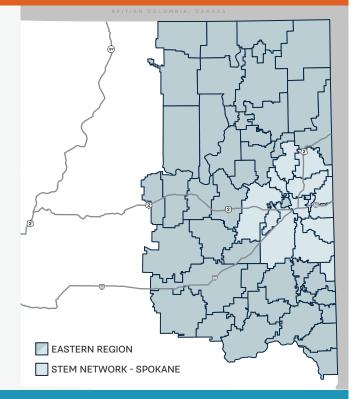


## **STEM BY THE NUMBERS: EASTERN REGION**

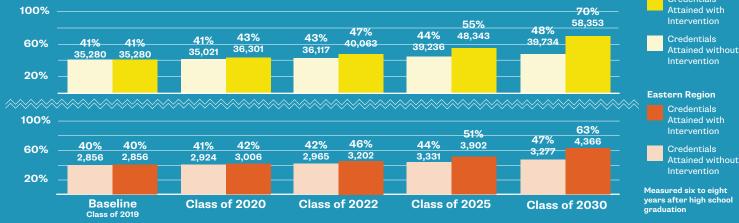
The Eastern Region is home to historically robust STEM industries, spanning from information technology to healthcare, served by the Spokane STEM Network and its cross-sector



partners. By 2030, 82% of high-demand, family-sustaining wage jobs available in our region will require a postsecondary credential; 46% of those jobs will be STEM or STEM literacy-based occupations. However, students in the Eastern Region are not equitably or adequately prepared to take advantage of these opportunities, with only 40% 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 Spokane STEM Network, visit http://spokanestem.org.



## **137 MORE CREDENTIALS PER YEAR = REGION ON TRACK**



Washington State

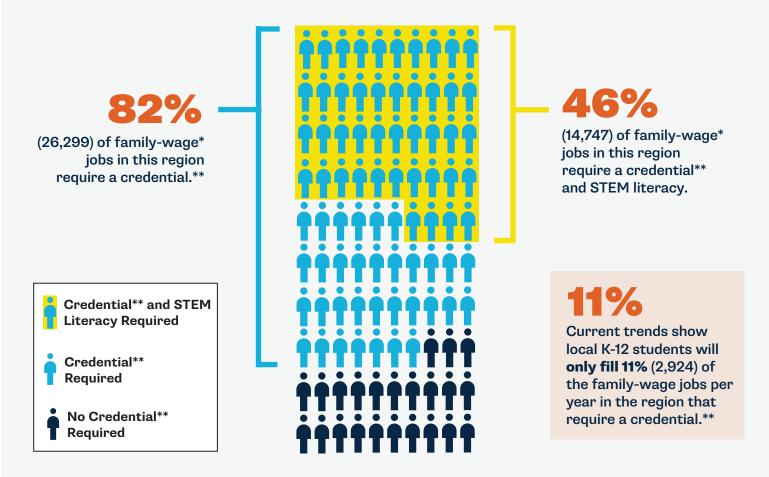
Attained with

Attained without Intervention

years after high school graduation

## THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

### **32,220 JOBS PAY A FAMILY WAGE\*** IN THE EASTERN REGION



\*"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.



## **ENGAGING IN EARLY STEM**

Currently, only 65% of incoming kindergarteners enter with the necessary math skills across the Eastern region. Spokane STEM, along with other local partners, are expanding the community-focused project, Project ELLO, continuing to increase math readiness for young learners entering kindergarten. This project aims to develop additional conversation materials in early STEM and mathematics that can be utilized by caregivers in a home setting, in the community and in partner businesses. Free early learning resources for families and educators in multiple languages are available at www.helloello.org.

# **EASTERN REGION STEM INDICATORS**



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.

**EARLY LEARNING** 

of children under 6 years old with **1** 30% all parents working are able to access quality-rated early learning

> of children demonstrate the math skills expected for their age

Not enough families are able to access guality-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.

### **COLLEGE & CAREER PATHWAYS**



**\***†65%

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

of high schoolers

### **\*†** 42%

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.

Systems Supports 盦



### K-12 STEM LEARNING

• 55% of fifth graders demonstrate the science skills and knowledge expected for their grade level



of third graders 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.

teachers in our region are teachers of color, compared to 24% students of color



### **CREDENTIALS & EMPLOYMENT**

**<u><u></u>** 33%</u>

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.

