



STEM BY THE NUMBERS: SNOHOMISH REGION

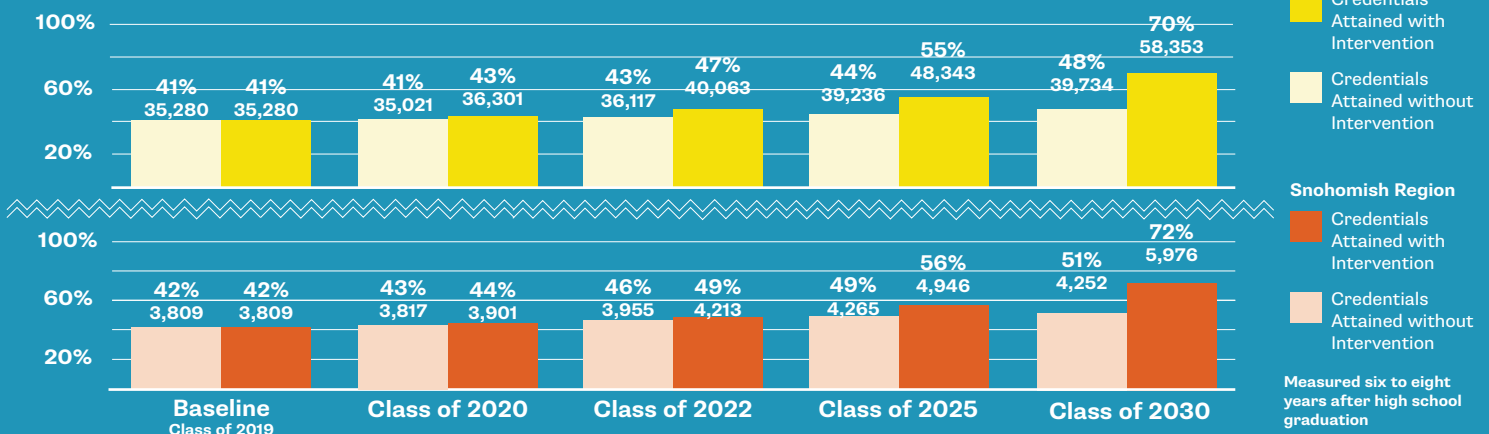
The Snohomish Region is home to historically robust STEM industries, spanning from advanced manufacturing to information technology, served by the Snohomish STEM Network and its cross-sector partners. By 2030, 79% of high-demand, family-sustaining wage jobs available in our region will require a postsecondary degree or credential; 50% of those jobs will be STEM or STEM literacy-based occupations. However, students in the Snohomish Region are not equitably or adequately prepared to take advantage of these opportunities, with only 42% 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 Snohomish STEM Network, visit <http://www.snohomishstem.org>.



Innovate. Educate. Achieve.



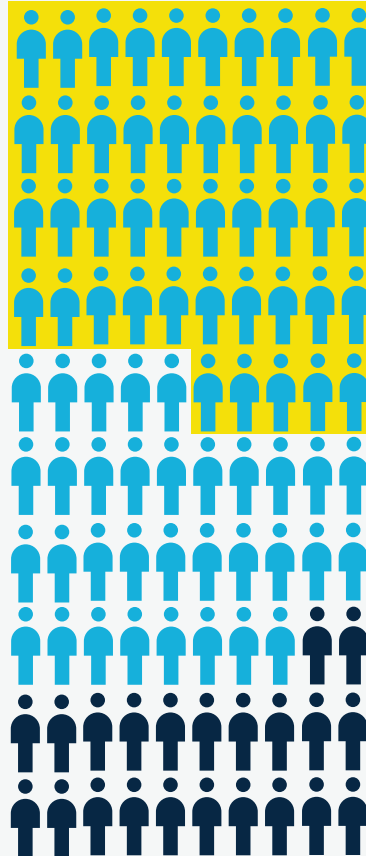
197 MORE CREDENTIALS PER YEAR = REGION ON TRACK






THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

19,640 JOBS PAY A FAMILY WAGE* IN THE SNOHOMISH REGION

79%
(15,442) of family-wage* jobs in this region require a credential.**



50%
(9,807) of family-wage* jobs in this region require a credential** and STEM literacy.

