TECH'S IMPACT ON washington Statewide & Regional STEM Data

TechAlliance | The Economic Effect of Technology on Jobs and Communities

OCTOBER 2017



Counties by Region

PENINSULA

Clallam County Grays Harbor County Jefferson County Kitsap County Mason County Pacific County Wahkiakum County

NORTHWEST WASHINGTON

Island County San Juan County Skagit County **Snohomish County** Whatcom County

KING COUNTY

King County

SOUTH SOUND

Lewis County Pierce County Thurston County

VANCOUVER

Clark County Cowlitz County Skamania County

NORTHEAST WASHINGTON

Ferry County Okanogan County Pend Oreille County Stevens County

CENTRAL WASHINGTON

Chelan County Douglas County **Grant County** Kittitas County

TRI-CITIES

Benton County Franklin County Klickitat County Walla Walla County Yakima County

SPOKANE

Lincoln County Spokane County

PULLMAN

Adams County Asotin County Columbia County Garfield County Whitman County

STEM Jobs in Washington State

STEM EMPLOYMENT, 2016

503,139

TOTAL EMPLOYMENT, 2016 3.122.749

PERCENT OF JOBS that are STEM, 2016

STEM GRADUATES, Cumulative Completions. 2005-2016

16%

132.799

TOP STEM INDUSTRIES	% STEM JOBS
Information	52%
Professional, Scientific, and Technical Services	44%
Health Care and Social Assistance	32%
Management of Companies and Enterprises	21%
Government	19%

TOP STEM OCCUPATIONS	# STEM JOBS
Software Developers, Applications	63,754
Registered Nurses	54,792
Computer Systems Analysts	19,954
Civil Engineers	16,096
Computer User Support Specialists	15,734

TOP REGIONS FOR STEM	# STEM JOBS
King County	249,114
Northwest WA	60,121
South Sound	51,814
Tri-Cities	28,357
Spokane	25,578

Regional STEM Employment, Jobs and Graduates

	STEM EMPLOYMENT, 2016	TOTAL EMPLOYMENT, 2016	PERCENT OF WA JOBS THAT ARE STEM, 2016	STEM GRADUATES, Cumulative Completions, 2005-2015
KING COUNTY	249,114	1,313,619	19%	58,360
NORTHWEST WASHINGTON	60,121	441,834	14%	15,923
SOUTH SOUND	51,814	429,896	12%	15,030
TRI-CITIES	28,357	263,838	11%	5,591
SPOKANE	25,578	217,642	12%	13,420
VANCOUVER	24,171	188,914	13%	4,903
PENINSULA	21,735	160,411	14%	4,374
CENTRAL WASHINGTON	9,062	108,245	8%	5,163
PULLMAN	3,782	34,201	11%	10,035
NORTHEAST WASHINGTON	3,524	33,443	11%	0



Top STEM Occupations by Region

KING COUNTY	# STEM JOBS
Software Developers, Applications	47,227
Registered Nurses	20,874
Computer Systems Analysts	11,934
Software Developers, Systems Software	10,463
Computer Programmers	9,601

SOUTH SOUND	# STEM JOBS
Registered Nurses	9,624
Licensed Practical and Licensed Vocational Nurses	2,347
Computer Systems Analysts	2,195
Computer Programmers	2,020
Civil Engineers	1,730

NORTHWEST WASHINGTON	# STEM JOBS
Registered Nurses	6,655
Aerospace Engineers	5,564
Industrial Engineers	2,610
Software Developers, Applications	1,915
Software Developers, Systems Software	1,715

	SPOKANE	# STEM JOBS
	Registered Nurses	5,847
	Software Developers, Applications	756
	Licensed Practical and Licensed Vocational Nurses	684
	Civil Engineers	659
	Computer Systems Analysts	651

TRI-CITIES	# STEM JOBS
Registered Nurses	3,926
Civil Engineers	3,531
Architectural and Engineering Managers	715
Engineers, All Other	659
Physicians and Surgeons, All Other	578

VANCOUVER	# STEM JOBS
Registered Nurses	3,894
Computer User Support Specialists	1,193
Civil Engineers	1,094
Software Developers, Applications	778
Computer Systems Analysts	712

PENINSULA	# STEM JOBS
Registered Nurses	2,274
Engineering Technicians, Except Drafters, All Other	1,492
Nuclear Engineers	1,179
Mechanical Engineers	893
Computer Systems Analysts	765

CENTRAL WASHINGTON	# STEM JOBS
Registered Nurses	1,524
Forest and Conservation Technicians	604
Civil Engineers	346
Biological Technicians	273
Pharmacy Technicians	265

PULLMAN	# STEM JOBS
Registered Nurses	608
Civil Engineers	270
Forest and Conservation Technicians	243
Emergency Medical Technicians and Paramedics	149
Zoologists and Wildlife Biologists	150

STEM JOBS
552
256
206
122
114

Note: Each region may have additional presence within other STEM occupations



Top STEM Industries by Region

KING COUNTY	% STEM JOBS
Information	59%
Professional, Scientific & Technical Services	46%
Health Care & Social Assistance	34%
Management of Companies & Enterprises	22%
Manufacturing	20%

TRI-CITIES	% STEM JOBS
Professional, Scientific & Technical Services	52%
Health Care & Social Assistance	29%
Government	17%
Management of Companies & Enterprises	16%
Administrative Services*	15%

% STEM JOBS
44%
31%
28%
23%
19%

VANCOUVER	% STEM JOBS
Professional, Scientific & Technical Services	40%
Health Care & Social Assistance	30%
Management of Companies & Enterprises	23%
Information	21%
Government	20%

PENINSULA	% STEM JOBS
Professional, Scientific & Technical Services	36%
Health Care & Social Assistance	28%
Government	22%
Information	10%
Management of Companies & Enterprises	8%

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SPOKANE	% STEM JOBS
Health Care & Social Assistance	31%
Professional, Scientific & Technical Services	31%
Management of Companies & Enterprises	18%
Government	15%
Information	13%

SOUTH SOUND	% STEM JOBS
Professional, Scientific & Technical Services	31%
Health Care & Social Assistance	30%
Government	21%
Management of Companies & Enterprises	15%
Information	12%

% STEM JOBS
31%
30%
20%
15%
12%

PULLMAN	% STEM JOBS
Health Care & Social Assistance	30%
Professional, Scientific & Technical Services	30%
Government	20%
Information	16%
Management of Companies & Enterprises	15%

Each region may have additional presence within other STEM industries.

*Includes: Administrative, Support, Waste Management and Remediation Services



The Technology Alliance is a statewide, non-profit organization of leaders from Washington's technology-based businesses and research institutions. These stories were created in conjunction with an interactive website: technology-alliance.com/tech-impact-wa



community attributes Inc. produced the research, the reports, and the interactive website for *Tech's Impact on Washington*. CAI is based in Seattle, with practice leaders in Denver and San Francisco. CAI provides research and tools to increase awareness, inform decisions, and improve results for our clients and the communities they serve.

Sources: Washington State Employment Security Department, 2016, Bureau of Labor Statistics, 2016; Washington State Employment Security Department, 2016; National Center for Education Statistics, 2015; National Center for Education Statistics, 2005-2015; Washington State Employment Security Department, 2017; Community Attributes Inc., 2017.