Council Priority Funds - Application

(Page 2 of 2)

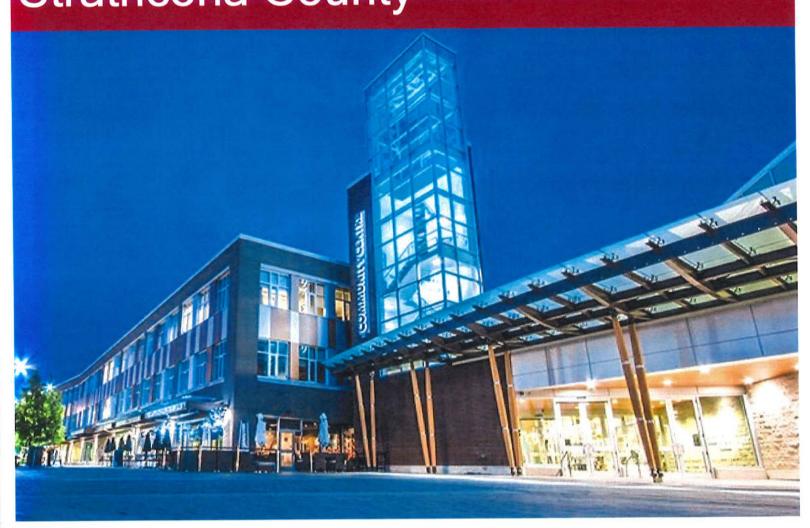
PRIORITY FUND INFORMATION – Completed by Applicant
Organization Name Strathcona County Robotics Association
Address PO Box 3487 Street and number Subdivision if rural
City or town Sherwood Park Province Alberta Postal code T8H 2T3
Contact person Sanny Chan
Telephone
Email address (optional) _info@strathconarobotics.ca
Project Type
Amount Requested \$ _13,100
Is the organization receiving other grant funding from Strathcona County? Yes No If yes – please attach details
Brief description of request Strathcona County Robotics Association (SCRA) is a fully volunteer run, not-for-profit organization created for the
purpose of promoting STEM, Science, Technology, Engineering and Math, to our community's youth.
The Strathcona County Robotics Association (SCRA) is looking to Council Priority Funds for sponsorship to help raise \$13,100 for robotic equipment for our community STEM outreach program.
Over the last five years, our organization has delivered many half-day coding camps to hundreds of 7–9-year-old youths living not only in Strathcona County, but also in the underserved inner city and indigenous communities. The existing robots, purchased in 2018, are at the end of life and need to be replaced to continue to offer these camps.
Our proposal is to purchase 25 Lego™ Education Spike Prime robots for our community STEM outreach program so we can continue to spread the joy of STEM/robotics, without any financial barriers, to every youth interested
Sanny Chan JULY 19, 2023
Print name Signature Date
Please remember to attach a proposed budget, other grant details (if applicable), and request letter to this request.
Number of attached pages

Collection and use of personal information

Personal information is collected under the authority of section 33(c) of the Freedom of Information and Protection of Privacy Act and will be used to manage and administer Council Priority Funds. Please be aware that information provided may be made public. If you have questions regarding the collection, use or disclosure of this information, contact Vicky Cushman at 780-464-8098.

REQUEST FOR SPONSORSHIP

Presented to:
Strathcona County





Strathcona County Robotics Association

PO Box 3487 - Sherwood Park - Alberta - T8H 2T3 (780) 952-2593 strathconarobotics.ca

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Executive Summary

Strathcona County Robotics Association (SCRA) is a fully volunteer run, not-for-profit organization created for the purpose of promoting STEM, Science, Technology, Engineering and Math, to our community's youth.

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Our Request: STEM Outreach Equipment

One of our core values at SCRA is giving back to the community. All our teams participate in many events throughout the year including coding camps, offered free of charge, to youth in Strathcona County and the Edmonton inner-city.

