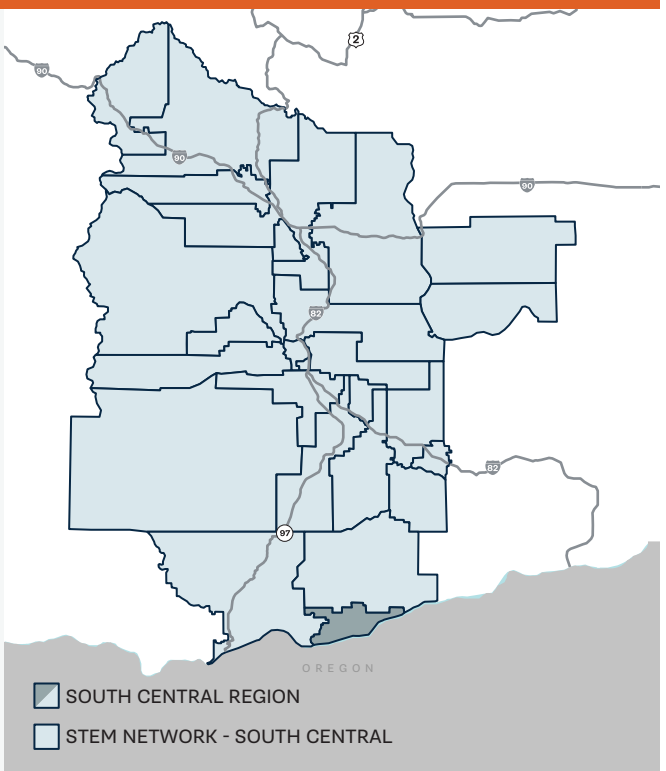
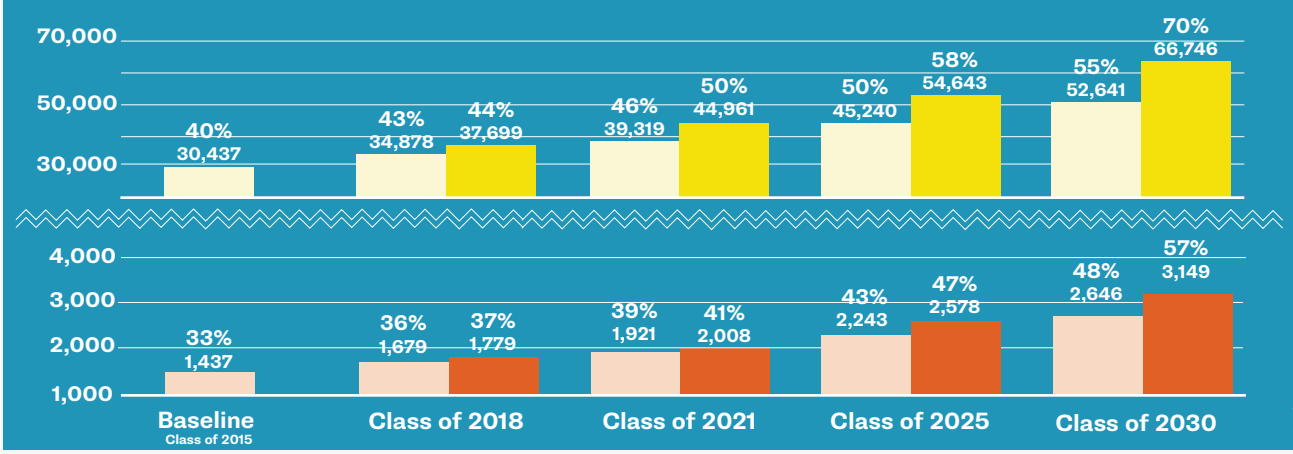
STEM BY THE NUMBERS: SOUTH CENTRAL REGION

South Central Washington STEM
Science, Technology, Engineering, & Mathematics

The South Central Region is home to growing information and technology, healthcare, K-12 education, and construction, spanning from Ellensburg to Yakima. The region is made up of 26 school districts, 25 of which are members of the South Central STEM Network. The Network's business, education, and community partners are working to close credential attainment gaps, especially for students of color and students from low-income families. They aim to increase the number of local students who become computer and IT professionals, construction and trades professionals, teachers, and healthcare professionals, which have 1,310 annual projected openings combined over the next five years.



