

EXECUTIVE SUMMARIES 2023

Describe the impact of the *FIRST* program on team participants within the last 3 years. This can include but is not limited to percentages of those graduating high school, attending college, in STEM careers, and in *FIRST* programs as mentors/sponsors.

CGW strongly emphasizes academic achievement and 100% of our members graduate from high school. All of our graduating seniors are going to college and are majoring in STEM fields. Many of these are going to top schools such as the Colorado School of Mines. Six of our recent alumni are mentors to FRC teams. Our team ran the FLL Southern Colorado State Qualifier in 2017-18 and 2018-19.

387

Describe your community along with how your team addresses its unique opportunities and circumstances.

Our team enjoys being involved with events like Cool Science where we bring our competition robots to show the community. We also bring our muppet-bot and set up a game field with VEX robots for the kids to play. At our week-long MAD Summer Camp, we teach middle schoolers how to build a robot. In the process, they also learn about teamwork, leadership, cooperation, and gracious professionalism. We use our full-sized field to run a scrimmage for all regional FRC teams at the end of build season.

500

Describe the team's methods, with emphasis on the past 3 years, for spreading the *FIRST* message in ways that are effective, scalable, sustainable, and creative. How does your team measure results?

CGW team members have an unparalleled enthusiasm for FIRST. We spread excitement through demos at large festivals, which measure their attendance in the thousands, and small events for elementary through high school students. No matter how many attendees, the real impact occurs in the one-to-one interactions between our team members and the students. By kneeling to a child's level and explaining how the robot works, we engage imagination and an eagerness to be involved in robotics and FIRST.

496

Please provide specific examples of how your team members act as role models within the *FIRST* community with emphasis on the past 3 years.

Team 2996 is known for its generosity. We run a pre-competition scrimmage and invite all FRC teams. Through sharing our tools, facilities, and expertise, we help all teams become competition-ready. We run our field all weekend at the Denver Regional as the practice field. By sharing knowledge and resources with other teams, we encourage gracious professionalism. CGW is known throughout the FIRST community for our spirit and positive attitudes. We bring the fun with our team dance.

485

Describe your team's initiatives to Assist, Mentor, and/or Start other *FIRST* teams with emphasis on activities within the past 3 years.

CGW assists other FRC teams in numerous ways. We are often asked for information on our team's structure, so we have run the Business Exchange at the Denver Regional since 2016. Recently, our team assisted FTC Team 16253, Beastbotics, by discussing our team structure and sharing our tools and facilities. We assist several FRC teams like Bearbotics (4068), Manitou Mustangs (2945), Rocky Mountain Robotics (662), and Rapid Acceleration (4593) with technical expertise and business strategies.

493

Beyond starting teams, what initiatives have you done to help inspire young people to be science and technology leaders and innovators? What results have you seen from your efforts in the past 3 years?

In 2016, CGW started the annual Making A Difference (MAD) Camp for middle school students. We develop and teach the 5-day curriculum, coaching the campers to design, program, and build VEX robots that compete on the final day. We also talk about the opportunities available through FIRST. Seventeen past campers have joined our FRC team. We also reach thousands of students each year through our numerous outreach events.

421

Describe the partnerships you've created with other organizations (teams, sponsors, educational institutions, philanthropic entities, etc.) and what you have accomplished together with emphasis on the past 3 years.

Elks Lodge 309 allows us to use their facilities for our annual fundraiser dinner. In return, we help them clean their building before their summer celebration. We also set up and serve at their dinner events. Our school board allows us to work in our school's facilities and run our annual scrimmage for regional teams. Two Men and A Truck transports our

field to the Denver Regional, helping us provide practice space for other teams. We are pursuing more of these relationships.

474

Describe your team's efforts in the past 3 years to promote equity, diversity, and inclusion within your team, *FIRST*, and your communities.

Our team members come from schools across the Pikes Peak region and have different backgrounds, interests, and abilities. Regardless of their previous experience, we find a place where they can thrive. We have found ways to accommodate students with physical and mental challenges so they can be productive team members. We work to keep the cost of membership low and offer scholarships for team trips so that all students are able to attend.

442

Explain how you ensure your team and the initiatives you have created will continue to run effectively for the foreseeable future.

Students are responsible for passing information on from one year to the next. Student leaders train their sub-teams and maintain notebooks of their progress through the season—things we tried, what worked, and what failed. They identify and train leaders for the following year and ensure that important projects will continue. An example is MAD Camp, which occurs after graduation. The new VP has to be prepared to run the camp while the old VP may be gone.

461

Describe your team's innovative strategies to recruit, retain, and engage your sponsors within the past 3 years.

Pre-COVID, we performed presentations for our sponsors at their offices to enlist their support and keep them up-to-date on our teams' progress. We have found companies are less comfortable having non-employees on-site these days. Because of this, we invite our sponsors to our annual fundraiser, the January Kickoff, and the sponsor appreciation dinner, where we demonstrate our accomplishments for that year. We also encourage them to visit us and send sponsor newsletters to keep them updated.

496

Highlight one area in which your team needs to improve and describe the steps actively being taken to make those improvements.

Communication is a challenge, especially on larger teams. We have 11 subteams who work independently but have common goals. Six are responsible for designing technical subsystems, integrating to meet the parameters required for the robot. The 5 business subteams must create a unified image for CGW. To foster communication, our team meets daily before we begin work and leadership meets twice weekly. Our members work in the same area so we can discuss issues as they arise.

475

Describe your team's goals to fulfill the mission of *FIRST* and the progress you have made towards those goals.

We prepare our students for the workforce, giving them both technical and business experience. They learn engineering design, manufacturing, and hands-on skills, as well as interviewing techniques, leadership, and communication. They persevere through inevitable challenges, and learn how to work creatively in a team. This experience instills determination and ambition, and gives students the confidence that they are ready to take their place in the world.

459

Briefly describe other matters of interest to the *FIRST* Judges, including items that may not fit into the above topics. The judges are interested in learning about aspects of your team that may be unique or particularly noteworthy.

Our team is student-led. This means mentors make suggestions, but allow students to make decisions even if they foresee a failure. We remember the lessons that hurt the most, and failure is a valuable learning experience.

We accept anyone and find a place for them. Because students perform all the functions of the team, we need a myriad of skill sets. From graphic designers to writers to techies, everyone can find a way to contribute.

437

(OPTIONAL) Please use this space to ask 1 question to your *FIRST* Impact Award Judges which will be answered after each event with feedback from the judges (250 characters maximum). Note: Questions asking what is required to win the award will not be answered.

What do you admire most about FIRST?

What are the important impacts that FIRST has on students?

Why are you a FIRST judge, and what do you get from being involved with FIRST?

Why would you want your children/grandchildren to be a part of FIRST?

What would you change about FIRST Robotics?

What are ways that we can be impactful to FIRST other than developing new FIRST teams?