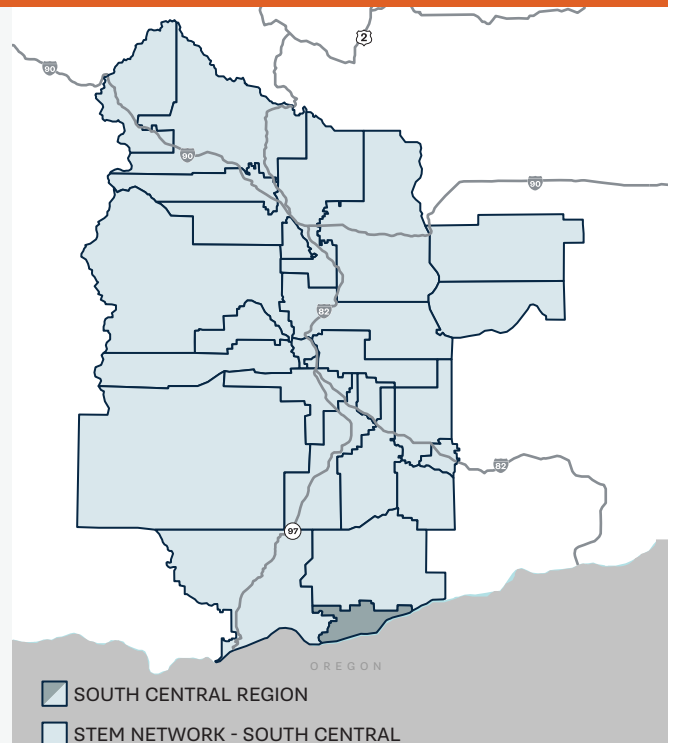


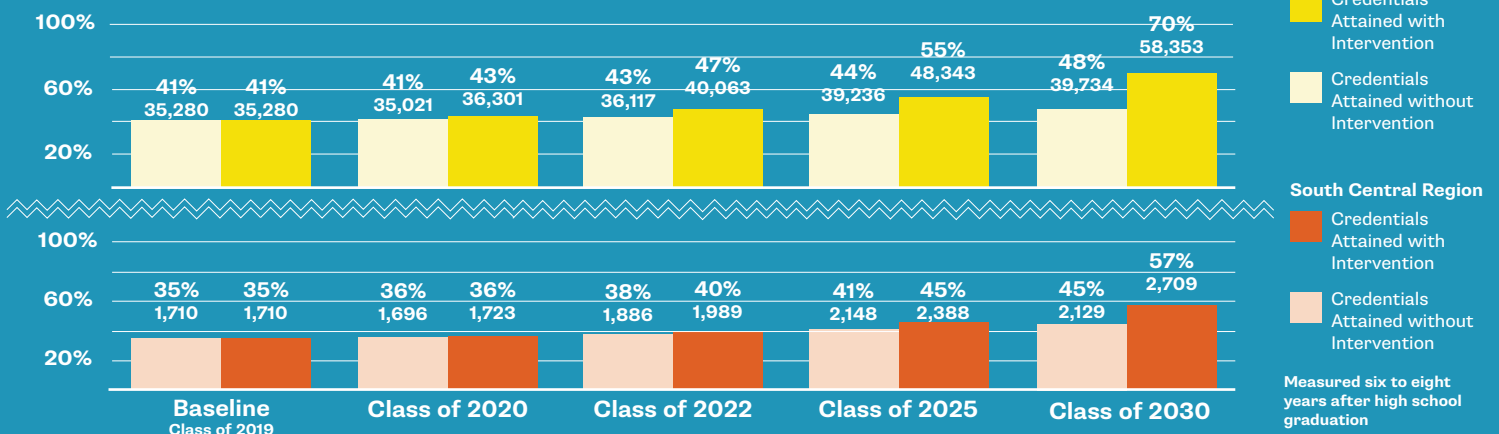


STEM BY THE NUMBERS: SOUTH CENTRAL REGION

The South Central Region is home to historically robust STEM industries, including agriculture, education, health-care, and manufacturing. The South Central Washington STEM Network and its cross-sector partners develop career pathways in these and other in-demand career fields. By 2030, 75% of high-demand, family-wage jobs available in our region will require a postsecondary credential; 39% of those jobs will be STEM or STEM related occupations. However, students in the South Central Region are not equitably or adequately prepared to take advantage of these opportunities, with only 35% of the high school cohort of 2019 projected to be on track to attain postsecondary credentials. We aim to close those gaps and increase the number of our local students who gain access to jobs that pay a family wage and have shown strong resilience during times of economic uncertainty. To learn more about the South Central Washington STEM Network, visit <https://www.esd105.org/stem>.