Since inception, we have reached over 300 youths with these camps. The association provides all equipment, robots and tablets/laptops, for the events, so there is no financial barrier for youth participation.

The robots, purchased in 2018, are at end of life. Our proposal is to purchase 25 Lego™ Education Spike Prime for our STEM outreach program. We chose the Lego™ Education Spike Prime because:

- 1. We can leverage our inventory of Lego™ parts from our existing FIRST Lego Robotics Teams including motors, sensors, etc.
- Spike Prime has more flexibility for us to develop programs for a wider age range of youth. The Spike Prime uses both block as well as script (such as Python) coding – allowing for more challenging programming.

Each Lego™ Education Spike Prime set retails at \$499 CAD + GST; 25 units will cost \$13,098.75.

Project Budget

Hardware	Units	Totals
Lego Education Spike Prime		
from Studica.ca @\$499+GST	25	\$ 13,098.75
Laptops		
Donated by Private Industry	12	\$ _
Tablets		
Existing Inventory	10	\$ -
Total Funding Request		\$ 13,098.75

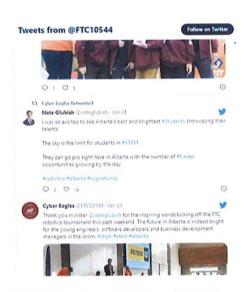
Sponsorship Benefits

As the premier sponsor of SCRA, Strathcona County would benefit from:

- High rate of return on investment. Many of our alumni are going, or have gone, "professional" in STEM fields and become very productive members and leaders of our community.
- High visibility of Council's sponsorship on team jerseys, website (https://strathconarobotics.ca/) and social media (Twitter, Instagram, Facebook)







Strathcona County Robotics Association About FIRST Teams Sponsors Contact (

Sponsor Recognition on Webpage





Local Paper Coverage

In the whole received an invitation to the Chan city.

Local Paper Coverage

Interview with CBC TV

Our Teams

In the 2022-23 season, our association was represented by three teams, Cyber Eagles FLL, Cyber Eagles Jade (Junior) and Cyber Eagles Silver (Senior).

CYBER EAGLES





Why Robotics

We believe that there is a gap in STEM programming for the youth in the region.

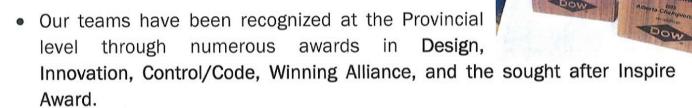
- 1. There is much focus on **sports** (swimming/ skating/ softball) and **arts** (pottery, glass fusing, painting, dance, drama) in county programming. However, there is little offered in the way of STEM/robotics.
- 2. In the school system, robotics/programming classes are not offered until high school; and are often limited to single semester offerings.
- Unlike other programs like soccer, hockey, softball, swimming, STEM has
 no extra-curricular progression/competitive opportunities. And unlike
 athletics, there are many STEM/robotics alumni who can, and have gone
 "pro".

We want to close the gap in extra-curricular STEM programming. We want provide opportunities for the underserved youths, aged 8-18, who aren't inspired by the conventional competitive athletic or arts mold. Often, these youths don't fully feel they belong in the mainstream peer groups. However, when they find likeminded contemporaries in our STEM/robotics programs, we have seen these youth transform into well spoken, confident young adults.

Why Partner with SCRA

Partnering with SCRA is an investment in the youth of our community with an organization that has a strong track record of success. These results garner high visibility in local and social media which can be leveraged to showcase Strathcona County as a leader in youth STEM development.

- Our teams have earned a spot to compete, representing Strathcona County,
 - **FIRST** World at the Alberta and Canada Championships in Houston, Texas six years running including the past 2022-2023 season. The team has just returned in April with the best performance by a Canadian Team.



