THE FUTURE OF WORK: WORKFORCE TRENDS AND THEIR IMPACT ON STUDENTS

FOR THE TRIO PROGRAM AND GENERAL PUBLIC AT CLATSOP COMMUNITY COLLEGE OCTOBER 8, 2025

Shaun Barrick-Regional Economist



- 2023-2033 OCCUPATIONAL PROJECTIONS
- OCCUPATIONS BY EDUCATION
- IMPACTS OF AI
- TOOLS AND RESOURCES



WHAT ARE PROJECTIONS? WHERE DOES THE DATA COME FROM?

- Labor Force
- Industry Employment
- Occupational Employment
- Population Trends
- Demographic Trends
- Occupational Staffing
 - **Patterns**
- Industry Demand/Output

Economic Models for Over 300 Industries and 800 Occupations



Long-Term (10-Year)
Industry and
Occupational
Employment
Projections

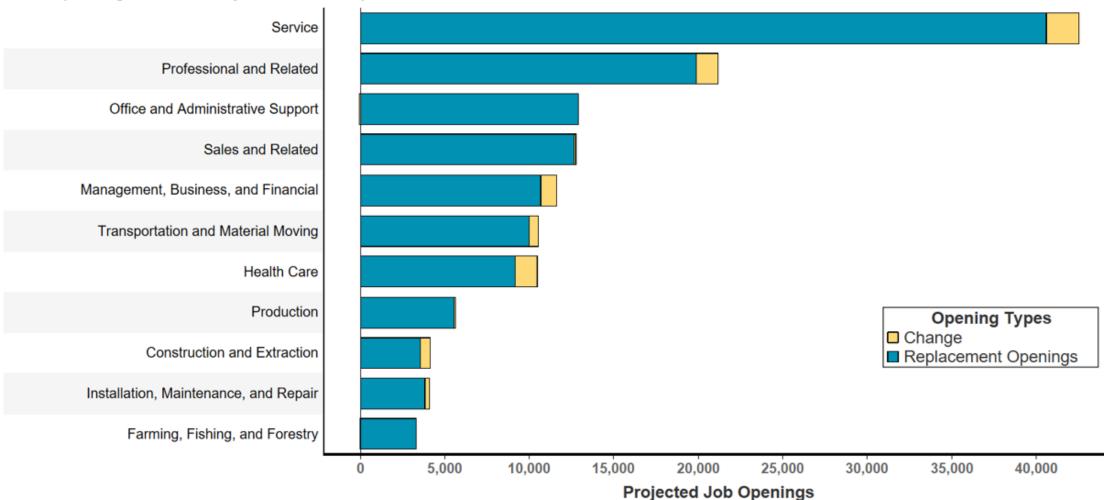


NORTHWEST OREGON EXPECTED TO HAVE NEARLY 140,000 TOTAL JOB OPENINGS BY 2033

	Employment 2023	Projected Employment 2033	Change	Percent Change	Replacement Openings	Total Openings
Total Job Openings	112,221	119,207	6,986	6%	132,011	138,997
Job Openings in High-Demand Occupations	107 106	113,797	6,691	6%	127,759	134,450
Job Openings in High-Wage Occupations	59 740	63,233	3,993	7%	50,937	54,930
Job Openings in High-Demand and High-Wage Occupations	555 709	58,918	3,709	7%	47,914	51,623
Job Openings in High-Skill Occupations	30.007	62,530	3,923	7%	51,161	55,084
Job Openings in STEM Occupations	// 0//	24,654	2,032	9%	17,179	19,211