**\***\* 48%

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

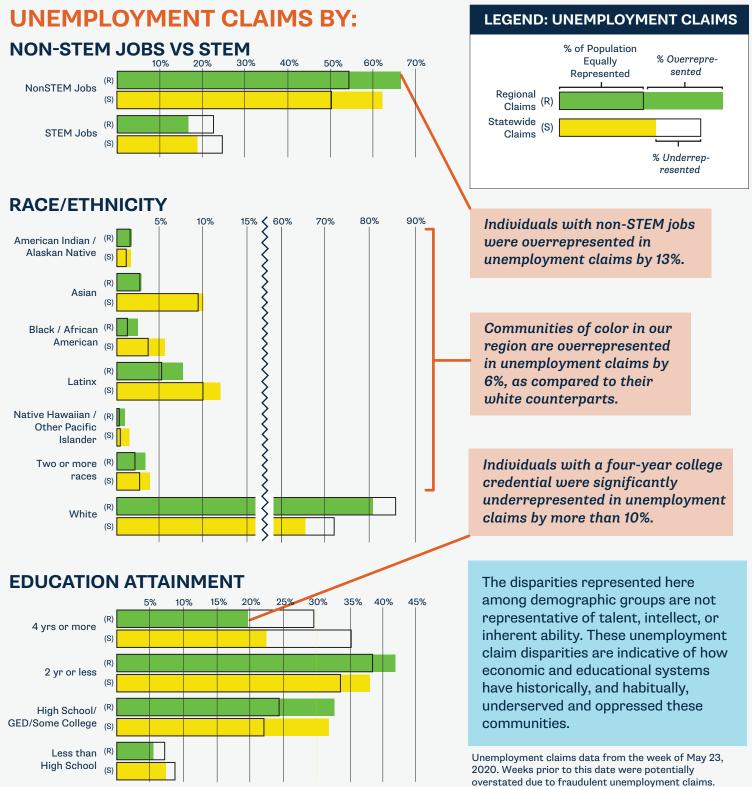
CONTINUED EDUCATION &

CREDENTIALS



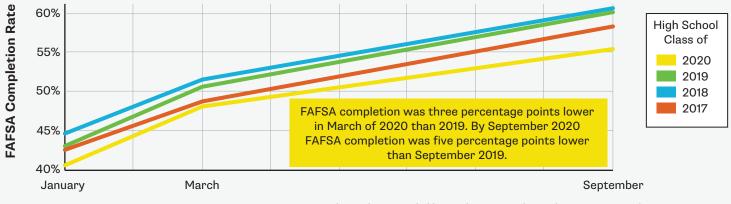
## **COVID-19 IMPACTS**

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 have been 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.



#### **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.



#### Eastern Region FAFSA Completion Rate by High School Cohort

FAFSA completion data provided by Washington Student Achievement Council. Explore the data here: http://bit.ly/WSACfafsacompletion

#### **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.

### PARTNERING TO INCREASE ACCESS TO FINANCIAL AID

The Spokane STEM Network was eager to financially support six virtual FAFSA/WASFA completion events hosted by College Success Foundation (CSF) near the end of 2020 for students and families across NEWESD 101. CSF is a strong partner of the Spokane STEM Network through their mission of improving educational equity for youth from groups that historically achieve college degrees at lower rates, specifically low-income youth, youth of color, and first generation students. With increased postsecondary degree attainment, our region is able to benefit from a stronger talent pipeline, positively contributing to increased economic development for our communities.

Each event was led by CSF's Scholarship Services Director alongside other CSF staff and volunteers who provided critical support and guidance to each student and family to enable them to complete their financial aid application, unlocking thousands of dollars in federal and state-based support for students' postsecondary education goals.

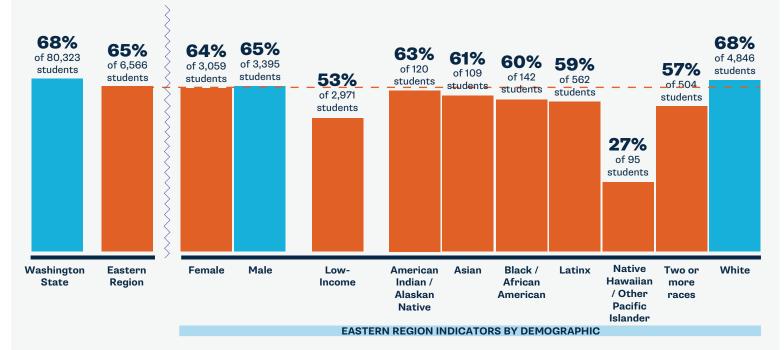
## EASTERN REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

#### **KINDERGARTEN MATH READY (2019)**

**65% of 6,566** Eastern 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

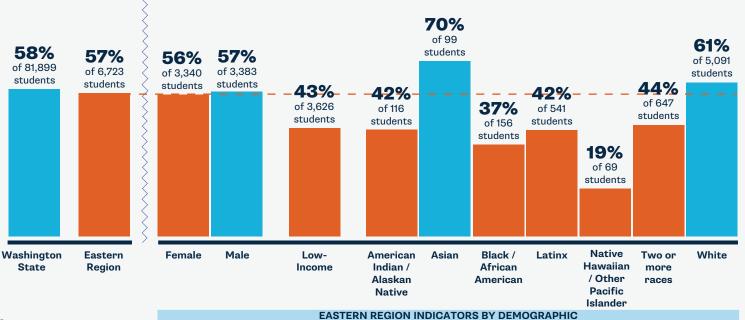


#### **3RD GRADE MATH (2019)**

**57% of 6,723** Eastern Region third graders meet grade level math standards compared to **58% of 81,899** third graders statewide.

