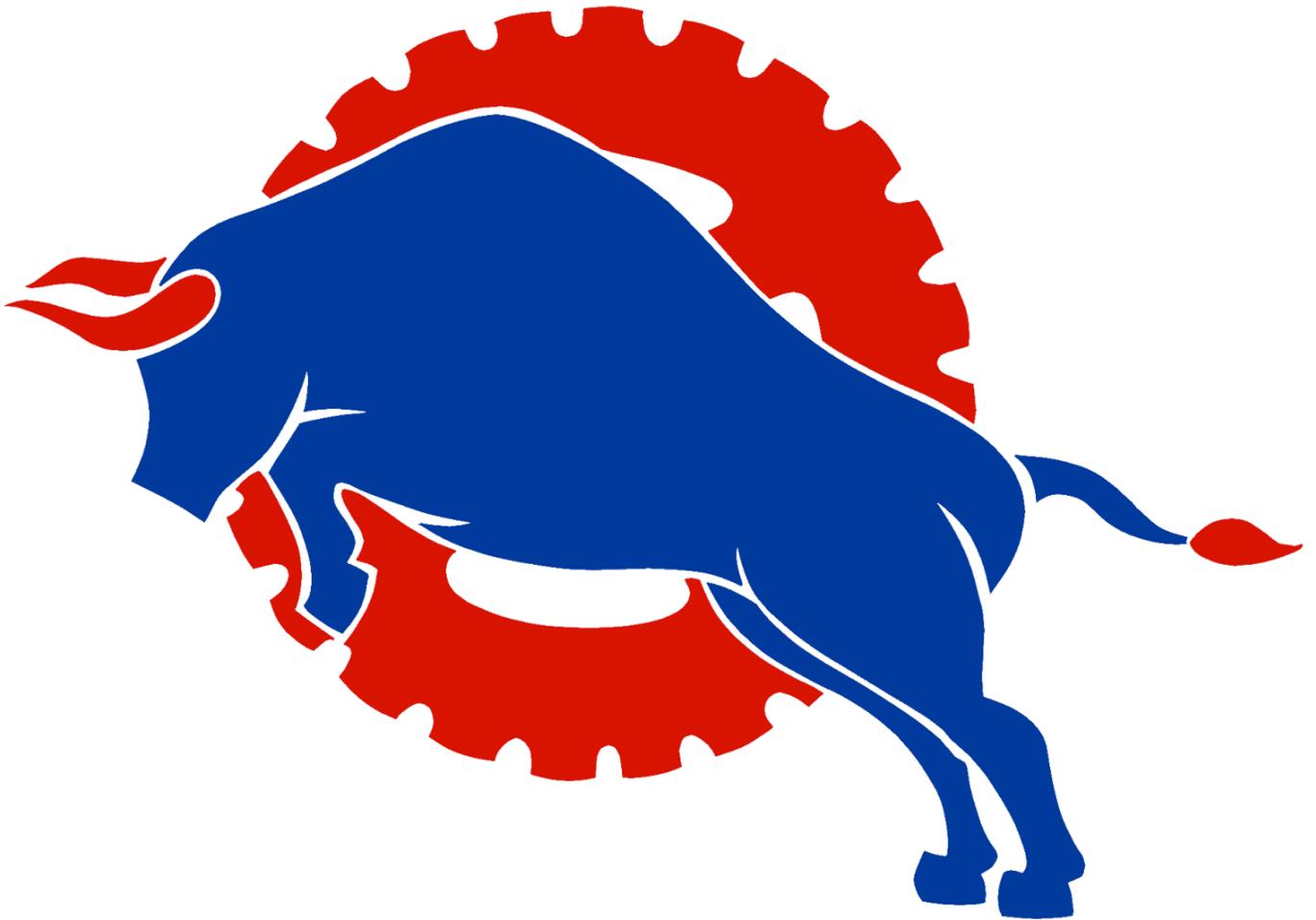


Team 810



Business Plan

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Introduction

Smithtown Robotics is a team under the non-profit organization known as *FIRST* (For Inspiration & Recognition of Science & Technology). Each year, we and teams around the world are given six weeks to design, build, and program a robot to compete in the *FIRST* Robotics Competition. In addition to creating a functional machine, we must also submit essays for business-related awards.

During the 2016 season, we won the Excellence in Engineering Award, sponsored by Delphi, for our skid plate design. Also, our current president, Carley Rowe, became a regional finalist for the Dean's List Award, which commends students for exceptional embodiment of the values of *FIRST*.

Our team is a student-run business. At the top is the president; below her are a number of officers who each manage and teach a specific group of the team. As with all businesses, expenses are inevitable. On average, it takes \$15,000 to run the team, which includes the costs of our robot and two regional competitions.

