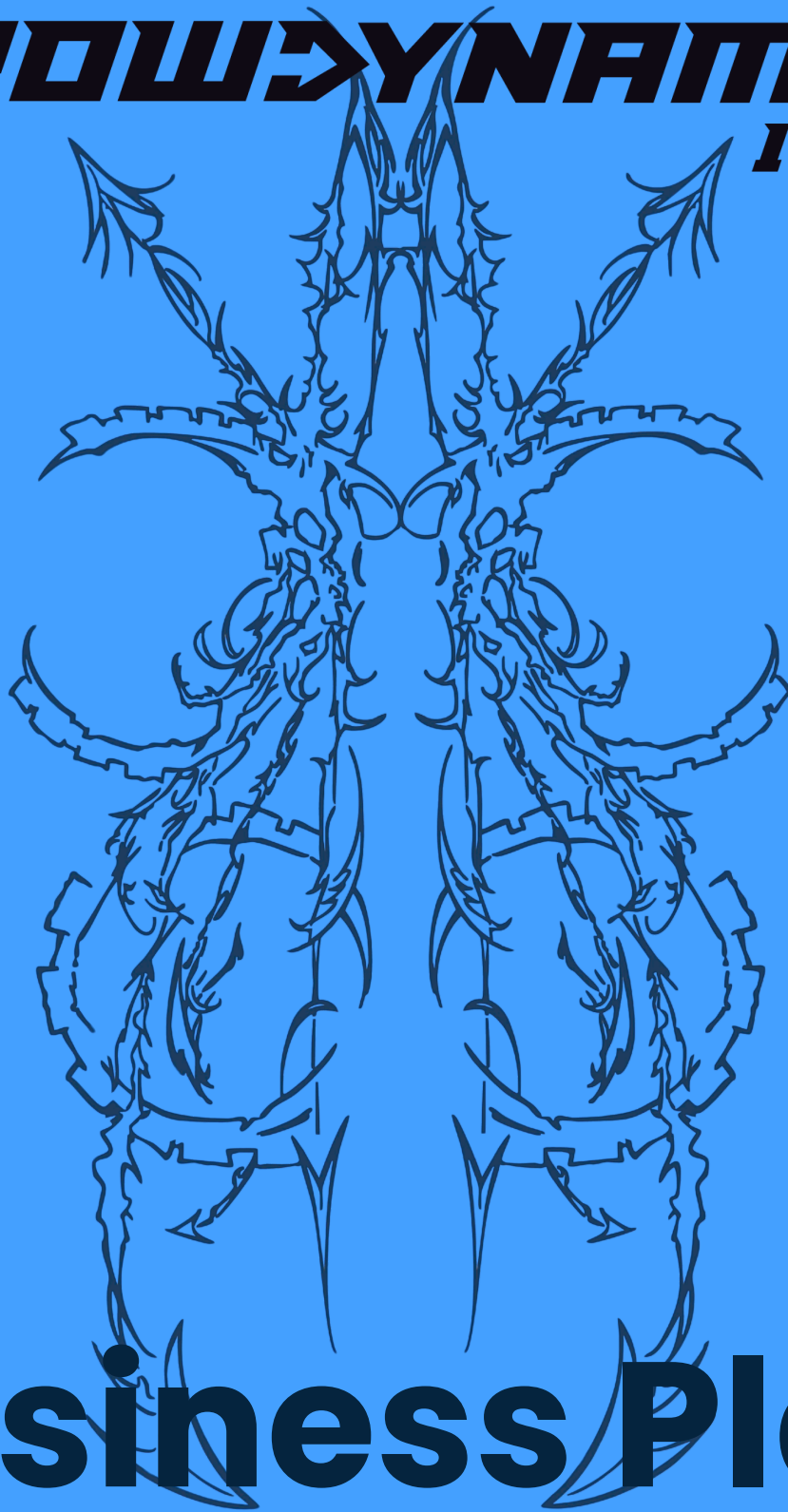


# ARROWDYNAMICS

10079



# Business Plan



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# About Us



## Who We Are

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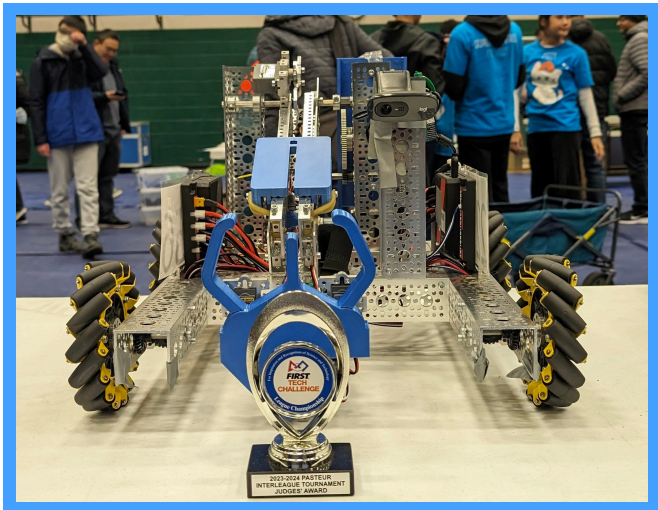
ArrowDynamics, FRC Team 10079, is always shooting for the stars! Based out of **Bothell High School**, we're the **first five-digit team** in the PNW district and we always try to **go above and beyond**. We strive to reach goals that seem distant—aiming for Worlds as a rookie team—not because they are easy, but because they are hard. We design, build, and test autonomous and remote-controlled robots to take on the challenges of FRC.

