

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

The Eastern Region is home to growing healthcare, education, manufacturing, construction, finance, IT, and engineering industries, spanning from Colville to



Pullman. The region is made up of 59 school districts, 14 of which are in Spokane County and served by the Spokane STEM Network. The Network and its business, education, and community partners are working to close credential attainment gaps, especially for students of color and students from rural and low income families. They aim to increase the number of local students who become healthcare professionals, business and IT professionals, construction apprentices, engineers, and teachers, which combined have 4,304 annual projected openings over the next five years.



Washington State

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



## THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT



By supporting more students to be on track to earn high-demand credentials, the Spokane STEM Network and its partners in the Eastern Region will ensure that up to 7,944 family-sustaining<sup>\*\*\*</sup> jobs (those that pay a regionalized wage of \$44,562 or more a year) are available to local young adults looking to start their career in the Eastern Region.

\*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 Eastern 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.



## **ENGAGING IN EARLY STEM**

Recognizing preschoolers' need for hands-on activities that encourage playful STEM learning, Spokane STEM Network partners Spokane County Library District and Inland Northwest Early Learning Alliance created 786 "Ready for School with STEM" kits. The kits, available at libraries, allow kids to explore their curiosity about nature, weather, building structures, and even robotics. The organizations also provided 24 training sessions for childcare providers and librarians and offered almost 200 related family Play-and-Learn events.

# EASTERN REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

## **KINDERGARTEN MATH READY (2018)**

**61% of 6,311** Eastern Region children entering kindergarten are math ready compared to **66% of 79,072** children statewide.

More than or equal to average of comparison

Less than average of comparison



### **3RD GRADE MATH (2017)**

**58% of 6,757** of Eastern Region third graders meet grade level math standards compared to **58% of 86,451** third graders statewide.

More than or equal to average of comparison

Less than average of comparison



### **DUAL CREDIT (2017 9-12TH GRADERS)**

**40% of 26,765** Eastern Region high schoolers complete at least one dual credit course compared to **56% of 330,854** youth statewide.



More than or equal to average of comparison

Less than average

More than or equal to average of comparison

Less than average

of comparison

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

**50% of 6,331** of the 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 will be posted at www.washingtonstem.org/STEMbythenumbers.

For more information on the Spokane STEM Network and its work in the Eastern Region, contact Network Director Meg Lindsay at mlindsay@greaterspokane.org.

# **EASTERN REGION STEM INDICATORS**

#### **Ready for Kindergarten**

While 61 percent of all Eastern 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.

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

TB

TBD

of Eastern Region children entering kindergarten are math readv

#### 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.

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

of Eastern Region third graders meet grade level math standards

#### **Secondary Pathways**

While students in the Eastern 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.

> we are determining availability of dual credit courses and career pathways programs by type and subject area in this region

of Eastern 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 Eastern 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.

we are determining local higher education and career training program capacity in this region

of the originating ninth graders in the Eastern Region enroll in a postsecondary program and 36 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.

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# **REGIONAL TOP INDUSTRIES AND STEM JOBS**

## **HEALTHCARE PROFESSIONALS**

REGISTERED NURSE & MEDICAL ASSISTANT

Annual **#** of Openings: 856 Credential: Certificate → Bachelor's Average Regional Wage: \$46,948 → \$83,408

## LIFE SCIENCES PROFESSIONALS

Annual # of Openings: 341 Credential<mark>: Associate</mark>'s → Doctorate Average Regional Wage: \$52,310 → \$71,961

## **BUSINESS & FINANCE PROFESSIONALS**

Annual **# of Openings: 749** Credential: Bachelor's Averag<mark>e Region</mark>al Wage: \$47,142 → \$85,549

### **TRADES PROFESSIONALS**

Annual # of Openings: 1,301 Credential: Apprenticeship Average Regional Wage: \$44,866 → \$89,329

#### INFORMATION TECHNOLOGY PROFESSIONALS

Annual # of Openings: 368 Credential: Bachelor's Average Regional Wage: \$73,382

## **ENGINEERS**

Annual # of Openings: 203 Credential: Bachelor's Average Regional Wage: \$73,294

## FORGING CAREER PATHWAYS

Spokane STEM Network builds student interest, exploration, and awareness of regional career opportunities through their Business AfterSchool Program. Middle and high school students engage in hands-on activities at Spokane's top employers, many of which are in the high-demand fields of STEM and healthcare. Over the 2017/18 school year, 380 students were introduced to 60 careers in the Spokane region through Business AfterSchool.

Spokane STEM Network also partners with employers like local utility company Avista and the Providence Medical Group to support the launch of apprenticeship programs which allow high school graduates and out-of-school youth to receive postsecondary credits paired with real-world experience. Spokane STEM is currently partnering with Career Connect Spokane to refresh the access2experience digital connection tool aiming to increase relationships that further the ability for business and education to expand regional career exploration and apprenticeship opportunities.



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.