FIRST Impact Award - Team 3620

2026 - Team 3620

Team Number

3620

Team Nickname

Average Joes

Team Location

Saint Joseph, MI - USA

Describe the impact of the *FIRST* program on team participants within the last 3 years. Think about percentages of those graduating high school, attending college, in STEM careers, leadership skills, and serving as mentors/sponsors in *FIRST* programs.

Since Feb ‘23, 100% of our 11 Average Joes (AJ) alumni graduated and pursued higher education, compared to Michigan’s statewide graduation rate of 82% and college enrollment rate of 53%. Of those AJ alumni, 64% currently pursue STEM-related fields, compared to 17% in Michigan. 45% of those alumni have returned to mentor or support the Joes. 100% of our pipeline mentors are Joes, family, or alumni. Of 38 AJ students, 9 are subteam leads who practice leadership skills and support newer students.

Describe your community along with its unique opportunities and circumstances. Think about your geographic region, diversity of town/school, language barriers, socioeconomic barriers, and cultural expectations.

St. Joseph (SJ) is a tourist town beside Lake Michigan that attracts tens of thousands of visitors each year. SJ houses ~8000 residents, with a 16% racial minority population. 51% of adult residents have a bachelor’s degree or higher. Numerous local businesses, organizations, & events operate around SJ, such as Little Things Play Cafe (LTPC), Whirlpool Corporation, & Blossomtime Parade—creating partnership opportunities. Our high school offers 4x more athletic & VPAA electives than STEM credits.

Describe the team's methods, with emphasis on the past 3 years, for spreading the *FIRST* Mission in ways that are effective, scalable, sustainable, and creative.

AJ supports a 21-team FIRST Robotics pipeline (2 FLLD, 10 FLLE, 5 FLLC, 3 FTC, 1 FRC), providing STEAM education to 180 students. Student Joes dedicated 84 hours to leading our second year of FLL summer camps, bringing STEAM to 20 kids. All camp slots filled within 25 minutes of release. Since Feb ‘23, Joes have provided 526 volunteering hours at FIRST competitions: FTC Coloma, FTC Lakeview, FTC State Championship, FLL Lance-A-Bot Mania, & our FRC St. Joe event.

Describe your team's goals and the progress you have made towards them to fulfill *FIRST’s* Vision.

To fulfill FIRST’s Vision and our mission of “Sharing STEAM through relationships with our community,” Joes host multiple interactive STEAM days. In our ‘25 event with LTPC, we brought our robot & STEAM games to 20 kids & 26 adults. Through yearly events at all 3 SJ elementary schools, Joes have celebrated STEAM with ~1300 students in 3 years. We also joined the ‘25 Blossomtime Parade where AJ and our pipeline teams displayed our programs and robots to ~10,000 in downtown SJ and Benton Harbor.

What impact has your team seen from your efforts described in the above question? How does your team measure impact?

Joes measure impact through lives changed. We have substantial community involvement, maintaining partnerships with 60 businesses, organizations, & teams. From May ‘23 to Feb ‘26, Joes have facilitated 89 events toward our mission. In this time, our STEAM Days alone reached >2700 people. Joes invested 3585 hours in these initiatives, spreading STEAM to ~113,700 people, aged 2 months to 92 years. As a result of our outreach, our pipeline now has 19% more students than last season.

Please provide specific examples of how your team and team members act as role models within the *FIRST* community with emphasis on the past 3 years. How do you share these best practices with other teams?

Joes inspire our community, hosting the FRC St. Joseph District Competition since ‘13 (except ‘21 & ‘26), creating a local competition for 40 participating teams per season. Joes share our impact submissions globally through Team 321’s Eyes On Impact Initiative, with 46 people referencing our submissions. Our social media shares STEAM & FIRST information, generating 112,760 views in 2 years. In the last year, the WSJM radio show featured Average Joes 4 times to share our program & impact.

