



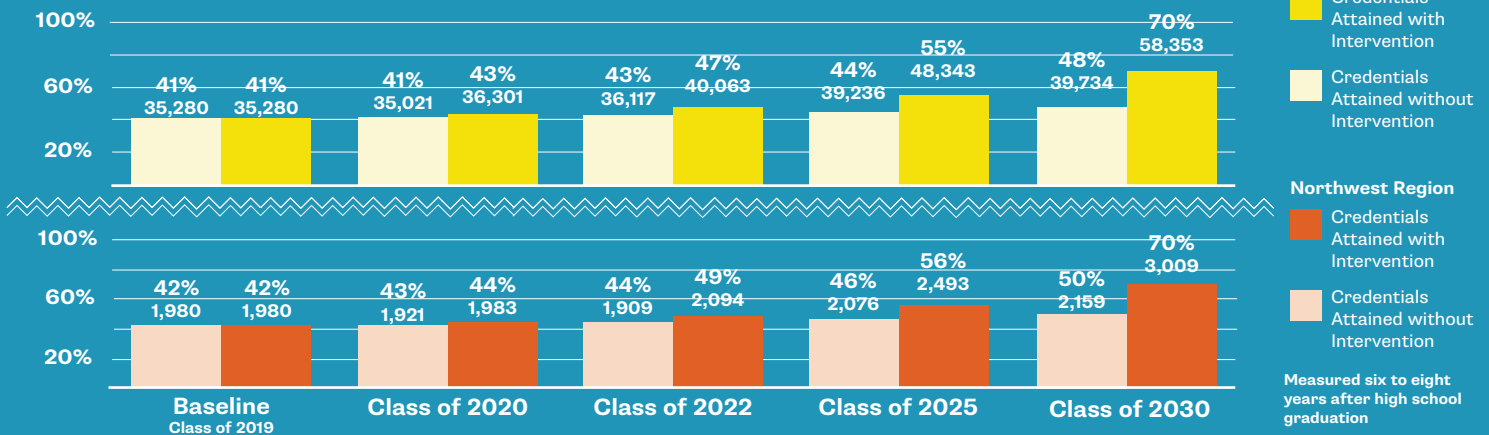
STEM BY THE NUMBERS: NORTHWEST REGION



The Northwest Region is home to historically robust STEM industries, spanning from maritime to healthcare, served by the Northwest Washington STEM Network and its cross-sector partners. By 2030, 78% of high-demand, family-sustaining wage jobs available in our region will require a postsecondary degree or credential; 44% of those jobs will be STEM or STEM literacy-based occupations. However, students in the Northwest 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 Northwest Washington STEM Network, visit <https://www.nwwashingtonstem.org>.



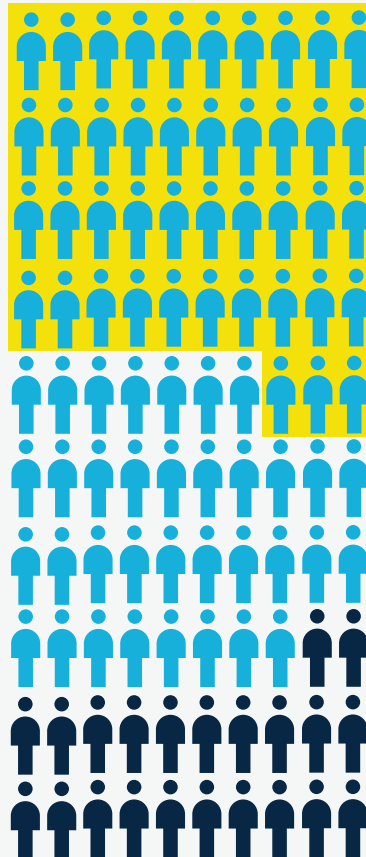
94 MORE CREDENTIALS PER YEAR = REGION ON TRACK






THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

10,801 JOBS PAY A FAMILY WAGE* IN THE NORTHWEST REGION

78%
(8,469) of family-wage* jobs in this region require a credential.**



44%
(4,752) of family-wage* jobs in this region require a credential** and STEM literacy.

