FIRST Robotics
2015-2016 Budget Proposal

Item		Budget	Actual
FIRST Robotics Team registration		$6,000.00	
Lead mentor teacher stipends		$7,500.00	
Support teacher stipends		$7,950.00	
Transportation to and from regional competition(s) and events		$1,200.00	
Supplies, equipment, materials		$2,000.00	
Building use rental (Saturdays and February vacation)		$2,712.00	
	Total	$27,362.00	

What is *FIRST* and why should Somerville High School start a FIRST Robotics Team (FTC?)

FIRST (**F**or **I**nspiration and **R**ecognition of **S**cience and **T**echnology) was founded in 1989 to inspire young people's interest and participation in science and technology. Now in its 25th year, *FIRST* has grown from 28 U.S.- based teams in the initial competition season (of which Somerville was a participant!) to more than 34,000 teams today in over 80 countries, involving more than 360,000 kids, and over 150,000 adult Volunteers. Based in Manchester, NH, the 501(c)(3) not-for-profit public charity designs accessible, innovative programs that motivate young people to pursue education and career opportunities in science, technology, engineering, and math, while building self-confidence, knowledge, and life skills.

We call *FIRST* Robotics Competition the ultimate Sport for the Mind. High-school student participants call it "the hardest fun you'll ever have." Under strict rules, limited resources, and an intense six-week time limit, teams of 20 or more students are challenged to raise funds, design a team "brand," hone teamwork skills, and build and program industrial-size robots to play a difficult field game against like-minded competitors. It's as close to real-world engineering as a student can get. Volunteer professional mentors lend their time and talents to guide each team. Each season ends with an exciting *FIRST* Championship.

FIRST is more than robots. *FIRST* participation is proven to encourage students to pursue education and careers in STEM-related fields, inspire them to become leaders and innovators, and enhance their 21st century work-life skills. The positive impact on *FIRST* Robotics Competition participants is gratifying and well documented. Over 88% have more interest in school, 90% have more interest in taking a challenging math or science course, and 90% are more interested in attending college. Evaluation data tells us that almost 90 percent of *FIRST* Alumni are now studying for or working in STEM careers, and female *FIRST* participants are four times more likely to study STEM subjects due to participation.

Teams attend a kick-off event in January where the new game and playing field are unveiled and teams receive a Kickoff Kit made up of donated items and components worth tens of thousands of dollars – and only limited instructions! Working with adult mentors from schools and the community, students have six weeks to design, build, program, and test their robots to meet the season's engineering challenge. Once these young inventors build a robot, their teams will participate in one or more of the Regional and District events that measure the effectiveness of each robot, the power of collaboration, and the determination of students.

FIRST Robotics Competition teams get to:

- Learn from professional engineers
- Master STEM skills
- Learn and use sophisticated software, hardware, and power tools
- Build and compete with a robot of their own design
- Improve teamwork, interpersonal, and communication skills
- Compete and cooperate in alliances and tournaments
- Understand and practice Gracious Professionalism™
- Earn a place at the *FIRST* Championship
- Qualify for $22+ million in college scholarships

The $6000 registration fee covers the Kickoff Kit of parts and attendance at the Kickoff event and one regional competition. The Kickoff event is at Northeastern in January and the Northeast Regional Competition is at Boston University in April.