-  Credential** and STEM Literacy
-  Credential** Required
-  No Credential** Required

25%
Current trends show local K-12 students will **only fill 25%** (3,817) 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.

CAREER CONNECTED LEARNING WITH SNOHOMISH PUD

Students and educators alike discover the science behind energy generation, storage, and consumption while learning about the impacts of energy demand, sustainability, and conservation. These hands-on learning experiences spark interest in students to better understand the need for energy, and the balance of environmental impacts. Through professional development sessions, educators acquire strategies, supplies, and in-classroom support to implement these concepts and activities in and out of the classroom. Snohomish PUD's tangible, meaningful experiences for students from elementary to high school and beyond, results in more than 35,000 student instruction hours annually.




SNOHOMISH 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


 **20%** of children under 6 years old with all parents working are able to access quality-rated early learning


 **67%** 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


 **55%** of fifth graders demonstrate the science skills and knowledge expected for their grade level


 **59%** 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.

 **9%** teachers in our region are teachers of color, compared to 44% students of color

COLLEGE & CAREER PATHWAYS

 **73%** of schools offer dual credit courses in at least two STEM subjects (2018)
*does not include Running Start or CTE

 **62%** 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.





CREDENTIALS & EMPLOYMENT





 **49%** 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.

 **55%** of the 2018 high school cohort have enrolled in a postsecondary credential

 **40%** of the 2018 high school cohort is on track to earn a postsecondary credential by age 26

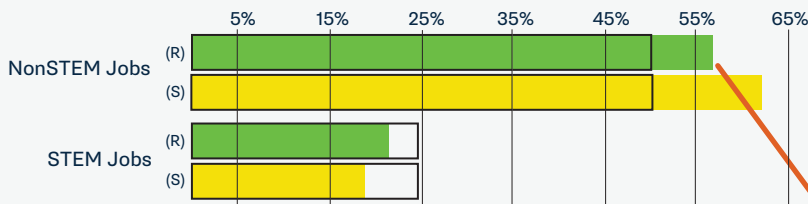
 Systems Supports
 Student Outcomes

COVID-19 IMPACTS

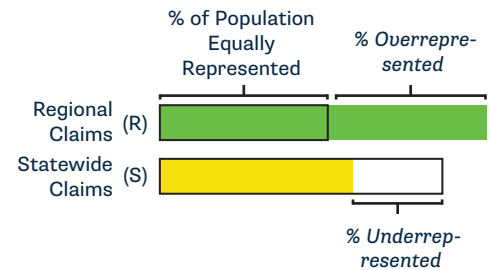
COVID-19 continues to have an outsized and ongoing impact on every community in our state and our region is no exception. However, those impacts have been felt disproportionately. When we look at the data, it's clear that communities of color have continued to see significant unemployment due to COVID-19, 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:

