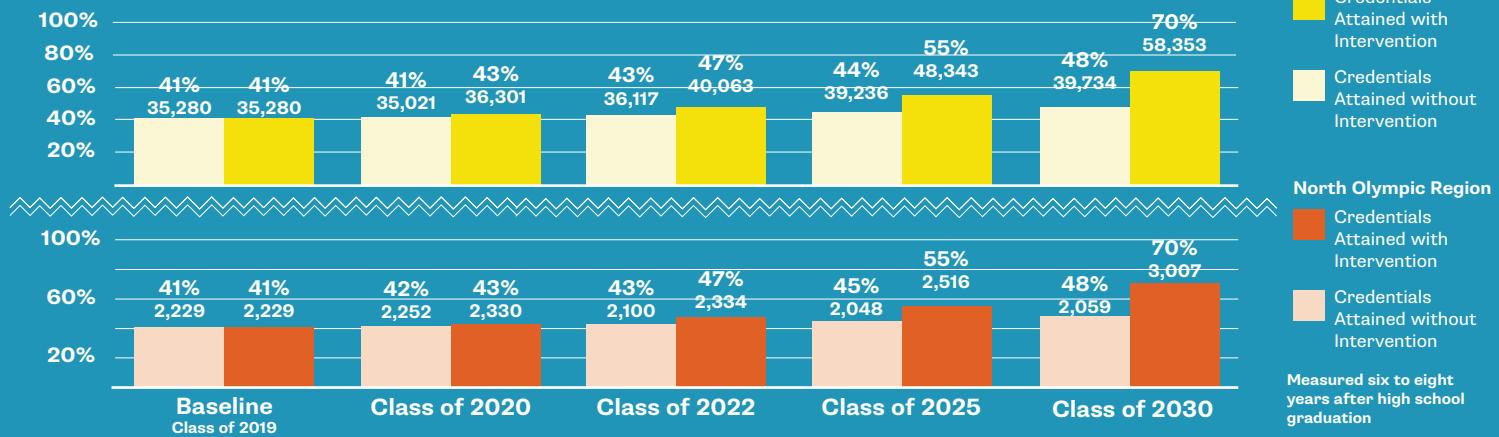


STEM BY THE NUMBERS: NORTH OLYMPIC REGION

The North Olympic Region is home to historically robust STEM industries, spanning from health-care to construction, served by the West Sound STEM Network and its cross-sector partners. By 2030, 80% of high-demand, family-sustaining wage jobs available in our region will require a postsecondary degree or credential; 48% of those jobs will be STEM or STEM literacy-based occupations. However, students in the North Olympic Region are not equitably or adequately prepared to take advantage of these opportunities, with only 41% 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 West Sound STEM Network, visit <http://www.westsoundstem.org>.



71 MORE CREDENTIALS PER YEAR = REGION ON TRACK

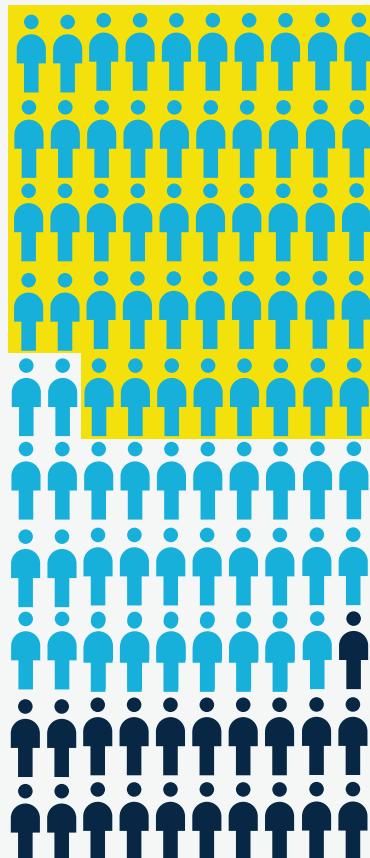


THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

7,993 JOBS PAY A FAMILY WAGE* IN THE NORTH OLYMPIC REGION

80%
(6,369) of family-wage*
jobs in this region
require a credential.**

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



48%
(3,855) of family-wage*
jobs in this region
require a credential**
and STEM literacy.