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

23%
Current trends show local K-12 students will **only fill 23%** (1,921) 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.



EXPANDING CAREER CONNECTED LEARNING

Building off of the success of the 7th-grade STEM Like ME!SM program that explores a variety of careers and has impacted over 1,000 students, the Network partnered with Burlington-Edison High School to pilot an industry specific High School SLM! event focused on IT careers. Information technology continues to be one the most in-demand careers in our region and by providing real-world, hands-on experiences for our students, the Northwest STEM Network is creating opportunities for students in our region to truly see themselves pursuing an IT career. High School STEM Like ME!SM is now expanding to cover additional business sectors in Northwest Washington.


NORTHWEST 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


 **26%** of children under 6 years old with all parents working are able to access quality-rated early learning


 **64%** 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


 **53%** 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.

 **6%** teachers in our region are teachers of color, compared to 38% students of color

COLLEGE & CAREER PATHWAYS

 **44%** of schools offer dual credit courses in at least two STEM subjects (2018)
*does not include Running Start or CTE

 **64%** 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



 **55%** 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.

 **53%** 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



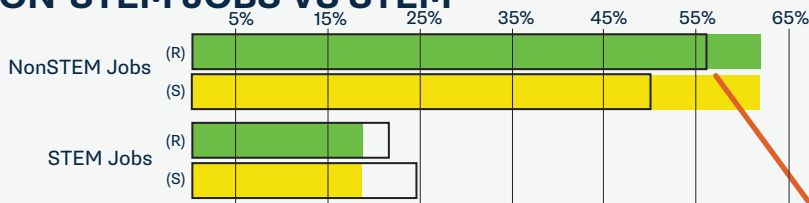
-  Systems Supports
-  Student Outcomes

COVID-19 IMPACTS

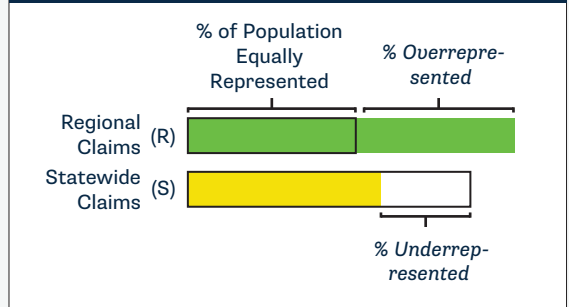
COVID-19 continues to have an outsized and ongoing impact on every community in our state and our region is no exception. However, those impacts have been felt disproportionately. When we look at the data, it's clear that communities of color have continued to see significant unemployment due to COVID-19,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