79 MORE CREDENTIALS PER YEAR = REGION ON TRACK



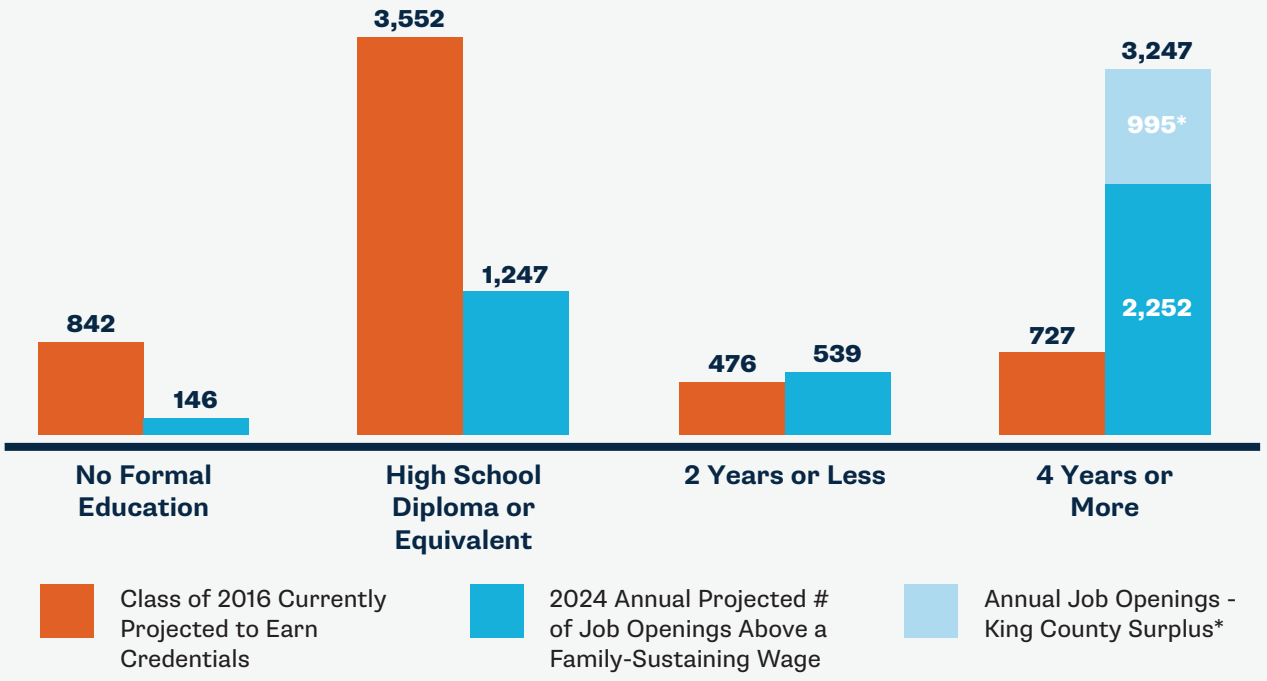
Washington State
- Credentials Attained with Intervention
- Credentials Attained without Intervention

South Central Region
- Credentials Attained with Intervention
- Credentials Attained without Intervention

Measured six to eight years after high school graduation

THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

SOUTH CENTRAL REGION SUPPLY-DEMAND PROJECTIONS



By supporting more students to be on track to earn a high-demand credential, the South Central Region will ensure that up to 4,184 available family-sustaining jobs (those that pay a regionalized wage of $34,300 or more a year) could be filled by local young adults.

*Over the next 12 years, there will be a surplus of jobs in King County compared to the number of new, local, credentialed individuals in King County. That means that if other regions throughout the state only attended to their own regional job openings, King County would be sorely under-supplied by Washington state-originating kids. This surplus represents a proportion of the surplus jobs that could be supplied by students from the South Central Region.

