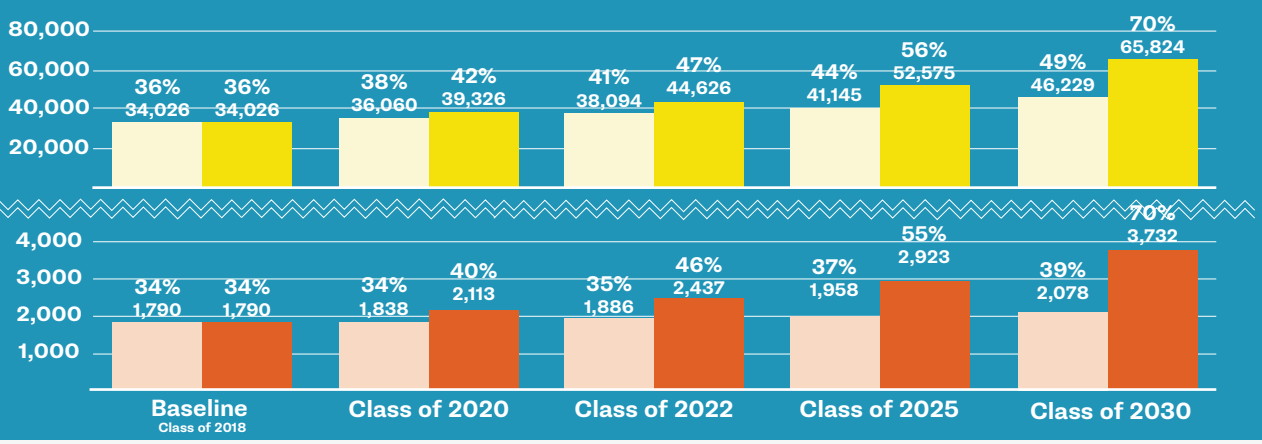
STEM BY THE NUMBERS: NORTH OLYMPIC REGION

West Sound STEM

The North Olympic Region is home to growing construction, building controls, maritime, healthcare, and advanced manufacturing industries, spanning from Cape Flattery to Bremerton to Gig Harbor. The region is made up of 18 school districts, 13 of which are members of the West Sound STEM Network. The Network's business, education, and community partners are working to close credential attainment gaps, especially for students of color and students from low-income families. They aim to increase the number of local students who become engineers, controls technology programmers, registered nurses, and construction/maritime apprentices, which combined have 1,330 annual projected openings in each of the next five years.

162 MORE CREDENTIALS PER YEAR = REGION ON TRACK



Washington State

- Credentials Attained with Intervention
- Credentials Attained without Intervention

