

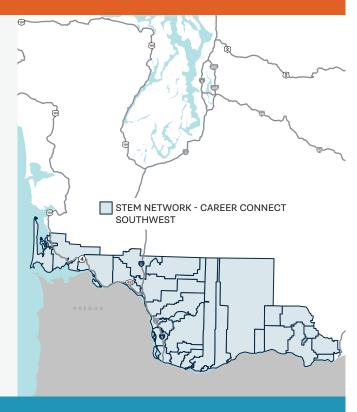
STEM BY THE NUMBERS: SOUTHWEST REGION

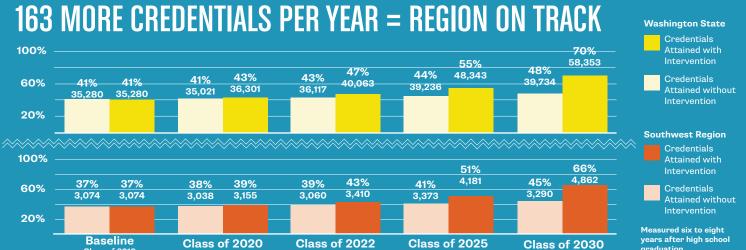
The Southwest Region is home to historically robust STEM industries, spanning from construction to information technology, served by the Career Connect Southwest Network and its cross-sector partners. By 2030, 79% of high-demand, family-sustain-





ing wage jobs available in our region will require a postsecondary degree or credential; 45% of those jobs will be STEM or STEM literacy-based occupations. However, students in the Southwest Region are not equitably or adequately prepared to take advantage of these opportunities, with only 37% of the high school cohort of 2019 projected to be on track to attain post-secondary 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 Career Connect Southwest Network, visit www.careerconnectsw.org.





THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

13,445 JOBS PAY A FAMILY WAGE* IN THE SOUTHWEST WASHINGTON REGION

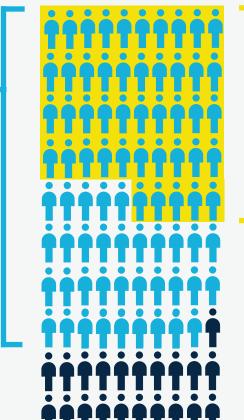
79%

(10,630) of family-wage* jobs in this region require a credential.**

> Credential** and STEM Literacy Required

Credential**
Required

No Credential** Required



45%

(6,067) of family-wage* jobs in this region require a credential** and STEM literacy.

29%

Current trends show local K-12 students will only fill 29% (3,038) 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.



EDUCATOR INDUSTRY IMMERSION IN SW WASHINGTON

Teachers from Cowlitz, Clark, Klickitat and Pacific Counties participated in an externship to learn more about construction services careers. The educators saw site work, framing, finishing, quarrying, and learned from professionals in architecture, project management, finance, and more. This experience, led by Career Connect Southwest and AGC Oregon-Columbia Chapter, invited middle and high school teachers from all subject areas to immerse themselves in the construction industry for a week, so they can return to their classrooms and help their students understand the breadth and depth of in-demand careers in construction.

SOUTHWEST 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

K-12 STEM LEARNING

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

★ † 53%

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.



teachers in our region are teachers of color, compared to 27% students of color



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

† † † 69%

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.

COLLEGE & CAREER PATHWAYS



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



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



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.

†† 46%

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

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: LEGEND: UNEMPLOYMENT CLAIMS NON-STEM JOBS VS STEM % of Population % Overrepre-Equally 40% 50% 60% 70% sented Represented Regional NonSTEM Jobs Claims Statewide Claims STEM Jobs % Underrenresented RACE/ETHNICITY 80% 90% 10% Individuals with non-STEM jobs American Indian / (R) were overrepresented in Alaskan Native unemployment claims by 10%. Asian Communities of color in our Black / African (R) American region are overrepresented in unemployment claims by 3%, as compared to their Latinx white counterparts. Native Hawaiian / (R) Other Pacific Islander Two or more Individuals with a four-year college races credential were significantly underrepresented in unemployment White claims by more than 10%. **EDUCATION ATTAINMENT** The disparities represented here