EMPLOYMENT OPPORTUNITIES PRESENT ACROSS ALL OCCUPATION GROUPS IN NW

Job Openings in None by Broad Occupation



ENTRY-LEVEL AND SERVICE JOBS HAVE MOST TOTAL OPENINGS

20 Occupations in Northwest with the Most Job Openings (All Occupations)

Employment 2023	Projected Employment 2033	Change		•	Total Openings
3,912	4,196	284	7%	9,408	9,692
6,412	6,644	232	4%	5,653	5,885
2,717	2,613	-104	-4%	5,065	4,961
1,951	1,993	42	2%	4,040	4,082
2,577	2,701	124	5%	3,822	3,946
2,184	2,385	201	9%	3,230	3,431
1,800	1,995	195	11%	3,018	3,213
1,873	2,122	249	13%	2,909	3,158
1,718	2,008	290	17%	2,793	3,083
2,375	2,598	223	9%	1,995	2,218
1,100	1,237	137	13%	1,982	2,119
1,310	1,396	86	7%	1,877	1,963
927	1,004	77	8%	1,613	1,690
1,461	1,442	-19	-1%	1,641	1,622
1,000	1,107	107	11%	1,511	1,618
1,393	1,354	-39	-3%	1,599	1,560
1,171	1,162	-9	-1%	1,370	1,361
871	978	107	12%	1,183	1,290
718	721	3	0%	1,285	1,288
1,221	1,344	123	10%	1,153	1,276
	2023 3,912 6,412 2,717 1,951 2,577 2,184 1,800 1,873 1,718 2,375 1,100 1,310 927 1,461 1,000 1,393 1,171 871 718	Employment 2023 2033 3,912 4,196 6,412 6,644 2,717 2,613 1,951 1,993 2,577 2,701 2,184 2,385 1,800 1,995 1,873 2,122 1,718 2,008 2,375 2,598 1,100 1,237 1,310 1,396 927 1,004 1,461 1,442 1,000 1,107 1,393 1,354 1,171 1,162 871 978 718 721	Employment Employment 3,912 4,196 284 6,412 6,644 232 2,717 2,613 -104 1,951 1,993 42 2,577 2,701 124 2,184 2,385 201 1,800 1,995 195 1,873 2,122 249 1,718 2,008 290 2,375 2,598 223 1,100 1,237 137 1,310 1,396 86 927 1,004 77 1,461 1,442 -19 1,000 1,107 107 1,393 1,354 -39 1,171 1,162 -9 871 978 107 718 721 3	Employment 2023 Employment 2033 Change Change Change 3,912 4,196 284 7% 6,412 6,644 232 4% 2,717 2,613 -104 -4% 1,951 1,993 42 2% 2,577 2,701 124 5% 2,184 2,385 201 9% 1,800 1,995 195 11% 1,873 2,122 249 13% 1,718 2,008 290 17% 2,375 2,598 223 9% 1,100 1,237 137 13% 1,310 1,396 86 7% 927 1,004 77 8% 1,461 1,442 -19 -1% 1,000 1,107 107 11% 1,393 1,354 -39 -3% 1,171 1,162 -9 -1% 871 978 107 12%	Employment 2023 Employment 2033 Change Change Change Change Openings Replacement Change Openings 3,912 4,196 284 7% 9,408 6,412 6,644 232 4% 5,653 2,717 2,613 -104 -4% 5,065 1,951 1,993 42 2% 4,040 2,577 2,701 124 5% 3,822 2,184 2,385 201 9% 3,230 1,800 1,995 195 11% 3,018 1,873 2,122 249 13% 2,909 1,718 2,008 290 17% 2,793 2,375 2,598 223 9% 1,995 1,100 1,237 137 13% 1,982 1,310 1,396 86 7% 1,877 927 1,004 77 8% 1,613 1,461 1,442 -19 -1% 1,511 1,393 1,354



TOP HIGH-WAGE, HIGH-DEMAND OCCUPATIONS

Occupation Title	Employment 2023	Projected Employment 2033	Change	Percent Change	Replacement Openings	Total Openings	Median Wage
General and Operations Managers	2,375	2,598	223	9%	1,995	2,218	\$38.11
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1,250	1,135	-115	-9%	1,296	1,181	\$23.71
Registered Nurses	1,820	1,980	160	9%	977	1,137	\$54.55
Heavy and Tractor-Trailer Truck Drivers	1,026	1,084	58	6%	1,073	1,131	\$28.16
Medical Assistants	660	790	130	20%	929	1,059	\$23.65
Carpenters	950	1,066	116	12%	777	893	\$28.81
Construction Laborers	792	941	149	19%	722	871	\$23.17
Bus Drivers, School	510	541	31	6%	784	815	\$23.56
Medical Secretaries and Administrative Assistants	670	751	81	12%	705	786	\$22.99
Managers, All Other	852	888	36	4%	649	685	\$48.90
Real Estate Sales Agents	757	765	8	1%	623	631	\$24.96
First-Line Supervisors of Office and Administrative Support Workers	644	637	-7	-1%	605	598	\$30.20

TOP STEM OCCUPATIONS

							'
Occupation Title	Employment 2023	Projected Employment 2033	Chan ge	Percent Change	Replacement Openings	Total Openings	Median Wage
Registered Nurses	1,820	1,980	160	9%	977	1,137	\$54.55
Carpenters	950	1,066	116	12%	777	893	\$ \$28.81
Managers, All Other	852	888	36	4%	649	685	\$48.90
Accountants and Auditors	571	617	46	8%	449	495	\$35.78
Project Management Specialists	577	641	64	11%	423	487	\$39.03
Software Developers	496	664	168	34%	298	466	\$59.14
Automotive Service Technicians and Mechanics	472	492	20	4%	393	413	\$23.18
First-Line Supervisors of Production and Operating Workers	420	429	9	2%	394	403	\$30.58
Industrial Machinery Mechanics	463	487	24	5%	367	391	\$39.09
First-Line Supervisors of Mechanics, Installers, and Repairers	373	385	12	3%	298	310	\$39.51
Firefighters	293	316	23	8%	222	245	\$30.43
Computer User Support Specialists	323	331	8	3%	206	214	\$29.63