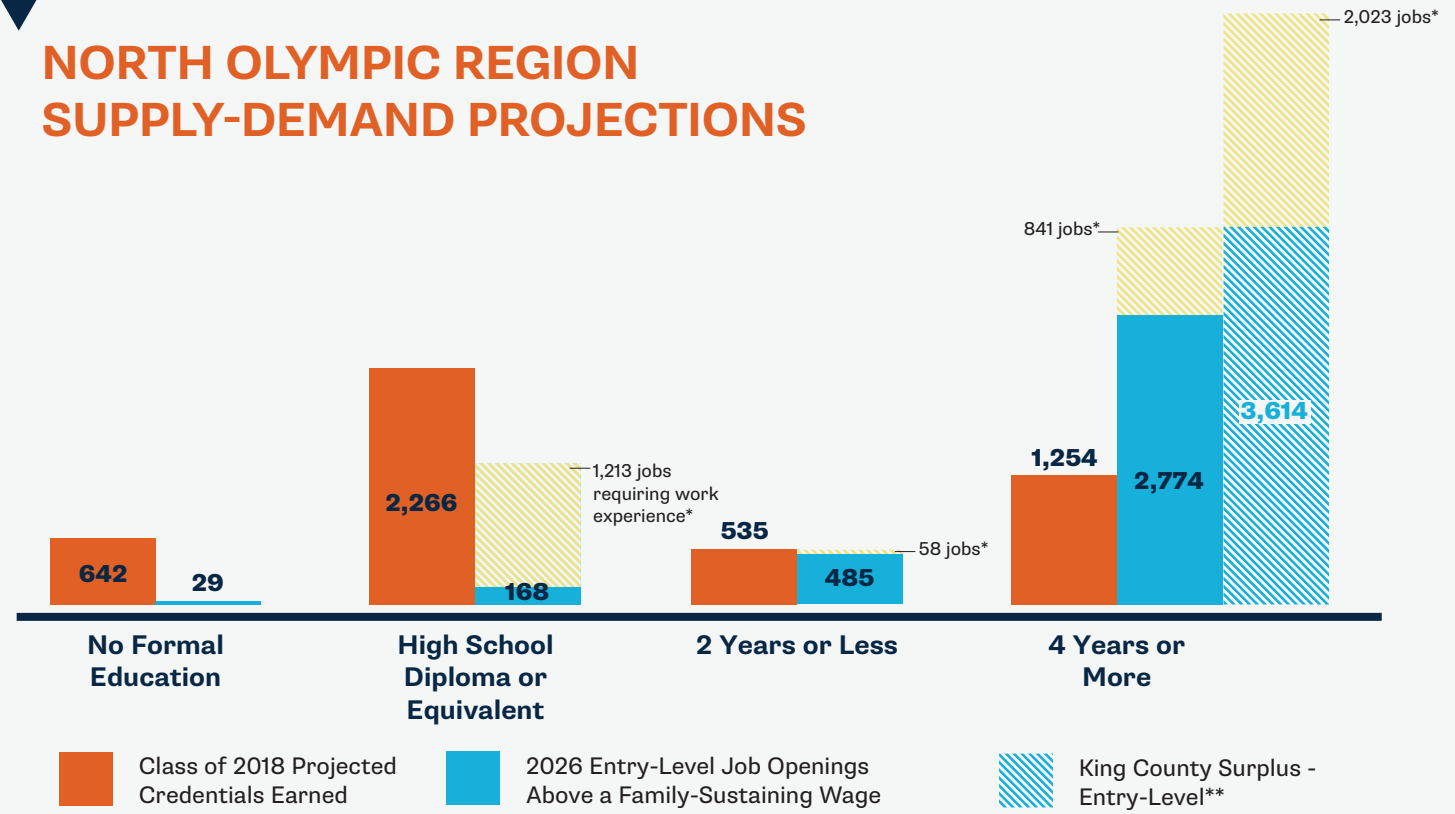
North Olympic Region

- Credentials Attained with Intervention
- Credentials Attained without Intervention

Measured six to eight years after high school graduation

THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

NORTH OLYMPIC REGION SUPPLY-DEMAND PROJECTIONS



By supporting more students to be on track to earn a high-demand credential, the North Olympic Region will ensure that up to 3,456 available family-sustaining*** jobs (those that pay a regionalized wage of $48,609 or more a year) could be filled by local young adults.

*Jobs requiring related work experience, and/or on-the-job training, would generally not be immediately available to high school graduates and be more competitive with a greater number of eligible applicants.

** The King County surplus represents a proportion of the surplus jobs that could be supplied by students from the North Olympic Region. The surplus is the result of fewer King County originating students than annual projected job openings in King County.

*** Family-sustaining regionalized wage is defined as the full-time wage needed to support a household of 2 adults (1 working) and 1 child, using the MIT Living Wage Calculator.