School College Col

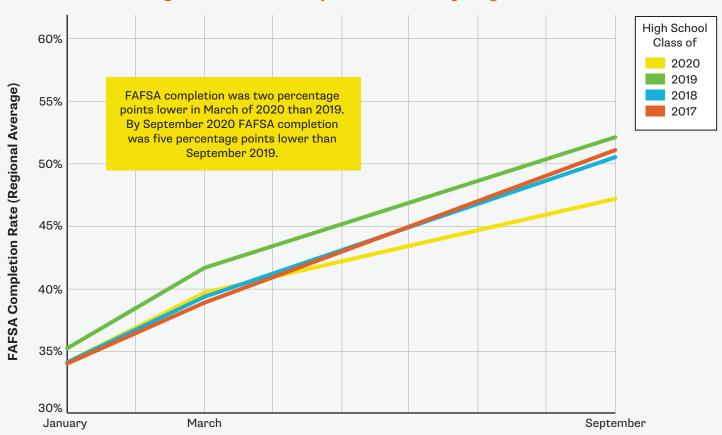
The disparities represented here among demographic groups are not representative of talent, intellect, or inherent ability. These unemployment claim disparities are indicative of how economic and educational systems have historically, and habitually, underserved and oppressed these communities.

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.

Southwest 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

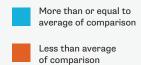
DID YOU KNOW?

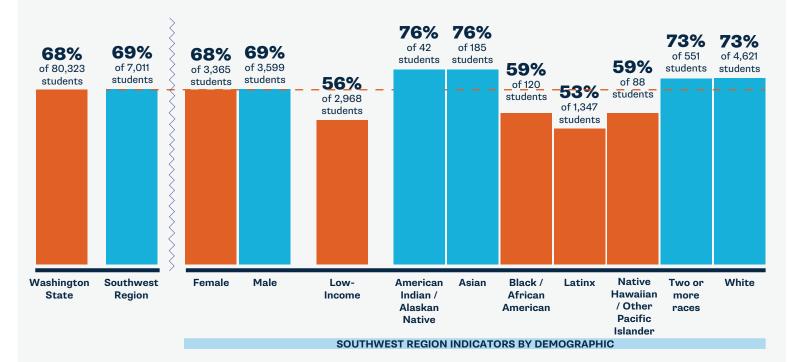
- Students experience a 25% increase in higher education enrollment and completion when they are made aware of financial aid by the time they're in high school and are awarded an aid package that meets their needs.
- Every \$1,000 a student from a low-income or working class background has to pay out 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.

SOUTHWEST REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

KINDERGARTEN MATH READY (2019)

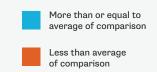
69% of 7,011 Southwest Region children entering kindergarten are math ready compared to **68% of 80,323** children statewide.

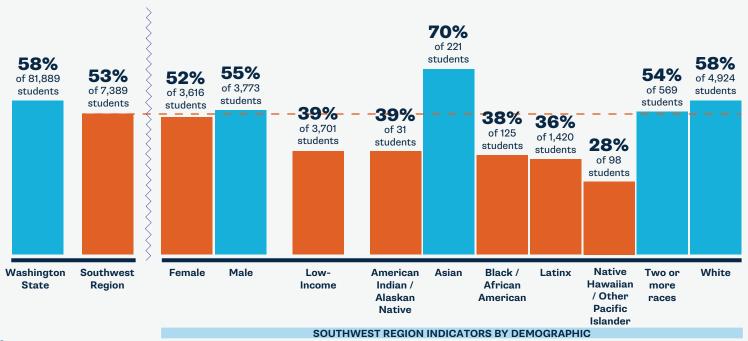




3RD GRADE MATH (2019)

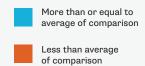
53% of 7,389 Southwest Region third graders meet grade level math standards compared to **58% of 81,889** third graders statewide.