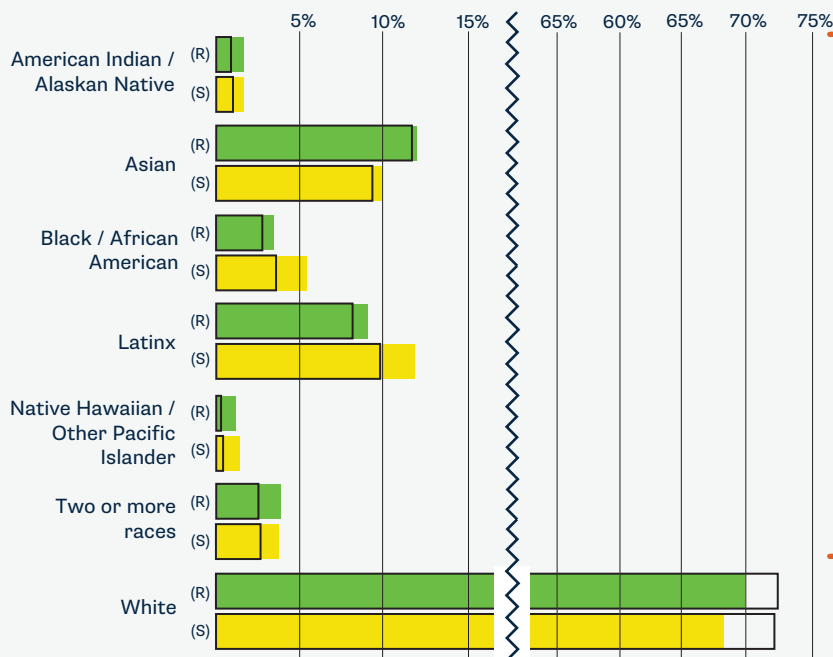
NON-STEM JOBS VS STEM



LEGEND: UNEMPLOYMENT CLAIMS



RACE/ETHNICITY



Individuals with non-STEM jobs were overrepresented in unemployment claims by 7%.

Communities of color in our region are overrepresented in unemployment claims by 4%, as compared to their white counterparts.

Individuals with a four-year college credential were significantly underrepresented in unemployment claims by more than 11%.

EDUCATION ATTAINMENT



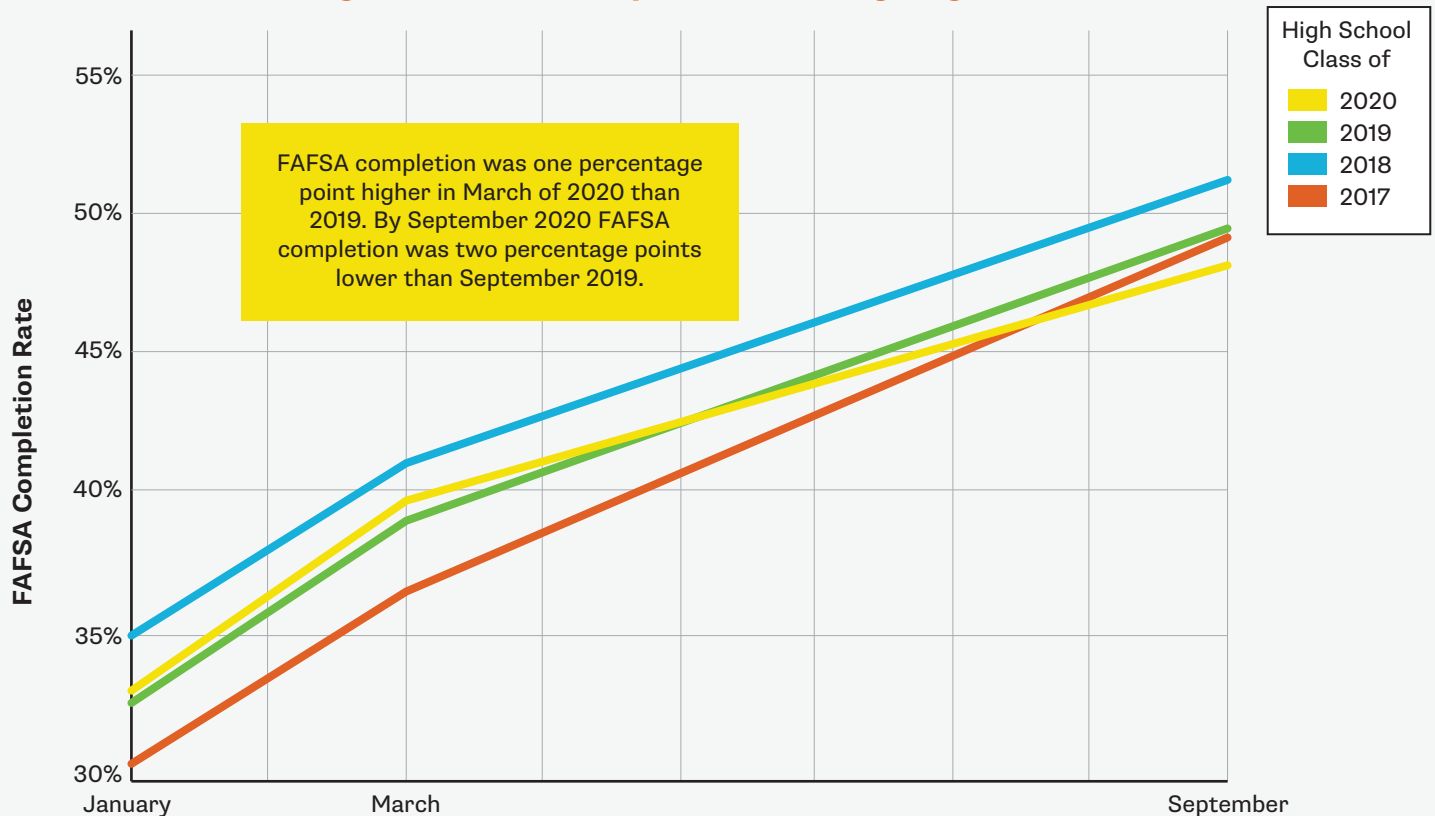
The disparities represented here among demographic groups are not representative of talent, intellect, or inherent ability. These unemployment claim disparities are indicative of how economic and educational systems have historically, and habitually, underserved and oppressed these communities.