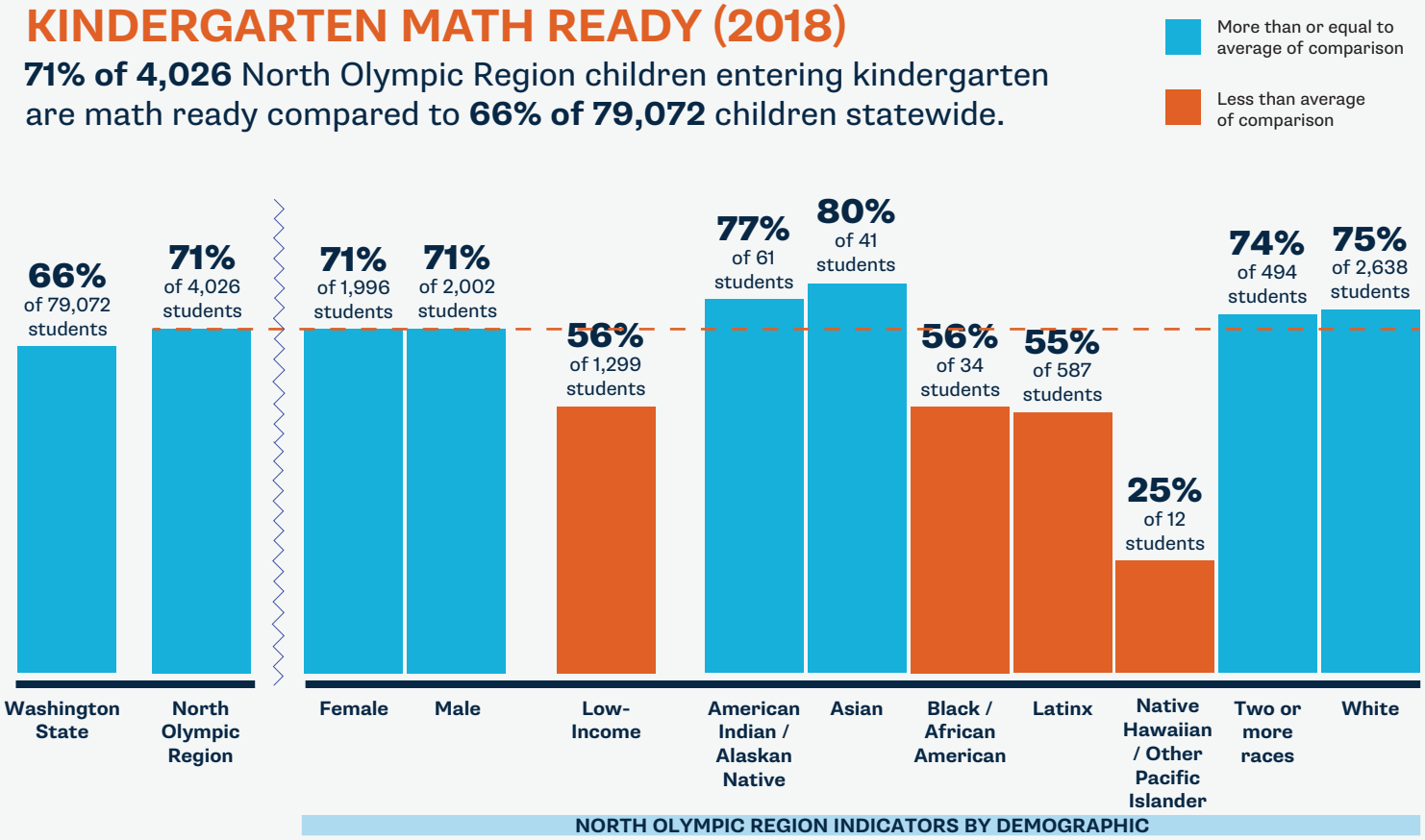
COMPUTER SCIENCE OPPORTUNITIES ACROSS THE REGION

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 K-12 STEM INDICATORS BY DEMOGRAPHIC

