At a time when schools across the country are challenged to meet the needs of students and educators with shrinking budgets, rural areas especially struggle to bring enriching STEM curriculum to their students. How can rural areas secure appropriate funding to sustain a robotics initiative? What if their existing robotics program cannot thrive due to the cost of travel and lack of community support for equipment and materials? These were just a few of the concerns shared by the Ysleta School District of West Texas.

THE SITUATION
Prior to the 2015-16 competition season, supporting robotics programs in the Ysleta School District of West Texas proved difficult. Robotics teams in this region were unable to compete, due to the cost of travel and a shortage of participants in cities such as El Paso. Districts that expressed interest lacked the resources to start teams or host events.

THE REC FOUNDATION APPROACH
The REC Foundation strives to make its programs accessible, affordable, and sustainable. In El Paso, we worked closely with the school district, military installations, and nontraditional schools to engage students in the VEX Robotics Competition. Through these efforts and by securing funding from our partners, we were able to reach traditionally underrepresented populations, such as minorities, women, low socioeconomic populations, rural and urban communities.

THE SOLUTION
The REC Foundation partnered with Google to secure funding designated for underrepresented rural communities and worked with El Paso’s community stakeholders, as well as cities surrounding Ysleta, to develop a STEM ecosystem and strategic plan to reach school districts within a 60-mile radius. The REC Foundation provided:

- Event Trailers – Equipped with everything needed to host an event and enable competition resources to be shared between schools.
- Coach/Teacher Training – Multi-day training taught teachers how to build and program robots and how to participate in VEX competitions.
- Leagues – Teams traveled to nearby districts to play matches against other schools, allowing them to correct and improve their design, all while preparing for the finals.
- Rookie Events – A newly established rookie event gave all new teams, coaches, volunteers, and the Event Partner an early opportunity to understand how an event runs.
At Alicia R. Chacon International School, our experience with the REC Foundation has been phenomenal and we are very grateful for their help building our robotics program. We had been trying for quite some time to establish a robotics program. The REC foundation provided us with a grant that allowed us to successfully start our program and provide our students the opportunity to learn, practice, and gain life skills through competitive robotics. Our students had a great season last year and their confidence in STEM has increased tremendously.

-Miguel Gonzalez
Innovative Technology Support Teacher
Alicia R. Chacon International School,
Ysleta Independent School District

THE RESULTS

El Paso is projected to see 104% growth during the 2018-19 season hosting at least 10 local competitions with over 200 total teams participating.

NUMBER OF EVENTS

1
Pre-Grant

10
Post-Grant

NUMBER OF TEAMS

218

POST-GRANT

PRE-GRANT

65

CURRENT TEAM NUMBERS

40
TEAMS

62
TEAMS