TOP OCCUPATIONS THAT PAY A LIVING WAGE FOR 2 ADULTS (1 WORKING) WITH 1 CHILD

Target Hourly Wage: \$37.95

Occupation Title	Employment 2023	Projected Employment 2033	Change	Percent Change	Replacement Openings	Total Openings	Median Wages
General and Operations Managers	2,375	2,598	223	9%	1,995	2,218	\$39.42
Registered Nurses	1,820	1,980	160	9%	977	1,137	\$56.55
Managers, All Other	852	888	36	4%	649	685	\$65.32
Project Management Specialists	577	641	64	11%	423	487	\$40.31
Software Developers	496	664	168	34%	298	466	\$60.92
Police and Sheriff's Patrol Officers	466	503	37	8%	360	397	\$40.23
Industrial Machinery Mechanics	463	487	24	5%	367	391	\$40.94
Electricians	282	328	46	16%	266	312	\$45.98
First-Line Supervisors of Mechanics, Installers, and	373	385	12	3%	298	310	\$42.52
Middle School Teachers, Except Special and Career/Technical	480	472	-8	-2%	313	305	\$38.26
Medical and Health Services Managers	269	352	83	31%	219	302	\$63.93
First-Line Supervisors of Construction Trades and	308	352	44	14%	252	296	\$38.98

FOR STUDENTS: EDUCATIONAL PATHWAYS



Regional Occupational Projections Summary, 2023-2033

Select from the list of workforce areas to see a summary of projection data for the selected area.

Summary

Workforce Area

Oregon

Portland Tri-County

Mid Valley

Northwest

Linn Benton

Lane

Rogue Valley

Southwestern

East Cascades

Columbia Gorge

Central Oregon

South Central

Eastern Oregon

Columbia Basin

Eastern Six

Industry Projections Broad Occupation

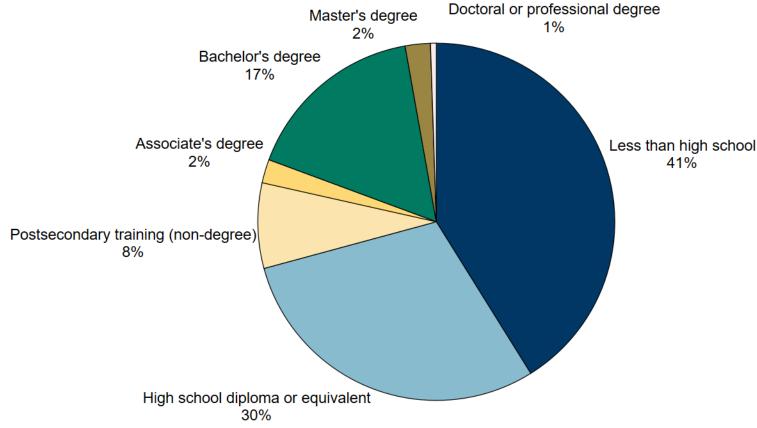
Top 20 Occupations

Typical Entry-Level Education

Competitive Education

Occ Crosswalks

2023 - 2033 Job Openings in Northwest, by Typical Entry-Level Education





Regional Occupational Projections Summary, 2023-2033

Select from the list of workforce areas to see a summary of projection data for the selected area.