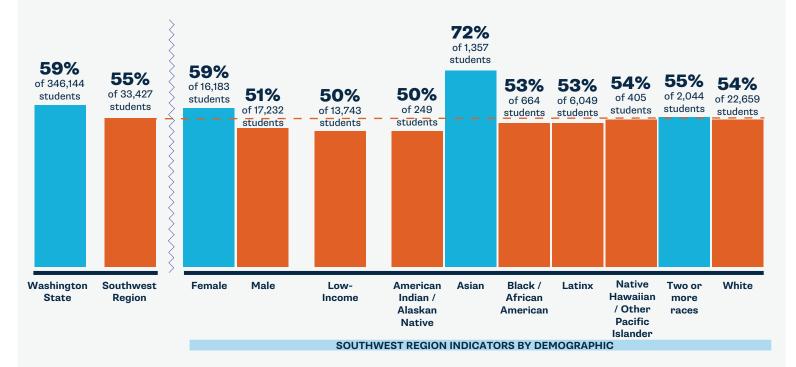




DUAL CREDIT (2020 9-12TH GRADERS)

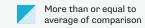
55% of 33,427 Southwest Region high schoolers complete at least one dual credit course compared to **59% of 346,144** youth statewide.

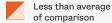


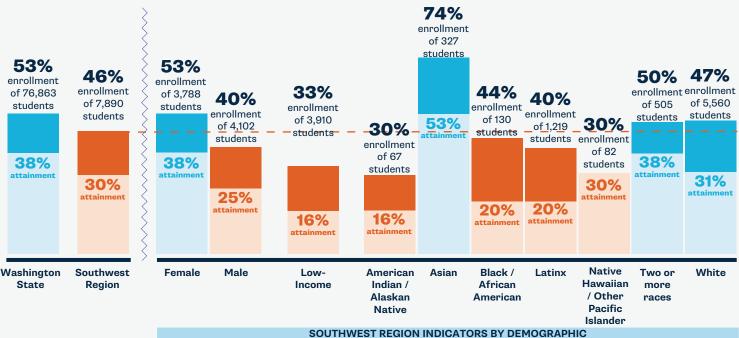


CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2018)

49% of 3,148 originating ninth graders in the Southwest 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 are posted at www.washingtonstem.org/STEMbythenumbers.

For more information about early learning and career pathways work in the Southwest Region, contact Southwest STEM Network directors Vickei Hrdina, vickei.hrdina@esd112.org.

REGIONAL TOP INDUSTRIES AND STEM JOBS

The following industries and jobs in the Southwest 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 occupations 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.

	Construction Trades	K-12 Teacher	Healthcare Professionals (RN & Medical Assistant)	Computer & IT Professionals
Annual Number of Openings**	1,125	594	588	608
Oct. Insured Unemployment* Rate	2.4%	0.5%	0.7%	0.0%
Oct. Regional Insured Unemployment* Rate	2.6%			
Credential	Apprenticeship	Bachelor's	Apprenticeship → Bachelor's	Associates → Master's
Average Regional Wage	\$59,579 → \$78,156	\$73,505 → \$77,892	\$42,815 → \$96,275	\$59,783 → \$147,099

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

FOCUSING ON FAMILY PLAY IN STEM

Early exposure to problem solving can help children develop positive identities in STEM subjects and can help adults positively reshape relationships with mathematics, technology, and engineering. Career Connect Southwest's early STEM initiatives include family-focused ways to enjoy growing healthy mindsets for our youngest learners. Math Anywhere! aims to create opportunities for playful mathematics in everyday spaces. They develop prompts to inspire math thinking and invite conversation as families interact with everyday tasks – shopping, taking walks, going to the movies, or going to the doctor. Our Early Robotics Loan program provides screen-free ways for toddlers to learn the basics of coding and logic with their caregivers at home or at preschool. These free materials are available to all our partners and include training and support for teachers, parents, and other caregiving adults.



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.

^{**}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.