91 MORE CREDENTIALS PER YEAR = REGION ON TRACK



THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

6,289 JOBS PAY A FAMILY WAGE*
IN THE SOUTH CENTRAL REGION

75%

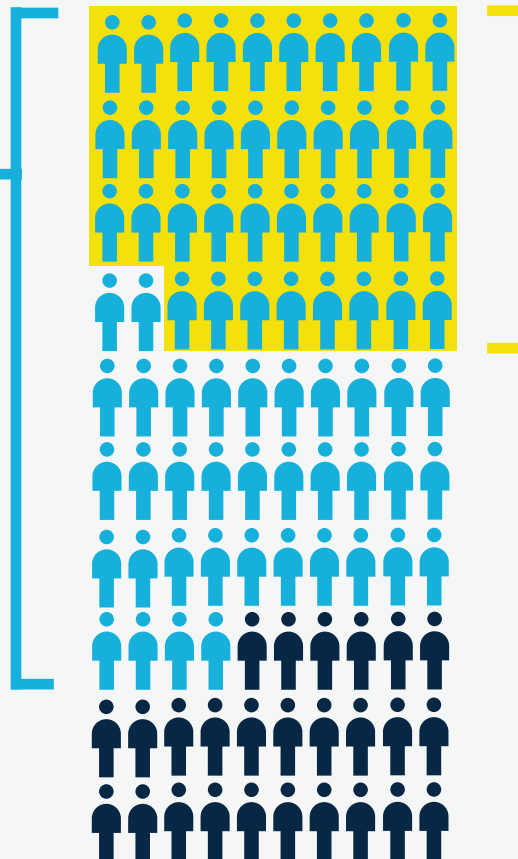
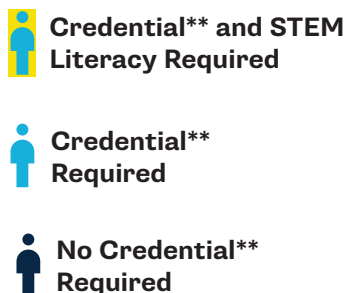
(4,697) of family-wage* jobs in this region require a credential.**

39%

(2,429) of family-wage* jobs in this region require a credential** and STEM literacy.

36%

Current trends show local K-12 students will **only fill 36%** (1,696) of the family-wage jobs per year in the region that require a credential.**



*"Family wage" and "family-wage jobs" are determined based on the assumption that two working adults are contributing to a household with two children (one infant and one child aged 5 to 12 years), using the statewide family-wage average from the University of Washington Self-Sufficiency Standard, 2020. For households with one adult and two children, the wage threshold is doubled.

** "Credential" refers to all forms of postsecondary education and training, including registered apprenticeships, 1-year certificates, 2-year degrees, and 4-year degrees.

Explore more Washington career and credential data at www.washingtonstem.org/labor-market.

A FOCUS ON EARLY MATHEMATICS

The South Central Washington STEM Network believes that when students engage in high-quality math experiences with caring adults in their preschool years, they are more likely to see themselves as problem solvers. In the 2020-2021 school year, the Early Math Innovation Project will provide the opportunity for teaching staff, students, and families from 28 preschool classrooms to engage in enjoyable and successful math experiences, helping to build a positive math mindset. This ongoing journey helps to establish the belief that there is no such thing as those who are "math people" and those who aren't, but rather that all individuals can be highly successful in mathematics.



SOUTH CENTRAL REGION STEM INDICATORS



As Washington students move through our education systems, they interact with and are influenced by a wide range of factors that impact their likelihood of success in K-12, postsecondary, and beyond. The following graphic helps illustrate how our educational infrastructure is, or isn't, supporting Washington students.



EARLY LEARNING



40%

of children under 6 years old with all parents working are able to access quality-rated early learning



47%

of children demonstrate the math skills expected for their age

Not enough families are able to access quality-rated early learning due to the lack of systemic supports and capacity. Quality-rated early learning can lead to sustained positive outcomes for students, especially those from low-income households.



K-12 STEM LEARNING



35%

of fifth graders demonstrate the science skills and knowledge expected for their grade level



50%

of third graders demonstrate the math skills expected for their grade level

Students of all races have better educational outcomes if they are taught by racially diverse teachers; students of color see positive benefits if they are taught by teachers who look like them and have similar cultural backgrounds.