Summary

Industry Projections

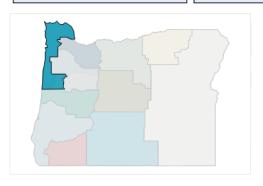
Broad Occupation

Top 20 Occupations

Typical Entry-Level Education

Competitive Education

Occ Crosswalks



Workforce Area

Oregon

Portland Tri-County

Mid Valley

Northwest

Linn Benton

Lane

Rogue Valley

Southwestern

East Cascades

Columbia Gorge

Central Oregon

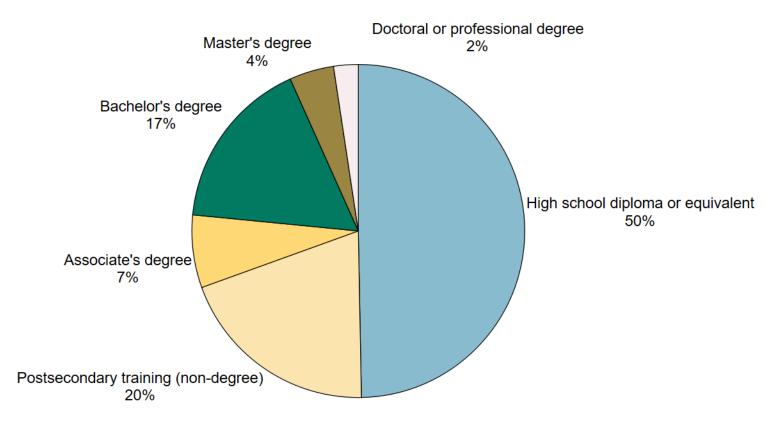
South Central

Eastern Oregon

Columbia Basin

Eastern Six

2023 - 2033 Job Openings in Northwest, by Competitive Education Level





VARIETY OF WAGE OPPORTUNITIES AVAILABLE FOR HIGH-SCHOOL GRADS

Occupation Title	Employment 2023	Projected Employment 2033	Change	Percent Change	Replacement Openings	Total Openings	Median Wages
Teaching Assistants, Except Postsecondary	1,171	1,162	-9	-1%	1,370	1,361	\$17.38
Police and Sheriff's Patrol Officers	466	503	37	8%	360	397	\$40.23
Industrial Machinery Mechanics	463	487	24	5%	367	391	\$40.94
Electricians	282	328	46	16%	266	312	\$45.98
First-Line Supervisors of Mechanics, Installers, and Repairers	373	385	12	3%	298	310	\$42.52
First-Line Supervisors of Construction Trades and Extraction Workers	308	352	44	14%	252	296	\$38.98
Coaches and Scouts	206	225	19	9%	263	282	\$36.27
Interpreters and Translators	170	181	11	7%	163	174	\$30.81
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping	133	146	13	10%	143	156	\$30.85
Postal Service Mail Carriers	223	217	-6	-3%	162	156	\$26.65
Property, Real Estate, and Community Association Managers	154	169	15	10%	124	139	\$34.62
Musicians and Singers	114	118	4	4%	135	139	\$51.04

TOP OCCUPATIONS REQUIRING POST-SECONDARY TRAINING OR CERTIFICATE

Occupation Title	Employment 2023	Projected Employment 2033	Change	Percent Change	Replacement Openings	Total Openings	Median Wages
Bookkeeping, Accounting, and Auditing Clerks	1,461	1,442	-19	-1%	1,641	1,622	\$22.49
Heavy and Tractor-Trailer Truck Drivers	1,026	1,084	58	6%	1,073	1,131	\$28.16
Medical Assistants	660	790	130	20%	929	1,059	\$23.65
Nursing Assistants	575	632	57	10%	842	899	\$20.88
Real Estate Sales Agents	757	765	8	1%	623	631	\$24.96
Automotive Service Technicians and Mechanics	472	492	20	4%	393	413	\$23.18
Hairdressers, Hairstylists, and Cosmetologists	237	288	51	22%	337	388	\$17.79
Dental Assistants	239	271	32	13%	336	368	\$24.53
Pharmacy Technicians	260	284	24	9%	249	273	\$23.62
Real Estate Brokers	329	331	2	1%	270	272	\$28.32
Chefs and Head Cooks	199	220	21	11%	248	269	\$26.14
Firefighters	293	316	23	8%	222	245	\$30.43

14 Employment Department

TOP OCCUPATIONS REQUIRING ASSOCIATES DEGREE

Occupation Title	Employment 2023	Projected Employment 2033	Change	Percent Change	Replacement Openings	Total Openings	Median Wages
Preschool Teachers, Except Special Education	314	352	38	12%	365	403	\$18.12
Construction Managers	223	254	31	14%	180	211	\$57.72
Veterinary Technologists and Technicians	143	179	36	25%	152	188	\$19.15
Graphic Designers	158	168	10	6%	123	133	\$27.10
Dental Hygienists	151	172	21	14%	104	125	\$50.38
Paralegals and Legal Assistants	120	120	0	0%	120	120	\$27.90
Radiologic Technologists and Technicians	146	157	11	8%	78	89	\$46.31
Transportation, Storage, and Distribution Managers	87	93	6	7%	72	78	\$40.38
Food Science Technicians	46	49	3	7%	68	71	\$26.03
Property Appraisers and Assessors	79	85	6	8%	63	69	\$34.82
Industrial Engineering Technologists and Technicians	67	75	8	12%	60	68	\$25.17
Electrical and Electronic Engineering Technologists and Technicians	56	59	3	5%	52	55	\$39.43