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.

Snohomish 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?

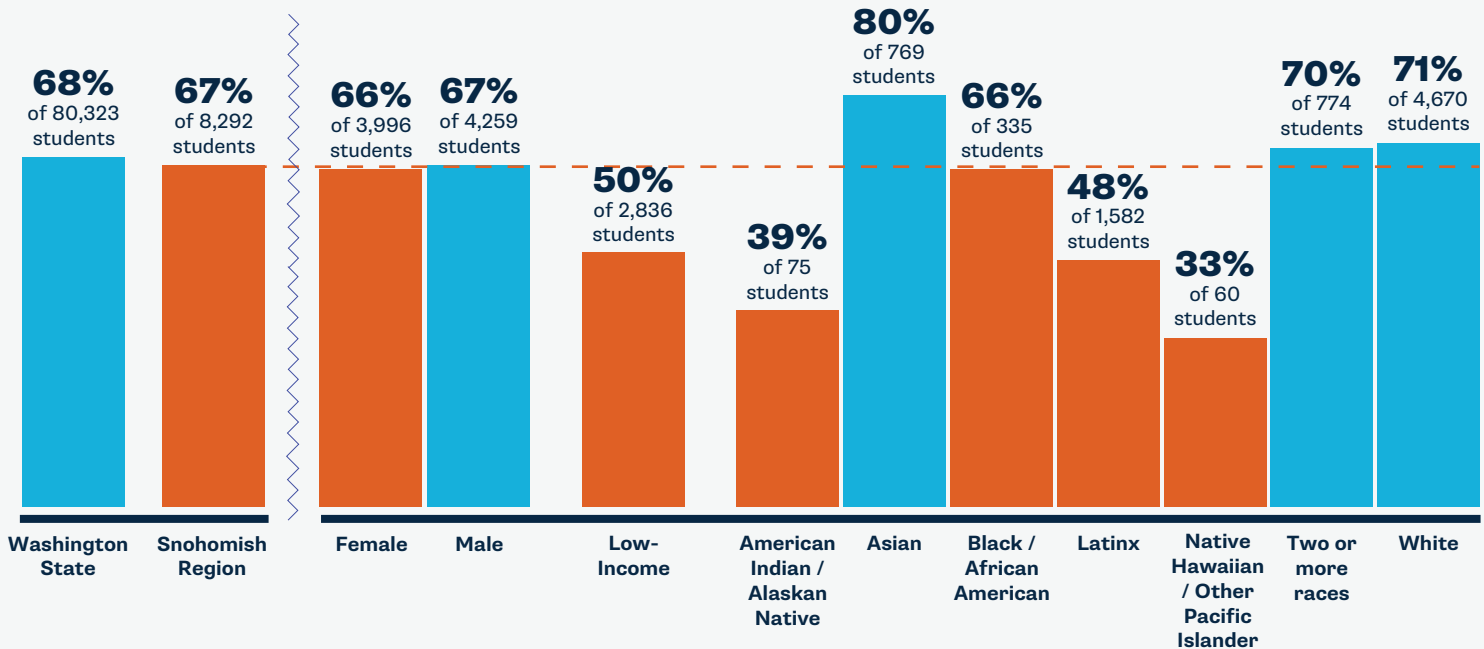
- Students experience a 25% increase in higher education enrollment and completion when they are made aware of financial aid by the time they're in high school and are awarded an aid package that meets their needs.
- Every \$1,000 a student from a low-income or working class background has to pay out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