22%

teachers in our region are teachers of color, compared to 72% students of color



46%

of schools offer dual credit courses in at least two STEM subjects (2018)
*does not include Running Start or CTE



38%

of high schoolers completed at least one dual credit course during high school

College credit completion that is accessible through high school is a strong indicator of success after high school. Students who can access STEM dual credit courses are more likely to go on to pursue a high-demand/STEM credential.



Systems Supports



Student Outcomes



CREDENTIALS & EMPLOYMENT



65%

shortfall in postsecondary program availability

Over 70% of family-wage jobs in our state require a postsecondary credential (certificate, degree, or apprenticeship) but our postsecondary system lacks the capacity and support to meet credential demand. Explore more WA occupation data at www.washingtonstem.org/cori.



43%

of the 2018 high school cohort have enrolled in a postsecondary credential



35%

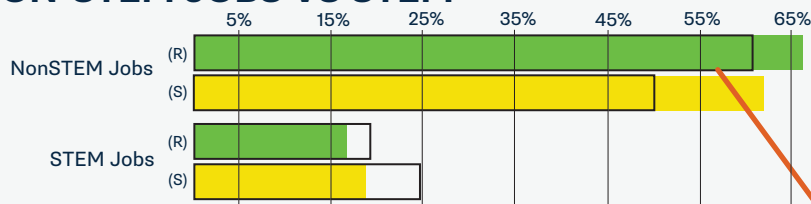
of the 2018 high school cohort is on track to earn a postsecondary credential by age 26



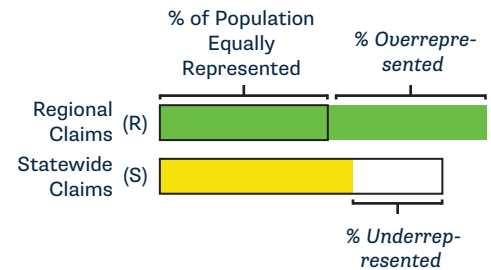
COVID-19 IMPACTS

COVID-19 continues to have an outsized and ongoing impact on every community in our state and our region is no exception. However, those impacts have been felt disproportionately. When we look at the data, it's clear that communities of color have continued to see significant unemployment due to COVID-19, as compared to their white counterparts. Additionally, community members without any kind of post-high school credential have also seen dramatic unemployment impacts, further highlighting the need for continued education and credential attainment beyond high school.

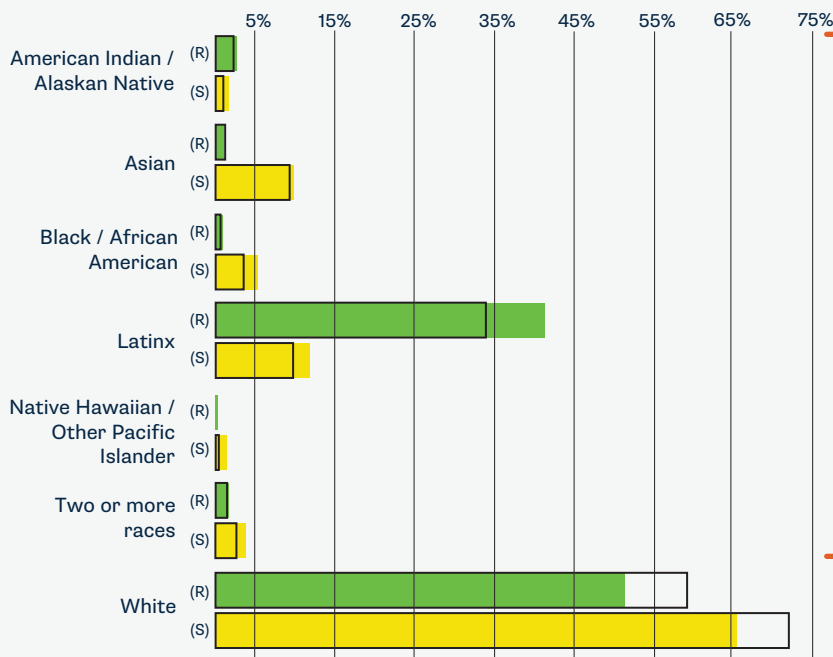
UNEMPLOYMENT CLAIMS BY: NON-STEM JOBS VS STEM



LEGEND: UNEMPLOYMENT CLAIMS



RACE/ETHNICITY



Individuals with non-STEM jobs were overrepresented in unemployment claims by 5%.