Source: Oregon Employment Department

Employment Department

TOP OCCUPATIONS REQUIRING BACHELORS DEGREE

Occupation Title	Employment 2023	Projected Employment 2033	Change	Percent Change	Replacement Openings	Total Openings	Median Wages
General and Operations Managers	2,375	2,598	223	9%	1,995	2,218	\$38.11
Registered Nurses	1,820	1,980	160	9%	977	1,137	\$54.55
Managers, All Other	852	888	36	4%	649	685	\$48.90
Elementary School Teachers, Except Special Education	864	850	-14	-2%	563	549	\$36.04
Accountants and Auditors	571	617	46	8%	449	495	\$35.78
Project Management Specialists	577	641	64	11%	423	487	\$39.03
Software Developers	496	664	168	34%	298	466	\$59.14
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	308	379	71	23%	282	353	\$30.93
Human Resources Specialists	369	392	23	6%	309	332	\$30.66
Secondary School Teachers, Except Special and Career/Technical Education	542	536	-6	-1%	327	321	\$38.02
Market Research Analysts and Marketing Specialists	289	337	48	17%	269	317	\$30.73
Middle School Teachers, Except Special and Career/Technical Education	480	472	-8	-2%	313	305	\$40.28

Source: Oregon Employment Department

Employment Department

SKILLS DATA HAS BEEN ADDED TO OCCUPATIONAL PROJECTIONS AT NAT'L LEVEL

- Projections created by the Bureau of Labor Statistics using Occupational Information Network data.
- 17 skills total, where skills are defined as a general human capacity that is developed, general, applied, and work related.

Adaptability	Computers and information technology	Creativity and innovation	Critical and analytical thinking	<u>Customer</u> <u>service</u>
Detail oriented	Fine motor	<u>Interpersonal</u>	<u>Leadership</u>	<u>Mathematics</u>
<u>Mechanical</u>	Physical strength and stamina	Problem solving and decision making	<u>Project</u> <u>management</u>	<u>Science</u>
Speaking and listening	Writing and reading			

TOP SKILLS BY TYPICAL EDUCATION NEEDED FOR ENTRY, 2024

Typical education needed for entry	Median annual wage, dollars, 2024	Top highest skill	Second highest skill	Third highest skill
Total, all occupations	49,500	Adaptability	Detail oriented	Interpersonal
Doctoral or professional degree	126,510	Adaptability	Writing and reading	Problem solving and decision making
Master's degree	81,910	Adaptability	Interpersonal	Writing and reading
Bachelor's degree	92,260	Adaptability	Writing and reading	Problem solving and decision making
Associate's degree	63,280	Adaptability	Detail oriented	Interpersonal
Postsecondary nondegree award	48,980	Adaptability	Detail oriented	Interpersonal
Some college, no degree	45,230	Adaptability	Interpersonal	Writing and reading
High school diploma or equivalent	47,150	Adaptability	Detail oriented	Interpersonal
No formal educational credential	35,660	Adaptability	Detail oriented	Interpersonal

Footnotes:

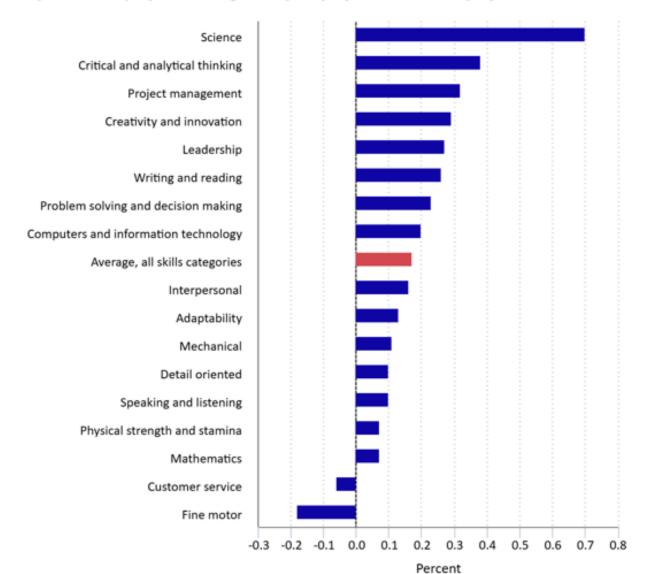
Data are from the Occupational Employment and Wage Statistics program, U.S. Bureau of Labor Statistics. Wage data cover non-farm wage and salary workers and do not cover the self-employed, owners and partners in unincorporated firms, or household workers. Note: Skills data for education categories are calculated using an employment-weighted average of the skills data for the detailed occupations within each education category.

