellville Lasers

Used Thunder NOVA 24 \$5,500	New Thunder NOVA 24 \$7,400	New Thunder NOVA 36 \$10,900
60W	60W	100W
Bed 23.6" x 15.7" x 6.1"	Bed 23.6" x 15.7" x 6.1"	Bed 35.4" x 23.6" x 9.1"
Floor Area: 57.1" x 31.9" x 26"	Floor Area: 57.1" x 31.9" x 26"	Floor Area 59.1" x 43.5" x 40.9"
Additional Items: \$2,870	Additional Items: \$2,870	Additional Items: \$2,870
Total \$8,370	Total \$10,270	Total \$13,770
	Additional \$1,900	Additional \$5,400
Taxes not included	Taxes not included	Taxes not included

Questions to Thunder Laser

Thunder NOVA 51 has 130W source and circuits are 110-120W? How does it get the extra power?

Can we add antifreeze to the coolant?