## Team Mission

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Our mission is to create a long-lasting foundation within our **community** to develop and apply STEM skills for all students for years to come. Additionally, we aim to **foster diversity and accessibility** for everyone interested in **STEM and various other fields** (media production, graphic design, business and more).

# Our Journey



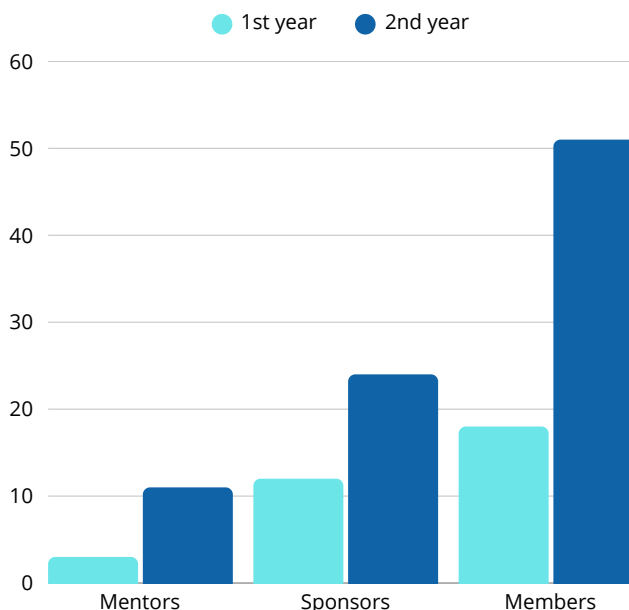
## FIRST TECH CHALLENGE ORIGINS

Before FRC, our team started with three members as a part of **FTC Team 22556 Rush Job Robotics**. The team faced several challenges, such as working out of the janitor's break room and a lack of a sustainability plan. Despite many setbacks, the **team persisted**, learning every day and focusing on growing.