Source: Employment Projections program, U.S. Bureau of Labor Statistics



SCIENCE, CRITICAL THINKING, MANAGEMENT AMONGST SKILLS GROWING MOST

Chart 1. Percent change in skills scores due to projected changes in occupational employment, weighted by employment, 2023–33 projected



Source: Bureau of Labor Statistics

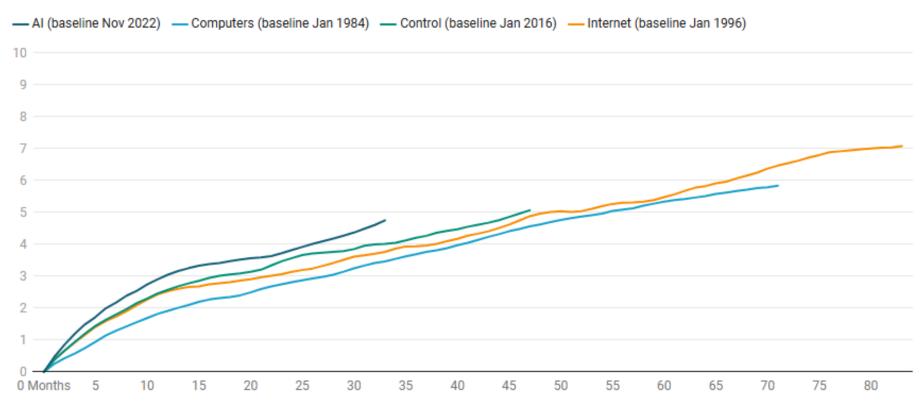
PROJECTED OCCUPATIONAL IMPACTS OF AI



CURRENT OCCUPATIONAL MIX CHANGING FASTER THAN IN PAST, BUT NOT MARKEDLY SO

Figure 1. Changes in the Occupational Mix Over Different Periods of Technological Change

Dissimilarity index (percentage points)
Months from baseline on x-axis



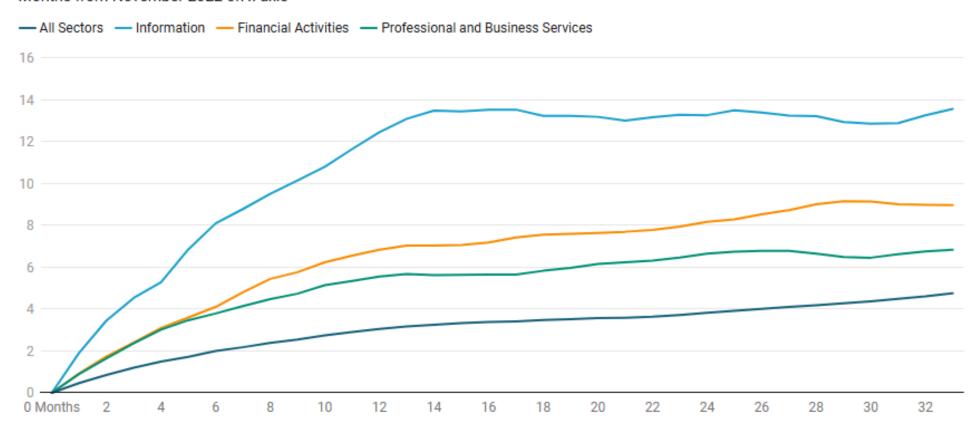
Dissimilarity index is calculated using a prospective 12-month moving average of employment data

Chart: The Budget Lab • Source: CPS, The Budget Lab analysis • Created with Datawrapper

SOME INDUSTRIES MORE VULNERABLE TO CHANGE THAN OTHERS, BUT IT'S NOT ALL AI

Figure 3. Changes in the Occupational Mix by Industry

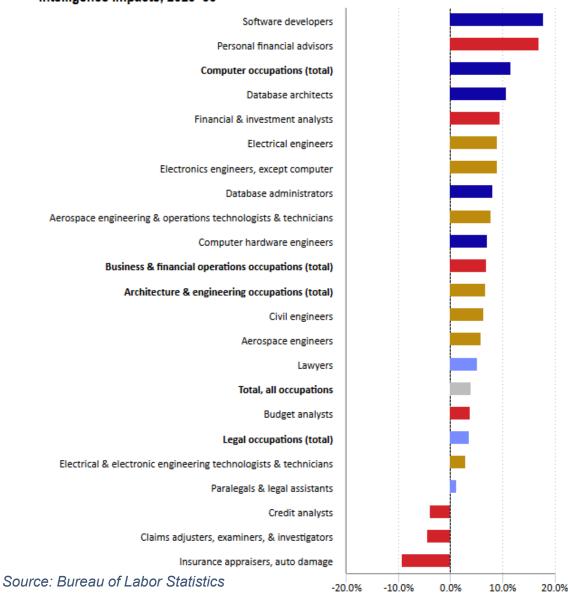
Dissimilarity index (percentage points)
Months from November 2022 on x-axis



Dissimilarity index is calculated using a 12-month moving average of employment data
Chart: The Budget Lab • Source: CPS, The Budget Lab analysis • Created with Datawrapper