Communities of color in our region are overrepresented in unemployment claims by 8%, as compared to their white counterparts.

Individuals with a four-year college credential were significantly underrepresented in unemployment claims by more than 6%.

EDUCATION ATTAINMENT



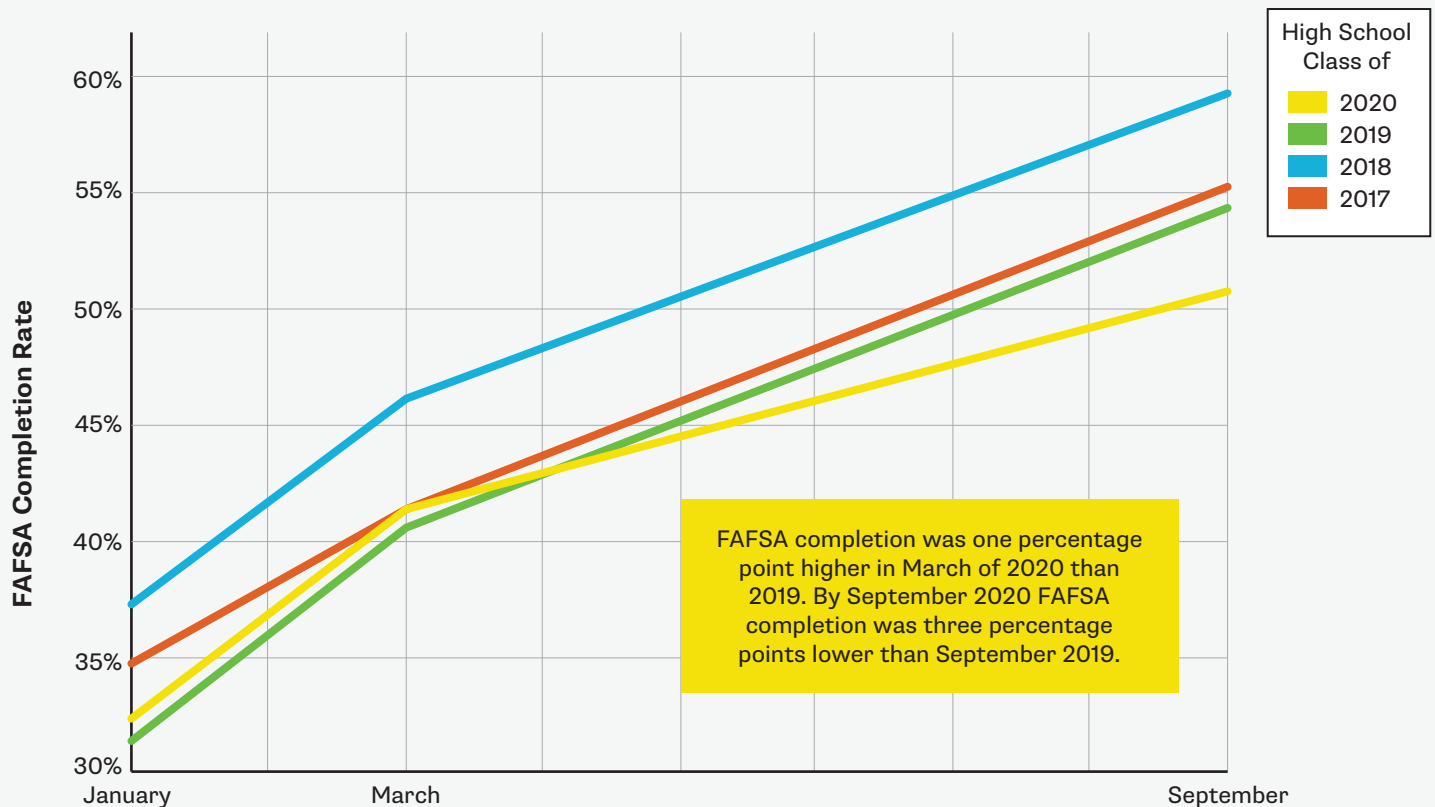
The disparities represented here among demographic groups are not representative of talent, intellect, or inherent ability. These unemployment claim disparities are indicative of how economic and educational systems have historically, and habitually, underserved and oppressed these communities.

Unemployment claims data from the week of May 23, 2020. Weeks prior to this date were potentially overstated due to fraudulent unemployment claims.

