

STEM by the Numbers – Data and Research Sources

Educational Service District (ESD)

- A map outlining each district can be found here http://www.k12.wa.us/maps/DownloadFiles/ESDs_2017_8x11.pdf
- A map of individual school districts was used to align WDA (Workforce Development Area) with ESD (Education Service District) and Regions. <https://data.wa.gov/Education/School-Districts-Washington-State/vk9k-n3r7>

ERDC High School Feedback Report – <http://www.erdcddata.wa.gov/hsfb.aspx>

- School Districts: Statewide Comparison – provides school district level details on where graduates enroll in postsecondary education and the enrollment patterns of graduates by demographic characteristics.
- High Schools: Statewide Comparison – provides high school level details on where graduates enroll in postsecondary education and the enrollment patterns of graduates by demographic characteristics.

ERDC – A credential by Age 26? - <https://erdc.wa.gov/sites/default/files/publications/201507.pdf>

- Seven-year outcomes for 2006 Washington Public High School Graduates
- Credentials include:
 - Post-secondary degree or certificate awarded in the US
 - Completion of an Apprenticeship program administered by Washington State Department of Labor & Industry
 - Completion of a private vocational school in the state of WA.
 - Professional licenses issued in by the Washington Department of Licensing that required training.
- Results – 42% of graduates or 31% of the 9th grade cohort, earned a credential within seven years of graduation.

Office of the Superintendent of Public Instruction (OSPI)

- Data files can be found here: <http://reportcard.ospi.k12.wa.us/DataDownload.aspx>
 - Graduation Rates by School 5-yr Cohort
 - 2015 Adjusted 5 yr cohort – The total number of students identified as belonging to the class of 2015, who are reported as graduating no later than the 2015-2016 school year.
 - Graduation rates and demographic characteristics
 - Washington Kindergarten Inventory of Developing Skills (WaKIDS) Data
 - Kindergarten Math Readiness by student demographics



- AIM/EOC/MSP/SBA Data
 - 3rd Grade Math Proficiency by student demographics
- Dual Credit Data
 - Dual Credit participation by student demographics

WA Employment Security Department Occupation Projections –

<https://fortress.wa.gov/esd/employmentdata/reports-publications/industry-reports/employment-projections>

- “Average Annual Openings” is determined by the separations projection method.
 - Separations projections measure job openings created by workers leaving the workforce or transferring to an occupation with a different Standard Occupational Classification (SOC). This measure excludes turnover within an occupation.
- 2016-2026 long term projections - [All occupational projections \(separations\)](#)

WA Employment Security Department Occupational Employment and Wage Estimates

- **Average Regional Wage** - Wage estimates by occupation and BLS Survey Area were used to calculate average regional wage <https://esd.wa.gov/labormarketinfo/occupations>

Workforce Development Areas (WDA)

- A map outlining WDAs and corresponding counties can be here <http://www.wtb.wa.gov/LocalWorkforcePlans.asp>
- The below table defines the BLS Survey Area associated with each WDA

WDA*	Survey Area**
Pacific Mountain	Southwestern WA Nonmetropolitan Area (NMA) - Includes Grays Harbor, Lewis, Mason, Pacific and Wahkiakum counties Olympia-Tumwater, WA MSA - Includes Thurston County
Seattle-King County	Seattle-Bellevue-Everett, WA MD - Includes King and Snohomish counties
North Central Washington	Central WA Nonmetropolitan Area (NMA) - Includes Kittitas, Klickitat and Okanogan counties Wenatchee, WA MSA - Includes Chelan and Douglas counties Eastern WA Nonmetropolitan Area (NMA) - Includes Adams, Ferry, Garfield, Grant, Lincoln and Whitman counties
Olympic Consortium	Northwestern WA Nonmetropolitan Area (NMA) - Includes Clallam, Island, Jefferson and San Juan counties Bremerton-Silverdale, WA MSA - Includes Kitsap County



South Central	Yakima, WA MSA - Includes Yakima County Central WA Nonmetropolitan Area (NMA) - Includes Kittitas, Klickitat and Okanogan counties
Northwest	Bellingham, WA MSA - Includes Whatcom County Mount Vernon-Anacortes, WA MSA - Includes Skagit County Northwestern WA Nonmetropolitan Area (NMA) - Includes Clallam, Island, Jefferson and San Juan counties
Eastern Washington	Clarkston (WA) and Lewiston (ID) MSA - Includes Asotin (WA) and Nex Pierce (ID) counties Eastern WA Nonmetropolitan Area (NMA) - Includes Adams, Ferry, Garfield, Grant, Lincoln and Whitman counties Walla Walla, WA MSA - Includes Columbia and Walla Walla counties
Spokane	Spokane-Spokane Valley, WA MSA - Includes Pend Oreille, Spokane and Stevens counties
Pierce County	Tacoma-Lakewood, WA MD - Includes Pierce County
Snohomish County	Seattle-Bellevue-Everett, WA MD - Includes King and Snohomish counties
SW Washington	Vancouver (WA) and Portland-Hillsboro (OR) MSA - Includes Clark and Skamania, (WA) counties; Clackamas, Columbia, Multnomah, Washington and Yamhill (OR) counties Longview, WA MSA - Includes Cowlitz County
Benton-Franklin	Kennewick-Richland, WA MSA - Includes Benton and Franklin counties

*Survey areas were combined for any WDA with multiple survey areas

**Survey areas are defined by BLS Metropolitan and Nonmetropolitan Area Definitions
(https://www.bls.gov/oes/current/msa_def.htm)

Family Sustaining Wage

For the purposes of this report, a family sustaining job has been defined as paying a wage above the amount required to support a household with 2 adults (1 working part time) and 1 child. The Living Wage Calculator was used to determine regional cost of living

<http://livingwage.mit.edu>.

Bureau of Labor Statistics (BLS)

Occupational Projections and Worker Characteristics -

<https://www.bls.gov/emp/tables/occupational-projections-and-characteristics.htm>

Provides the following data:

- Typical entry-level education
- Work Experience in a related occupation
- Typical on-the-job training needed to attain competency in the occupation



Typical Credential Needed for Entry

Using WA L&I data on registered apprentices and approved apprenticeship programs, combined with BLS data on typical entry-level education, we were able to generate typical credential needed for entry. Typical credential needed for entry allows us to include careers in which high school graduates can earn living wages through an apprenticeship program offered in the state of Washington.

WA Labor & Industries (L&I)

(ARTS) Apprenticeship Registration & Tracking

- WA state approved apprenticeship programs <https://secure.lni.wa.gov/arts-public/#/program-search>
- ARTS Public Data – WA state registered apprentices <https://data.wa.gov/Labor/ARTS-Public-Data/mcr6-ujqw>

The Integrated Postsecondary Education Data System (IPEDS)

- Completions, awards and degrees by 6-digit CIP code - <https://nces.ed.gov/ipeds/datacenter/CDS.aspx>
 - Credentials attainment data, provided by IPEDS, is a count of degrees and certificates conferred, not individual completers, in the 2015 academic year, as reported by 129 Washington State institutions.