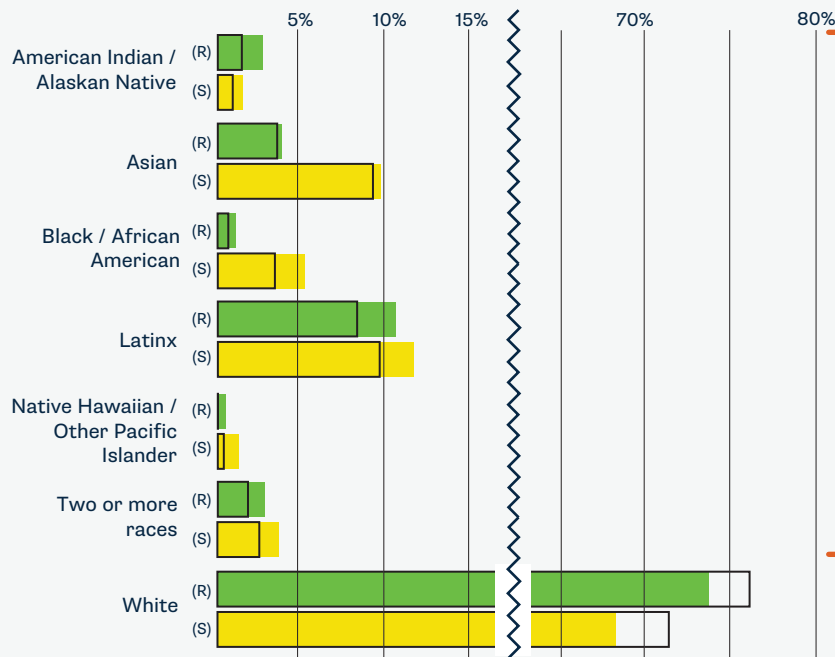
NON-STEM JOBS VS STEM



LEGEND: UNEMPLOYMENT CLAIMS



RACE/ETHNICITY

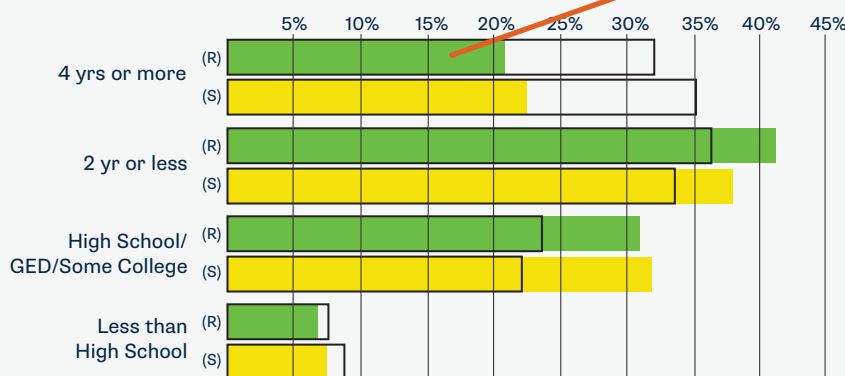


Individuals with non-STEM jobs were overrepresented in unemployment claims by 7%.

Communities of color in our region are overrepresented in unemployment claims by 5%, 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



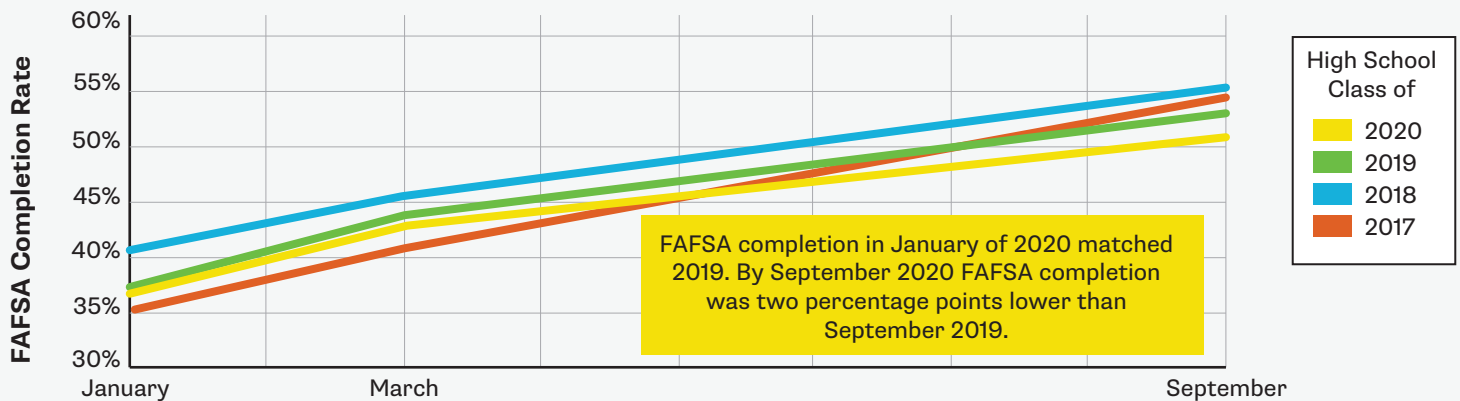
The disparities represented here among demographic groups are not representative of talent, intellect, or inherent ability. These unemployment claim disparities are indicative of how economic and educational systems have historically, and habitually, underserved and oppressed these communities.

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.

Northwest 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.