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

In the ‘25-’26 season, 9 student Average Joes mentored 8 teams in our pipeline, an increase of 80% from 5 student mentors in the previous season. These Joes dedicated 687 hours to mentoring students from FLLE to FTC, a 65% increase in student mentoring hours since last season. In 3 years, Joes have assisted 8 FRC teams by sharing our field, fabrication lab, and organizational resources. Overall, Joes spent 1598 hours mentoring other FIRST teams and supporting competitions in the last 3 years.

What other initiatives have you created, grown, sustained, or participated in (*FIRST* or otherwise) to help inspire young people to be science and technology leaders and innovators? What outcomes have you seen from your efforts in the past 3 years?

To make our pipeline more accessible, Joes worked with the School District to create after-school bus routes to our facility used by all of our 107 FLL students. We took “Washerbot”—a washing machine T-shirt cannon—to 16 high school football games in the last 3 years, reaching ~5000 people per game. Joes recruited & networked with students at our high school’s annual orientation events over 3 years, reaching 2055 people. We managed a summer camp at a nearby Montessori school, reaching 16 kids.

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

We host sponsor visits at our facility to allow partners to learn more about our program and interact with students and robots. In the last 3 years, partners have hosted the Joes on 10 site visits for networking and facility tours. Sponsors provide the funding and materials for our team, leading to competition and outreach success. In our ‘25 Joe Expo, we partnered with 11 FIRST teams at our facility to display their robots and run STEAM experiments. The last 3 Joe Expos reached 391 people.

Describe your team's efforts in the past 3 years to promote *STEM for Everyone*™ within your team, *FIRST*, and your communities.

Joes welcome students of any race, gender identity, or abilities. Of the 38 Joes, 42% are people of color. For specialized teams (Drive & Impact), we run thorough tryouts to ensure equal opportunity for all Joes. We partner with Team 1868, Space Cookies, in their Menstrual Equity in FIRST Initiative to provide hygiene products at FRC competitions. Joes ran a Diversity in STEAM event at Whirlpool’s Global HQ with their Employee Resource Groups, reaching 246 people from diverse backgrounds.

Explain how you ensure your team and the initiatives you have created will be sustainable.

Our pipeline is a source of students for our team. Of the 13 8th graders in our pipeline, 12 are now “Apprentice Joes,” participating in FRC to build early skills. First-year FRC students make up 42% of our team (16 students). Our Team Leads work closely with these newer Joes to create future leaders. We use regular SWOT analyses to improve team functions. Our Google Drive contains docs/info since Average Joes’s inception. Joes reused materials for our last Joe Expo to keep costs to just $70.

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

Due to economic shifts, Joes lost 44% of our sponsorships in the last year, putting financial pressure on our program. Through regular sponsor meetings and events, we’ve expanded on our existing partnerships. This season, we also identified >100 relevant businesses/organizations. Students wrote and sent each a detailed sponsor letter with documentation on our program, impact, and costs. In just 2 weeks, we began communicating with 4 organizations and raised over $1500.

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, particularly noteworthy, or had a large impact.

In Nov ‘23, the People with Parkinson’s (PwP), a local organization, contacted us for support. In ‘25, we built our first prototypes of “Buzz Gloves,” a non-invasive treatment for tremors from Parkinson’s. An anonymous donor reached out to us, and their generosity now allows us to distribute the devices to patients for free. In collected data, we found that just 3 minutes of using the devices could provide relief for an hour. Joes have provided 4 sets of gloves by Feb ‘26.

Essay

The Joes are raising the average. Through 16 years of connections, we’ve set a new standard for ourselves, our community, and future generations. Average Joes offer programs to develop technical and soft skills in youth while enhancing the quality of life for those we reach. From partnerships with local businesses to global online impact, we’re spreading STEAM awareness, one Joe at a time. To fulfill our mission of “sharing STEAM through relationships with our community,” Joes are dropping the first rock—starting a ripple effect that carries far beyond the shoreline of Lake Michigan.