FINANCIAL AID

Financial aid, like the Free Application for Federal Student Aid (FAFSA) and the Washington Application for State Financial Aid (WASFA), is a critical component for success for any Washington student who chooses to pursue education after high school. Despite the critical importance of financial aid, and the generous packages available for students in our state, Washington is woefully behind in financial aid completion as compared to the rest of the U.S. Our regional networks and partners are working to increase financial aid application completion, which will help close pervasive gaps in higher education attainment.

South Central Region FAFSA Completion Rate by High School Cohort



FAFSA completion data provided by Washington Student Achievement Council.
Explore the data here: <http://bit.ly/WSACfafsacompletion>

DID YOU KNOW?

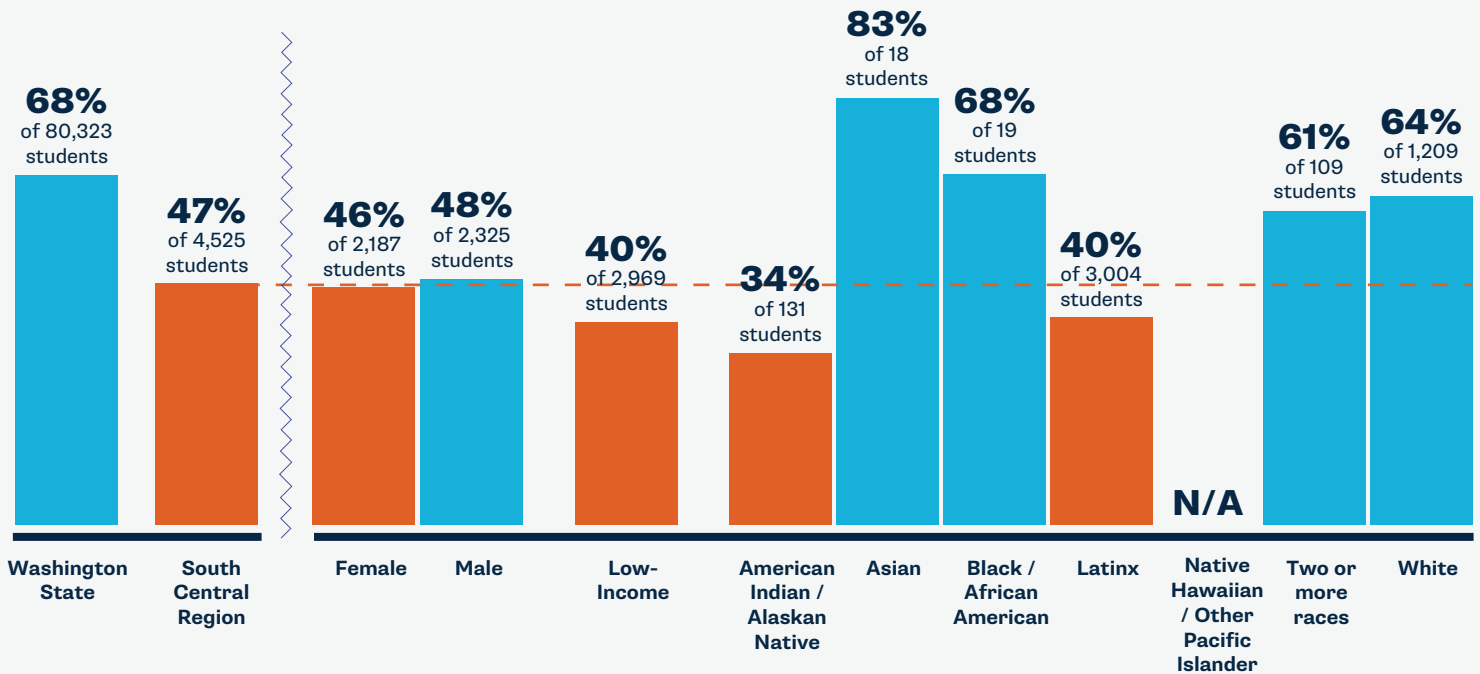
- Students experience a 25% increase in higher education enrollment and completion when they are made aware of financial aid by the time they're in high school and are awarded an aid package that meets their needs.
- Every \$1,000 a student from a low-income or working class background has to pay out of pocket reduces the probability of that student re-enrolling in college or university the following year by 16%.
- Students who are undocumented in Washington can access up to \$11,040 in state aid through the Washington Application for State Financial Aid (WASFA).
- Washington has several unique financial aid programs available to students: the Washington College Grant, the College Bound Scholarship, the Washington State Opportunity Scholarship, the WASFA, and more.
- Aid from the Washington College Grant can be used to support costs of apprenticeships, certificates, and two-year and four-year degree programs.