INCREASING FINANCIAL AID COMPLETION THROUGH COMMUNITY COLLABORATION

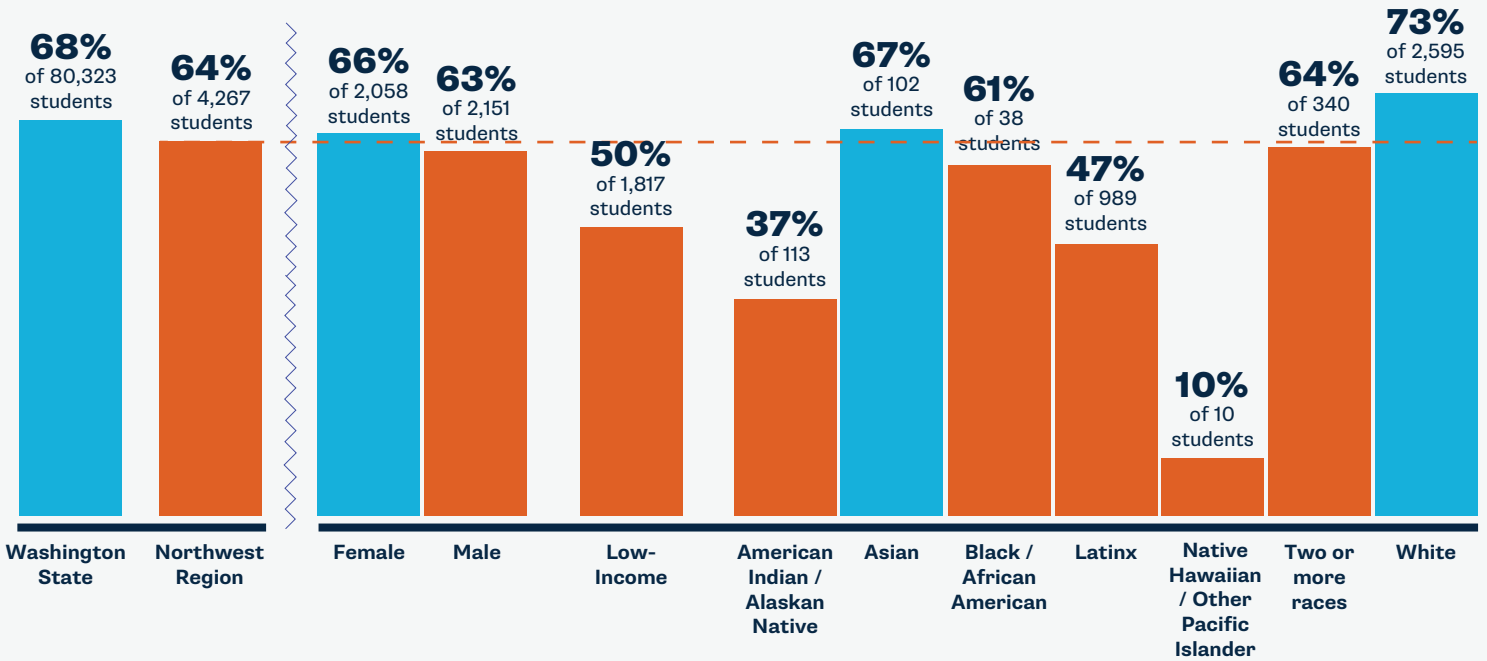
Improving Financial aid (FAFSA/WASFA) completion rates is a priority for the NW Washington STEM Network and their partners. Critical to those efforts in our region are community organizations such as Futures NW and the Foundation for Academic Endeavors. FuturesNW is a non-profit on a mission to level the socio-economic playing field by supporting students from under-served communities to achieve their career and college dreams. They provide resources, academic support, mentorship, financial aid literacy training and advising to succeed in college and beyond. The Foundation for Academic Endeavors Summer Academy serves low-income, preschool through high school students. They also run a Parent Academy through a series of evening workshops, to provide parents with tools supporting their own and their children's success. To learn more about financial aid completion efforts in the Northwest region, please contact the Ashley DeLatour at Futures NW (adelatour@futuresnw.org).