 Our Senior Team, the Cyber Eagles received the 2022 Strathcona County Award of Excellence for Youth, in recognition of their community support such as 3D printing and distribution of over 16,000 ear savers for healthcare providers & other community not-forprofit organizations, their work with the Boys & Girls Club, and the Beeping Egg program with the Edmonton Police Service for the CNIB, to name a few.



Inspire Award

Due to our ongoing success and community engagement, youth interest in our programs has significantly outgrown our current space. Support from Strathcona County in providing us with a new home would go a long way in helping us realize a FIRST® goal for every kid to recognize their worth, abilities and love who they are!



Our Robotics Programs

FIRST LEGO League (FLL)

(FLL) is designed to introduce STEM concepts to students ages 8 to 10 while exciting them through a brand they know and love – LEGO®.

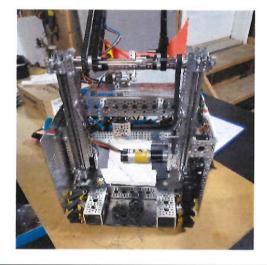
Engaging students in hands-on STEM experiences not only enhances their confidence but also fosters their knowledge and develops their habits of learning. With the guidance of adult coaches, students are encouraged to persevere through trial and error, allowing them to connect STEM concepts to real-world examples. This approach not only equips students with practical skills but also prepares them to take on future challenges with a growth mindset.

FIRST Tech Challenge (FTC)

FTC teams (ages 13-18) are challenged to design, build, program, and operate robots to compete in exciting head-to-head matches in an alliance format.

With adult coaches and mentors providing guidance and support, students gain valuable experience in STEM skills and engineering principles, while also learning the value of hard work, innovation and teamwork. As they overcome setbacks and work towards their shared goal, these young people develop a sense of camaraderie and dedication that will serve them well in all their future endeavors.







More Than Robots - Outreach 22/23

One of our core values at SCRA is giving back to the community. All our teams participate in many outreach events throughout the year – totaling over 2000 hours of volunteer time per year. All events are provided free of charge – to ensure that everyone gets to participate and play. Here is a glimpse of this past season's outreach.

Coding Camps for the Underserved Inner-city Youth at the Bent Arrow Traditional Healing Society







Coding camps for Local Youth Through Strathcona County Library







Annual Highway Clean Up - over 400lbs of garbage picked up from Hwy 21!





Beeping Eggs for Edmonton Visually Impaired Easter Egg (partner with EPS Bomb Squad)

Designed, 3D printed and assembled over 200 eggs for 2023 hunt







Many, Many Community Engagements and Demonstrations

- Life in the Heartland
- Great Canadian Trade Show
- Fort Sask. Boys and Girls Club
- Junior/Senior high school demonstrations











Awards and Recognition

Success On The Field

Over our eight-year history, our *FIRST* Tech Challenge teams, the Cyber Eagles have left a legacy of excellence - earning numerous awards at the *FIRST* Alberta Championships.

TEAM 10544 CYBER EAGLES (SENIOR TEAM)

- 2023, 2022, 2020, 2019, 2018, 2017
 FTC WORLD CHAMPIONSHIP QUALIFIER
- 2023. 2022, 2020 INSPIRE AWARD
- 2023, 2020, 2019, 2018, 2017, 2016
 WINNING ALLIANCE
- 2022, 2019, 2017 Motivate Award
- 2016 Rockwell Collins Innovate Award

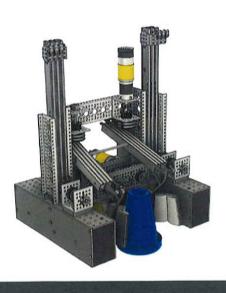


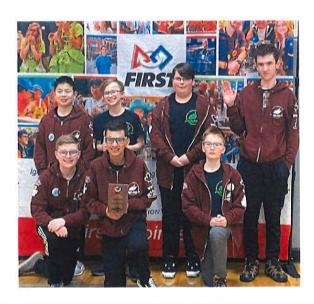
TEAM 22092 - CYBER EAGLES

(JUNIOR TEAM STARTED SEPTEMBER 2022)

2023 DESIGN AWARD

The teams have also had many successes on the field throughout the years – finishing as the top robot in tournament round play in several seasons – including the most recent 2022-2023 season.







