

## State of the Union

**Recovery and Growth** 



"To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology heroes."











## **History of Ranger Robotics**

2009 - Started FIRST Robotics Challenge Team (FRC)

2012 - Introduced our first, FIRST Lego League Team (FLL)

2014 - 1 FLL team is implemented at each elementary school

2015 - 1 FIRST Tech Challenge Team is introduced (FTC)

2017 - 3 More FLL teams are introduced

2017 - 1, Jr. FIRST LEGO League Team is introduced

2018 - 10 Jr. FLL Teams Leagues Teams (Community Ed)

2019 - 2020 - 17 Jr. FLL Teams each year (Community Ed)

2020 - We introduced 2nd FIRST Robotics Challenge Team at the High School (2716

# "Everyone can go pro in our sport"

## What is FIRST at Spencerport

www.firstinspires.org





FIRST Lego League (FLL)

Grades 5 - 9



Grades 7 - 12

Grades 8 - 12



## What makes Ranger Robotics World Class!

- Full implementation of FIRST Programs
- ~300 Students K 12 (pre-COVID)
- Qualifying for the World Championships 9 out of the past 10 years (2013)
- Implementation of a district wide STEAM Day
- Partnership with The Rochester Prep Academy
- Two Woodie Flowers Award Winners (mentor of the year) (Justin Montois 14', Joe Gallina 15')

- 2019 Volunteer of the Year Award (Joe Kesler)
- 2010 and 2021 FIRST Dean's List Award Winners
- 4 Chairman's Awards
- 10 Regional Wins
- 1 Championship Division Win
- 2016 World Finalist
- 2021 FRC at Home 4th in the World Rankings

### What makes Ranger Robotics World Class!

Return on Investment

\$1,725,000

In Spencerport FIRST Scholarships



## **Pre COVID Participation Numbers**

Team	Participation	Grades
FRC 3015	91 Students	10 -12
FRC 2716	32 Students	8 - 9
8 FLL Teams	74 Students	5 - 7
*17 Jr. FLL Teams	102 Students	K - 4

#### 299 Robotics Students

#### **Notes of Interest:**

- Jr. FLL is a Community Ed. program
  - 30 plus students waitlisted in 2019
- We cannot advertise for our FLL programs
- FLL is limited to 10 students per team
- FTC (no longer offered) was limited to 16 students per team
  - 32 students on 2716 without advertising in the middle school



### **Post COVID Participation Numbers**

Team	Participation	Grades
FRC 3015	49 Students	8 -12
7 FLL Teams	58 Students	5 - 7

107 Robotics Students 2021-2022

Down 192 students from previous year

#### **Notes of Interest:**

- Jr. FLL did not run in the fall due to community programs COVID start up
- FLL was down one team. We could not find a coach
- FLL is limited to 10 students per team
- 3015 and 2716 combined due to participation numbers, mentors and financial considerations due to COVID
- We did not advertise in the middle school



### **COVID's Impact on Mentors (Volunteers)**

The success of our robotics team directly correlates with the amount of volunteers and professionals we have gathered.

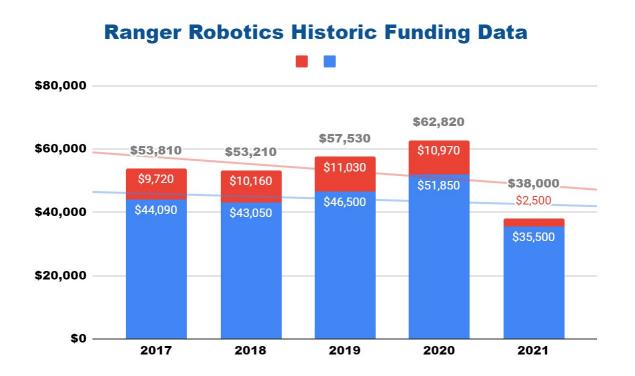
Our students from an early age work with industry leaders. These mentors show our students the proper way to approach a problem, ways to iterate a design, state of the art software and mechanical tools and industry standard marketing trends.

The ability to network with current professionals has led to lifelong professional relationships.