We work hard to find and raise the money we need to keep doing what we love. This is accomplished through sponsorship, which is accepted in the form of either money or mentorship. Our 2016-2017 sponsors are the Smithtown Central School District, Ross and Company CPA, PLLC, the Law Firm of Grace C. Guiffrida, FESTO, Signwave, and US Alliance Paper Inc. We also have a number of families that donate money or dinner during late-night meetings to support us.

We work hard to reach out to our community and tell them about both *FIRST* and our team. During pre-season, before the game is released, we participate in street fairs in Smithtown, St. James and Nesconset; we are also present at Freshman Orientation night, Math Fun Night and a number of other school events. Finally, as active participants on the Smithtown Industry Advisory Board, we make connections with local businesses and present to them in hopes of gaining partnerships.

In the past, Smithtown Robotics has focused on building the best robot. Today, we focus on building the strongest team. We strive to function as a cohesive, organized business that prepares the next generation for work in an ever-advancing society.

Executive Summary

Our Mission

Here on Smithtown Robotics, we aim to teach students how to succeed, as well as how to overcome failure. Within our build room, we promote consilience: the unification of management and engineering skills. Mentors provide expert insight, allowing students to make well-educated decisions. Members are given opportunities to lead and learn valuable skills they can only gain from experience. Our business plan's purpose is to organize Team 810 into a cohesive, sustainable unit, so members can focus on improving our community while developing professionalism and enthusiasm for everything we do. Not only do we create robots, we create the inventors, problem-solvers, and leaders of tomorrow.

Team Origin

Our rookie season in the FIRST Robotics Competition was 2002, the year of Zone Zeal. Smithtown Robotics is a Long Island team based at Smithtown High School East, one of two high schools in the Smithtown Central School District. By including students from both campuses, we are one of the few clubs to bridge the gap between East and West.

Smithtown Robotics has faced many obstacles through the years. Although we won the Rookie All Star and Highest Rookie Seed awards during our first season, a period of disorganization left 810 susceptible to failure. Threats of budget cuts from our main sponsor, our school district, were recurrent. However, dedicated members were able to regain support for our team. In 2013, we were faced with two sudden mentor switches caused by personal and health complications. These struggles taught us to persevere through hardship; our seasons since have been overwhelmingly successful. Our 2017 team consists of 70 students, a 26% increase from last season. We have also experienced an 8% growth in female members. We currently have 2 head mentors, 3 returning alumni, and 6 STEM professionals teaching our students. 56% of members this year are rookies who joined after seeing our achievements in 2016. In addition to becoming alliance captains at both of our regionals, current team President Carley Rowe became our first Dean's List Finalist. Last season's accomplishments set the bar high for this year's team, but we strive to raise it higher.

Organizational Structure

Smithtown Robotics is organized in two subdivisions: engineering and management. Our President promotes consilience by facilitating communication between the two components of the team. The Vice President of Engineering is responsible for the build, programming, and upkeep of our robots, while the Vice President of Management organizes award-writing, community interactions, and

sponsor relationships. Members of the Business group also oversee the team's financials in conjunction with the Booster Club, an organization run by team parents. Together, the students and Booster Club process all checks and monitor the team's spending to ensure that our resources benefit our students and community. We have a number of fundraising methods. Our annual coupon book fundraiser is our most profitable, it raised \$2,700 in 2016. Sponsors contributed to \$5,000 of our budget. We also made \$1,400 from students dues, and around \$900 from the street fairs we attended. The Media group is responsible for spreading the word about our team through our social media, website, and team emails. Potential members notice the team through our online updates and signs posted around the middle and high schools. We also hold meetings specifically to teach middle school students and inspire them to join our team.

Relationships

We believe communication is the foundation of every good relationship. As such, we strive to improve the connection between members, officers, and mentors. We implemented an exit survey to gather anonymous feedback which revealed that many students gained technical skills, public speaking abilities, and knowledge of engineering careers through the team. This year, we worked to promote correspondence within 810. Announcements are sent out through emails and text messages. We use Slack, a project management app that promotes group communication among students and mentors. In addition to Slack, our mentors are involved in all aspects of the team, including family-style dinners and inside jokes. They are invited to our end-of-the-year barbeque and often time off from work to attend away trips with the team. Students look up to them immensely, as their expertise is critical to our success. We update our town on our accomplishments through Instagram, YouTube, and Twitter. We also attend street fairs, sporting events, parades, and local summer camps in order to forge a personal connection with community members. Many new sponsors first learned about the team after speaking with students at these events. After connecting with potential sponsors, we make every effort to form a strong bond with them. Sponsor thank you packages, invitations to our build room, and sponsor appreciation nights are some of the ways we stay in touch with our generous supporters. We have recently established official team emails through which sponsors may contact us.

