

STEM BY THE NUMBERS: KING COUNTY

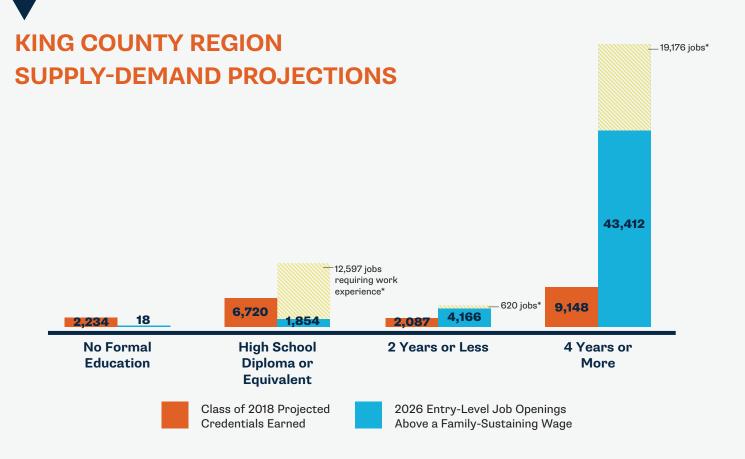
King County is home to vibrant and growing high-demand industries, including computer and information technology, healthcare, maritime, and construction, spanning from Bothell to Federal Way. It is projected that there will be over 42,000 entry-level, family-sustaining STEM jobs in King County per year. Washington STEM and its business, education, and community partners work together to support the 20 school districts in this region, specifically to close credential attainment gaps for students of color and students from low-income families, so that these students can access high demand, family-sustaining careers in King County.

By supporting more students to be on track to earn a high-demand credential (inclusive of apprenticeship, 1 year, 2 year, and 4 year degrees) King County partners and regional STEM Networks across the state will ensure that over 49,000 family-sustaining jobs could be filled by local young adults.



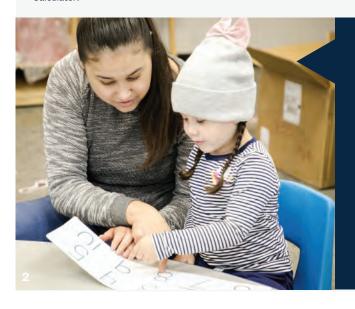
666 MORE CREDENTIALS PER YEAR = REGION ON TRACK **Washington State** Attained with 80,000 56% 49% **47%** 60,000 38% 42% 41% Credentials 36% 36% 46,229 41,145 40,000 36,060 Intervention 20,000 King Region Credentials 84% 20,500 Attained with 69% 19,224 62% 56% 61% Intervention 53% 55% 15,895 14.201 49% 49% 13,898 12.083 12.567 12,930 11,500 Credentials 11.235 11.235 Attained without Intervention 5,000 Measured six to eight years after high school graduation Class of 2020 Class of 2022 Class of 2025 **Baseline** Class of 2030

THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT



By supporting more students to be on track to earn a high-demand credential, King County partners and regional STEM Networks across the state will ensure that up to 49,450 family-sustaining** job openings per year in King County (those that pay a regionalized wage of \$58,746 or more a year) could be filled by local young adults.

^{**}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.



REMOVING BARRIERS TO EARLY MATH IN KING COUNTY

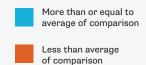
With support from the Bill and Melinda Gates Foundation, Washington STEM is working with the Puget Sound ESD, University of Washington, school districts, and community-based organizations in South King County on a community-wide approach to early math that focuses on removing structural barriers. Washington STEM shapes strategy as part of the Cross-Agency Core Team and leads the evaluation of the effort.

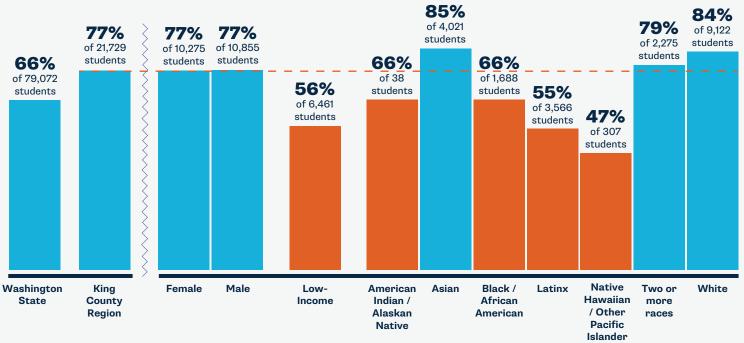
^{*}Jobs requiring related work experience, and/or on-the-job training, would generally not be immediately available to high school graduates and be more competitive with a greater number of eligible applicants.

KING COUNTY REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

KINDERGARTEN MATH READY (2018)

77% of 21,729 King County Region children entering kindergarten are math ready compared to 66% of 79,072 children statewide.