SOUTH CENTRAL REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

KINDERGARTEN MATH READY (2019)

47% of 4,525 South Central Region children entering kindergarten are math ready compared to **68% of 80,323** children statewide.

More than or equal to average of comparison
Less than average of comparison

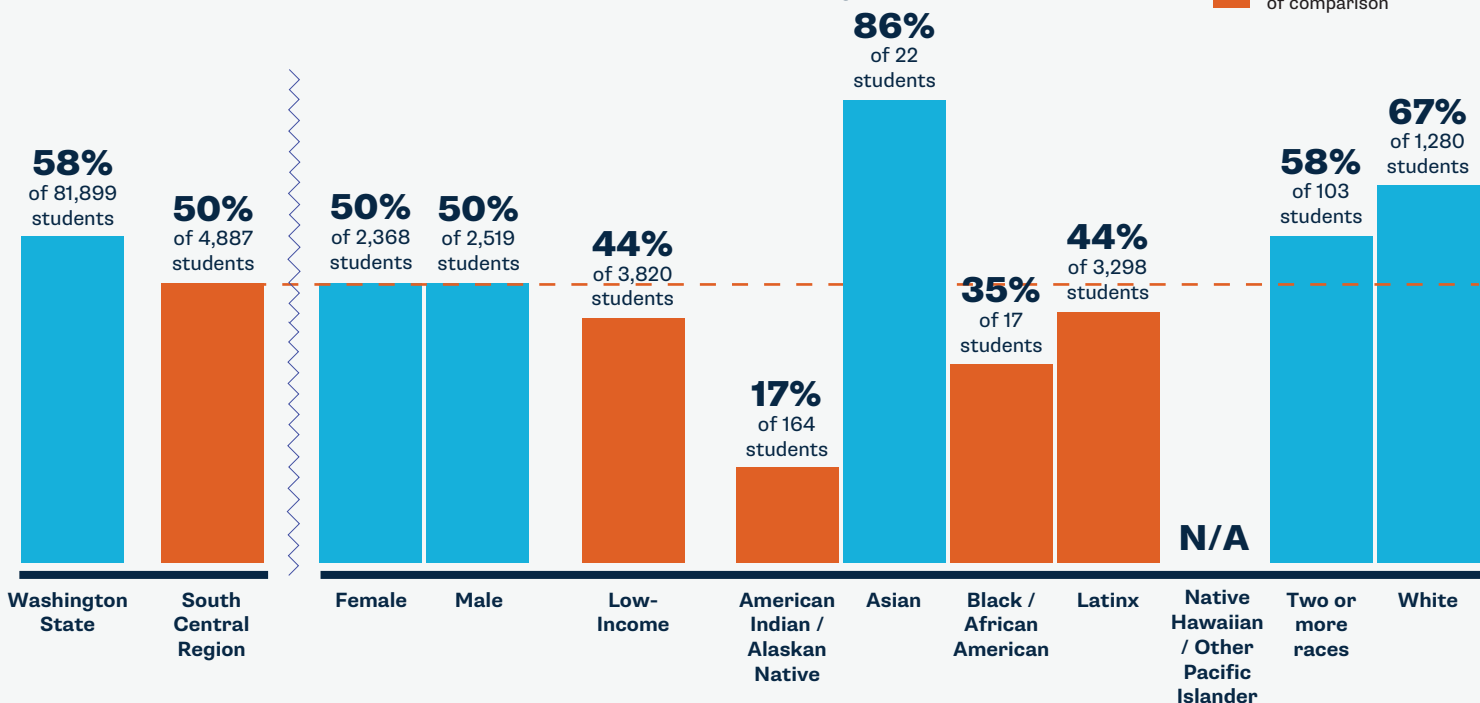


SOUTH CENTRAL REGION INDICATORS BY DEMOGRAPHIC

3RD GRADE MATH (2019)

50% of 4,887 South Central Region third graders meet grade level math standards compared to **58% of 81,899** third graders statewide.