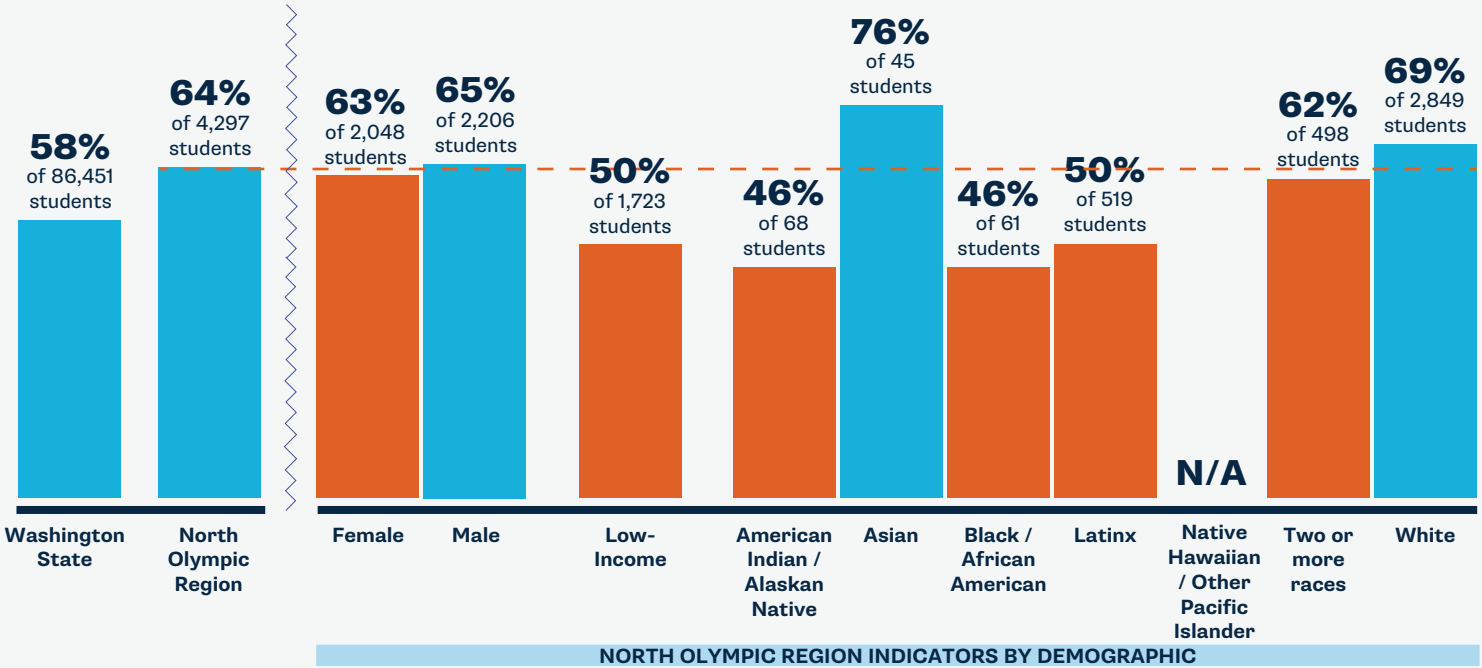
KINDERGARTEN MATH READY (2018)

71% of 4,026 North Olympic Region children entering kindergarten are math ready compared to **66% of 79,072** children statewide.



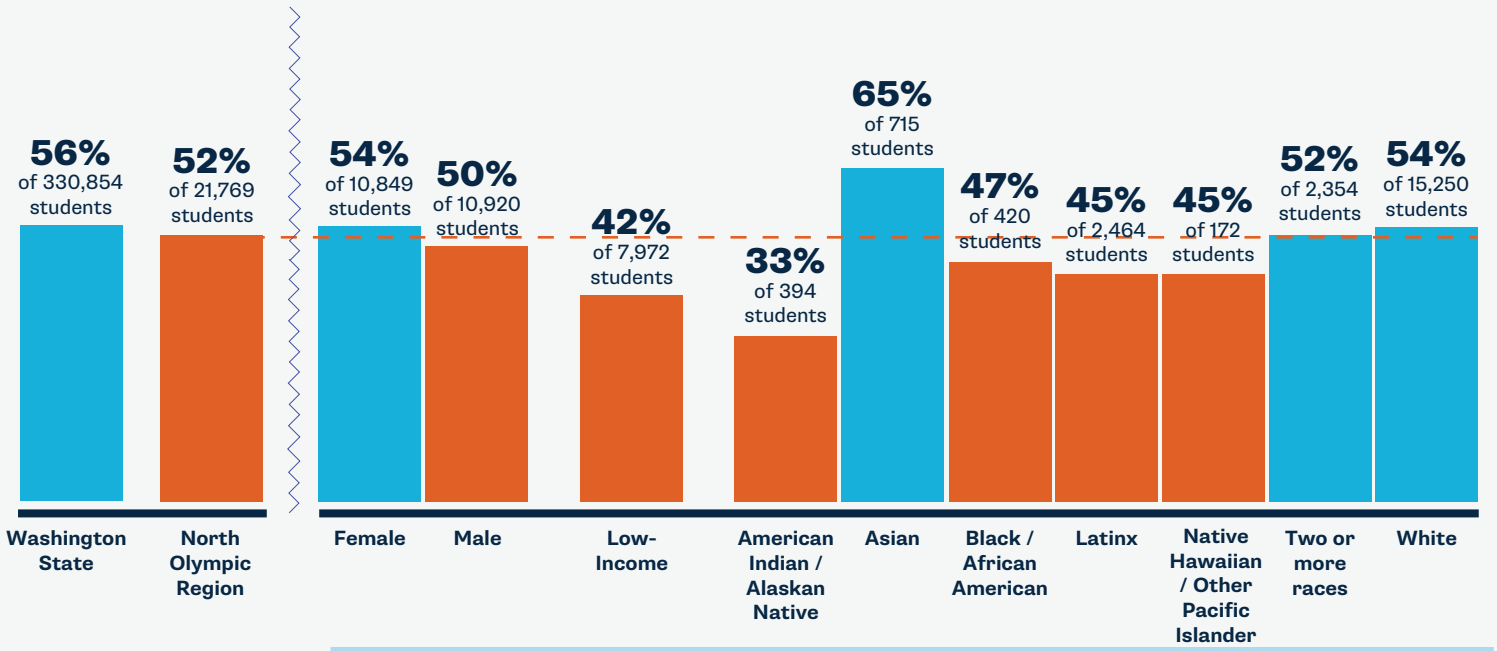
3RD GRADE MATH (2017)

