

Industry & Occupational Projections 2020-2030

Paul Martz

Alaska Department of Labor –
Research & Analysis Section

paul.martz@alaska.gov

907-465-6028

October Trends Article

[https://labor.alaska.gov/trends/
oct22.pdf](https://labor.alaska.gov/trends/oct22.pdf)

Background

- Federally Funded
- Every State Makes Them
- Two-Year Production Cycle
- 760 Individual Occupations
- 187 Industries in Alaska (No Idea What Other States Do)

Method

Industry Employment Time Series

Quarterly Census of Employment & Wages



Produce 10-Year Industry Projection

Occupation Data

Alaska Occupational Database (ODB)



Produce Staffing Ratios by
Industry



Combine Staffing Ratios & Industry
Projections



Occupational Projections

Results

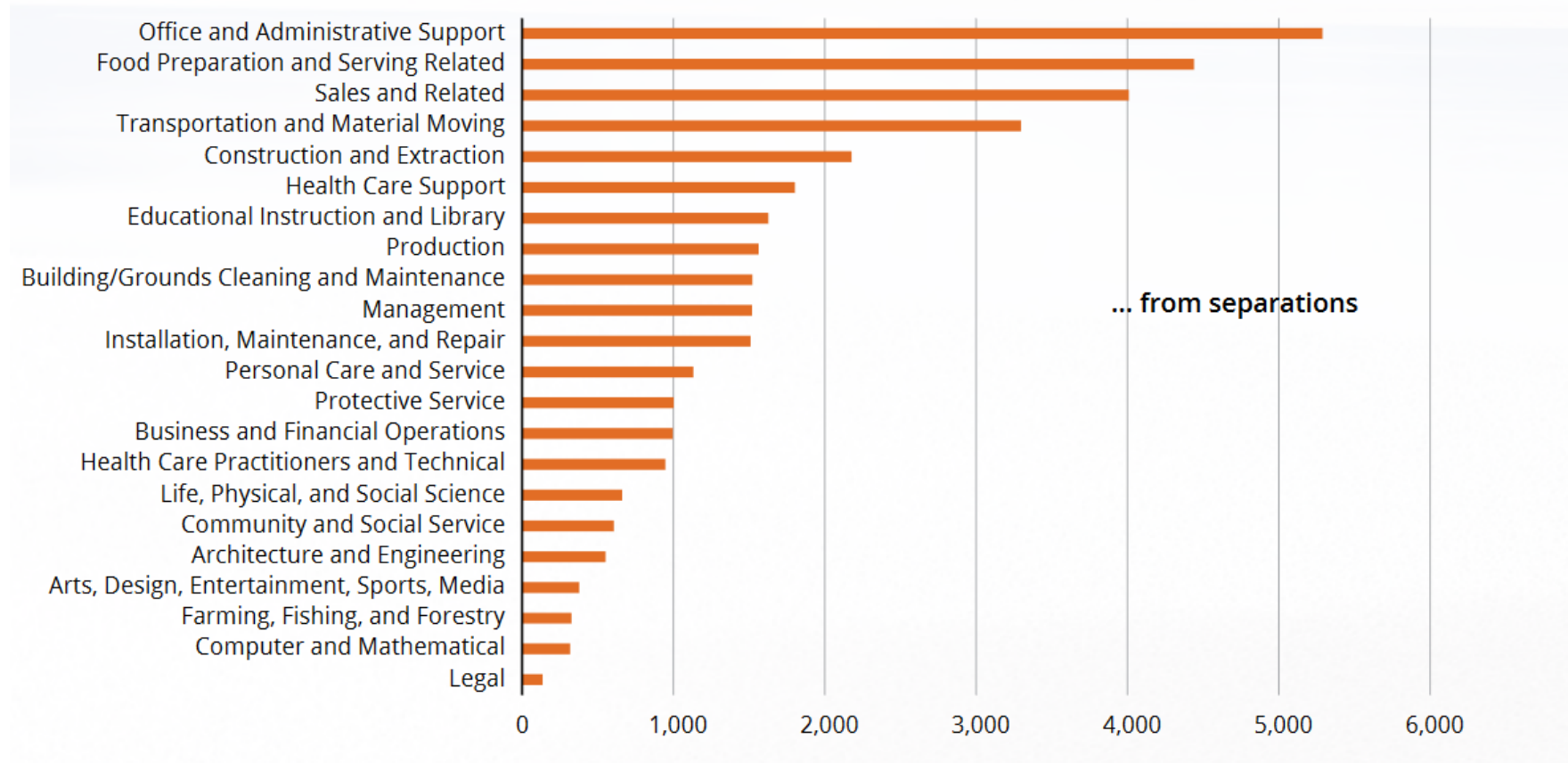
- Occupation Projected Change (Growth/Decline)
- Occupational Separations
 - Labor Force Exits
 - Labor Force Transfers
- OEWS Wages
- Education
- Training
- Work Experience

