



STEM BY THE NUMBERS: EQUITY AND OPPORTUNITY

What gets measured gets done. Washington STEM provides data on student indicators and labor market projections that can tell us whether we, along with our partners, are closing opportunity gaps across the state.

STEM Networks from Tacoma and Vancouver to Wenatchee and Yakima are participating in the Washington Early Math Coalition, working to identify the resources and systems supporting early math learning and identifying high-leverage opportunities where new investments would yield the largest return for children and families. 250,000 children of color, children from low-income backgrounds, children from rural areas, and young girls will be supported by family members and early educators who will be better prepared to support their early math learning.

In North Central Washington, the Apple STEM Network has increased the number of school districts offering computer science through the TEALS program from 11 to 18, and through coordination and partnership with regional two-year colleges, has developed nine articulated computer science pathways that provide a postsecondary credential for some of the most in-demand jobs in the region.

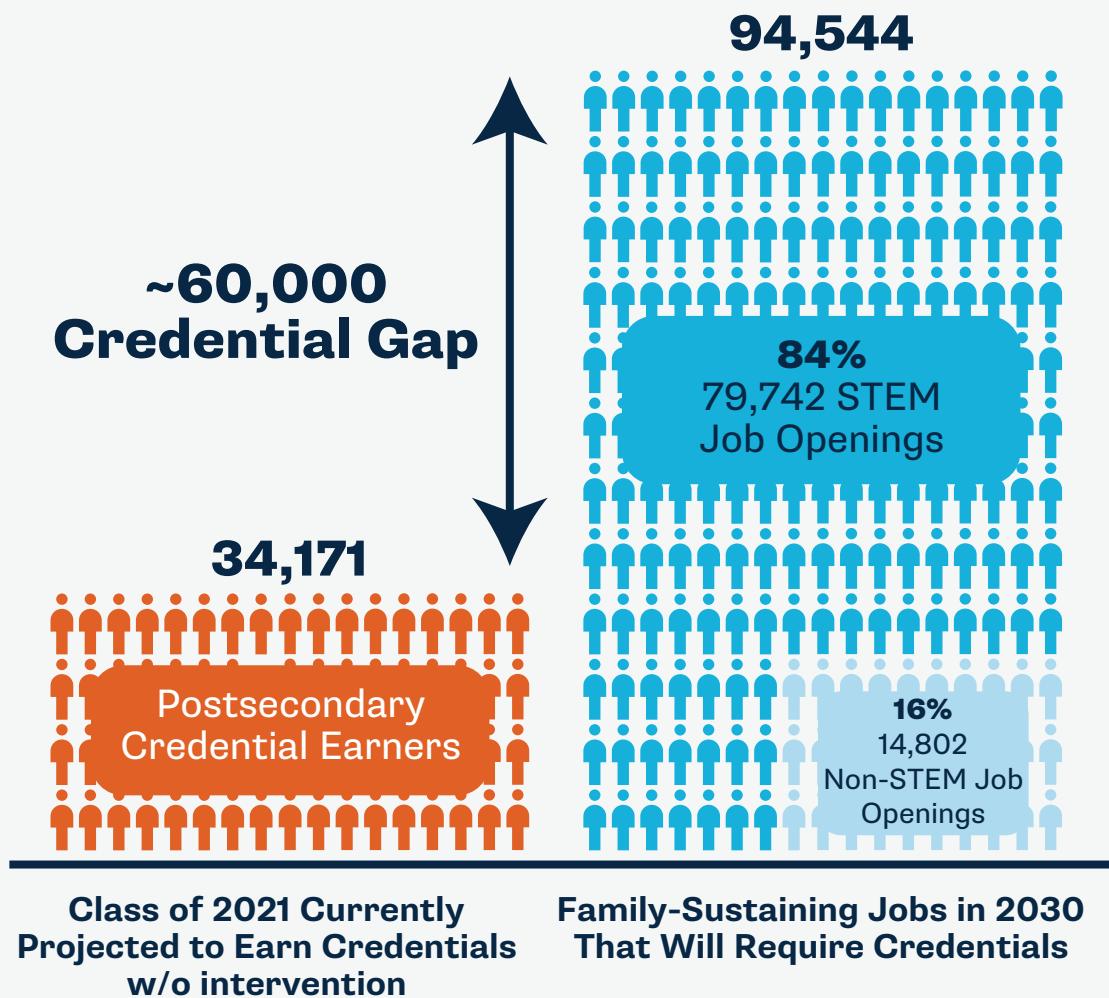
STEM jobs make up the majority of projected family-sustaining job openings and will be the hardest to fill with local talent, given the credentials they require and the current educational trajectory of local students across our state.

