

***FIRST* Impact Award - Team 3620**

2025 - Team 3620
Team Number
3620
Team Nickname
Average Joes
Team Location
Saint Joseph, MI - USA
Describe the impact of the <i>FIRST</i> 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 <i>FIRST</i> programs.
-100% of our 18 Joes alumni in 3 years graduated high school and pursued higher education compared to Michigan's graduation rate of 82% and college enrollment rate of 53% Of those 18 alumni, 78% are occupied in STEM-related fields -56% of the 18 alumni returned to assist our FIRST programs & events - We help Joes reach internships/apprenticeships at Whirlpool, Stryker, Convergix, & Hanson Mold -31% of students participate in our application-based leadership team where we foster leadership skills
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 averages 40,000 visiting tourists each summer, bringing us new people to reach every year - ~7,700 residents in St. Joseph -St. Joseph has a 15% people of color population -Only 51% of adults over 25 have a bachelor's degree or higher in St. Joseph -Our school has almost 4 times more athletic & visual/performing arts electives than STEM-based electives
Describe the team's methods, with emphasis on the past 3 years, for spreading the <i>FIRST</i> Mission in ways that are effective, scalable, sustainable, and creative.
-Annually, Average Joes run 7 STEAM days in partnership with local businesses and schools, reaching ~900 people -Volunteered at local FLL/FTC competitions, generating 85 volunteer hours since Worlds 2024 -Ran our first year of FLL summer camps in June, hosting 36 FLL students -Collaborated with 11 other FIRST teams to spread science and technology at events like Berrien County Youth Fair (BCYF) and Joe EXPO -Gave 5 total impact/robot presentations this year to sponsors families and other teams
Describe your team's goals and the progress you have made towards them to fulfill <i>FIRST's</i> Vision.
-Average Joes empower the community to enjoy science & technology through events such as our Joe Expo, running 20 activities and reaching 200 people -We annually offer robot demonstrations and show off our 21-team pipeline at 3 elementary school Science Nights, reaching ~400 people -We take our

Washerbot to school football games, reaching around 4000 fans per game (5 football games this year) - We inspired 56 people to be STEAM leaders at our STEAM Play Day with The Little Things Play Cafe
What impact has your team seen from your efforts described in the above question? How does your team measure impact?
-Average Joes generated 1491 hours by spreading STEAM access from May 1, 2024, to Feb 13, 2025, by running/supporting events, coaching, collaborating with partners, & facilitating outreach -Joes attended/ran 36 events/initiatives (w/ socials), generating a total reach of 72265 people since May 2024 - Because of our reputation we turn away an average of 15 volunteers from our district event, due to a surplus of people who apply -In 3 yrs 95% of the organizations we've worked with invited us back
Please provide specific examples of how your team and team members act as role models within the <i>FIRST</i> community with emphasis on the past 3 years. How do you share these best practices with other teams?
-Our Social media platforms reached 43296 views from May 2024, with 91.5% of posts being FIRST-related educational content -We've hosted the MISJO district event for 13 years, welcoming 165 different teams -Collaborated with 11 other FIRST teams at our Joe EXPO -Support a 21-team St. Joe Robotics program, reaching students PreK-12: with 1 FLLD, 11 FLLE, 6 FLLC, 2 FTC, and 1 FRC team -42% of Average Joes are people of color, and 27% are female, ensuring that anyone can find a Joe role model
Describe your team's initiatives to Assist, Mentor, and/or Start other <i>FIRST</i> teams with emphasis on activities within the past 3 years.
-5 Average Joes students coached younger teams in our pipeline this year, a 150% increase from last year -An Average Joe independently ran our FLLD program -151 students participate in our 21-team pipeline -We invited 8 teams to use our innovation center, FAB lab, and programming room last year -In 2023, Joes supported Team 1940 Tech Tigers who qualified for states for the first time in 4 years -We spent 415+ hours this year, supporting other FIRST teams, 28% of our total outreach hours
What other initiatives have you created, grown, sustained, or participated in (<i>FIRST</i> 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?
We biennially attended the Senior PGA Tour hosted in our community to show off robots and celebrate ---STEM with young generations at the Kids Day STEM tent -Students build their skills by assisting in the coordination/running of 32 initiatives/events out of 36 total initiatives/events that Average Joes support -In 2 years, we have reached a total of 800 students with our Washerbot through 2 Laps 4 Lincoln events -We recruit students at our school's freshman and 8th-grade orientation nights
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 partner with 42 teams, organizations, companies, and philanthropic entities who help us run events, raise funds, and compete -We volunteer at our local museum's events, and the museum allows us to generate funds from its parking lot every 4th of July weekend -We partner with our school's Key Club, giving their members opportunities and gaining support for our initiatives -A large portion of our Super Pit, our portable workshop, was funded/supported by some of our partners/sponsors