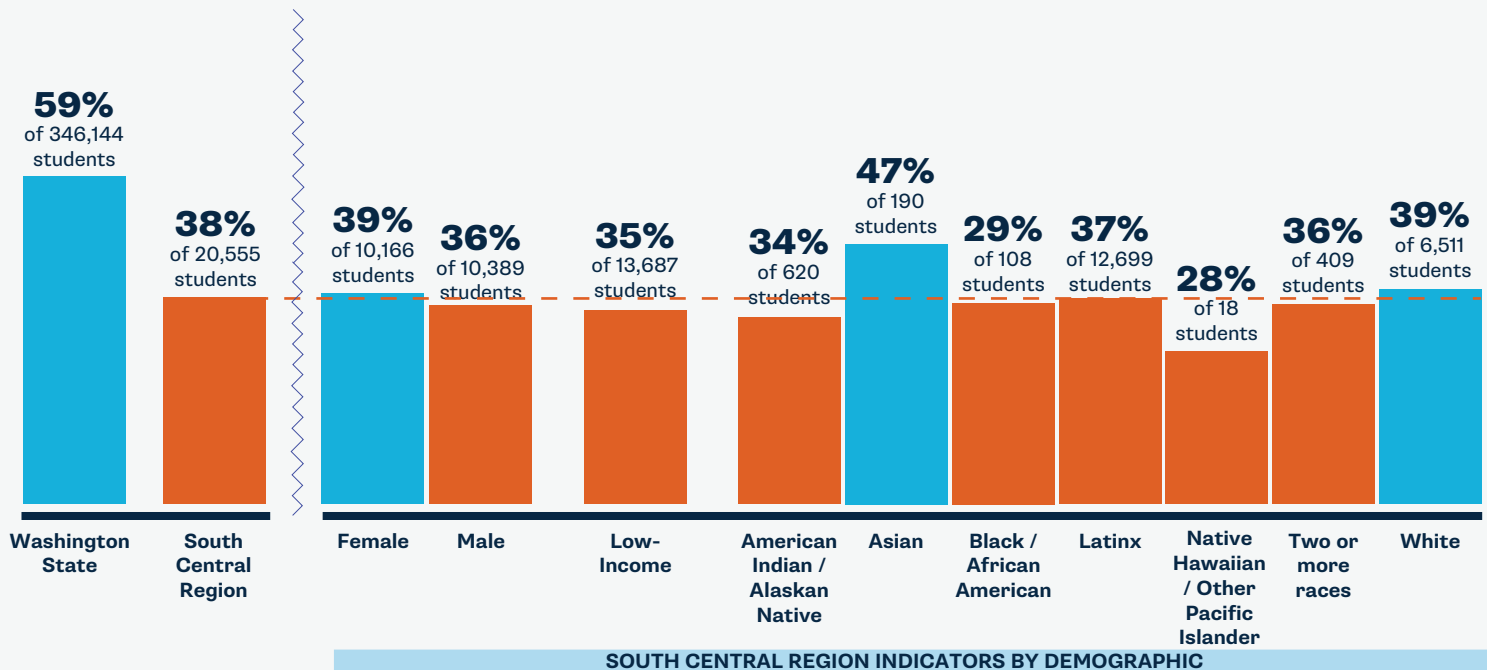
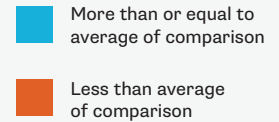
More than or equal to average of comparison
Less than average of comparison