SNOHOMISH REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

KINDERGARTEN MATH READY (2019)

67% of 8,292 Snohomish 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

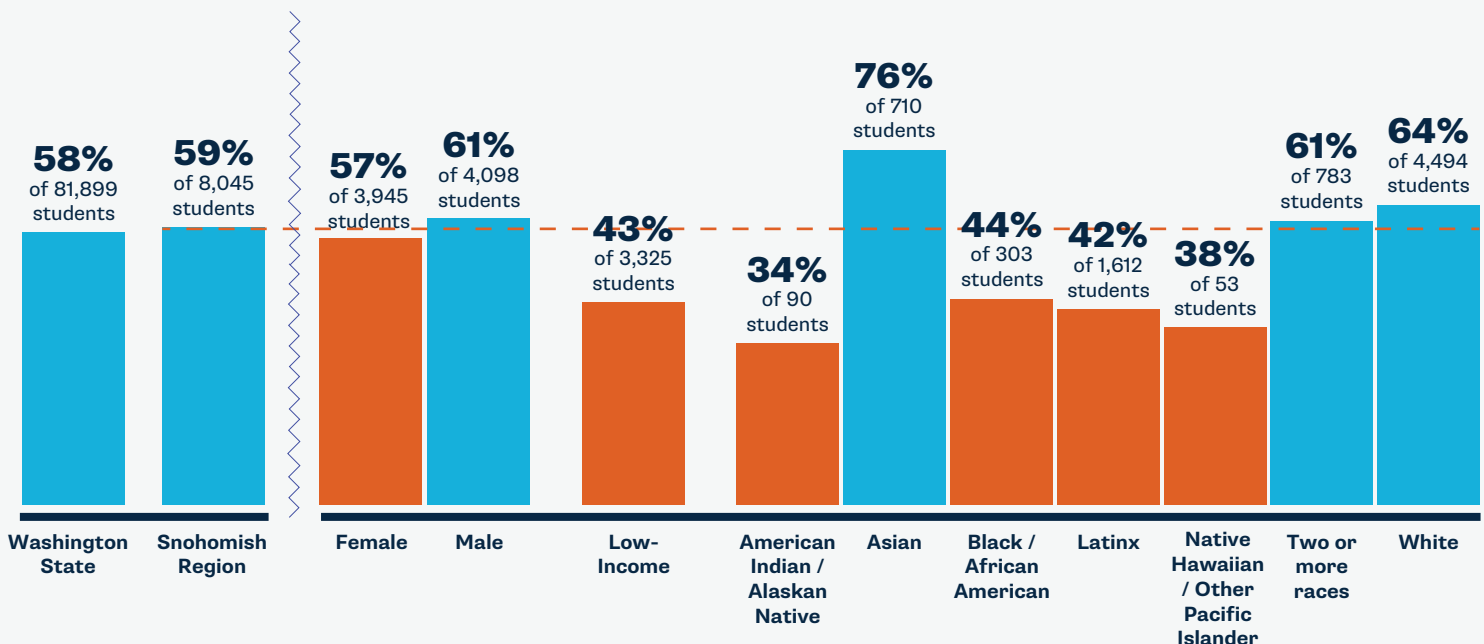


SNOHOMISH REGION INDICATORS BY DEMOGRAPHIC

3RD GRADE MATH (2019)

59% of 8,045 Snohomish Region third graders meet grade level math standards compared to 58% of 81,899 third graders statewide.