Describe your team's efforts in the past 3 years to promote equity, diversity, and inclusion within your team, <i>FIRST</i>, and your communities.	
-We create a welcoming culture in the Average Joes 27% of our team is female, and 42% is of racial minority groups -We're creating children's books to represent students with disabilities, different races, and different ethnicities. One character will have Cerebral Palsy, one will wear a hijab, and others will reflect many different skin tones. -We ran a booth at our local Girls on the Run 5K and volunteered on the race course, reaching 653 girls	
Explain how you ensure your team and the initiatives you have created will be sustainable.	
-We've maintained an average of 31 students on our team in 3 years -Our pipeline and outreach ensure a constant flow of new students; 50% of Average Joes this year are first-year team members -We utilize swim-lane project management boards to organize our time, plans, and priorities -56% of our alumni in 3 years returned to support the Joes and FIRST -Our team's shared Google Drive allows our upperclassmens knowledge to be saved past graduation -Partners support our initiatives and funds	
Highlight one area in which your team needs to improve and describe the steps actively being taken to make those improvements.	
-Communication between our 7 subteams is one of our weaknesses -Mentors approved 8 student applications to serve as subteam leads who work as the main points of communication and organization in their subteams -We created The Average Diary where business students take note of the progress of every subteam -We hold full-team meetings every Saturday to communicate the team's progress in front of our swim-lane project management board	
Briefly describe other matters of interest to the <i>FIRST</i> 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.	
-We partnered with a local group, the People with Parkinson's (PwP) last season and we've achieved significant progress since -We are making them buzz gloves: gloves that use vibration therapy to relieve Parkinson's symptoms -We have started developing a prototype that we hope to see completed by competition week 2. -We also identified where the money for Buzz gloves will come from, a significant step in the process	
Judge Feedback	
	What is the biggest area of improvement you see for us as an impact team? An area the team has an opportunity to improve. Something that really impressed the judges.
Essay	
As Average Joes, we empower everyone within our reach an Above-Average opportunity to thrive in all STEAM-related fields and beyond. Our mission is to make STEAM accessible to everyone, one Joe at a time. After the 2024 World Championships, we conducted a thorough SWOT analysis, pinpointing weaknesses, identifying opportunities, and developing a strategic plan to capitalize for future success.	

Through our introspection, we discovered our lack of summer activities, missing out on a prime opportunity to expand our reach. In an effort to make STEAM majorly accessible—even in the summer—we supported the Super Joes Facets and implemented FLL summer camps in 2024. The Super Joe Facets is a team of FLL Challenge students who practice year-round. The Joes assist them with practicing FIRST Core Values and presentation skills. Our Impact team presented to Facets, teaching them our feedback system of Average (where we can improve) and Above Average (what we did well): this spearheaded their focus for the upcoming months. Continuing our support, we stuffed goodie bags with treats, activities, and a handwritten good luck note to take with them to the State Championship. We want to ensure they feel supported and encouraged; while also remembering that fun, as one of our core values, is essential to the experience. FLL Explore and Challenge summer camps are our other new initiative. Joes held four summer camps over two weeks at our Innovation Center, our team's facility. Anyone is welcome to attend, whether they are homeschooled, a St. Joseph Public Schools student, or a former robotics team member. Explore students designed a LEGO model, learned to code, and collaborated to apply FIRST Core Values. Meanwhile, Challenge students developed programming skills to run robots from the 2019 FLL game, and designed a mini-innovation project. These skills equip students for their future success in FIRST. Six Average Joes provided instruction for six Explore and three Challenge teams, guiding 36 engaged FLL students and generating almost 180 volunteer coaching hours. The Innovation Center continues to support our endeavors beyond summer camps. With 21 teams in our pipeline, we reach students from PreK-12th grade. This allows everyone in our district to access STEAM through all five FIRST programs. This year, five of our 20 younger teams were mentored and/or coached by five of our Average Joes, marking a significant 150% increase from last year's support of just two students. Beyond the Joes' FLL, FTC, and FRC programs, the Innovation Center provides support to other local teams. We're proud of the opportunity to share our facilities for drive practice, part-making, and more. For example, we shared our space, mentors, tools, and meals with team 1940, the Tech Tigers. Most recently, team 4237 Lance-A-Bot, came to use our practice field for calibration, drive practice, mechanism testing, and support in their business endeavors. Teams 5056 Megahurtz, and 9208 Eddies Circuit also visited for similar aid. Providing this support gives them access to additional resources they did not previously have. To continue supporting the local FIRST community, the Joes volunteer at local FLL and FTC competitions and host the FRC FIRST in Michigan St. Joseph District event. Through these efforts, Joes ensure accessibility to local teams—reducing costs and barriers to entry. Our impact to the surrounding community extends beyond the season. Annually, we organize a robotics exhibit collaborating with many other teams at the Berrien County Youth Fair. Running mock matches and allowing fairgoers to drive the robot provides a unique, hands-on robotics experience, while giving Joes the opportunity to share their journey. This event sparks enthusiasm and excitement for all participants, allowing for STEAM and FIRST access, creating everlasting memories. In addition to team partnerships, we partner with local businesses like the YMCA. Utilizing their summer camps, we work with the toddler to tween demographic and provide opportunities for more kids to become submerged in STEAM. Not only did the campers interact with the robot, they also participated in a Michigan Tech Mind Trekkers experiment, Grape Crusher, which taught physics and engineering principles. To help the kids understand programming, the Joes developed a maze-type game called "Program a Friend." Students left with smiles on their faces, chanting our names. Watching STEAM light up kids' eyes inspired us to bring this event to other children throughout our county. So we collaborated with the Little Things Play Cafe (LTPC), creating a new annual event, "STEAM Play Day". This year we brought an experiment that taught preschoolers the importance of hand washing. We also brought a DIY robot, Six Brick LEGOS, and our 2024 competition robot. Building STEAM accessibility at LTPC is allowing preschoolers to explore curiosity and STEAM and preparing them for their future. We aim to continue promoting accessibility, especially to minority groups. Turning this into a reality, we developed a partnership with