NORTHWEST REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

KINDERGARTEN MATH READY (2019)

64% of 4,267 Northwest 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

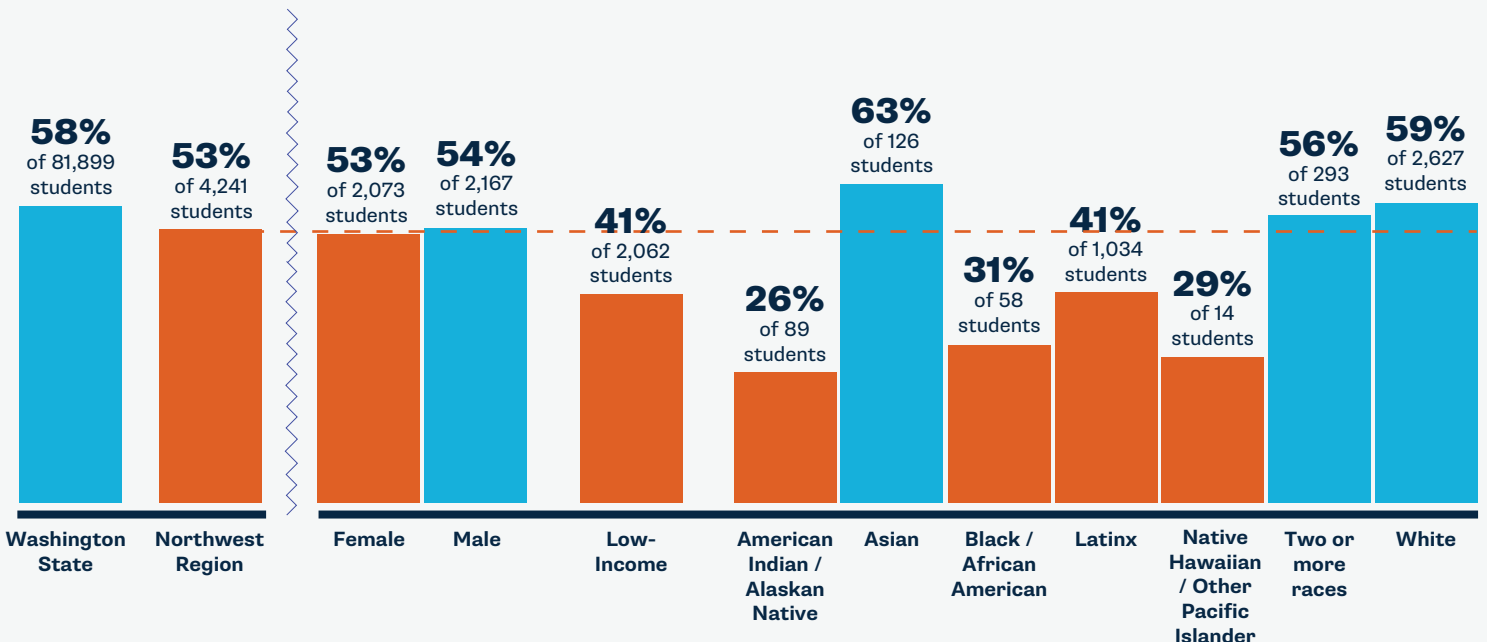


NORTHWEST REGION INDICATORS BY DEMOGRAPHIC

3RD GRADE MATH (2019)