35%
Current trends show
local K-12 students will
only fill 35% (2,252) 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.



COMPUTER SCIENCE OPPORTUNITIES ACROSS THE REGION

In partnership with Western Washington University, OSPI, Olympic College, Chief Kitsap Academy, industry leaders and employers, and ten school districts, we launched a year-long program called COSTAR centered around computer science competencies, equity, and pathways. As part of a longer learning sequence, 20 teachers from the region were hosted by MacDonald-Miller Facility Solutions, Inc. for a day of intensive learning and engagement to discuss computer science skills, including computational thinking, coding, and design thinking. This innovative program will disrupt inequitable systems and provide tangible connections to the importance of computer science competencies in living-wage jobs.

NORTH OLYMPIC REGION STEM INDICATORS



EARLY LEARNING

 **22%**

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

 **71%**

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.

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.

K-12 STEM LEARNING

 **59%** of fifth graders demonstrate the science skills and knowledge expected for their grade level

 **65%** 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.

COLLEGE & CAREER PATHWAYS

 **53%**

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

 **57%**

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.



 **8%** teachers in our region are teachers of color, compared to 34% students of color

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.

 **50%** of the 2018 high school cohort have enrolled in a postsecondary credential

 **37%** of the 2018 high school cohort is on track to earn a postsecondary credential by age 26

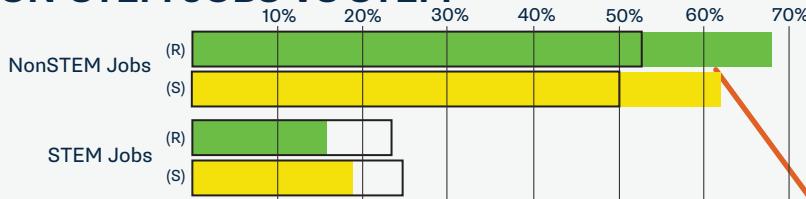


COVID-19 IMPACTS

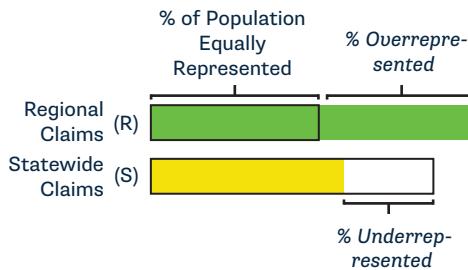
COVID-19 continues to have an outsized and ongoing impact on every community in our state and, our region is no exception. However, those impacts are felt disproportionately. When we look at the data, it's clear that communities of color have continued to see significant unemployment due to COVID-19,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

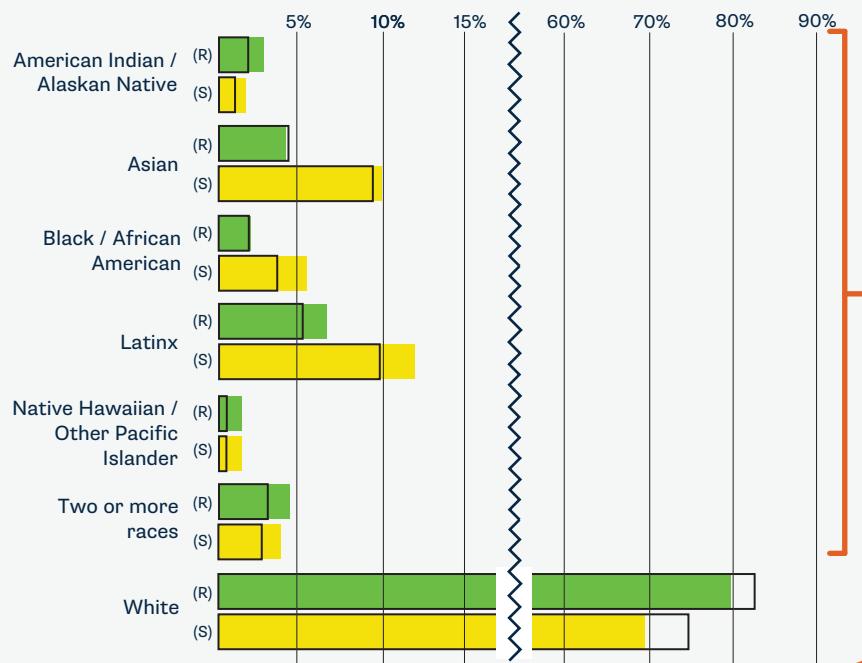
NON-STEM JOBS VS STEM



LEGEND: UNEMPLOYMENT CLAIMS



RACE/ETHNICITY



Individuals with non-STEM jobs were overrepresented in unemployment claims by 13%.