## OUR FIRST TWO YEARS

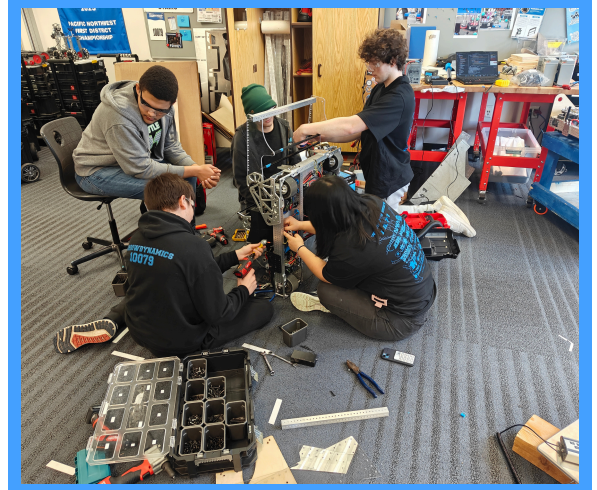
In our early days of being a **FRC robotics team**, we started with **18 members** and **three mentors**, no designated space to work in, a budget of \$247, and a small set of tools from our lead coach. We **set our aim high**. We had the incredible and consistent **support from the FRC community** around us as well as the **dedication of our students and mentors**. We promoted STEM in our community, fundraised, won the **Rookie All-Star award**, and competed at **Worlds**. After our first year, we ended with 14 sponsors and financial reserves to start our second year.

In our **second year**, we grew to a team of **52 members, 11 mentors, & 24 sponsors**. We advance education in our city, school district, and in other countries. We created a team structure designed for our growth, processes for knowledge transfer, and a full scouting team with our own app. **All our work is setting the stage for a long term sustainable team that will continue to give back to the community for years to come.**



# Our Vision

Our vision is to utilize our skills in **engineering, programming, CAD, media, and business**. We strive to be **innovative**, compete in the annual challenge, develop an **inclusive** and **sustainable** team, and to foster the growth of **STEM** in our community.



## Working with Future Engineers

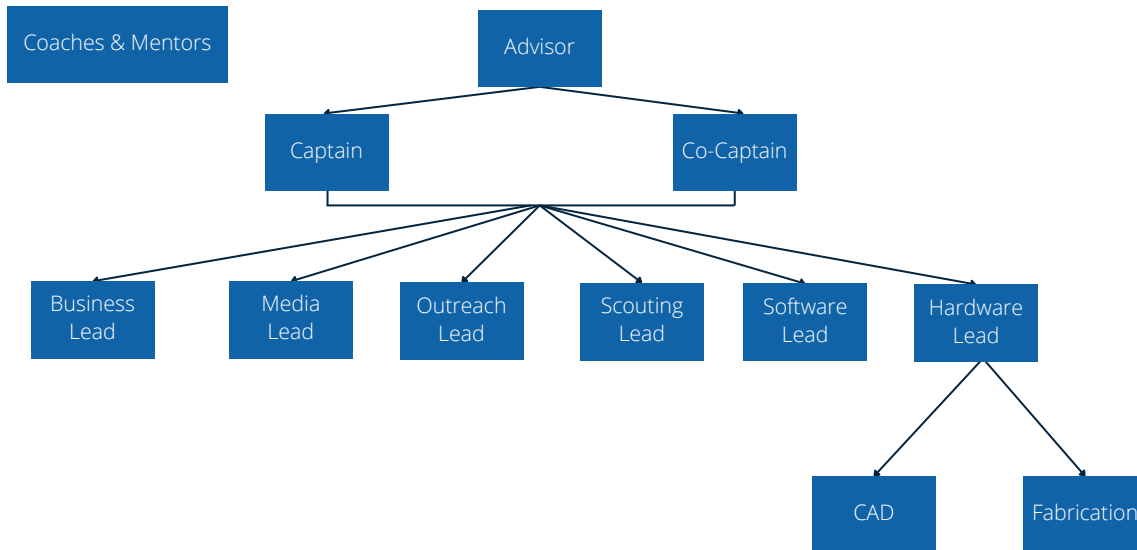
From working with local **elementary schools**, to hosting stands at **festivals**, and working with **non-Profits** to build robotics programs, we have made a **difference** for the kids in our community.