Deployment of Resources

Within the team, our monetary funds pay for our competition robot, prototyping materials, computers, software, and supplies for extra projects. This year, we established Human Resources and Rookie Officer positions. These student leaders ensure that members feel comfortable communicating issues in order to improve their learning conditions. Team executives are administrators on Slack, our group messaging platform, to ensure that all members can participate in group discussions with Gracious Professionalism. To educate the community about FIRST, we invested time and money into

creating a t-shirt cannon. We exhibit it at street fairs, sports games, and pep rallies, spreading the excitement of robotics. At demonstrations, we allow people to interact with our previous competitions robots, VEX Robots, and Ozobots. This build season, we hosted an open house night to involve middle school students in the processes of designing, building, and marketing a robot. In addition to spreading STEM in our school district, we strive to support other FIRST teams. This season, we assisted FIRST Tech Challenge Team 9715 and FIRST Robotics Competition Team 1751. We also connected FIRST Long Island with PSEG and helped fund the construction of field elements for FIRST Robotics kickoff. This year, our volunteer participation at FIRST events tripled. Over 30 members of 810 volunteered at the FIRST Tech Challenge Long Island Regional Championship, which we hosted at Smithtown High School West.

Future Plans

In addition to continuing our current outreach projects, we plan to establish STEM programs that will benefit our community in the long run. The Project Lead the Way curriculum, the implementation of which we spearheaded, includes an “Automation and Robotics” course that will become mandatory for eighth graders in 2018. This program will also bring courses like “Aerospace Engineering” and “Environmental Sustainability” to the high schools. At the college level, we are working with Long Island University to plan and prepare students for its new “Autonomous Robotics” class, which will start this fall. Within our team, we have recently rebranded. Because of this, we have rewritten our branding and business manuals. Furthermore, we plan to edit our team handbook and even write an officer manual in the near future. Last summer, the team built a remote-controlled t-shirt cannon; this summer, we intend to tackle another off-season project to keep members active. After the success of this year’s FTC Long Island Regional Championships, we are excited at the prospect of hosting again next year. We plan to mandate volunteering at FIRST Long Island events for members interested in applying for officer positions or attending competitions in the future. We recognize that FIRST has given us a one of a kind opportunity, and we want to help extend it to others.

Risk Analysis

Strengths:

- Consistent support from our school district
- Leadership opportunities are available for all students, creating a sustainable hierarchy of leadership
- Dedicated head mentors allow us to work many hours during build season

Weaknesses:

- Not every subgroup has a professional mentor aiding it
- Our recent restructure left some officers leading groups without members

-Only about half of our registered members regularly attend meetings

Opportunities:

- Our participation in the Smithtown Industry Advisory Board connects us with many potential mentors and sponsors
- The Lego Ideas STEAMWORKS set draws international attention both to our team and FIRST
- By hosting the 2017 FIRST Tech Challenge Long Island Regional Championship, we have opened up the opportunity to host future events

Threats:

- School district budget cuts could result in a loss of our main sponsor
- Our build room is unable to contain a team larger than our current one; growth as a team would require us to move locations.
- The collapse of the Smithtown Robotics Booster Club due to a lack of leadership

When faced with the aforementioned threats, we evaluate them using our Risk Analysis Chart, which takes into account the probability and effects of a threat. The chart, a major component of our business manual, allows the team to plan for potential challenges. For instance, losing the school district's sponsorship would have a large impact on our team, but is not likely to occur, so it is only a threat of moderate risk.

The Smithtown Robotics Brand

After attending the "Creating and Managing Explosive Growth on your FRC Team" presentation at Championships in 2016, we were inspired to restructure our team leadership. The former Business group, a sixth of the team, has been expanded to four groups under the supervision of a Vice President of Management. To solidify this change, the Management officers collaborated to write a new business plan, which includes a branding manual. For a majority of our history, Team 810 has sported red shirts and a front-facing robotic bull. This year, our look has become more professional: a new logo, grey shirts, and redesigned banners all accompany our rebrand as we strive to build our reputation as a cohesive, organized unit. Our student-built website reflects these changes. In conjunction with the Media team, the Webmaster uses www.smithtownrobotics.com to promote our brand and the message of FIRST. Some of the newest additions to our site are pages dedicated to the Lego sets we design for each FRC game. This year, members rendered a panoramic version of the set that can be viewed in virtual reality directly from the website. We now publish resources for use by other FIRST Teams, including software download links, manuals, and handbooks. As in the past, we still have a "Contact" page including our social media and emails. However, this year, we have created student-managed emails such as sponsor@smithtownrobotics.com and join@smithtownrobotics.com to ensure that members remain just as connected with sponsors and the community as our mentors do.

