



SPOTLIGHT ON LOCAL WORKFORCE INNOVATIONS

Building Partnerships to Enhance NASCAR's Talent Pipeline

NASCAR and Richard Childress Racing (RCR) have a vision for growing and developing their own engineers, marketing specialists, drivers, and pit crew members. Founded in 1969, RCR is one of the largest and most storied organizations in NASCAR competition. With over 16 championships and more than 200 victories across NASCAR's top three series, RCR leaders have an interest in encouraging high school and college students to enter Science, Technology, Engineering, Arts, and Math (STEAM) careers in NASCAR.

"As these cars have become more technical, there just aren't enough engineers to go around anymore," said Dr. Eric Warren, the recently named director of NASCAR programs for General Motors and former Head of Competition Racing for RCR — as well as a Mount Airy High School graduate.

RCR selected Mount Airy City Schools to help realize the dream of developing an academic-to-career pathway. With funding from the Burroughs Wellcome Fund, a non-profit research organization that funds Science, Technology, Engineering, and Math (STEM) education, this vision has become a reality for students in this area. Dr. Warren has championed this partnership, and since its conception, Mount Airy City Schools has had 150 students participate in this three-year program, with 45 students in the full internship program.

With roughly \$150,000 in total costs to operate, The Burroughs Wellcome Fund provides funding to pay for the logistics around the project, while RCR provides the training facility and industry leaders to instruct students. Students participating in the internship travel to RCR each Friday to spend time with mentors in their area of interest such as graphic design, marketing, aerodynamic engineering, mechanical engineering, sales, and more. During the internship, students conduct projects in real time to be tested on race days. Student interns have tweaked driving approaches with the team and learned to work in areas of engineering,

such as steering dyno, suspension fatigue, components and chassis, and durability testing.

"This is not only exciting for the students but creates real-world applications that they can then go to RCR and actually test out their ideas," said Dr. Kim Morrison, Mount Airy City Schools Superintendent.

This comprehensive three-year program ensures that all 150 students receive a broad exposure to STEAM careers and can see that many exciting opportunities are possible. The students participate in field trips to NASCAR sites, speedways, and ZMAX drag ways for experiments, culminating with a trip to Florida to see the Daytona 500 including pit road and garage passes before the race. Exposure to an academic career pathway in NASCAR extends further than the internship program. Students in this school district are first introduced to the NASCAR industry in middle school through RCR Future Drivers Club, an after-school club working with mentors to build racing simulators, trying to break world records using remote control cars, and solving real-world problems. Once they enter high school, they can participate in the internship program regardless of classification. Teachers have also collaborated with NASCAR to incorporate specific industry problems within their lesson plans to demonstrate how math and scientific concepts can be applied every day to preparing for the next race.