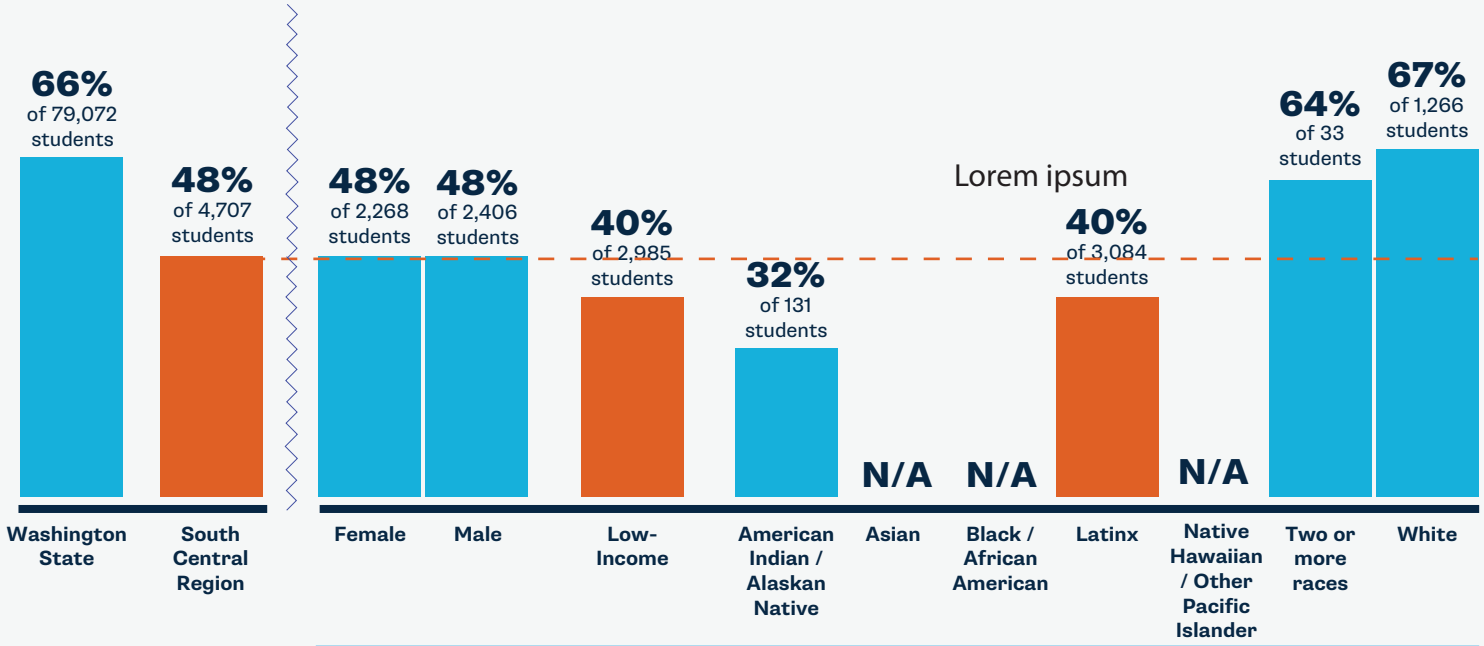
THE ENGINEERING FELLOWS PROGRAM

The Engineering Fellows Program (EFP) brings engineering expertise into classrooms by partnering 5th grade teachers with professional engineers and engineering college students to create hands-on engineering activities for students. Students learn about and experience what engineers do daily through design challenges with a localized focus. Essential to the program's success is the inclusion of a diverse pool of engineering professionals and post-secondary students. Students across South Central Washington are seeing themselves as engineers and are prepared to be the problem solvers that are so critical to the future of our region, the state, and the world.