OCCUPATIONS CURRENTLY AT RISK OF AI

Employment projections for selected occupations susceptible to potential artificial intelligence impacts, 2023–33



- Productivity gains expected to outweigh job displacement in many industries
- Computer, Business, Engineering, and Legal occupations expected to gain the most from generative AI
- Occupations whose core tasks can already be replicated by GenAl are at risk, such as
 - Credit analysts
 - Insurance appraisers
 - Medical transcriptionists
 - Customer service representatives



RESOURCES FOR STUDENTS, PARENTS, AND PROFESSIONALS



QUALITY INFO

State of Oregon **Employment Department** Quality Information, Informed Choices



Tools ▼ Regional Info ▼ Data

Publications

ress Release

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Jake Procino Sep 29

Transit and intercity bus drivers are critical to the economy of Oregon. Nearly 50,000 Oregonians commuted to work daily on public transit in 2023, a...

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Slow Growth in Oregon's Agriculture Sector

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Human Resources Specialists: Creating a Quality Workforce Spanning All Industries

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Oregon Jobs in 2024: A Wage Data Perspective

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OREGON ECONOMIC INDICATORS

Unemployment Rate - August 2025 个 5.0% 0.1% Seasonally Adjusted

Search...

Total Unemployed - August 2025

111,930

Seasonally Adjusted

1 2,396 Q

Nonfarm Employment - August 2025

1,978,400

Seasonally Adjusted

6,900

Job Vacancies - 2nd Quarter 2025

51,048

 $\mathbf{\Psi}$ -0.5%

Fastest and Slowest Industry Changes in Oregon

August 2024 to August 2025, Seasonally Adjusted

Private education and health services

Leisure and

Employment Change in Oregon's Metro Areas

August 2024 to August 2025, Seasonally Adjusted

Salem, OR MSA

Bend, OR MSA

JOB & CAREER SEARCH

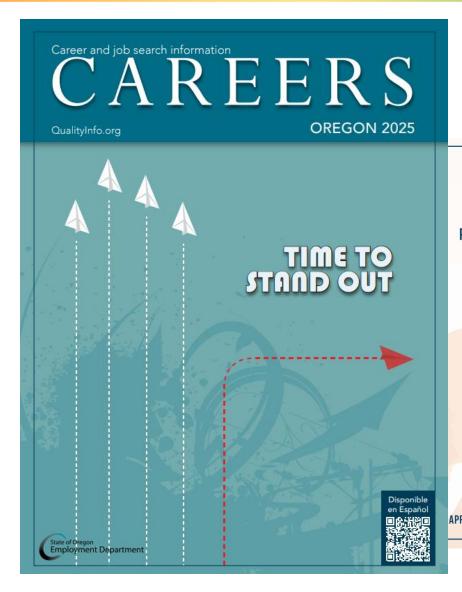
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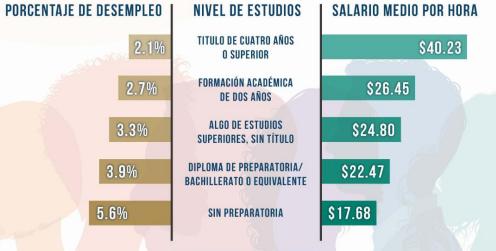
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LA EDUCACIÓN PAGA