## Team Sustainability

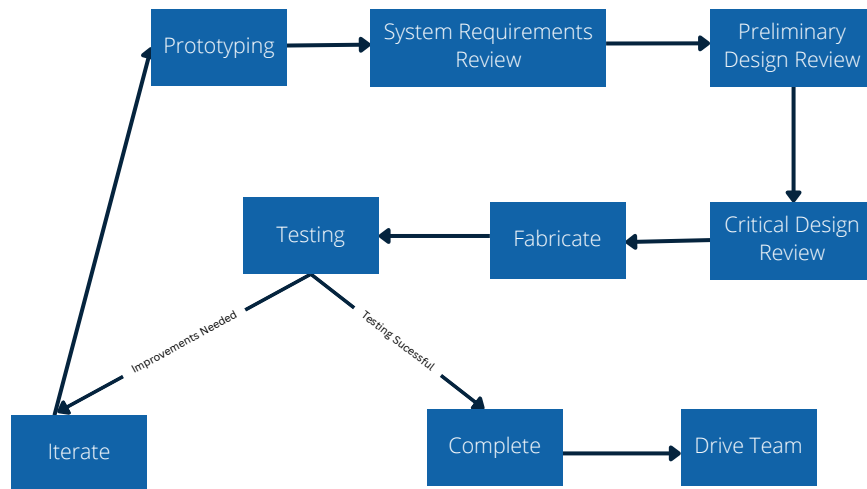
We strive to ensure the **long-term sustainability** of our team by building a strong presence in our community through **outreach and advertising**. By **connected** with those around us, we can guarantee **continual support** for our team, so that we can foster **young minds and introduce them to FIRST**.



# Team Composition

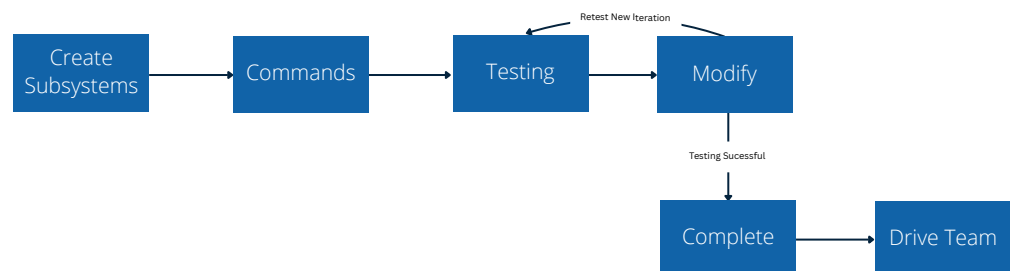


# Engineering Process



## Hardware 6 Step Process

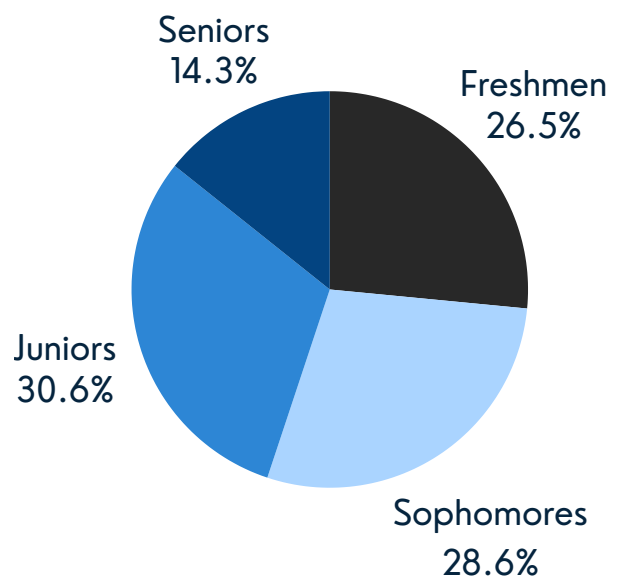
## Software 4 Step Process



# Sustainability

One of our primary goals is to continue to be a sustainable club for years to come. To achieve that, we represent our club to our local Northshore School District and the world beyond. We...

- **Organize events** and attend fairs to promote STEAM in our community.
- **Create relations** with neighboring teams and possible mentors & sponsors.
- **Establish** long-term relationships by periodically returning to host fun and educational workshops.
- **Encourage** students in our school district to get involved in STEM & FIRST with our **NSD Ladder Initiative**, making FIRST accessible throughout K-12 education in all our schools.
- **Educate** our members through our **engineering process** one step at a time. With so many new members in our second year, we are all learning about FRC. Through **hands-on experience** we work hard to ensure our team learns together.
- **Structure** team meetings, team organization, and finances to better organize and prepare our team for future seasons.
- **Promote** our team and our FRC community through various social media, district leadership, and school ensuring that we are an essential part of our community and beyond.