53% of 4,241 Northwest 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

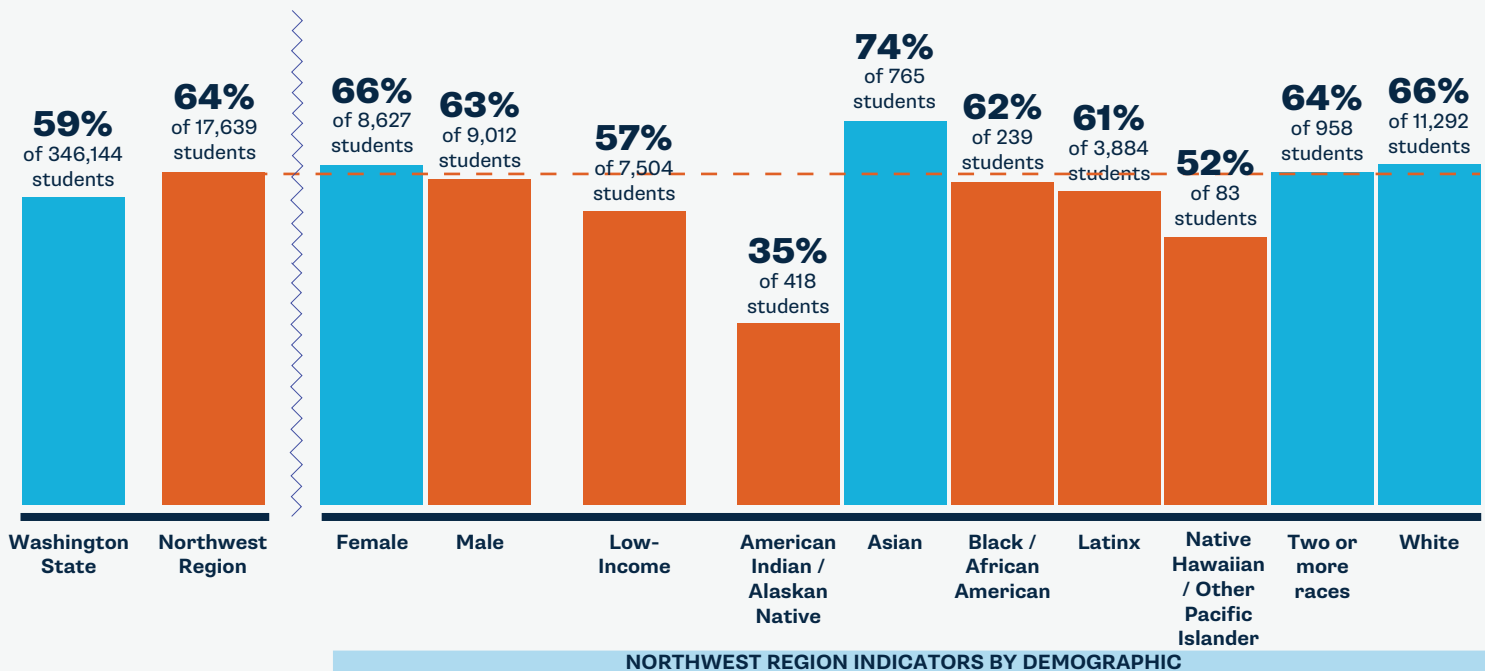


NORTHWEST REGION INDICATORS BY DEMOGRAPHIC

DUAL CREDIT (2020 9-12TH GRADERS)

64% of 17,639 Northwest Region high schoolers complete at least one dual credit course compared to 59% of 346,144 youth statewide.