SOUTH CENTRAL REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

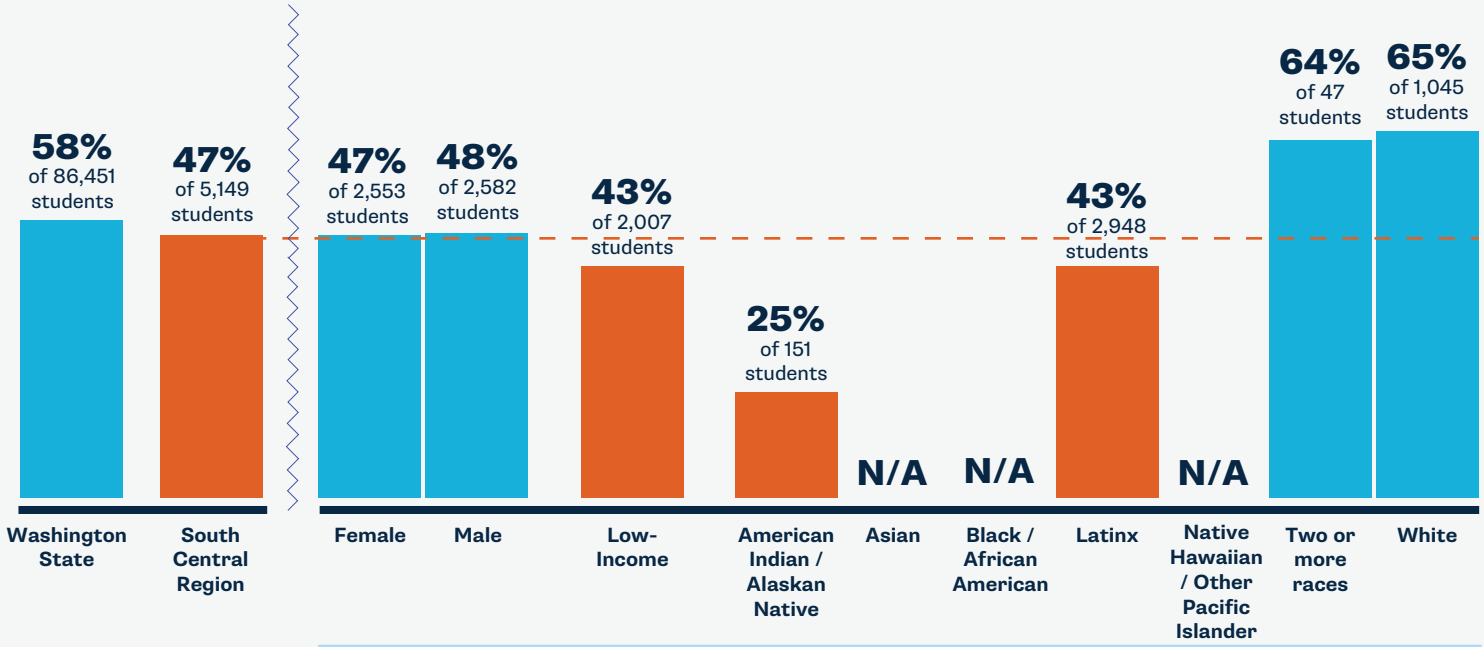
KINDERGARTEN MATH READY (2018)

48% of 4,707 South Central Region children entering kindergarten are math ready compared to **66% of 79,072** children statewide.



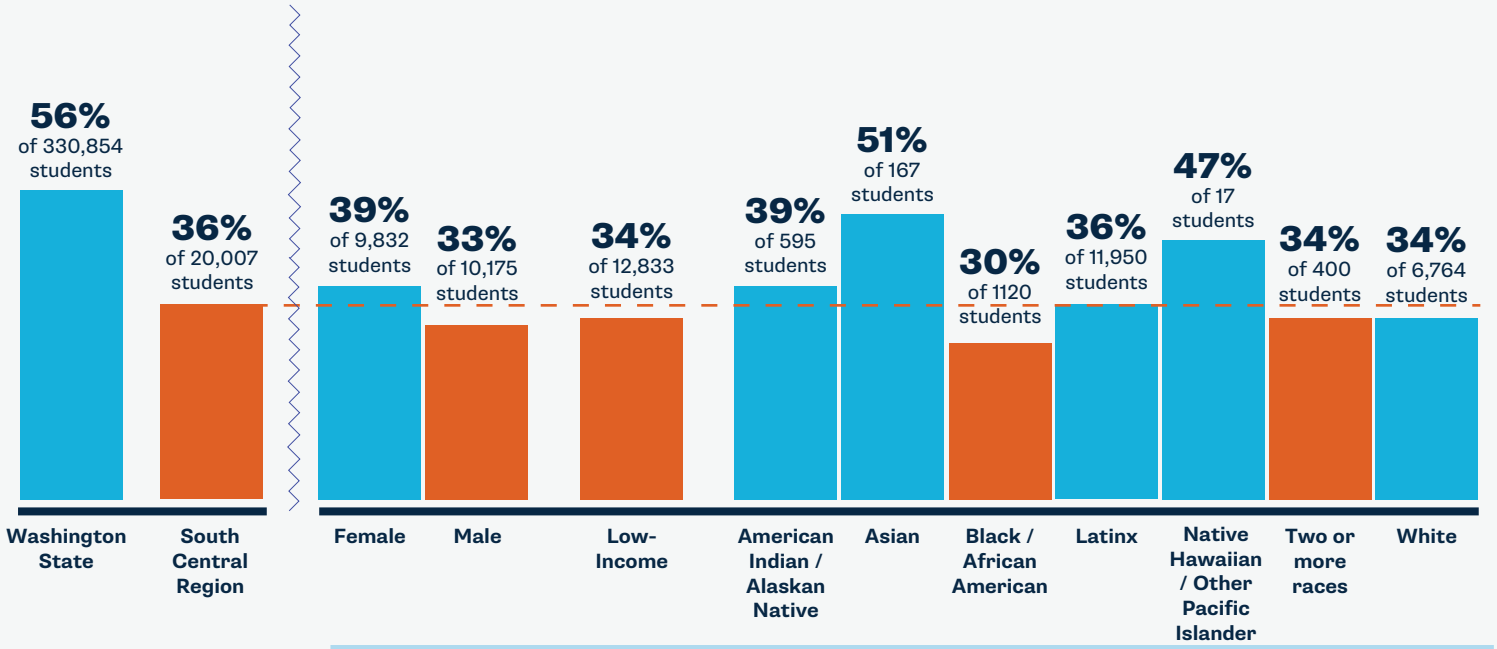
3RD GRADE MATH (2017)