Success Off The Field

The Cyber Eagles Team 10544 was awarded the Strathcona County Award of Excellence for Youth in 2022 for their robotics performance, their

representation on the world stage as well as their initiative and efforts to help our community during the Covid19 pandemic. When the Covid19 pandemic hit, the team saw a need for ear-savers for healthcare workers to make masks wearing more comfortable. The team kicked 3D printers into high gear and printed and distributed over 16,000 ear savers during the



first few months of the pandemic to local hospitals (Grey Nuns, Misericordia, Royal Alexandra, Fort Hospital), Cross Cancer Institute, multiple long term care/senior centers, and other not-for-profit organizations.



Alumni

We're proud to share that <u>100%</u> of our alumni are either attending or have graduated from post-secondary education with many of them in STEM fields such as engineering (multiple disciplines), computer science, science, nursing, economics and science education.

We also have very high alumni participation with many returning to coach and mentor teams, as well as volunteer at robotics competitions after they themselves have graduated from the FIRST® robotics program.

Our Operations

Strathcona County Robotics is a fully volunteer run organization. There are no paid positions.

All club fees, sponsorships and donations go towards registration/competition fees, robot parts and mandatory fixed overheads such as insurance and business registration costs. Our current operations are in a donated 400 SQFT garage space.

The space limitation prevents the club from expanding to meet the growing community demand. By providing the association with space or funding for three years, the county would be the spark that launches the legacy of community youth robotics in Strathcona County.

Strathcona County Robotics Association Profit & Loss

July 1, 2022 through June 11, 2023

	Jul 1, '22 - Jun 11, 23
Ordinary Income/Expense	
Income	
4000 · Registration/Club Fees	8,600.00
4005 · Grants, Sponsorships, Donations	12,058.61
4010 - Fundraising Activities	770.10
4100 · Interest Revenue	13.29
Total Income	21,442.00
Cost of Goods Sold	
5005 · Registrations/Game Sets	5,754.76
5010 · Equipment & Parts	8,228.1
5012 · Shipping & Brokerage - COGS	1,517.8
5015 · Tools & Supplies	532.4
5020 · Outreach Program	277.20
Total COGS	16,310.40
Gross Profit	5,131.5
Expense	
6010 · Business Reg. / Membership Fees	318.0
6012 · Depreciation Expense	1,977.7
6015 · Insurance	1,266.3
6025 · Office Expenses	358.5
6040 · Rentals	943.9
6045 · Meals & Entertainment	201.1
Total Expense	5,065.7
Net Ordinary Income	65.8
Other Income/Expense	
Other Expense	
7015 · Furniture, Equipment, Tools	1,743.1
7049 · Purchases Moved to Fixed Assets	-1,743.1
Total Other Expense	0.0
Net Other Income	0.0
et Income	65.8

Board of Directors



Eugene Zarowny, cpa, ca, cfp
President

Eugene is a Chartered Professional Accountant in Edmonton providing tax and financial services to his clients throughout Alberta and has been involved with *FIRST®*

robotics teams since 2018. He has volunteered as a referee, MC, mentor and became president of SCRA in June 2021. This past 2022/23 season, Eugene and his son utilized their past FTC experiences to mentor SCRA's new and first junior high *FIRST®* Tech Challenge Team.

Eugene has witnessed firsthand the profound effect *FIRST*[®] has on our students and looks to grow our association so that we may offer more kids in our community access to these great STEM programs.