Team Information

Team Name	Smithtown Robotics
FIRST Robotics Competition Number	810
Rookie Season	2002
Team Mascot	The Mechanical Bull
Location	Smithtown High School East, Room 144 10 School Street Saint James, NY 11780
School Affiliation	Smithtown High School East Smithtown High School West
IRS Organization Type	501(c)(3)
Students	69 Students <ul style="list-style-type: none"> • 13 girls and 56 boys • 11 Seniors, 14 Juniors, 12 Sophomores, 32 Freshmen
Mentors	10 Mentors <ul style="list-style-type: none"> • 2 teachers • 2 alumni • 6 professionals
Social Media	Website: www.smithtownrobotics.com Twitter: @Team810 Instagram: @Smithtown_Robotics YouTube: SmithtownRobotics810 Email: <ul style="list-style-type: none"> • contact@smithtownrobotics.com • sponsor@smithtownrobotics.com • outreach@smithtownrobotics.com

Organization Summary

Legal Structure

Smithtown Robotics is a 501(c)(3) organization: a nonprofit organization that runs through the Smithtown Central School District. We act only in the interest of our students, community, and team. According to IRC section 170, all monetary contributions to our team are tax-deductible to our supporters. All team funds are managed by the Smithtown Robotics Booster Club, a parent organization that operates independent of our school district.

The *FIRST* Robotics Competition

Smithtown Robotics is one of over 5,000 robotics teams within the non-profit organization *FIRST* (For Inspiration and Recognition of Science and Technology). *FIRST* is divided into four leagues: Lego League Junior, Lego League, Tech Challenge, and Robotics Competition. The *FIRST* Robotics Competition is only available to high school students and involves the heaviest robots, most difficult challenges, and largest teams. Every year in early January, all FRC teams are shown the game they will have to compete in. Then, they have six weeks to design, construct, and program a functional robot in a time called “Build Season.”

History

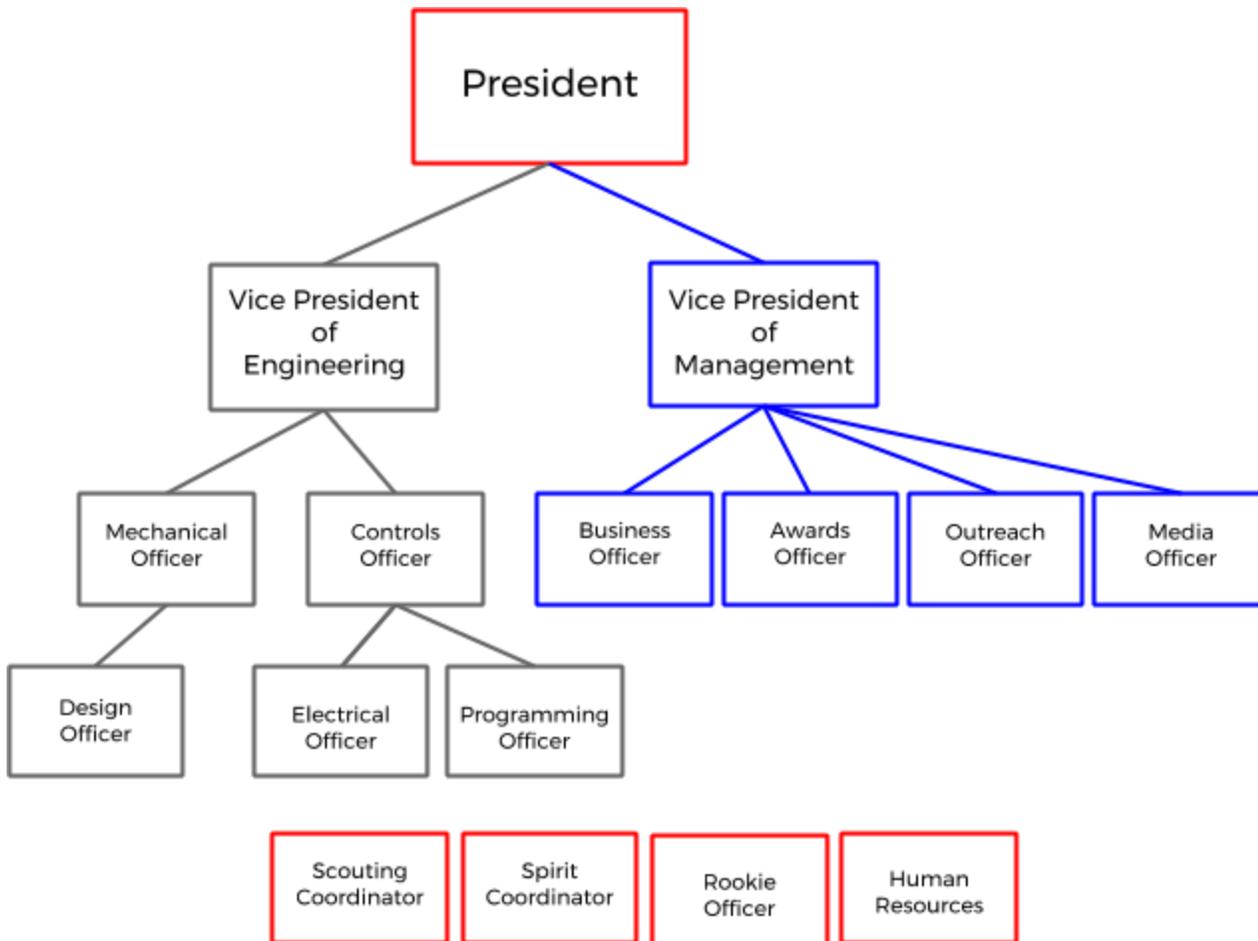
Our team was founded in September 2001 at Smithtown High School by a few members of its Science Research program. We first competed in the winter of 2002, when the *FIRST* Robotics Competition challenge was *Zone Zeal*. When Smithtown High School split into two campuses--East and West--in 2005, the team stayed together. To this day, it remains one of the few clubs that unites the rival schools. However, from 2005 to 2009, we experienced a period of disorganization. Our communication, and in turn relationship, with school administration was poor. Only a select group of students each year could work on a robot, so many students left the team disillusioned. In 2013 and 2014, we had two changes of head mentor, but the team remained organized and grew stronger. Since then, our success, organization, and impact on our community has grown, and we intend to continue this upward trend.