SOUTH CENTRAL REGION INDICATORS BY DEMOGRAPHIC

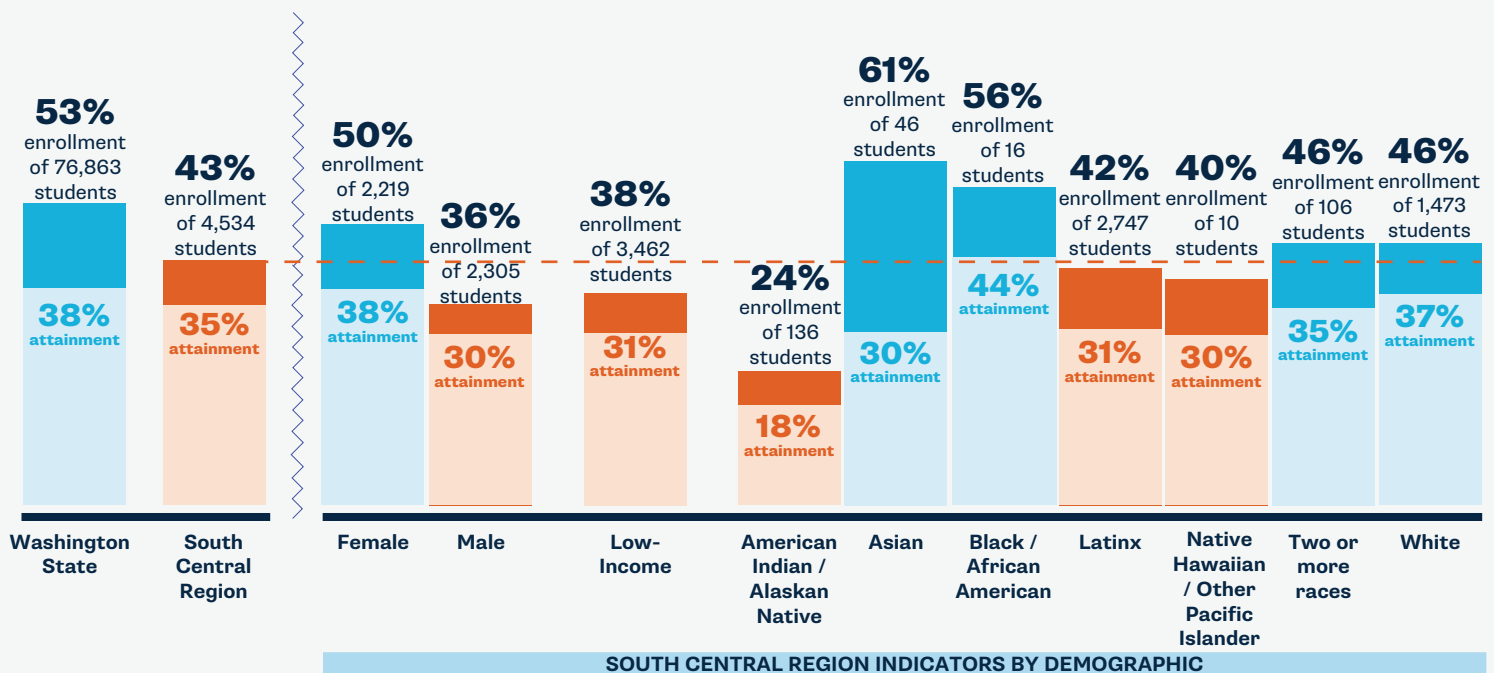
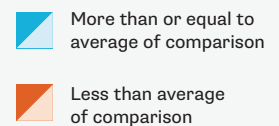
DUAL CREDIT (2020 9-12TH GRADERS)

38% of 20,555 South Central Region high schoolers complete at least one dual credit course compared to **59% of 346,144** youth statewide.



CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2018)

43% of 4,534 originating ninth graders in the South Central Region enroll in a postsecondary program and **35%** of those originating ninth graders earn a credential by age 26.







Data citations and region-by-region analyses are 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 Co-Director Mark Cheney at Mark.cheney@esd105.org and/or Network Co-Director Hugo Moreno at hugo.moreno@esd105.org.

REGIONAL TOP INDUSTRIES AND STEM JOBS

The following industries and jobs in the South Central Region continue to offer meaningful career opportunities for local students, and have shown strong resilience or have seen a strong rebound during the COVID-19 pandemic. Jobs like those listed below are examples of strong, family-sustaining wage jobs that can provide economic security amid uncertainty, while creating clear pathways for future growth. Explore more Washington labor market data at www.washingtonstem.org/labor-market.

	 K-12 Teacher	 Healthcare Professionals (RN & Medical Assistant)	 Construction Trades	 Advanced Manufacturing Professionals
Annual Number of Openings**	375	297	286	161
Oct. Insured Unemployment* Rate	0.5%	0.9%	2.8%	2.3%
Oct. Regional Insured Unemployment* Rate	2.7%			
Credential	Bachelor's	Bachelor's	Apprenticeship	Certificate, Associates, Apprenticeship, Bachelors
Average Regional Wage	\$60,058 → \$66,234	\$38,057 → \$80,392	\$51,728 → \$67,610	\$43,157 → \$127,073

*Insured unemployment is a count of payments made to unemployment insurance claimants.

**Annual number of entry level job openings created by workers who leave an occupation and need to be replaced or occupation growth. Openings do not include turnover.

COMPUTER SCIENCE IS ESSENTIAL

In South Central Washington, computer science is a top priority. The region is home to one of the three Computer Science Teachers Association (CSTA) chapters in WA State. The number of rural districts utilizing the Microsoft TEALS Program has grown from six in 2018, to 14 in 2020. In addition, ESD 105, in partnership with Computing for All and other regional stakeholders we have developed the new Computer and Software Technician (CAST) program. Through this innovative program students will receive industry recognized credentials, college credit, 21st century job skills, and a paid internship. Recruitment for this exciting new opportunity is currently underway with the program start in the fall of 2021 at the Yakima Valley Technical Skills Center.



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.