This ripple begins with FIRST, giving the Joes a platform to build future STEM leaders. From that initial drop, we established a 21-team pipeline, spanning all five levels of FIRST. Across our pipeline, this school year, 180 students have developed technical, engineering, and professional skills—including CAD, fabrication, programming, data science, business, and marketing. By emphasizing student-led

initiatives, we strengthen essential life skills in our Joes, preparing them to tackle challenges both inside and beyond the team.

During the 2025-26 season, Average Joes expanded support for our pipeline by mentoring eight younger teams, dedicating nearly 700 hours to empowering the next generation—a 65% increase in hours from last season. Our student mentors created a fun, inclusive, and hands-on learning environment. These role models were dedicated and skilled, guiding their teams to success. Four of these eight teams advanced to State.

Our ripple flows beyond competition seasons into summer by providing two week-long STEM camps. High demand and positive references led to all camp slots filling within 25 minutes of opening, demonstrating the program's popularity. We plan on offering additional opportunities in future summers.

For these camps, Joes designed lesson plans that encouraged Discovery, Innovation, and a passion for robotics. Students practiced Core Values through creative activities while learning STEM basics through building LEGO robots; they learned to iterate on designs using the engineering process. We plan on sharing our camp plans with other teams, extending the wave of our reach within the FIRST community.

We help other teams raise the average in their own programs. Over the last three years, we have shared our field, fabrication lab, and mentors with six teams, including 10633 Beebotics, providing guidance in design, coding, and electronics. To further our support, Joes have dedicated 526 hours over the past three years to volunteering at FIRST competitions of all levels. Our students served as referees, queuers, set-up crew, and more, helping ensure the sustainability of local competitions.

Joes run the FRC St. Joseph District Event, a competition so popular that we receive a surplus of 15 potential volunteers above our capacity each season. While scheduling changes in 2026 prevented our event from fitting into this year’s FIM plan, we will support the FRC Berrien Springs Event and hope to host our competition again next year, continuing to raise the standard for FIRST events in our community.

Joes prepare for success beyond high school, ensuring the skills they gain will ripple through their lives and communities. From learning with LEGO to meeting potential employers, students in our pipeline receive support throughout their journey. Our FLL Discover teams involve kids as young as four, introducing them to STEAM and Core Values. At the FRC level, sponsors connect with our students, inviting them to tour facilities. Over the past three seasons, Joes have visited Tigmaster, Fortress, Convergix, and Colson Manufacturing. To maintain relationships, we’ve hosted Lion’s Club, Kiwanis, Convergix, & Colson to engage with students, tour our facility, and share team progress. These symbiotic relationships ensure the financial sustainability of our programs and the future workforce of local companies.

However, finance is but one channel of sustainability. Our pipeline creates a consistent source of innovators for the Average Joes. Our “Apprentice Joes” program invites 8th-grade FTC students to participate in the FRC season under the guidance of upperclassmen, building their experience. This year, we have 13 Apprentice Joes, a 333% increase over the last three years.

Through our community involvement, Joes build partnerships beyond traditional sponsors. In the last year, Joes were featured on the WSJM radio show four times. We used this platform to highlight FIRST and our impact initiatives, including Buzz Gloves and the Joe Expo. We also use social media platforms Instagram, TikTok, and Facebook. In just two years, our Instagram page has generated over 112,760 views.

Joes bridge the gap between athletics and STEM by bringing our Washerbot, a washing-machine-turned-T-shirt-cannon, to local sporting events. In the past three years, we visited 16 high school football games, reaching ~5000 people per game. The Washerbot is a tradition that makes our program visible and approachable, creating a culture of STEM within our town.