During our time competing in the *FIRST* Robotics Competition, we have won:

- 2016
 - *FIRST* Long Island Regional
 - *FIRST* Dean’s List Finalist Award

- 2015
 - Excellence in Engineering Award sponsored by Delphi
 - New York City Regional
 - Industrial Safety Award sponsored by Underwriters Laboratories
 - Team Spirit Award sponsored by Chrysler
 - Tech Valley Regional
 - Entrepreneurship Award sponsored by Kleiner Perkins Caufield Byers
- 2014
 - SBPLI (Long Island) Regional
 - Creativity Award sponsored by Xerox
 - New York City Regional
 - Team Spirit Award sponsored by Chrysler
- 2013
 - New York City Regional
 - Team Spirit Award sponsored by Chrysler
- 2011
 - New York City Regional
 - Judges Award
- 2009
 - SBPLI (Long Island) Regional
 - Creativity Award sponsored by Xerox
- 2005
 - SBPLI (Long Island) Regional
 - Innovation in Control Award sponsored by RadioShack
- 2004
 - SBPLI (Long Island) Regional
 - Regional Finalist
- 2003
 - SBPLI (Long Island) Regional
 - Engineering Inspiration Award
- 2002
 - SBPLI (Long Island) Regional
 - Highest Rookie Seed
 - New York City Regional
 - Rookie All Star Award
 - Highest Rookie Seed

Student Structure



- **President:** Represents the team to mentors, sponsors, and school administration. They manage the team as a whole and can initiate or veto any decision.
- **Vice President Of Engineering:** Organizes all of the engineering groups, making sure that they stay on task and communicate. They are responsible for the completion of the robot and cohesion of all of its components.
 - **Mechanical Officer:** Oversees the designing, prototyping, and building of the robot. They, in collaboration with the Safety Captain, ensure that all students operate machinery safely.
 - **Design Officer:** Teaches students how to use CAD (Computer-Aided Design) programs and make a 3D, digital model of the robot using the most successful prototypes.
 - **Controls Officer:** Manages the development of both the programming and electrical components of the robot. The student coordinates the two groups so that software and hardware work seamlessly together.

- **Electrical Officer:** Connects the electrical aspects of the robot, including physical wiring and schematics. The student works to provide power to the robot to accomplish the task.
- **Programming Officer:** Teaches programmers the Java language and writing both the autonomous and teleop parts of the robot's code.
- **Vice President of Management:** Oversees and coordinates all of the management groups. At public business events, such as Industry Advisory Board meetings or Board of Education meetings, they represent the team and work to make connections with the community.
 - **Business Officer:** Gains and maintains relationships with sponsors. They are the team's representative to the Smithtown Robotics Booster Club, which handles the team's finances.
 - **Awards Officer:** Writes and edits essays for the *FIRST* Robotics Competition awards, including Chairman's and Woodie Flowers. They work closely with the Outreach group to submit the best content.
 - **Outreach Officer:** Organizes community service events and operations. This includes the various STEM spreading events and general activities that benefit our community.
 - **Media Officer:** Manages all social media and online marketing endeavours. They create content to spread information about our team progress and events for future teams to learn from.
- **Scouting Coordinator:** Leads team members in scouting other teams' robots at competition. They are crucial to developing game-day strategy and deciding alliance partners.
- **Rookie Officer:** Voices the opinions and beliefs of new members to the officers to ensure that all students, not just the older ones, have the best experience on our team.
- **Spirit Coordinator:** Coordinates the creative, artistic aspect of robotics. Focuses on team bonding and maintaining a friendly, open atmosphere. At competition, they work to motivate the team to cheer.
- **Human Resources Manager:** Ensures that all students have a person on the team that they can discuss issues with in confidence. When students bring up issues they experience on the team, the Human Resources Manager conveys those concerns to other team leaders.