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



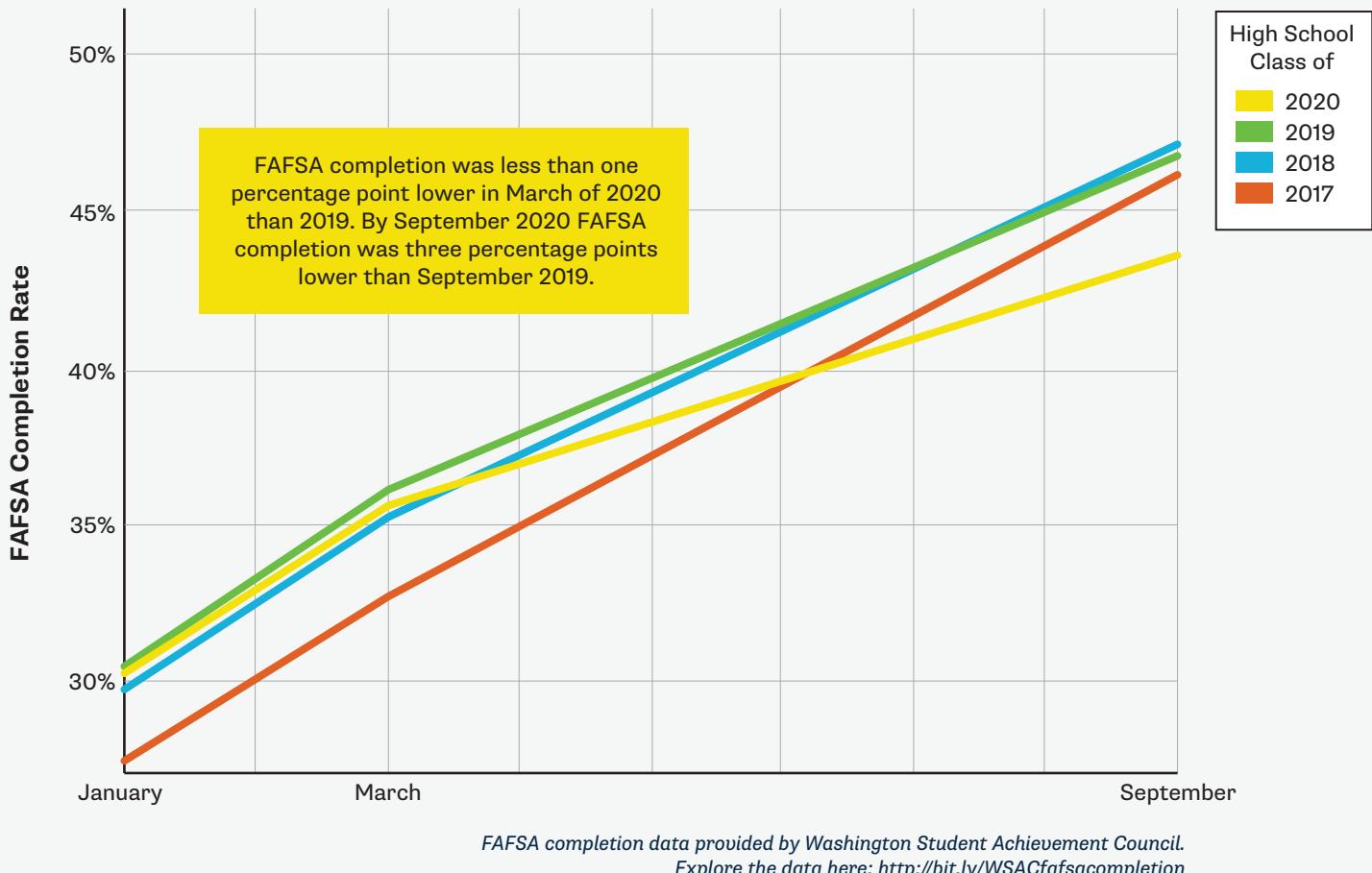
The disparities represented here among demographic groups are not representative of talent, intellect, or inherent ability. These unemployment claim disparities are indicative of how economic and educational systems have historically, and habitually, underserved and oppressed these communities.

