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.
THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

KING COUNTY REGION
SUPPLY-DEMAND PROJECTIONS

2026 Entry-Level Job Openings Above a Family-Sustaining Wage

<table>
<thead>
<tr>
<th></th>
<th>Class of 2018 Projected Credentials Earned</th>
<th>2026 Entry-Level Job Openings Above a Family-Sustaining Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Formal Education</td>
<td>2,234 18</td>
<td>10,176 jobs*</td>
</tr>
<tr>
<td>High School Diploma or Equivalent</td>
<td>6,720 1,854</td>
<td>4,166</td>
</tr>
<tr>
<td>2 Years or Less</td>
<td>2,087</td>
<td>620 jobs*</td>
</tr>
<tr>
<td>4 Years or More</td>
<td>9,148</td>
<td>43,412</td>
</tr>
</tbody>
</table>

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.

*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.

**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.
KINDERTGARTEN MATH READY (2018)
77% of 21,729 King County Region children entering kindergarten are math ready compared to 66% of 79,072 children statewide.

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.
### 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.

- **Female**: 68% of 41,877 students
- **Male**: 66% of 44,539 students

#### Washington State vs. King County Region
- **King County Region**: 67% of 86,416 students
- **Washington State**: 56% of 330,854 students

#### Low-Income
- **Female**: 56% of 28,733 students
- **Male**: 52% of 550 students

#### American Indian / Alaskan Native
- **Female**: 66% of 28,733 students
- **Male**: 59% of 15,456 students

#### Asian
- **Female**: 74% of 28,733 students
- **Male**: 74% of 15,456 students

#### Black / African American
- **Female**: 59% of 28,733 students
- **Male**: 60% of 15,456 students

#### Latinx
- **Female**: 59% of 28,733 students
- **Male**: 60% of 15,456 students

#### Two or more races
- **Female**: 67% of 28,733 students
- **Male**: 69% of 15,456 students

#### White
- **Female**: 67% of 28,733 students
- **Male**: 69% of 15,456 students

### CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2016)

65% of 19,679 of the originating ninth graders in the King County Region enroll in a postsecondary program and 55% of those originating ninth graders earn a credential by age 26.

- **Female**: 70% enrollment of 9,615 students (59% attainment)
- **Male**: 62% enrollment of 10,064 students (52% attainment)

#### Washington State vs. King County Region
- **King County Region**: 65% enrollment of 19,679 students
- **Washington State**: 51% enrollment of 75,862 students

#### Low-Income
- **Female**: 49% enrollment of 7,997 students (41% attainment)
- **Male**: 42% enrollment of 26 students (28% attainment)

#### American Indian / Alaskan Native
- **Female**: 49% enrollment of 7,997 students (41% attainment)
- **Male**: 42% enrollment of 26 students (28% attainment)

#### Asian
- **Female**: 77% enrollment of 3,482 students (65% attainment)
- **Male**: 57% enrollment of 1,658 students (47% attainment)

#### Black / African American
- **Female**: 47% enrollment of 2,799 students (33% attainment)
- **Male**: 47% enrollment of 2,799 students (33% attainment)

#### Latinx
- **Female**: 57% enrollment of 3,482 students (65% attainment)
- **Male**: 54% enrollment of 1,375 students (54% attainment)

#### Two or more races
- **Female**: 48% enrollment of 1,375 students (54% attainment)
- **Male**: 28% enrollment of 1,375 students (28% attainment)

#### White
- **Female**: 69% enrollment of 9,974 students (58% attainment)
- **Male**: 64% enrollment of 1,175 students (54% attainment)

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Data citations and region-by-region analyses will be posted at [www.washingtonstem.org/STEMbythenumbers](http://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).
### KING COUNTY REGION STEM INDICATORS

<table>
<thead>
<tr>
<th><strong>Ready for Kindergarten</strong></th>
<th><strong>K-12 STEM Learning</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>TBD</strong></td>
<td><strong>TBD</strong></td>
</tr>
<tr>
<td>of King County Region children entering kindergarten are math ready</td>
<td>we are determining availability of high-quality early learning for families and supports for professionals in this region</td>
</tr>
<tr>
<td><strong>77%</strong></td>
<td><strong>TBD</strong></td>
</tr>
<tr>
<td>we are determining the STEM indicators for each school district in this region in partnership with LASER</td>
<td>of King County Region third graders meet grade level math standards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Secondary Pathways</strong></th>
<th><strong>Credential Enrollment/Attainment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>TBD</strong></td>
<td><strong>TBD</strong></td>
</tr>
<tr>
<td><strong>67%</strong></td>
<td>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.</td>
</tr>
<tr>
<td>of King County Region high schoolers complete at least one dual credit course</td>
<td>we are determining availability of dual credit courses and career pathways programs by type and subject area in this region</td>
</tr>
<tr>
<td><strong>67%</strong></td>
<td>we are determining local higher education and career training program capacity in this region</td>
</tr>
</tbody>
</table>

**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.**

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**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).
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.

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.