# Sustainability

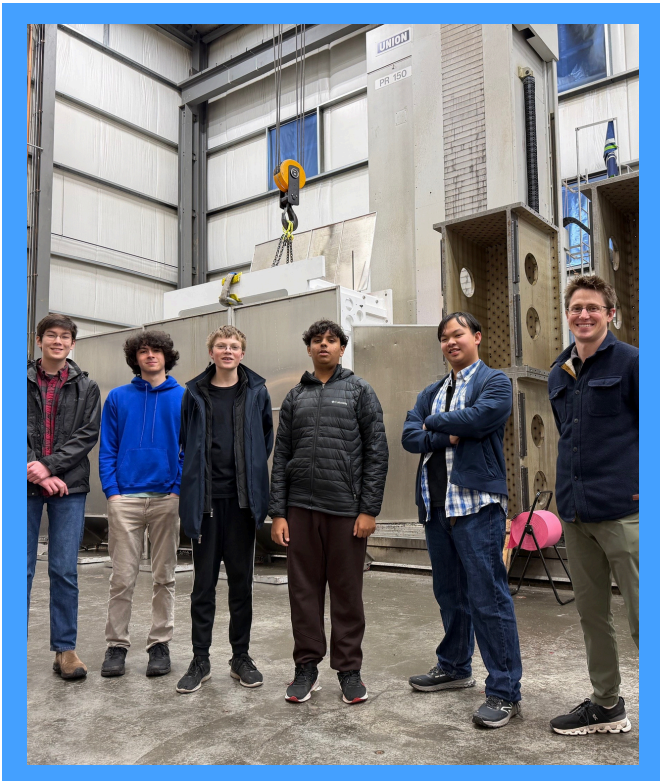
## SUSTAINABLE FINANCES

This year, due to state **budget shortfalls**, all teams in Washington state lost a major grant from OSPI. In our first year, that \$11,000 grant was a major source of our funding, paying for our FIRST registration fees. Knowing this, our team worked through the summer and into fall focusing on making up that shortfall. After we went to Worlds last year, we immediately started lobbying for more sponsors, presenting to local businesses and community organizations. Because of our efforts, we secured **13 more sponsors** than our previous year. We deepened relationships with existing and new sponsors, touring Fluke and ElectroImpact to learn about their tech industry businesses. This connects our students to real world tech applications and supports our sponsors' investment in our students' futures beyond the team activities.



## SUSTAINABLE RELATIONSHIPS

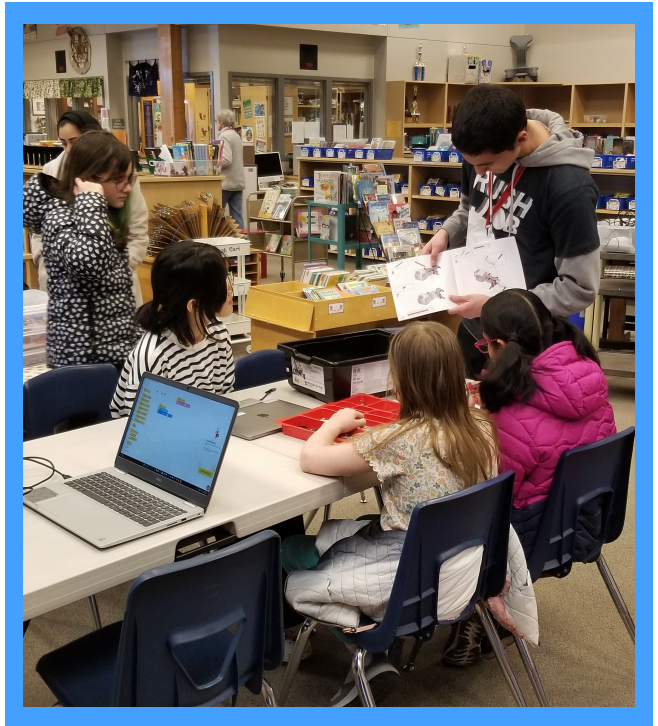
We have been sending regular newsletters and updates, invitations to competitions, to keep **sponsors and community partners invested** in our success as a team as well as showing our **financial responsibility** with the funding they gave us. In addition, we advocated for funding in our district for FIRST teams, not just ourselves, ensuring the ILHS FTC team got a share of the grant from Fluke, because it was their second year too and we wanted to ensure they could be financially sustainable. We have advocated for funding at our school district, and to our teacher's union, and made STEM more accessible in our district. Our efforts have made up the OPSI budget shortfall and set the team up from continued **financial sustainability** not just for next year but for **years to come**.