47% of 5,149 of South Central Region third graders meet grade level math standards compared to **58% of 86,451** third graders statewide.



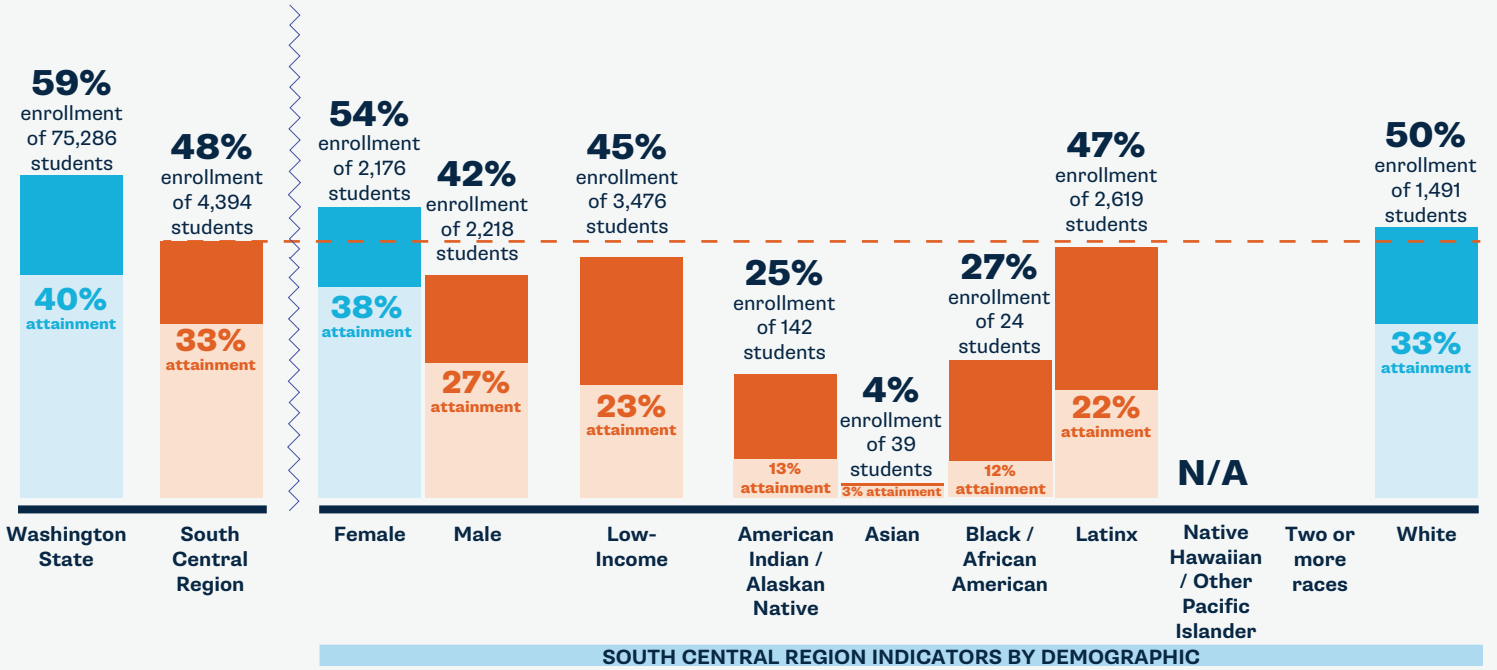
DUAL CREDIT (2017 9-12TH GRADERS)

36% of 20,007 South Central Region high schoolers complete at least one dual credit course compared to **56% of 330,854** youth statewide.