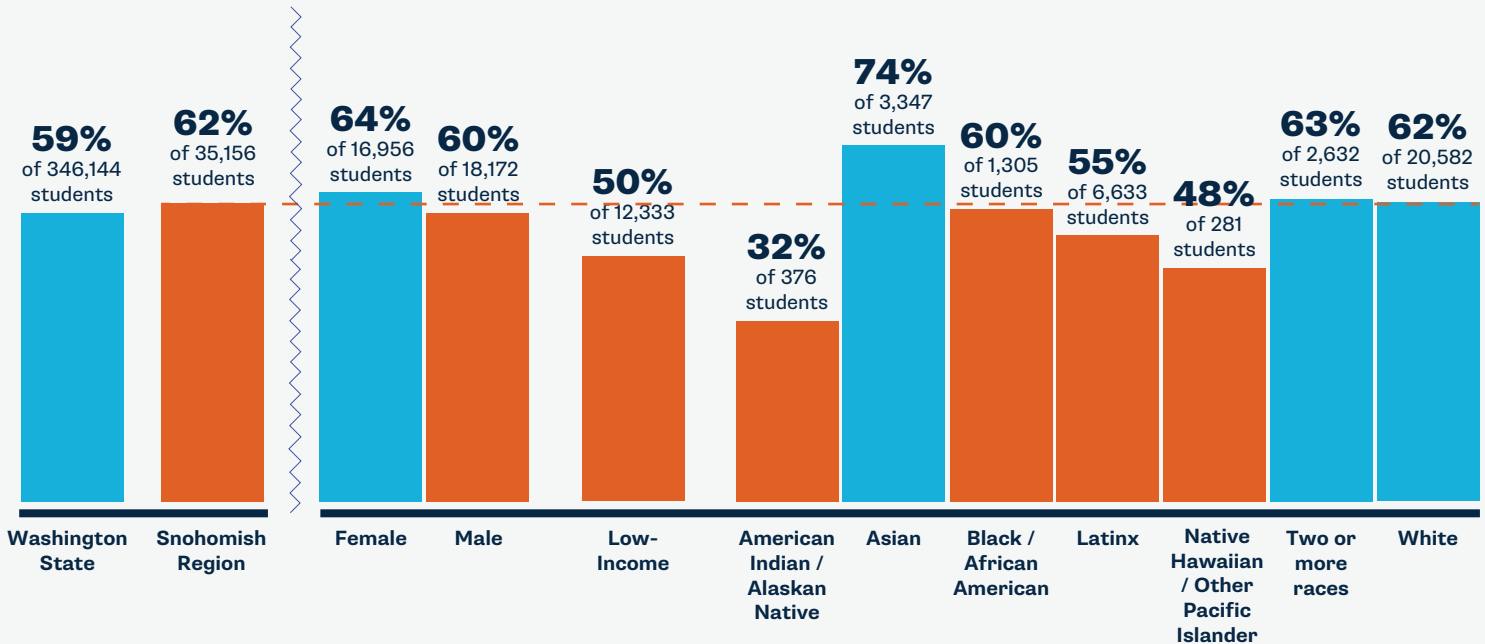
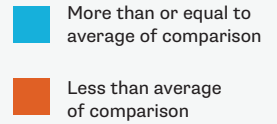
More than or equal to average of comparison
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SNOHOMISH REGION INDICATORS BY DEMOGRAPHIC

DUAL CREDIT (2020 9-12TH GRADERS)