Each region of our state has developed innovative approaches to STEM education that lead to high-demand careers, from agriculture tech to healthcare to advanced manufacturing. And each region has equity and opportunity gaps. What would happen if every region in our state had opportunities for all young people from underserved backgrounds to be on track to attain a family-sustaining job?



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.

BRIDGING THE GAP: A STRONG DEMAND FOR STEM TALENT



*The class of 2021 will have completed credentials by 2030 and be ready to enter the workforce.

Our state has an opportunity to better support students of color, students with low-income and rural backgrounds, and young women by removing systemic gaps to access high-demand credentials and family-sustaining careers. By prioritizing those student populations, we are ensuring that all of our state's residents have access to opportunity, and we are securing our state's economic future.

WASHINGTON STEM INDICATORS

Ready for Kindergarten – Math

While two-thirds of all Washington kids are math ready by Kindergarten, families of color and lower income families need expanded access to early learning support to close math-readiness gaps.

TBD

we are determining availability of high-quality early learning for families and supports for professionals across the state

66%

of Washington's children entering Kindergarten are math ready

3rd Grade Math

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 the state in partnership with LASER

59%

of Washington's third graders meet grade level math standards

Secondary Pathways

While over half of the students in Washington complete at least one dual credit* course in high school, low-income students and some students of color remain underrepresented in these courses.

TBD

we are determining availability of dual credit courses and career pathways programs by type and subject area across the state

56%

of Washington's high schoolers complete at least one dual credit course

Credential Enrollment/Attainment

While over 89% of youth aspire to complete a postsecondary credential, less than half of all students from Washington earn a credential by age 26.

TBD

we are determining local higher education and career training program capacity across the state

51%

of Washington's originating ninth graders enrolled in a postsecondary program and 40 percent of the originating ninth graders earn a credential by age 26.

*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.



Together with our partners, we are advocating for and developing regionalized, cross-sector, and longitudinal data on 30 indicators to tell us which Washington students are supported to earn credentials and access family-sustaining careers. We highlight student indicators above, and in future publications we will report on systems indicators, like high school course offerings and availability of STEM professional learning and supports for educators.

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

WASHINGTON STEM CREATING IMPACT TOGETHER

Washington STEM is a statewide nonprofit organization that supports and scales both systems-level and regional-level policy changes and best practices. As an "outside, but alongside" partner, we support state agencies, local businesses, and educational leaders in identifying systems gaps, learning from peers about what works, and scaling relevant and responsive solutions.

Our **early STEM** work is focused on early math experiences and outcomes for newborns to eight-year-olds. We see substantial opportunity gaps as children enter Kindergarten. The gaps measured at the start of Kindergarten consistently widen by the time children complete third grade. We work with a coalition of partners to strengthen our early education system so that it better supports children of color, children from low-income backgrounds, children from rural areas, and young girls in achieving their full potential.

Our **career pathways** work focuses on high school and postsecondary career preparation. We see substantial gaps between the rich opportunity for family-sustaining careers across Washington communities and the preparation available to young people in order to benefit from those careers. We work with partners to expand the quality and availability of career connected learning experiences ranging from career exploration to internships and apprenticeships.

WASHINGTON STEM WILL:

Triple the number of underserved students who earn credentials - We fight for statewide policies—as well as **policy alignment** across agencies and initiatives—that can fund, scale, and support cross-sector efforts to close gaps for Washington students so that no one gets lost in the cracks.

Ensure 186,000 more students on track to earn credentials by 2030 - We seeded and now support the scaling of **10 regional Networks** and King County partners that pull together local leaders and practitioners to align regional education-to-workforce pathways, policies, and educational experiences and curriculum, reflecting **each region's economy, educational context, and residential population**.

Each region has pledged to work toward the statewide goal of tripling 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.

2.4 million students on-track for family-sustaining careers by 2030 - We **identify and support innovative solutions** that can address persistent gaps in STEM competency, engagement, and outcomes. We work with our Networks and our statewide policy connections to **scale** solutions that are responsive to a region's needs.