CREDENTIAL ENROLLMENT/ATTAINMENT

48% of 4,394 of the originating ninth graders in the South Central Region enroll in a postsecondary program and **33%** of those originating ninth graders earn a credential by age 26.



Data citations and region-by-region analyses will be posted at www.washingtonstem.org/STEMbythenumbers.

For more information on the South Central STEM Network and its work in the South Central Region, contact Network Director Mark Cheney at Mark.cheney@esd105.org.

SOUTH CENTRAL REGION STEM INDICATORS

Ready for Kindergarten

While 48 percent of all South Central Region kids are math ready by kindergarten, high-quality early learning opportunities need to be more accessible to families of color and those that are lower-income to close math-readiness gaps.

TBD we are determining availability of high-quality early learning for families and supports for professionals in this region

48% of South Central Region children entering kindergarten are math ready

K-8 STEM Learning

Between kindergarten and third grade, math-readiness and skills gaps widen for many students, which is correlated with success in related areas of study. School districts need resources and assistance to remove barriers and create opportunities in STEM for all students.

TBD we are determining the STEM indicators for each school district in this region in partnership with LASER

47% of South Central Region third graders meet grade level math standards

Secondary Pathways

While students in the South Central Region are overall less likely to complete dual credit** courses than their peers across the state, students of color and low-income students experience reduced access to and completion of these courses compared to their peers.

TBD we are determining availability of dual credit courses and career pathways programs by type and subject area in this region

36% of South Central Region high schoolers complete at least one dual credit course

**Dual credit programs give students the opportunity to earn high school and college credit simultaneously. Completion of dual credit coursework is highly correlated with higher education enrollment and completion.

Credential Enrollment/Attainment

Of the originating ninth graders across the state, 59 percent enroll and 40 percent complete a credential. While South Central Region students enroll and complete at comparable rates, the region is working to expand credential pathways capacity to close opportunity gaps for key student groups.

TBD we are determining local higher education and career training program capacity in this region

48% of the originating ninth graders in the South Central Region enroll in a postsecondary program and 33 percent of those originating ninth graders earn a credential by age 26.

STEM by the Numbers is a series of regional reports which examines data that tells us about Washington students' access to credentials and family-sustaining jobs. Together with our partners, we are advocating for and developing regionalized, cross-sector, and longitudinal data. We highlight student outcomes above, and in future publications we will report on systems indicators, like high school course offerings and availability of STEM professional learning and supports.

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REGIONAL TOP INDUSTRIES AND STEM JOBS

MEDICAL ASSISTANTS & NURSES

Annual # of Openings: 470

Credential: Certificate → Bachelor's

Average Regional Wage: $46,725 →$71,921

CONSTRUCTION & TRADES PROFESSIONALS

Annual # of Openings: 311

Credential: Apprenticeship

Average Regional Wage: $52,629

K-12 TEACHERS

Annual # of Openings: 336

Credential: Bachelor's

Average Regional Wage: $58,146

COMPUTER & IT PROFESSIONALS

Annual # of Openings: 97

Credential: Certificate → Bachelor's

Average Regional Wage: $62,447

CENTRAL WASHINGTON STATE FAIR STEM BUILDING

Each fall, residents from all across Washington state look forward to attending the Central Washington State Fair. The Fair provides an opportunity to share STEM and possible STEM career pathways with the thousands of fairgoers'. For the last five years the South Central Washington STEM Network, in partnership with the Yakima School District CTE Department, have coordinated the school districts, businesses, and community organizations who serve as Day Sponsors for the STEM Building. Each organization serving as a Day Sponsor provides the volunteers to lead the 12-15 hands-on STEM-related activities as well as share proudly the STEM opportunities that they as an organization provide to their students, employees, or community members. 50,000+ fairgoers' visit the STEM Building and this year experienced activities that included virtual reality, engineering challenges, a phosphorescent shadow wall, 3-D printers, robotics, and more. The STEM Building exists to develop/deepen fairgoers' understanding of STEM and the opportunities that STEM provides to the youth of our community.

By 2030, Washington STEM and our statewide partners aim to **triple the number of students** of color, students from low-income and rural families, and young women who are on track to earn high-demand credentials and enter family-sustaining careers in the state.