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.

North Olympic Region FAFSA Completion Rate by High School Cohort



DID YOU KNOW?

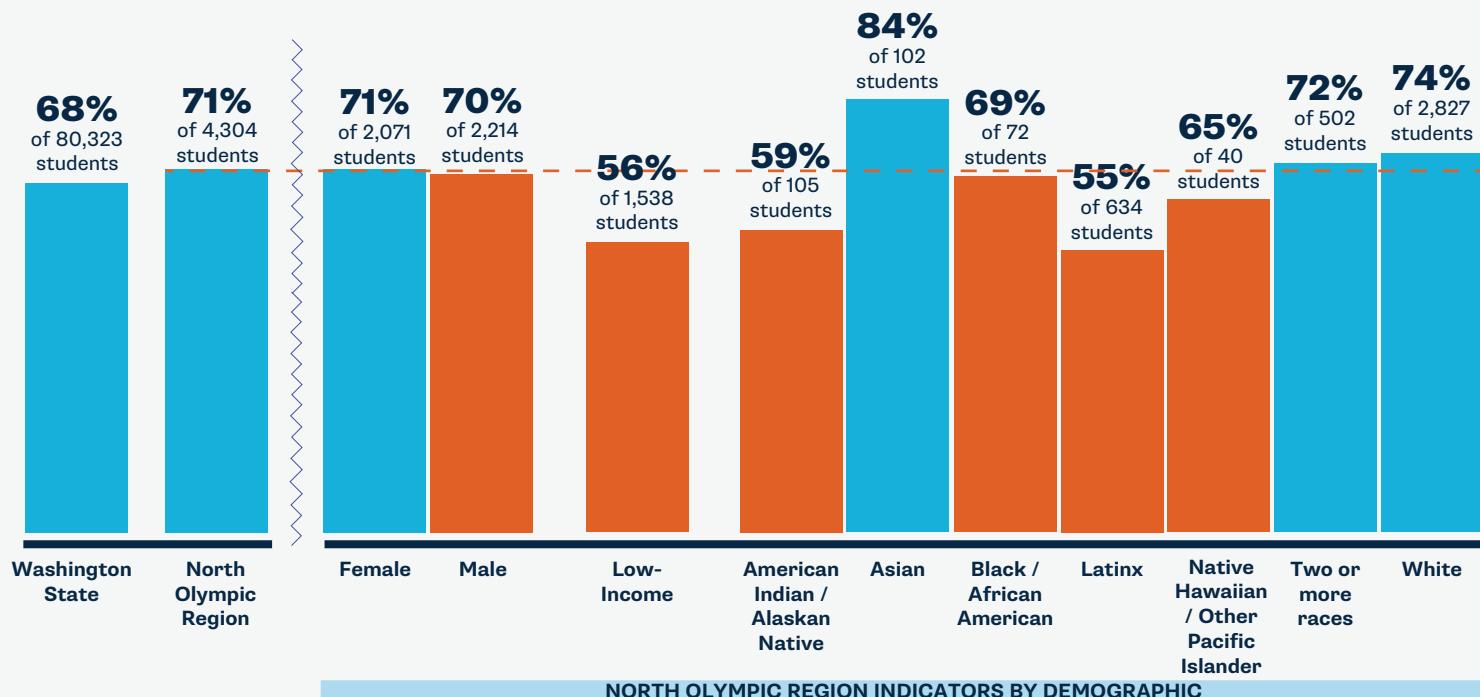
- Students experience a 25% increase in higher education enrollment and completion when they are made aware of financial aid by the time they're in high school and are awarded an aid package that meets their needs.
- Every \$1,000 a student from a low-income or working class background has to pay out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

NORTH OLYMPIC REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

KINDERGARTEN MATH READY (2019)

71% of 4,304 North Olympic Region children entering kindergarten are math ready compared to **68% of 80,323** children statewide.