"As a global robotics community preparing young people for the future, we at FIRST® want every kid to recognize their worth, abilities and love who they are. Together with our sponsors, we know the power STEM education has in inspiring the innovative spirit and self-esteem our kids need to tackle the world's greatest challenges."

https://info.furstinspires.org/morethanrobots?utm_source=first-inspires&utm_medium=headline&utm_campaign=mtr_brand-022



Sanny Chan, BSc, MSc, PEng Board Member

Sanny is a process engineer at Dow Chemical Canada and has been passionate about *FIRST®* robotics since 2009 when her son and daughter first joined a LEGO robotics team.

As a founding board member of SCRA and the Outreach Coordinator, Sanny is dedicated to expanding STEM extra-curricular opportunities for youth in the community. Her commitment to this cause has endured long after her own children graduated from the program, demonstrating her unwavering belief in the power of robotics to inspire and empower young people.



Dean Kennedy
Board Member

Dean is a Suncor Energy Pipeline operator and has been involved with *FIRST®* robotics since 2017 when his son joined the Cyber Eagles Robotics team. Despite his busy

schedule, Dean spent countless hours coaching and mentored FTC teams from 2017 to 2020. He is a founding board member and past president of SCRA. Although Dean's children both graduated from the program over three years ago, he continues to take time to serve on the SCRA board as well as spend countless hours to nurturing the growth of STEM and robotics in the community.



Dave Stork, BSc, PEng Board Member

Dave Stork, P.Eng, is a 27-year veteran at PCL Construction, where he designs software to help manage the company's operations. He has been involved with FIRST® robotics teams since 2018 and has had two sons

go through the FIRST® robotics programs. Additionally, Dave has previously hosted a team at his place for two years. Currently, he is in his 6th year of coaching and mentoring FIRST® robotics teams. His commitment to the team stems from seeing the learning opportunities the FIRST® program provides students and from witnessing the growth in students working towards a common goal in a team environment.



Shawn Loewen, BSc Board Member

Shawn is a Software Product Architect at Computronix and has been involved with *FIRST®* robotics since 2017 when his son joined a LEGO robotics team.

Shawn has spent countless hours mentoring students on

software development practices and watching them grow. His son Ben will graduate from grade 12 this year and start studying engineering at the University of Alberta in the fall. Both Ben and Shawn plan to stay involved with *FIRST®* and continue to mentor the next generation.



Angel Zarowny, сра, сма Treasurer

Angel is the Vice President of Corporate Services at solūt ltd, a comprehensive IT management and consulting firm, and has been involved with *FIRST®* robotics since 2018 and is a founding board member of SCRA. Angel

continues to support all SCRA accounting and operating functions. The ongoing success of SCRA is extremely important to Angel, so that other students may participate and enjoy the many positive experiences her son realized during his 4 years as a member of the Cyber Eagles FTC team.

More Photos









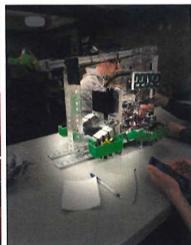














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Robotics tournament set for Saturday



Local robotics team gears for Worlds

A local robotics team has blown away the competition and will now compete aginst the best desired blet sevetame side steam, said the two-team side steam in the world.

Over the weekend on March 4 and sin Red Deer, the PIRSTTech Challenge Alberts of Championships, the northern saw more than 200 stockens there as 200 stockens there as 200 stockens there are allowed to the competition and that challenges stockens and allowed create solutions.

The regional competition away the competition away the teams probets create an allowed active the state of the state of



Sanny Chan, outreach coordinator for Cyber Eagles Roboties team, said the two teams did excellent, with the Cyber Eagles Sflyer placing first overall.

The team has qualified for the FIRST Tech Challenge World Championships in Houston, Texas between April 19 and April 22. This marks the sixth time that the team has received an invitation in its eightyears in existence and seven years competing.

"Only two of the 33 leasms attending received an invitation to go to Worlds, so it its kind of like the Olympics because you have to qualify and receive an invitation." Chan said.

Cyber Eagles Silver won the Insented the Company of the Co







BGC Fort Saskatchewan hosts FIRST Lego League festival

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off to Texas