# Outreach

## FLL WORKSHOPS

- Since fall of 2024, we've been hosting **free FLL workshops to over 75+ elementary students** at Maywood Hills Elementary, providing these students with opportunities they wouldn't usually have access to.
- Through these workshops, we hope to form an **official FLL team**, where our members will work throughout the summer to mentor this team.
- We work closely with these students to learn to **build, code, and innovate** while also having a **fun** time.
- **Early exposure to STEM** contributes to our NSD Ladder initiative.



## STARTING AND MENTORING

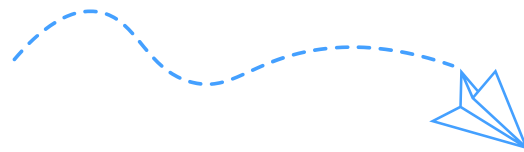
- We are **mentoring** North Creek High School for the 2026-2027 season.
  - providing technical and non technical assistance, **mentoring** team formation, structure and layout.
  - **sponsoring** their participation in off season events for fall 2026.
  - **connecting** them to the FRC community.
  - **supporting** the application of grants and sponsorships.
- We applied for BHS to be a **Unified Championship school** so we can start and mentor the Unified Robotics program in fall of 2026. We will mentor the students in our special education program to design, build and program their robot. We will mentor the students in our special education program to design, build and program their robot.



# Outreach

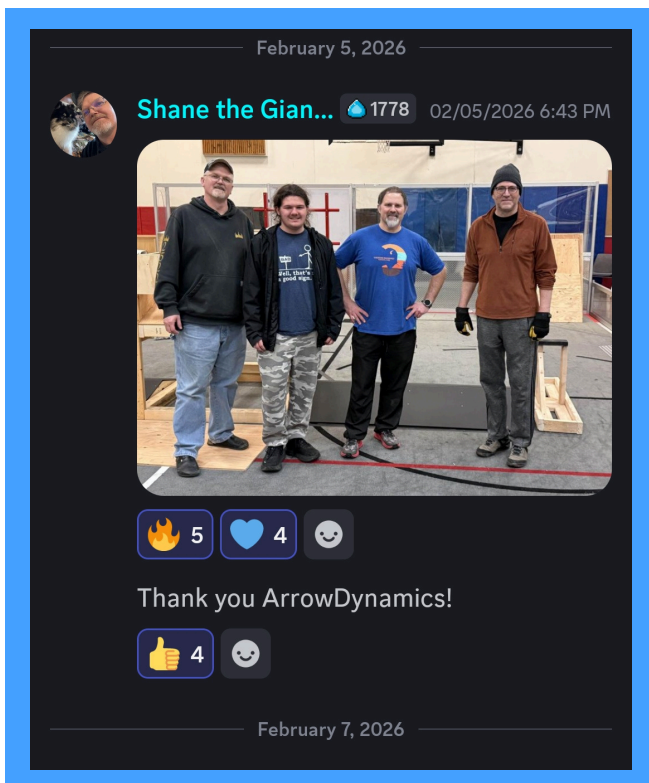
## COMMUNITY AND BEYOND

- Attended to **city events, science fairs, senior centers,** and **numerous elementary & middle schools.**
- Showcased the field of STEM through interactive and engaging demonstrations to students & families.
- Presented to the **Northshore Rotary Club, Woodinville Rotary, Northshore Schools Foundation, Northshore Education Association** allowing us to find several sponsors.
- Partnered with **Joy of Reading** non-profit organization to help impoverished areas in **India** create **school libraries** for students. Our goal is to expand our relationship and teach students STEAM.
- **Collaborated** with 8 teams in the larger Seattle area to build the **North End Practice Field** for teams to test their robot and hold scrimmages. This year we expect **49 teams** from **Washington and Canada** to use it, supporting them through their FRC journey.