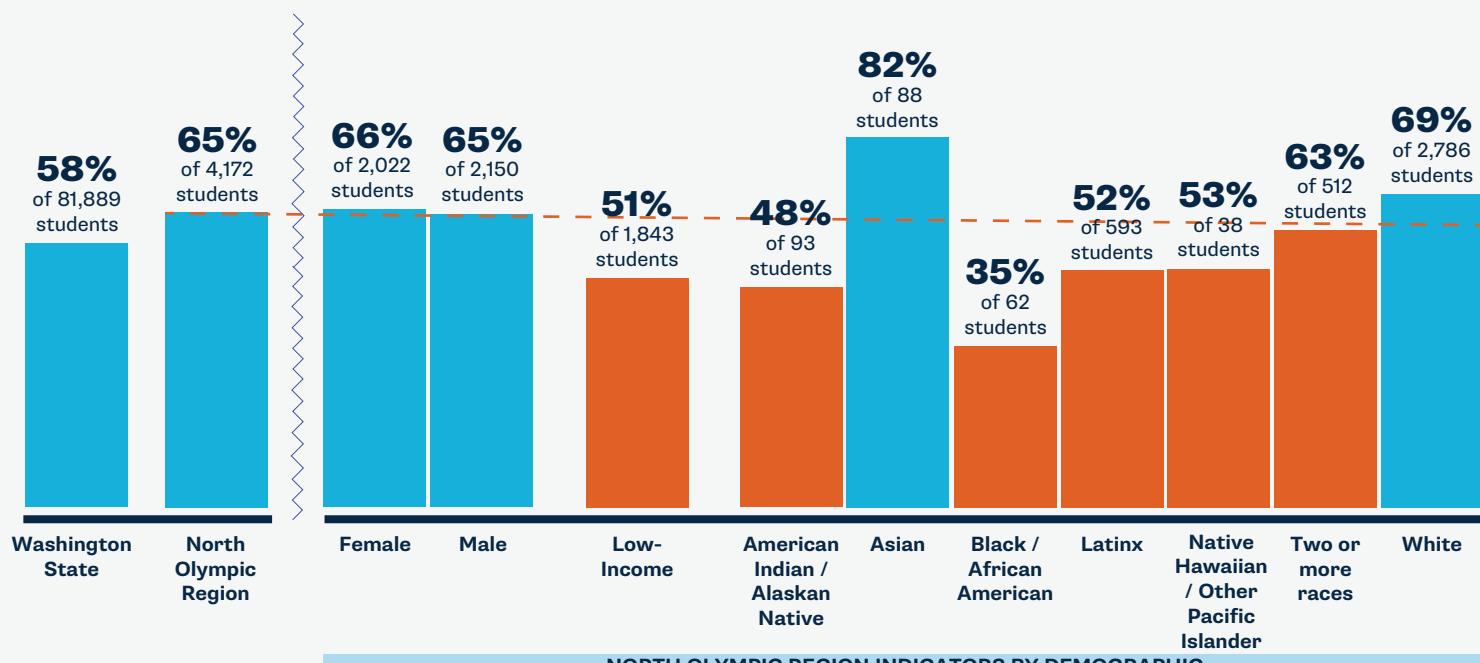
- More than or equal to average of comparison
- Less than average of comparison



3RD GRADE MATH (2019)