64% of 4,297 of North Olympic Region third graders meet grade level math standards compared to **58% of 86,451** third graders statewide.



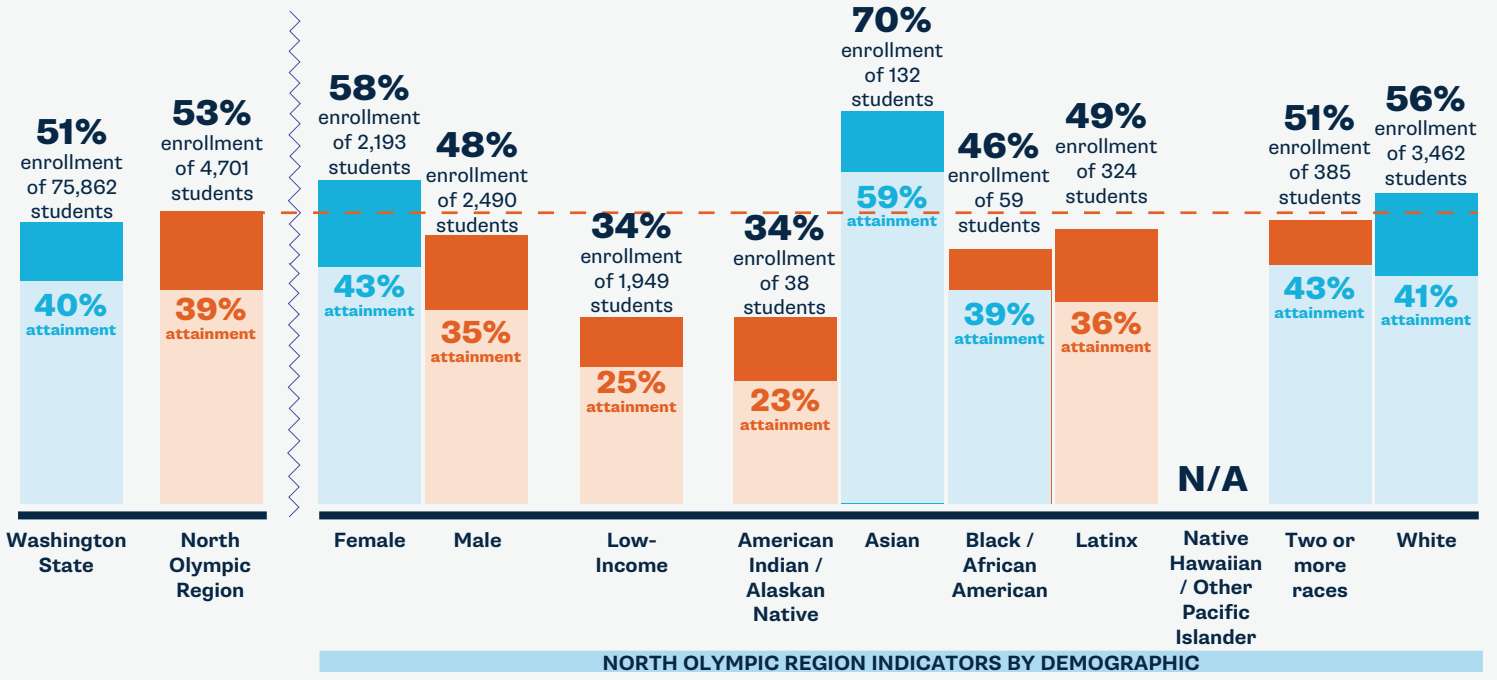
DUAL CREDIT (2017 9-12TH GRADERS)

52% of 21,769 North Olympic Region high schoolers complete at least one dual credit course compared to **56% of 330,854** youth statewide.



CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2016)

53% of 4,701 of the originating ninth graders in the North Olympic Region enroll in a postsecondary program and **39%** of those originating ninth graders earn a credential by age 26.



Data citations and region-by-region analyses will be posted at www.washingtonstem.org/STEMbythenumbers.

For more information about early STEM and career pathways work in the North Olympic Region, contact West Sound STEM Network director Dr. Kareen Borders, borders@skschools.org.

NORTH OLYMPIC REGION STEM INDICATORS

Ready for Kindergarten

While 71 percent of all North Olympic Region kids are math ready by kindergarten, high-quality early learning opportunities need to be more accessible to families of color and those that are lower-income to close math-readiness gaps.

TBD we are determining availability of high-quality early learning for families and supports for professionals in this region

71% of North Olympic Region children entering kindergarten are math ready

K-12 STEM Learning

Between kindergarten and third grade, math-readiness and skills gaps widen for many students, which is correlated with success in related areas of study. School districts need resources and assistance to remove barriers and create opportunities in STEM for all students.

TBD we are determining the STEM indicators for each school district in this region in partnership with district leadership

64% of North Olympic Region third graders meet grade level math standards

Secondary Pathways

While students in the North Olympic Region are overall less likely to complete dual credit** courses than their peers across the state, students of color and students from low-income backgrounds experience reduced access to and completion of these courses compared to their peers.

TBD we are determining availability of dual credit courses and career pathways programs by type and subject area in this region in partnership with CTE

52% of North Olympic Region high schoolers complete at least one dual credit course

**Dual credit programs give students the opportunity to earn high school and college credit simultaneously. Completion of dual credit coursework is highly correlated with higher education enrollment and completion.

Credential Enrollment/Attainment

Of the originating ninth graders across the state, 51 percent enroll and 40 percent complete a credential. While North Olympic Region students enroll and complete at comparable rates, the region is working to expand credential pathways capacity to close opportunity gaps for key student groups.

TBD we are determining local higher education and career training program capacity in this region in partnership with higher education and district leadership

53% of the originating ninth graders in the North Olympic Region enroll in a postsecondary program and 39 percent of those originating ninth graders earn a credential by age 26

STEM by the Numbers is a series of regional reports which examines data that tells us about Washington students' access to credentials and family-sustaining jobs. Together with our partners, we are advocating for and developing regionalized, cross-sector, and longitudinal data. We highlight student outcomes above, and in future publications we will report on systems indicators, such as high school course offerings and availability of STEM professional learning and supports.

Data citations and region-by-region analyses will be posted at www.washingtonstem.org/STEMbythenumbers.

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REGIONAL TOP INDUSTRIES AND STEM JOBS

ENGINEERS

Annual # of Openings: 144
Credential: Bachelor's
Average Regional Wage: $93,416

REGISTERED NURSES

Annual # of Openings: 175
Credential: Bachelor's
Average Regional Wage: $77,939

CARPENTERS
(MARITIME & CONSTRUCTION)

Annual # of Openings: 320
Credential: Apprenticeship
Average Regional Wage: $54,317

MEDICAL ASSISTANTS

Annual # of Openings: 130
Credential: Certificate → Associate's
Average Regional Wage: $55,054 → $81,881

INFORMATION & CONTROLS TECHNOLOGY PROFESSIONALS

Annual # of Openings: 329
Credential: Associate's, Apprenticeship, and Bachelor's
Average Regional Wage: $53,452 → $75,013

GREEN OCCUPATIONS

Annual # of Openings: 223
Credential: Associate's → Doctorate
Average Regional Wage: $59,365 → $102,956

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 and six school districts to establish the first-of-its-kind controls programmer 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.