PROGRAM REVIEW

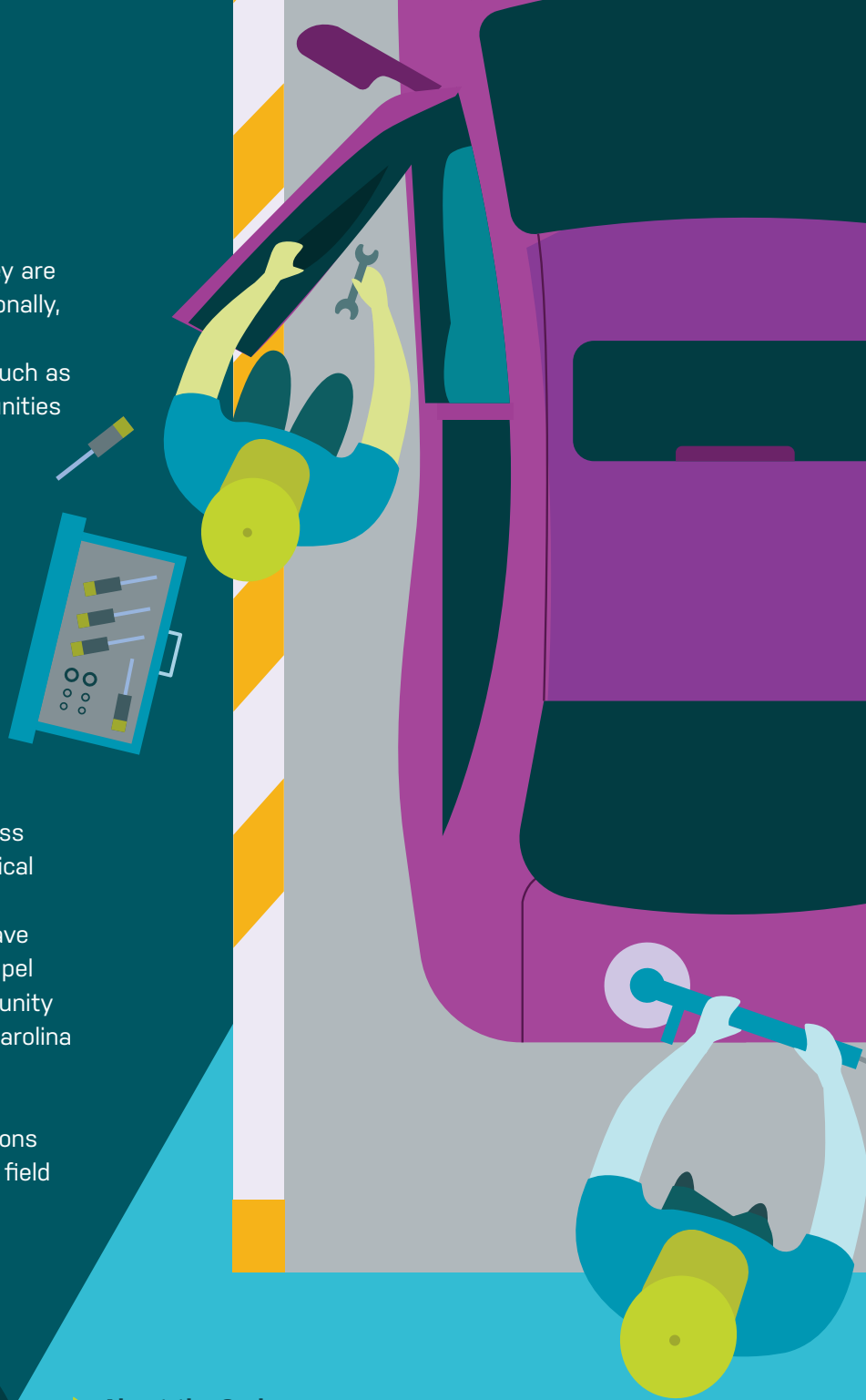
Partnership Mission

The partnership's mission is to demonstrate to students when and how they will apply what they are learning in the classroom later in a career. Additionally, the partnership aims to increase non-traditional populations in the STEAM field and in NASCAR, such as female students and certain ethnic/racial communities not frequently represented.

Program Goals

- Increase student enthusiasm for science and mathematics;
- Increase student achievement by providing a learning environment with technology, STEAM knowledge, and project-based learning;
- Motivate students to pursue STEAM career pathways.

More than 25% of the program's 2020 senior class majored in STEAM-related fields such as mechanical and civil engineering, mechanics, marketing, and electrical engineering. Former NASCAR interns have attended The University of North Carolina at Chapel Hill, North Carolina State University, Surry Community College, Forsyth Tech Community College, East Carolina University, and The University of North Carolina at Charlotte. Many of the interns attribute their experiences with NASCAR as real-world connections leading them to hopefully pursue a career in this field one day.



► About the Series

Brought to you by the NCWorks Commission, the Spotlight on Local Workforce Innovations series showcases local innovations in collaborative, employer-led workforce development partnerships across our state. The series will highlight promising practices that can be replicated across North Carolina.

The NCWorks Commission is the state's Workforce Development Board. Led by a private sector chair, the 33-member, Governor-appointed commission includes representatives from the business community, heads of state workforce agencies, educators, and community leaders.

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