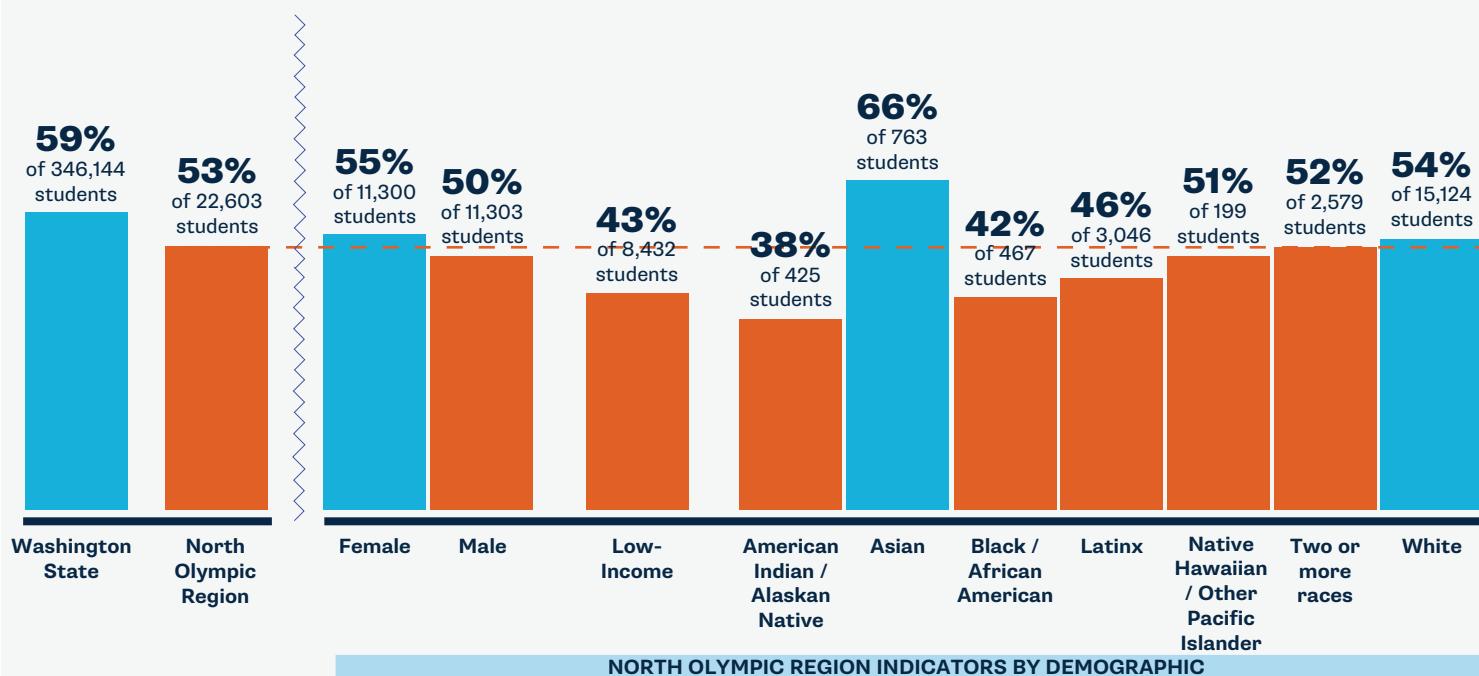
65% of 4,172 North Olympic Region third graders meet grade level math standards compared to **58% of 81,889** third graders statewide.