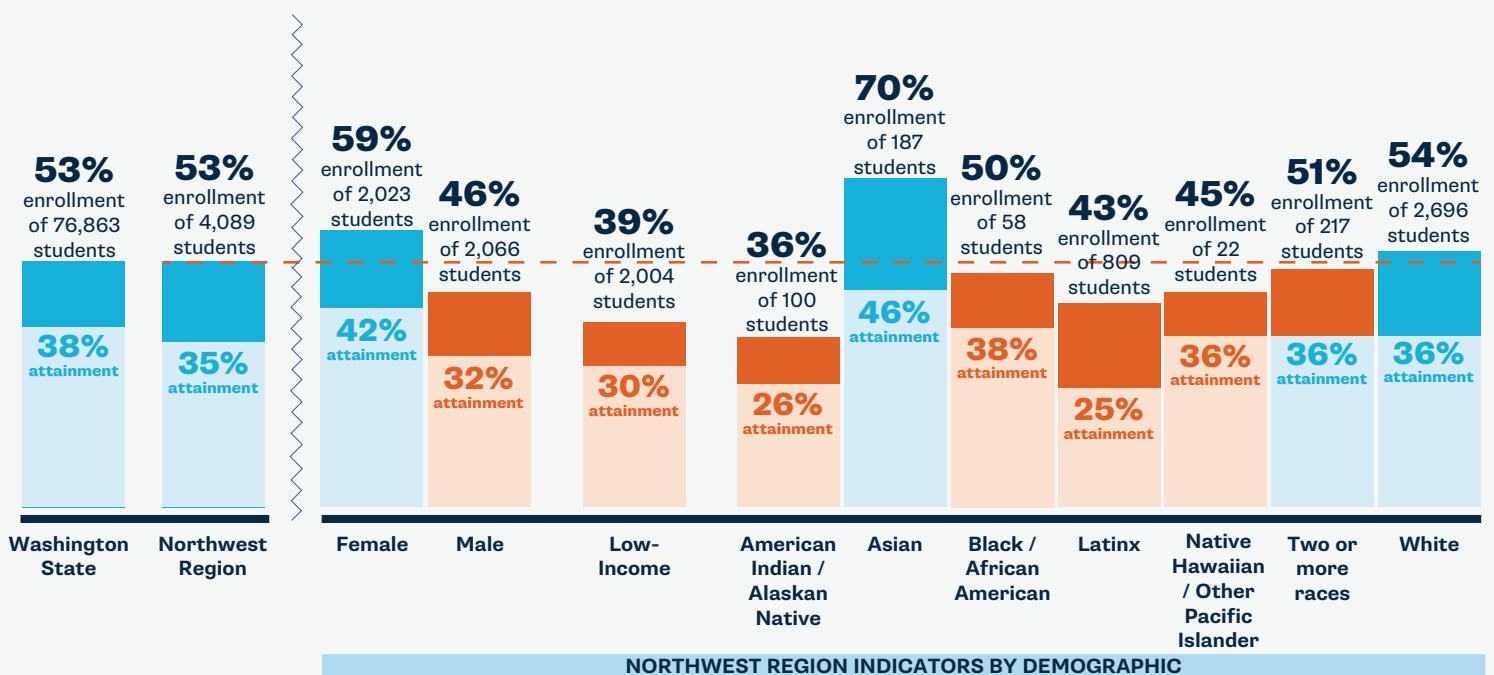
More than or equal to average of comparison
Less than average of comparison



CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2018)

53% of 4,089 originating ninth graders in the Northwest Region enroll in a postsecondary program and 35% of those originating ninth graders earn a credential by age 26.

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








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 Northwest Region, contact Northwest Washington STEM Network Director Michelle Judson, michelle@nwwashingtonstem.org.

REGIONAL TOP INDUSTRIES AND STEM JOBS

The following industries and jobs in the Northwest 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.

	 Maritime	 Information Technology Professional	 K-12 Teacher	 Healthcare Professionals (RN & Medical Assistant)	 Advanced Manufacturing Professionals
Annual Number of Openings**	1,088	308	466	422	394
Oct. Insured Unemployment* Rate	2.4%	0.0%	0.2%	0.4%	1.8%
Oct. Regional Insured Unemployment* Rate	2.9%				
Credential	Apprenticeship	Associates, Apprenticeship, Bachelors	Bachelor's	Apprenticeship → Bachelor's	Certificate, Associates, Apprenticeship, Bachelors
Average Regional Wage	\$59,105 → \$76,112	\$54,161 → \$110,945	\$64,345 → \$73,866	\$42,397 → \$85,656	\$47,174 → \$93,229

*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 PATHWAYS: WOMEN IN STEM

The Skagit STEM Network annually hosts 400 middle school and high school girls and young women from the surrounding region to connect them with STEM professionals in their backyard. The event creates an interactive learning environment where students experience hands on activities, listen to the career journeys of successful STEM professionals/students, and network with Notable Women in STEM. Careers represented at the event include engineers, advanced manufacturing, healthcare, biotechnology, life sciences, and more. The STEM Network's goal is to create an engaging experience, where students can explore the endless possibilities of STEM careers available to them.



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.