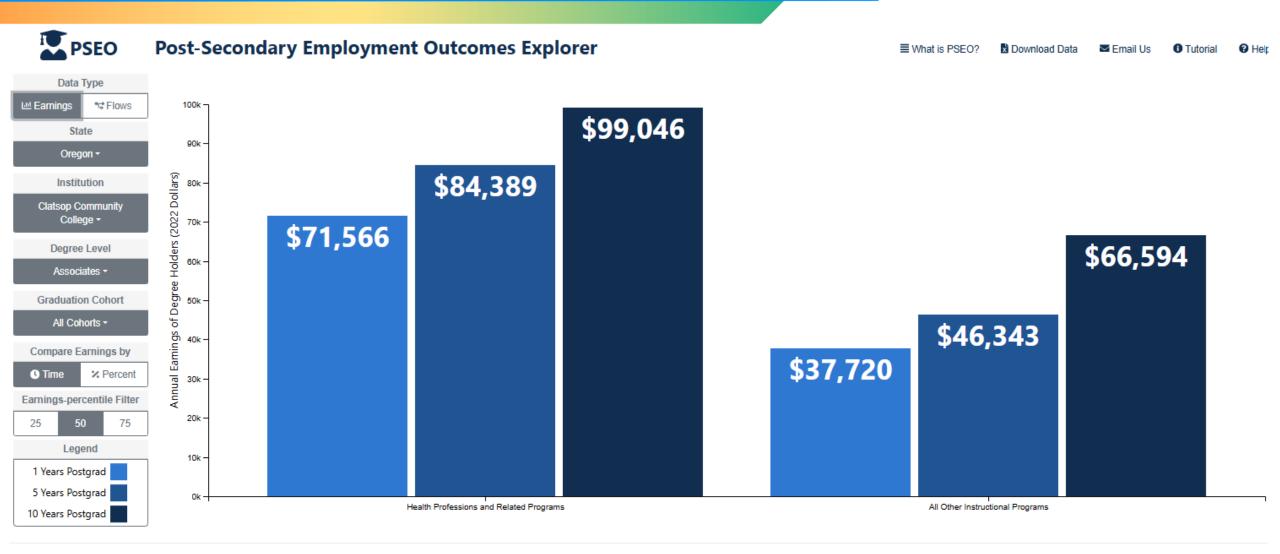


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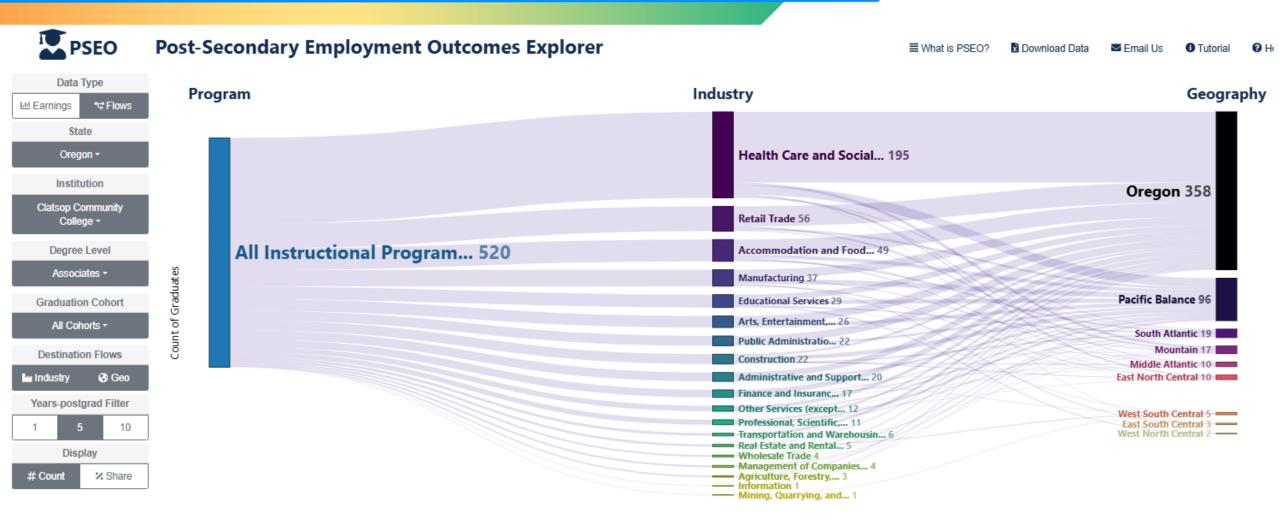
PSEO EXPLORER



Post-Secondary Employment Outcomes Explorer



PSEO EXPLORER



Post-Secondary Employment Outcomes Explorer



WORKS REFERENCED AND FURTHER READING

Articles on Al

- https://budgetlab.yale.edu/research/evaluatingimpact-ai-labor-market-current-state-affairs
- https://www.bls.gov/opub/mlr/2025/article/incorporati ng-ai-impacts-in-bls-employment-projections.htm

Links to Resources:

- QualityInfo.org
- https://lehd.ces.census.gov/applications/p seo

HAVE YOU BEEN ASKED TO PARTICIPATE IN A BUREAU OF LABOR STATISTICS (BLS) SURVEY? *PLEASE DO!*

BLS survey information is gathered to create data for businesses, jobseekers, workers and policy-makers about the economy including:

Employment*	Unemployment*	Occupational Wages*
Job vacancies*	Productivity	Occupational Employment*
Consumer spending patterns	Workplace injuries	Compensation
Long-term employment projections*	Employer-provided benefits	Price movements

^{*} Collected and produced by Oregon Employment Department

Your response is vital to ensuring accurate, complete, and unbiased data that is representative of the people and businesses in Oregon and the United States.

Your confidential responses are protected by federal and state law and strict security policies that prohibit us from releasing any information that could reveal the identity of you or your business without your consent.



Thank You!

Please scan the QR code for a short survey.



SHAUN BARRICK, REGIONAL ECONOMIST FOR NORTHWEST OREGON SHAUN.BARRICK@EMPLOY.OREGON.GOV

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