## NORTHSHORE SCHOOL DISTRICT

- Created the **Northshore School District Ladder** initiative, in collaboration with other Northshore School District teams, making FIRST accessible throughout K-12 education in all our schools.
- **Advocated** to the **Superintendent** and the **School Board** for more STEM programs throughout the district.



# Finances

Over the summer, we **doubled our sponsors** to 24 that support us through both financial and material income. Our sponsors are a mix of local businesses, school organizations, and large companies.

## Income

Where	How Much
Apple	\$3,300
Bc Craftsman	\$2,000
Boeing	\$3,000
Club Dues	\$3,000
Dunn Lumber	Materials
ElectroImpact	\$2,500
Fluke	\$4,000
FIRST WA	\$9382.87
Fluke metal products	Time & Materials
Gene Haas	\$3000
Intuitive Foundation	\$750
NASA	\$6300
Neal Brenner	\$750
Northshore Rotary	\$1000
Northwest Folklife	\$150
Online Metals	\$200
Robonauts	\$2900
Romac Industries	\$5000
SPEEA	\$941
Woodinville Prints	Time & Materials
Bothell PTSA	\$1000
Bothell High School	Storage & Room
Northshore School District	Storage & Room
Last year savings	\$8500
<b>Total</b>	<b>\$59,674</b>

## Expenses

Category	Spent
Robot Parts	\$7,100
Supporting Equipment	\$1,000
Registration	\$11,300*
Northend FRC field	\$800
New laptop	\$1,800
Pit Supplies	\$350
Safety Equipment	\$300
<b>Total</b>	<b>\$22650</b>
Income	\$59,674
Expenses	-\$22,650
<b>Current Balance</b>	<b>\$37,024</b>

## Long Term Financial Goals

- **Maintain** a majority of this year's sponsors and **add** at least **four more** in our community. The funds we raise support all club activities including FRC registration, robot build, outreach events, and other team costs.
- End each year with **enough reserves** to pay for the next year's registration fees for the entire season, including possible advancement to DCMP and Worlds, as well as robot building costs, so that we can ensure long term **sustainability**.
- Establish a **parent booster club** (currently waiting for their 501(c)(3) status). They are our **financial partners** who support the cost of travel including food, lodging, and transportation to make FRC affordable for all team members.

# Thank You!

## Mentors and Parent Volunteers

- Kevin Finney
- Chris deVidal
- Shane Lambing
- Andrew An
- Andrew Bush
- John Bush
- Flynn Duniho
- Pete Duniho
- Eishan Mohammed
- Tim Swartz
- Debra Tan
- Brian Tax
- Sobby Thakalath
- Jason West
- Chuong Dang
- Tamryn Dove
- Thuy Hong
- Oliver Kruaprasert
- Andrea Madrigal
- Tom Nord
- Brian Sayre
- David Votemann
- Jeremy Warren
- Brian White
- Steve Winckler

## Fellow FIRST Teams

- Velocity Raptors (9450)
- Miso Mechanics (9442)
- Chill Out (1778)
- Royal Robotics (2522)
- SOTAbots (2557)
- Robototes (2412)
- Jack in the Bot (2910)
- Saints Robotics (1899)
- Sonic Squirrels (2930)
- CyBears (4682)
- CPR (3663)
- Robotic Conspiracy (FTC 28139)
- Valhallabots (3268)

## Supporting Schools

- Bothell High school (Kimberly Jensen, Carrie Burr, Kathryn Varvarigos, Skylar Edwards, Dereck Jacobsen)
- Maywood Hills Elementary
- North Creek High school
- Northshore school district (Dr. Justin Irish, Damen Schunamen)
- University of Washington
- Kenmore middle school

# Thank You Sponsors!