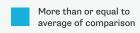




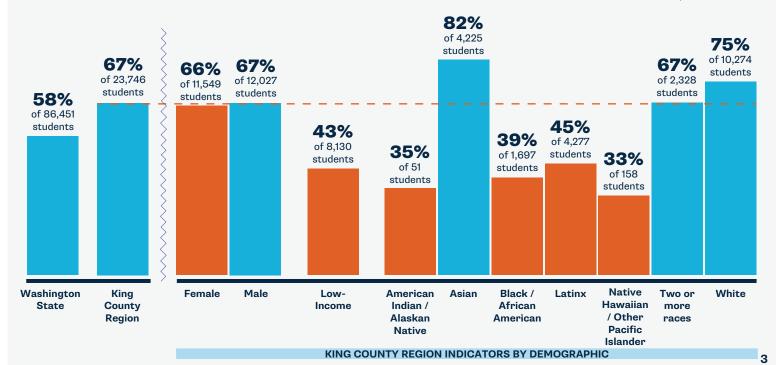
KING COUNTY REGION INDICATORS BY DEMOGRAPHIC

3RD GRADE MATH (2017)

67% of 23,746 of King County Region third graders meet grade level math standards compared to **58% of 86,451** third graders statewide.

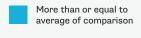


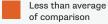
Less than average of comparison

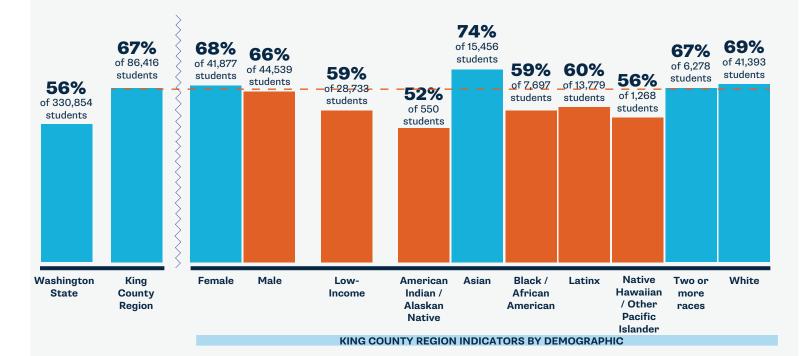


DUAL CREDIT (2017 9-12TH GRADERS)

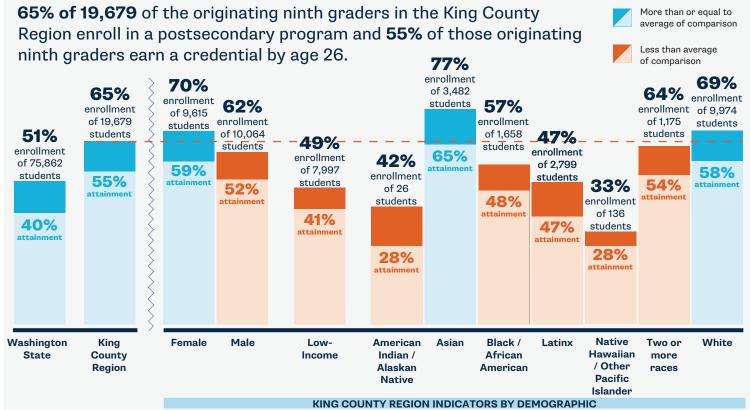
67% of 86,416 King County Region high schoolers complete at least one dual credit course compared to **56% of 330,854** youth statewide.







CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2016)



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

KING COUNTY REGION STEM INDICATORS

Ready for Kindergarten

While 77 percent of all King County 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

77%

of King County 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

67%

of King County Region third graders meet grade level math standards

Secondary Pathways

While students in the King County Region are overall less likely to complete dual credit** courses than their peers across the state, students of color and low-income students 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

67%

of King County 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 King County 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

65%

of the originating ninth graders in the King County Region enroll in a postsecondary program and 48 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, like 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.

For more information about early STEM and career pathways work in King County, contact Afi Tengue (afi@washingtonstem.org) and Gilda Wheeler (gilda@washingtonstem.org).

REGIONAL TOP INDUSTRIES AND STEM JOBS

SOFTWARE DEVELOPERS

Annual # of Openings: 9,271

Credential: Bachelor's

Average Regional Wage: \$126,114

BIOTECHNICIANS

Annual # of Openings: 1,875

Credential: Associate's → Doctorate

Average Regional Wage: \$67,834 → \$132,690

ELECTRICIANS

Annual # of Openings: 1,040

Credential: Apprenticeship

Average Regional Wage: \$73,675

MEDICAL ASSISTANTS & NURSES

Annual # of Openings: 2,612

Credential: Certificate → Bachelor's

Average Regional Wage: \$58,529 → \$120,213

SUPPORTING STRONG STEM EXPERIENCES

Through a partnership with Seattle Public School, Seattle Colleges, and Washington STEM, the King County STEM Partners are designing a *Health and Medical Pathway* for Seattle Public School students. This pathway offering begins Fall of 2019 in three high schools and will give students opportunities to explore a variety of health-related careers, earn postsecondary credit towards a meaningful degree, and be set on a path to a family-wage, high-demand job. Along with the Health and Medical Pathway project, the partnership has developed the *Advancing Equitable Industry Specific Career Pathways Playbook* to help other K-12 and postsecondary leaders, alongside industry partners, to develop or redesign K-12 to postsecondary pathways in high demand industries. The playbook provides tools, proof points, best practices, and lessons learned that can be applied across the state.



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.