Current Student Leaders

In the 2016-2017 season, there are three executives, twelve officers, and four coordinators.

- **President:** Carley Rowe, Senior
- **Vice President of Engineering:** Daniel Melcer, Senior
 - **Mechanical Officer:** Brandon DiSalvo, Junior
 - **Design Officer:** Evan Blake, Senior
 - **Controls Officer:** Vlad Stelea, Senior
 - **Electrical Officer:** Max Bublitz, Junior
 - **Programming Officers:** Dylan Ross, Sophomore; Andrew Stein, Sophomore
- **Vice President of Management:** Taylor Pedley, Junior
 - **Business Officers:** Rileigh Dowling, Sophomore; Alexis McCauley-Pearl, Sophomore
 - **Awards Officers:** Kayla Goldsborough, Senior; Aaron Min, Junior
 - **Outreach Officer:** Noah Fauchon, Senior
 - **Media Officer:** Thomas Hunt, Senior
- **Scouting Coordinator:** Shrey Thaker, Junior
- **Rookie Officer:** Taylor Key, Senior
- **Spirit Coordinators:** Katherine Stovall, Senior; Shubhangi Tank, Junior
- **Human Resources Manager:** Kayla Goldsborough, Senior

Our Supporters

Corporate Sponsors

The requirements and advantages of each sponsorship level are on page __
All contributions are from this year, not from past years of support.

The Smithtown Central School District

Sponsor Level: Diamond

Supporting Since: 2001

Field: Education

Contribution: Payment of *FIRST* Competition Fees, payment of travel to away competitions, our work space, computers, and machines

The Law Firm of Grace C. Guiffrida, Esq.

Sponsor Level: Gold

Supporting Since: 2017

Field: Law

Contribution: \$1000

Ross & Company CPA, PLLC

Sponsor Level: Gold

Supporting Since: 2017

Field: Accounting

Contribution: \$1000

GSE Dynamics

Sponsor Level: Gold

Supporting Since: 2017

Field: Defense Manufacturing

Contribution: \$1000

Festo

Sponsor Level: Silver

Supporting Since: 2012

Field: Industrial Control and Automation

Contribution: \$500

Signwave

Sponsor Level: Silver
Supporting Since: 2014
Field: Printing
Contribution: Discounts on team promotional material

U.S. Paper Alliance, Inc.

Sponsor Level: Silver
Supporting Since: 2017
Field: Stationary
Contribution: \$500

Private Backers

All requirements and advantages of each backer level are located on page __

The McCauley-Pearl Family
The Rowe Family
Mr. Steve Gottlieb

Program Summary

For Team Members

Here on Smithtown Robotics, one of our primary goals is to equip students with a mindset essential to their success in both college and the professional world. Each season, the pressure of the *FIRST* Robotics Competition offers all students a unique opportunity to develop their communication, problem-solving, and teamwork skills. Without the ability to function as a productive, cohesive group, we would fail to produce a successful robot, so from the moment a student enters our build room, he is encouraged to share his ideas, listen to others, and cooperate with teammates to produce a final product. Along with this communication comes an increased respect for students, mentors, and himself or herself. Even when competing against other teams, our students act as gracious professionals, aiming not to beat the opponents, but to succeed with them.

In addition to the life and social skills they gain during their time as Mechanical Bulls, students also acquire technical skills, which vary depending on the groups they participate in. However, all students learn how to conduct themselves in a safe manner, especially in the build room, in accordance with both the *FIRST* Safety Manual and the Smithtown Robotics Safety Manual.

Mechanical and Design

In the mechanical and design groups, students see the engineering process firsthand as they follow our robot from initial concept to finished product. During the prototyping phase, students are encouraged to be creative and think outside of the box to solve the problems of the *FIRST* Robotics Competition. Then, they utilize the design process to determine the most efficient mechanisms for the given challenge. They learn how to use Autodesk Inventor, a Computer-Aided Design program, to create 3D models of our future robot, as well as how to read those designs when building the physical components. Students learn, hands-on, how to use many advanced machines, including a milling machine and miter saw. In mechanical engineering or manufacturing fields, these skills make our students valuable assets to any school or business.

Programming and Electrical

In the programming and electrical groups, students learn to be organized and think logically about issues. Programmers learn Java, the language used to code our robot. They learn to communicate and work closely with the electrical group to ensure that our machine executes the written code as it is supposed to. While working with electrical, students learn the *FIRST* Robotics Competition controls

system, as well as how to build wire schematics so that all of the components are connected in an organized, safe manner. In these groups, students learn skills that will help them advance in electrical or computer engineering as well as computer science careers.

Management

The management side of the team, which is composed of the Awards, Outreach, Business, and Media groups, teaches students public speaking, writing, and time management skills. While planning public demonstrations, corporate showcases, and award submissions, students learn how to set goals and cooperate to finish the job on time. Then, students learn to deliver a presentation in an efficient, informative, and entertaining manner. In addition to presentations, they learn to interact with the outside community through advertisements, social media, email, and written letter. Their writing skills are further developed while creating and perfecting essays to submit for the Chairman's Award, Entrepreneurship Award, and Woodie Flowers Award. However, our Management program's primary goal is to show students the importance of business in STEM.