In 2025, Joes were invited to our local Blossomtime Parade for the first time. Thirty Joes—from FLL to FRC—marched through downtown St. Joseph and Benton Harbor, carrying hand-drawn signs representing FIRST’s Core Values and our pipeline. We also built two parade floats with sections of the FTC and FRC field, which allowed us to drive our robots live through the parade. This event reached ~10,000 in-person viewers and was broadcast to thousands more.

Joes also host STEAM days in collaboration with our community. We annually bring in robots and lead hands-on STEAM activities at our three elementary school Science & Culture Nights. In three years, we introduced about 1300 elementary-age students to robotics, creating an entry point to our pipeline.

In addition to these efforts, we partner with the Little Things Play Cafe (LTPC), a local cafe and indoor playground. Our yearly event enables us to inspire future innovators who get to interact with our robot and participate in STEAM activities, such as LEGO building, science experiments, and robot crafts. Seeing the fascination of the visitors, LTPC reached out to us, proposing an expanded partnership —a monthly LEGO club at the cafe. Community events like these reach students who don’t typically have access to our pipeline (students who are homeschooled or out-of-district).

To bring robotics to a county-wide audience, we organized an exhibit in the Berrien County Youth Fair. We collaborated with pipeline and local teams, such as 3452 GreengineerZ. Students ran mock matches and let fairgoers drive the robots, creating a hands-on experience. In 2025, we were invited to a local church for the first time to participate in their free community event. We brought interactive experiments and let participants compete in robot time trials to win an Average Joes T-shirt, reaching ~1000 people.

One of the most significant STEAM days we organize is the Joe Expo, a community event filled with robots, science, and learning for all ages. Joes collaborate with 11 other FIRST robotics teams from across the community at our facility. Teams showcase their robots, scrimmage, and lead STEAM activities. While watching FRC robots race across a field, visitors get to participate in experiments, such as making non-Newtonian fluid and building a motor from magnets, copper wire, and a battery. In three years, Joes have facilitated 800+ volunteering hours toward this event.

These events engage families, raising the average of STEAM awareness throughout our community.

Our waves extend beyond families to workplaces. We organized the “Diversity in STEAM” event in partnership with Whirlpool’s Employee Resource Groups. We brought our robot, a section of the field, buzz gloves, Impact documentation, and many Joes, which led us to engage 246 people. This was a first-time event in 2025 that we plan on continuing to show that STEAM is for everyone.

After last season, Team 201, The FEDs, invited us to participate in Team 1868 Space Cookies’s Menstrual Equity in FIRST initiative. 86% of women have started their period in public without the supplies needed. Misuse of products due to lack of access can result in vaginal infections, possibly leading to Toxic Shock Syndrome. This season, we will provide menstrual hygiene products at the FRC Berrien Springs Event & the FRC Kentwood Event, ensuring that everyone has a healthy environment at FIRST competitions.

Joes extend beyond FIRST to be “more than robots” and help everyone live their best life. In November 2023, People with Parkinson’s (PwP), a local organization, asked if we could create vibration therapy boards that numb the erratic brain signals that cause Parkinson’s Disease tremors. After discussion, Joes decided to innovate on the design and build “Buzz Gloves,” devices that administer vibration therapy but are also wearable for mobility.

We spread a request form through PwP presentations to start a waitlist. During a scheduled Buzz Glove trial with a parent with Parkinson’s from Cassopolis Roborangers, we attracted the attention of a bystander who is now an anonymous sponsor for this initiative, allowing us to distribute the devices for free. By February 2026, we have given out four sets of gloves, and we remain committed to iterating on the design and enhancing accessibility to impact as many people as possible–including a request from Poland!

The strongest waves were once ripples. Over 16 years, Joes have grown from 22 kids in a lab to hosting the Joe Expo at our personal facility to attracting international demand for our Buzz Gloves. We’ve reached new shores through bonds with our community. Our pipeline develops each Joe, building the future of our world. Through 3600 hours and 89 outreach events, Joes have propelled ripples into waves, raising the average—for not just ourselves, but our ever-expanding community. ;