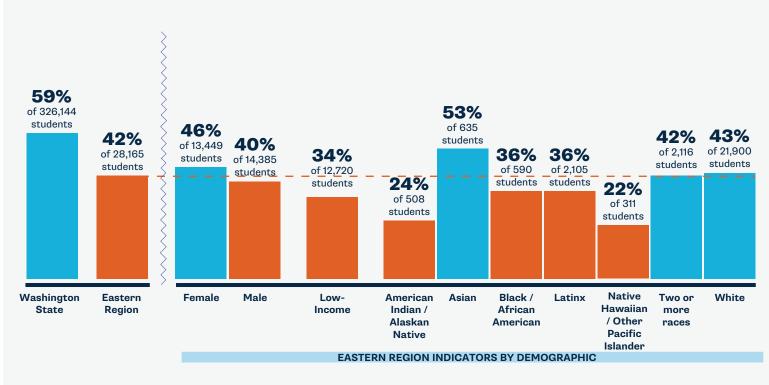
More than or equal to average of comparison

Less than average of comparison



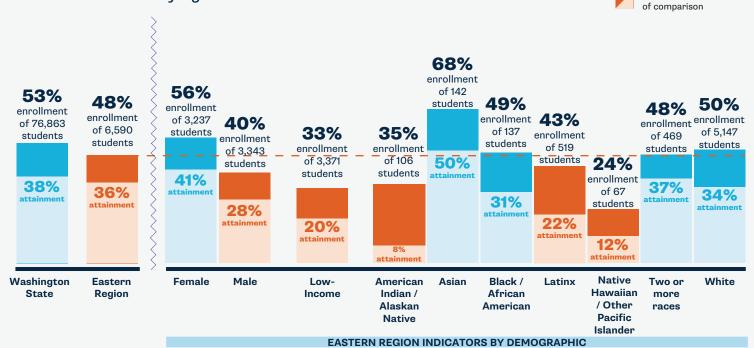
#### **DUAL CREDIT (2020 9-12TH GRADERS)**

**42% of 28,165** Eastern Region high schoolers complete at least one dual credit course compared to **59% of 326,144** youth statewide.



#### **CREDENTIAL ENROLLMENT/ATTAINMENT (CLASS OF 2018)**

**48% of 6,590** originating ninth graders in the Eastern Region enroll in a postsecondary program and **36%** 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 on the Spokane STEM Network and its work in the Eastern Region, contact Network Director Cassidy Peterson at <a href="mailto:cpeterson@greaterspokane.org">cpeterson@greaterspokane.org</a>.

More than or equal to average of comparison

More than or equal to average of comparison

Less than average

Less than average

of comparison

# **REGIONAL TOP INDUSTRIES AND STEM JOBS**

The following industries and jobs in the Eastern 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.

	Information Technology Professional	Construction Trades	Healthcare Professionals (RN & Medical Assistant)	Business and Finance Professionals	<b>F</b> Life Sciences Professional
Annual Number of Openings**	1,488	994	919	714	352
Oct. Insured Unemployment* Rate	0.0%	7.5%	1.2%	0.7%	1.0%
				·	

#### Oct. Regional Insured Unemployment\* Rate

Credential	Associate's → Bachelor's	Apprenticeship	Certificate → Bachelor's	Bachelor's	Certificate → Doctorate
Average Regional	\$49,130 <del>→</del>	\$47,366 <b>→</b>	\$38,343 <b>→</b>	\$57,273 <b>→</b>	\$36,507 <b>→</b>
Wage	\$94,756	\$66,906	\$82,038	\$77,449	\$104,635

2.5%

\*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.

## FORGING CAREER PATHWAYS

The Spokane STEM Network builds student interest, exploration, awareness, and preparation of careers through programs and opportunities like Business AfterSchool. This program invites middle and high school-aged students into local businesses to engage in hands-on activities at the region's top employers, many of which are in the STEM and healthcare fields. Over the 2019/2020 school year before COVID suspended our workshops, more than 440 students were introduced to a variety of careers in the Spokane region through this program.

Through the expansion of access2experience, more opportunities like Business AfterSchool are enhanced and made available to students, such as Avista's Energy Pathways Program and Providence Medical Group's Medical Apprenticeship program, and Wagstaff's Production, Manufacturing and Engineering Academy. These programs offer students and out-of-school youth the opportunity to receive real-world experience, CTE or postsecondary credits, and a monetary stipend. Advancing regional business and education partnerships through the above strategies strengthens and expands pathways for the future talent of the Eastern region.



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.