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



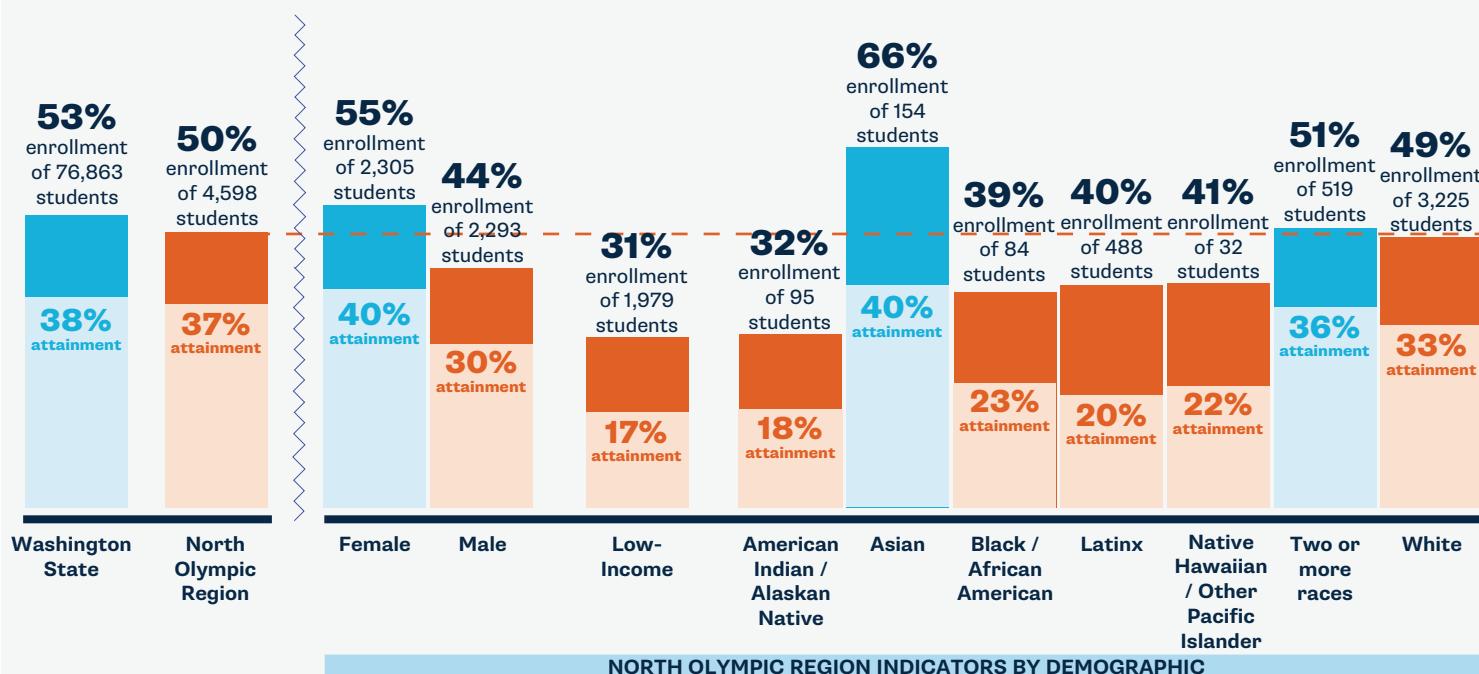
DUAL CREDIT (2020 9-12TH GRADERS)

53% of 22,603 North Olympic Region high schoolers complete at least one dual credit course compared to 59% of 346,144 youth statewide.



CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2018)

50% of 4,598 originating ninth graders in the North Olympic Region enroll in a postsecondary program and 37% 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 learn and career pathways work in the North Olympic Region, contact West Sound STEM Network Executive Director Dr. Kären Borders, borders@skschools.org.

REGIONAL TOP INDUSTRIES AND STEM JOBS

The following industries and jobs in the North Olympic 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.

	 Carpenters (Maritime & Construction)	 Engineers	 Registered Nurses	 Life Sciences Professional	 Information Technology Professional
Annual Number of Openings	300	156	206	174	205
Oct. Insured Unemployment* Rate	<0.1%	0.3%	0.5%	0.8%	<0.1%
Oct. Regional Insured Unemployment* Rate	2.4%				
Credential	Apprenticeship	Bachelor's	Bachelor's	Associates → Bachelor's	Associates → Bachelor's
Average Regional Wage	\$52,799 → \$68,224	\$87,131 → \$116,731	\$70,035 → \$100,971	\$42,852 → \$84,804	\$56,544 → \$120,153

*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.

CONTROLS SPECIALIST APPRENTICESHIP OPPORTUNITY

A group of employers led by MacDonald-Miller Facility Solutions and Siemens Corporation committed to a public-private partnership with West Sound STEM Network, six school districts, and five-community colleges to establish the first-of-its-kind controls specialist registered apprenticeship program for youth and adults that is scalable across the state.

This engaged team is developing the classroom curriculum, a professional development strategy for teachers, a mechanism for developing youth pathways, trainings and externships for counselors and teachers, and organizational support for employers who are approved as Training Agents. This will create a “talent river” that benefits employers who rely on a range of controls technology occupations to do business and provide permeable pathways to develop an individual’s competencies through coursework and on-the-job training.



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.