For Our Community

Smithtown Robotics strives to achieve *FIRST*'s mission of spreading awareness of STEM by reaching out into our community. Some of our successful outreach projects are:

***FIRST* Tech Challenge Long Island Regional Championship**

The *FIRST* Tech Challenge is another robotics competition similar to the one that Smithtown Robotics Competes in. On February 11th, 2017, we collaborated with *FIRST* Long Island to host the regional championship, which determined which teams continued to the super-regional in Pennsylvania. We had to work with school administration to hire custodians and security guards on the competition day. We also collaborated with Smithtown West DECA to run concession stands. Thirty-six of our team members volunteered with *FIRST* Long Island or as site volunteers to help set up, run, and take down the event.

FIRST Robotics Competition Lego Sets

Volunteering at *FIRST* Long Island Events

Open House Night for Smithtown Middle School Students

“STEAM into the Future!” Conference for Smithtown High School Students

Robotics Curriculum in Our Schools

Participation on the STEM Committee of the Smithtown Industry Advisory Board

Local Street Fairs

Other Robot Demonstrations

For Our Sponsors and Backers

Sponsorship Levels

(Donations between \$50 and \$250 receive a thank you letter)

Bronze: \$250

- Name on website sponsor page
- Bronze thank you package:
 - Personalized thank you letter
 - Brochure
 - Pins
 - Magnetic bumper sticker
 - Framed Team Picture

Silver: \$500

- All Bronze Benefits
- Logo on sponsor page
- Name on team gear
- Name displayed in pit, at demonstrations, & in our work room
- Name on front page of website
- Name on team banner
- Bronze thank you package + new t-shirt

Gold: \$1000

- All Silver benefits
- Logo displayed in pit, at demonstrations & in our work room
- Logo on team gear
- Logo on front page of website
- Small logo on robot
- Hand out company brochure at events we host/attend
- Silver thank you package + Invitation to sponsor appreciation event (2 people per company)+ new sweatshirt

Platinum: \$2500

- All Gold benefits
- Medium-sized Logo on robot
- Logo on team banner
- Invitation to private tour of build room
- Gold thank you package + Team polo + up to 5 people at event

Diamond: \$5000+

- All Platinum benefits + up to 10 people at event
- Large, prominent logo on robot

- Smithtown Mechanical Bulls supported by [insert company name here]
- Prominent logo on all promotional material

All sponsorships reset every calendar year (January 1st): if a company wants to continue to be represented, they have to contribute again.

Backer Levels

Chef: (donates food during build season)

- Special section on backer page
- Team car magnet
- Letter of thanks

Ally: \$25

- Name on website sponsor page
- Letter of thanks

Backer: \$50

- Ally benefits
- Team car magnet

Friend: \$100

- Backer benefits
- Framed picture of team with current robot

Supporter: \$250

- Friend benefits
- Larger name on website sponsor page
- Current team t-shirt

Benefactor: \$500

- Supporter benefits
- Team polo shirt
- Name on team banner

Major Contributor: \$1000

- Benefactor benefits
- Invitation to our sponsorship appreciation event (2 people per family)

Risk Analysis and Strategy

Risk Analysis Format

	Impact on Team:	1 Low	2 Medium-Low	3 Medium	4 Medium-High	5 High
Likelihood of event occurring	1 Low	Yellow			Orange	
	2 Medium-Low	Yellow		Orange	Red	
	3 Medium	Yellow	Orange	Red		
	4 Medium-High	Yellow	Orange	Orange	Red	
	5 High	Orange	Orange	Red	Red	

Yellow: Low Risk

Orange: Moderate Risk

Red: High Risk

Risks

1. Losing the funding of a Gold-Level sponsor
 - a. Likelihood of event occurring: Medium-High
 - b. Impact on team: Low
 - c. Overall risk: Low
 - d. How to prevent it from happening:
 - i. Follow through with sponsorship benefits
 - ii. Send out thank you packages quickly
 - iii. Communicate with sponsors often and update them on our success
2. Losing the funding of the Smithtown Central School District
 - a. Likelihood of event occurring: Low
 - b. Impact on team: High
 - c. Overall risk: Moderate
 - d. How to prevent it from happening:
 - i. Communicate openly with district administrators and teachers
 - ii. Follow all school protocol when planning events and field trips
 - iii. Host demonstrations within the district
3. Losing a student officer during the school year
 - a. Likelihood of event occurring: Medium-Low
 - b. Impact on team: Medium
 - c. Overall Risk: Moderate
 - d. How to prevent it from happening:
 - i. Tell future officers all of their responsibilities before they take the position
 - ii. Prioritize passion for the team when selecting officers
 - iii. Keep pathways of communication open to officers
4. Injuries in the build room
 - a. Likelihood of event occurring: Medium
 - b. Impact on team: Medium-High
 - c. Overall Risk: Moderate
 - d. How to prevent it from happening:
 - i. Require all members to sign safety contracts before joining the team
 - ii. Hold mandatory safety seminars to teach safe work on machines
 - iii. Post signs around the build room educating students on safe work habits