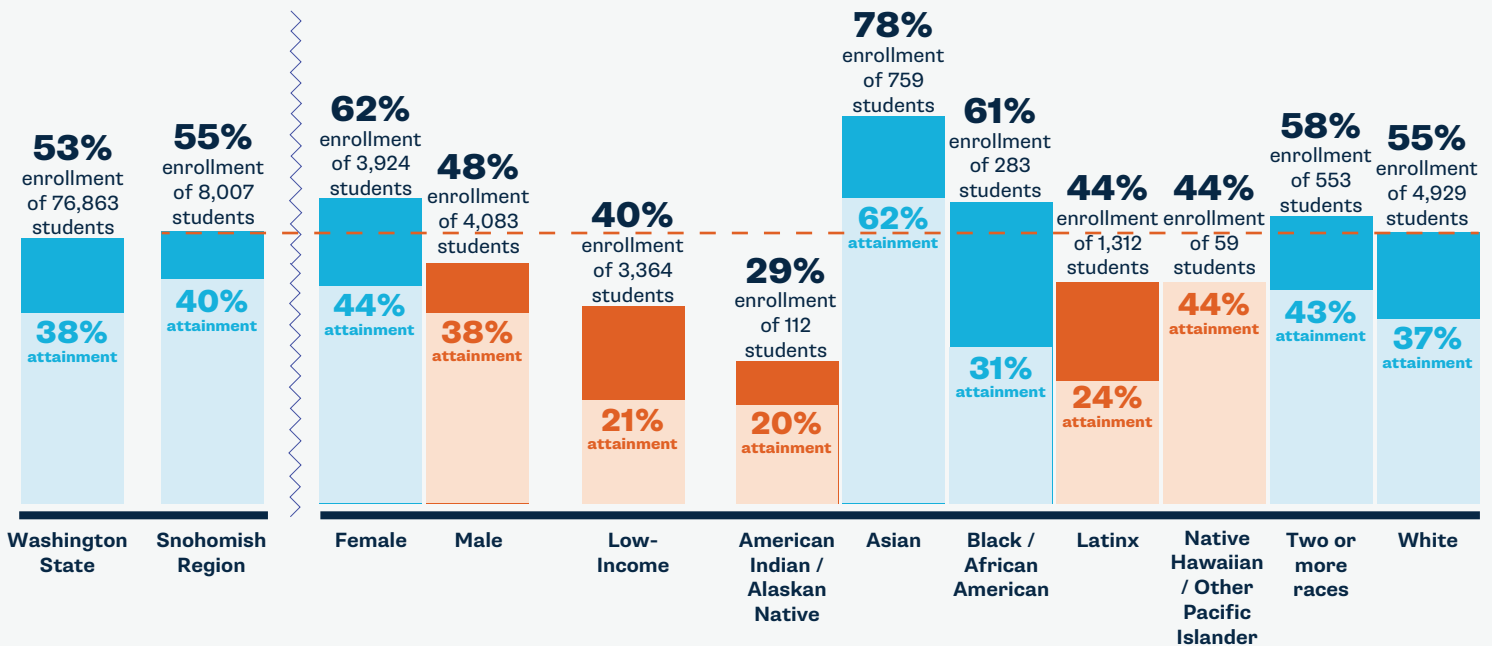
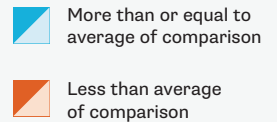
62% of 35,156 Snohomish Region high schoolers complete at least one dual credit course compared to 59% of 346,144 youth statewide.



SNOHOMOMISH REGION INDICATORS BY DEMOGRAPHIC

CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2018)

55% of 8,007 originating ninth graders in the Snohomish Region enroll in a postsecondary program and 40% of those originating ninth graders earn a credential by age 26.








SNOHOMOMISH REGION INDICATORS BY DEMOGRAPHIC

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 Snohomish Region, contact Snohomish STEM Network Director Angie Sievers, angies@snohomishstem.org.

REGIONAL TOP INDUSTRIES AND STEM JOBS

The following industries and jobs in the Snohomish 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.

| |  Advanced Manufacturing Professionals |  Construction Trades |  Information Technology Professional |  Healthcare Professionals (RN & Medical Assistant) |  K-12 Teacher |
|---|--|---|--|---|--|
| Annual Number of Openings** | 1,276 | 875 | 855 | 790 | 576 |
| Oct. Insured Unemployment* Rate | 3.0% | 8.4% | 0.0% | 2.1% | 0.9% |
| Oct. Regional Insured Unemployment* Rate | 3.9% | | | | |
| Credential | Certificate → Bachelor's | Apprenticeship | Associates → Master's | Apprenticeship → Bachelor's | Bachelor's |
| Average Regional Wage | \$57,887 → \$116,129 | \$53,619 → \$89,159 | \$67,309 → \$142,880 | \$48,557 → \$92,685 | \$66,098 → \$74,566 |

*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.

CAREER CONNECTED LEARNING IN SNOHOMISH

STEM Like ME!SM (SLM!) is an invaluable asset for Snohomish County's career connected learning system and essential in a meaningful High School and Beyond Plan. This engaging program connects STEM professionals with 7th and 8th grade students to explore a variety of careers and has impact-ed nearly 600 students in the first year of implementation. Entry surveys and exit surveys showed a significant increase in interest towards STEM careers after a SLM!SM session - student interest measured 39% prior to the program and 85% interest in STEM careers following the program. This year, the middle school program will be expanded to include SLM! High School and STEM Like ME!SM Internships more closely connecting students to current work and training opportunities. This year, the program has been expanded to include virtual experiences with mentors through 'Live Here. Learn Here. Work Here.', more closely connecting students to current work and training opportunities.



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.