Team	2020	2022
FRC 3015	22	10
FRC 2716	13	0
FLL	6	6
Jr. FLL	48	0
Totals	89	16



### **COVID's Impact on Sponsors**



#### Losses:

Colins Aerospace - \$7,000 NASA Grant - \$5,000 Bosch - \$5,000 Baxter Medical - \$2,000 Delphi - \$2K PGM - \$1K Superior Tech - \$1000 Labella -\$500 SMP-\$500 Wolf Mech - \$500

#### **Gains:**

Teacher Geek - \$5K Lidestri - \$500



**Spencerport High School Spencerport High School** 

## Baxter **BAUSCH** Health

2020



Baxter

**BAUSCH** Health















**Gatti Plumbing** 

**Spencerport Federal Credit Union** 

## 2019 - 2020 Spencerport Robotics Cost Projection

	FRC 3015	FRC 2716	8 FLL	Jr. FLL	Totals
Registration	\$14,000	\$6000	\$2400	\$995	\$23,395
Robot Build	\$8,000	\$3,000	\$500	\$500	\$12,000
Outreach	\$500	\$200	\$100	\$0	\$800
Marketing	\$500	\$200	\$0	\$0	\$700
Off Season	\$800	\$350	\$0	\$0	\$1,150
Travel	\$~70,000	\$0	\$0	\$0	~\$70,000
Misc.	\$5,000	\$500	\$100	\$100	\$5,700
Totals	\$98,800	\$10,250	\$3,100	\$1595	\$113,745

- Spencerport does pay the \$2,400 FLL registration fee in March and does donate \$5K if we make championship to aid in student travel.
- Also note the district does lease a shared robotics space at \$7,000 per year



### **Recommendations for Recovery & Growth**

- -Team vs. Club
- -Additional Stipend Support
- -Budgeted Registration Fees
- -Dedicated Space for Robotics



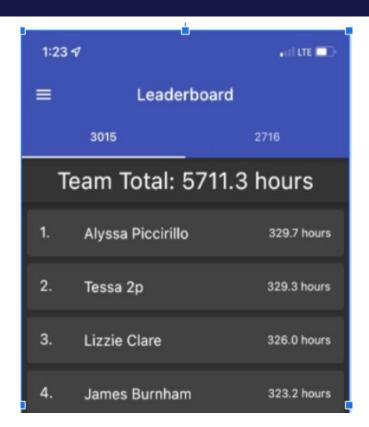
### Recommendation for Recovery & Growth: Academic Team vs. Club

#### Teams have budgets, clubs have pizza parties

- Yearly Budget
- Direct Advocate
- Facilities

- 5711.3 team hours since January 8, 2022
- 7 days a week
- Unpaid Mentor Hours

\*Shift Change at the high school





## Recommendation for Recovery & Growth: Additional Stipend Support

<sup>\*</sup> note I did combine Soccer on the last cell to directly compare a similar COED program

Program	Participation 9 - 12	# of Coaches	Coaches Salaries	Student:Coach
Boys Soccer	60	4	\$17,647	15:1
Girls Soccer	65	4	\$16,953	16:1
Football	72	8	\$36,026	9:1
Wrestling	41	3	\$15,754	14:1
Robotics	91	3	\$7,600	30:1
Soccer	125	8	\$34,600	15:1

Recommendation: 2 additional stipends - \$3500 each



<sup>\*</sup>Data was taken was taken from the BOE minutes and coaches survey for school year 2019/20

## Recommendation for Recovery & Growth: Budgeted Robotics Funds

School District	# of paid Coaches	# of Students	Salaries	District Contribution
Churchville - Chili	3	40	\$7,500	\$33,000
Fairport	3	35	\$12,000	\$30,000
Penfield	3	40	\$12,000	\$0
Spencerport	3	91	\$7,800	*\$5,000

- Churchville Information was gathered from Jason Rees CCSD FIRST Coordinator
- Fairport information was gathered from Dom Monacelli Fairport Assistant Principal
- Penfield information was gathered from David Weisbrod Penfield FIRST Coordinator
  \*L3Harris has supported Penfield since 2005 \$40,000 a year and additional funds if they qualify



## Recommendation for Recovery & Growth: Dedicated Space for STEM/Robotics

- Our classrooms at school are setup to meet the educational needs of our students, not the needs of a competitive robotics program.

#### **Current Set Up**

- 1 Wood Shop, 2 Computer Labs, Robotics Storage Room
- Warehouse off campus shared space between Hilton, Churchville and Spencerport

Recommendation: High School East Cafe, STEM Center, Onsite Pole Barn



## **Current District Support**

2- \$3,500 Stipends

1- \$1,200 Stipend

8-\$600 Stipends

1- \$7,000 Practice Space Lease

\*1- \$5,000 Championship Travel Assistance

\$20,000-\$25,000

## Team Desired Additional Support

2- \$3,500 Stipends

2- \$5,000 for Registration Fees (Regional)

1- \$5,000 Registration Fee (Championship)

\$22,000

Total Desired District Support \$42,000-\$47,000