SWOT Analysis

<p>Strength -</p> <ul style="list-style-type: none"> ● Cohesive subsets of the team ● Strong friendship between members ● Daily skill building activities for both current and future use ● Approachable upperclassmen and mentors ● Unique competitive yet cooperative atmosphere ● Gracious Professionalism with mentors, sponsors and at competition. 	<p>Weakness -</p> <ul style="list-style-type: none"> ● Too few mentors to fit every skill required for a successful team ● Weak retained attendance amongst members ● Too many officer positions and not enough members to govern ● Lack of efficient administrative communication
<p>Opportunity -</p> <ul style="list-style-type: none"> ● IAB connections for mentors ● IAB connections for sponsors ● “STEAM Into the Future” Conference ● Lego STEAMWORKS ● FTC competition hosts ● Alliances with teams all around the world ● Scholarships provided by FIRST ● The opportunity for teams to connect and solve a common problem 	<p>Threats -</p> <ul style="list-style-type: none"> ● Loss of sponsorship from SCSD ● Failure to retain relationships with sponsors ● Loss of mentors ● Loss of interest in the team

Financial Plan

The financial statements are created by the Smithtown Robotics Booster Club, a parent-run organization that operates independent of the school district.

Smithtown Robotics Team 810 Booster Club, Inc.

PROFIT AND LOSS

September 1 - December 30, 2016

	TOTAL
INCOME	
Donation	
Lana Rowe Photography	200.00
McCauley - Pearl	100.00
Plourde	1,000.00
Ross & Company CPAs	1,000.00
Total Donatlon	2,300.00
Dues	1,419.00
Fundraising Income	
Fundraising - Smithtown Day	440.00
Fundraising - St. James Day	501.16
HHH Offseason Event - Pizza / Tshirts	97.00
Total Fundraising Income	1,038.16
Uncategorized Income	48.60
Total Income	\$4,805.76
EXPENSES	
Meals	123.57
Misc Build Season Expenses	44.43
Office/General Administrative Expenses	125.58
Parts	2,611.21
Registration Fees	450.00
Supplies	123.15
Travel-Rochester	
Travel	8.11
Travel Meals	284.70
Total Travel-Rochester	292.81
Uncategorized Expense	253.48
Total Expenses	\$4,024.23
NET INCOME	\$781.53

Smithtown Robotics Team 810 Booster Club, Inc.

PROFIT AND LOSS

September 2015 - August 2016

	TOTAL
INCOME	
Donation	20.00
Donation - Anonymous	100.00
Donation - Festo	500.00
Donation - Forrester Maher Funeral Home	500.00
Donation - Retlif	250.00
Donation-Stein Family	100.00
Total Donation	1,470.00
Dues	1,720.00
Fundraising Income	
Fundraising - Cabo Fresh	150.00
Fundraising - Coupon Books	1,220.00
Fundraising - Misc	634.50
Fundraising - Moe's Southwest Grill	121.00
Fundraising - Nesconset Day	277.00
Fundraising - Smithtown 350 day	252.00
Fundraising - Smithtown Day	335.00
Fundraising - St. James Day	266.36
Total Fundraising Income	3,255.86
Grants	750.00
Total Income	\$7,195.86
EXPENSES	
End of Year Picnic	153.07
Fundraising	300.95
Machinery	1,638.20
Meals	77.13
Office/General Administrative Expenses	200.73
Parts	6,767.67
Registration Fees	400.00
Supplies	134.22
T Shirts	71.64
Travel-Rochester	
Entertainment	180.00
Student payments	-9,256.76
Travel	5,655.79
Travel Meals	3,241.40
Total Travel-Rochester	-179.57
Travel-St. Louis	
Student payments	-4,711.76
Travel	4,711.98
Total Travel-St. Louis	0.22
Total Expenses	\$9,564.26
NET INCOME	\$ -2,368.40

References:

<http://articles.bplans.com/how-to-write-a-business-plan/>

<http://www.adambots.com/wp-content/uploads/2016/03/2016-Business-Plan-FINALIZED-PDF-2.pdf>

http://www.firstinspires.org/sites/default/files/uploads/resource_library/fundraising-toolkit/frc-4272-business-plan-example.pdf

[http://www.team2337.com/uploads/8/2/9/1/8291371/team_2337 - 2012 business plan and budget.pdf](http://www.team2337.com/uploads/8/2/9/1/8291371/team_2337_-_2012_business_plan_and_budget.pdf)