Girls on the Run of Michiana. At their 5k Run celebration, we brought Joes-branded coloring pages, Six Bricks, and FLL robots to show off STEAM before their race. Joes also volunteered on the course during the race ensuring safe participation. Most importantly these activities and demonstrations excited young women about STEAM, including students from our district. Joes collaborate with all three of our elementary schools, involving all ages in STEAM. At the culmination of their Science and Culture Nights, all students gather in the gym to see demonstrations from our entire FIRST pipeline. We're honored to be a fundamental part of these Nights for the last eight years. Families are engaged through our informational posters and interactive robots. After our presentation, families ask questions, interact with our robots, and can sign up for one of our teams: this keeps our pipeline operating and creates the next generation of FIRST and STEAM advocates. As a team that values being "more than robots," students provide technical support to our local community through hands-on projects. One of our elementary schools asked us to rebuild a polycarbonate divider for their lunchroom. Joes quickly measured, designed, cut, and placed new ones so the school was prepared for lunchtime. Our district partnerships extend beyond the lunchroom, into the athletic department. The Joes take our Washerbot—a washing-machine-turned-t-shirt-cannon robot—to local sporting events, like home football and basketball games. The Washerbot is becoming so popular that we have been asked to attend baseball games in the spring. This is a two-fold benefit. The Joes have the opportunity to address a new challenge of driving the Washerbot on dirt as well as sharing FIRST principles with another audience. These events promote our pipeline, creating a name in our community, encouraging students to join, and engaging our team in fun. Partnering with our school ensures everyone in the district has access to STEAM. With the goal of expanding STEAM access, the Joes host the annual Joe EXPO: a free educational exhibition featuring over 20 STEAM unique experiments in our Innovation Center. This event enables families from all backgrounds to come together, experience STEAM, and participate in FIRST Robotics. Teams are invited from all over Michigan to assist the Joes in putting on the event as well as playing robots for a day. We established 106 volunteer opportunities for students of the Joes or the 11 visiting teams. While many FIRST students enjoy the opportunities to form connections, it also creates an approachable environment for new students to learn FIRST and STEAM, enabling them to discover a new passion. The impact of our annual Joe EXPO creates a community buzz, and companies continue reaching out to us to organize STEAM day events at their locations. In addition, teams who missed the 2024 Joe EXPO requested an invite for 2025, proving that our FIRST community is passionate and ever-growing. To spread this vital STEAM awareness to a large audience we utilize social media: sharing our team culture, information about FIRST, updates on the program, and our Core Values. Our short-form content shows that Average Joes are "more than robots". Beyond short-form content we have a newsletter, the Average Report, that is sent out to over 6,000 people. Here, we highlight what we do, our students, and our mentors. We are more than a robotics team to our community too. We're a group of students who are here to provide support on community initiatives. We partner with the Berrien Community Foundation to help fill bags for people in homeless shelters, and we've helped them fill medkits for over 100 seniors. To continue improving the quality of life in our community, Joes work with People with Parkinson's (PwP). Last season they approached us about making buzz boards, vibration therapy devices that help relieve the symptoms of Parkinson's. We dove at the opportunity to assist them. After researching and analyzing materials, statistics, and studies, we've finally landed on buzz gloves—a more mobile form. We're eager to help the PwP improve their quality of life with the power of STEAM. Through making STEAM accessible, we are proud to have reached a record number of volunteering opportunities: this totals to 1491 hours toward our mission (as of Feb. 13), a 460% increase from last year. From all of these hours, we've reached over 72000 people. Seeing this growth inspires us to make plans to continue growing outreach events and hours exponentially in the future. We take pride in our accomplishments and work. As Average Joes, we know we're not just preparing for a competition: we're preparing for the real world,

improving our soft and technical skills. Through STEAM impact, Average Joes create an Above-Average community ready to take on what the world brings next. ;