Fastest and Slowest Growing Occupations

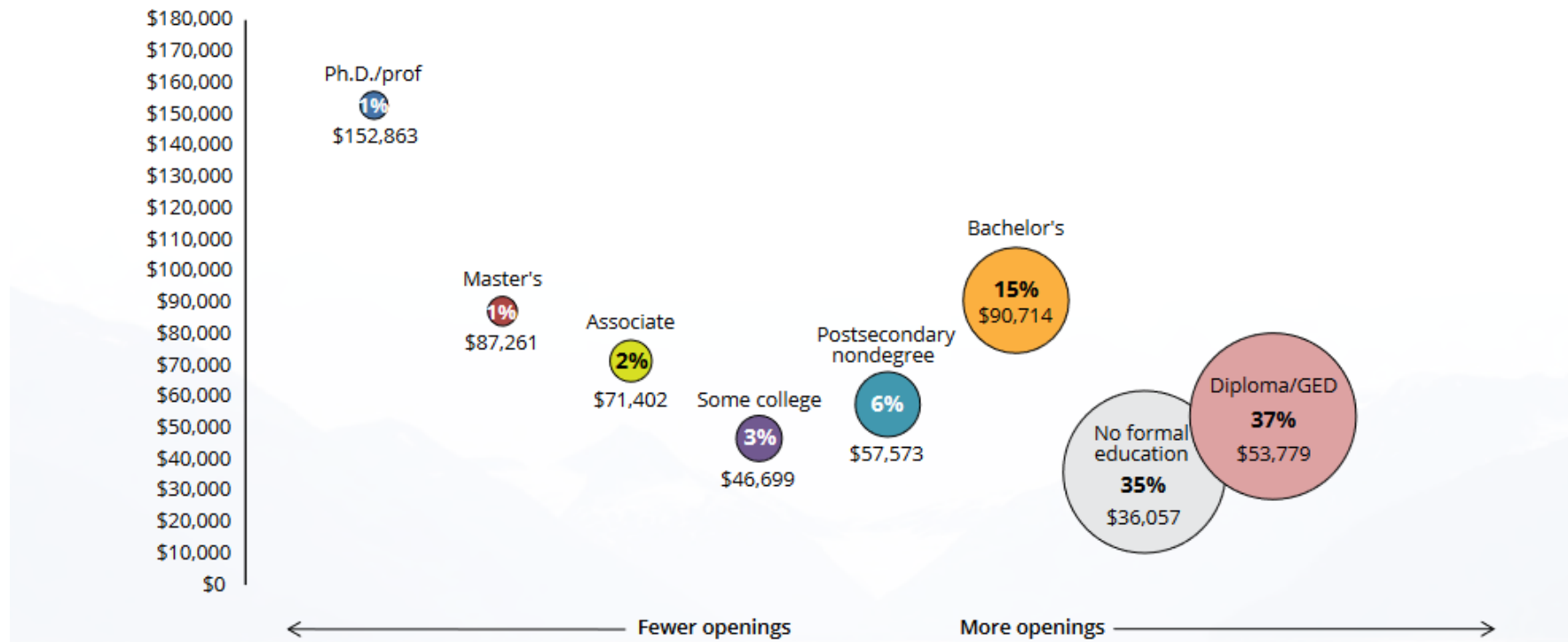
- Industry Specific Occupations Stand Out
 - Agriculture
 - Healthcare
 - Production (Mining / Oil & Gas)
 - Arts, Design, Entertainment, Sports, and **Media**
- Industry Diverse Occupations Don't (Not As Much Anyway)
 - Accountants and Auditors – 4% growth (2019)
 - Network and Computer Systems Administrators – 4% growth
 - Pharmacists – 9% growth
 - (Grocery Stores, General Merchandise Stores, Health and Personal Care Stores, Hospitals, Clinics, Doctors Office, etc.)

Occupational Separations

- Exits
 - Retirement
 - Education
- Transfers
 - Permanent Change to New Occupation
 - (NOT JUST A NEW JOB)



Percent of yearly openings by education level and wages, 2020-30



Notes: Annual wage estimates are based on employment-weighted averages of 2020 Occupational Employment Statistics wage data. Occupational education levels are based on the U.S. Census Bureau American Community Survey Public Use microdata. Openings include annual average wage growth and separations for occupations with a reported OES wage.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Projected yearly wages by category, 2020 to 2030

Occupational category	Avg annual wages
Management	\$110,030
Health Care Practitioners and Technical	\$102,275
Architecture and Engineering	\$96,653
Legal	\$90,906
Computer and Mathematical	\$81,914
Business and Financial Operations	\$81,287
Life, Physical, and Social Science	\$75,615
Construction and Extraction	\$66,646
Installation, Maintenance, and Repair	\$63,912
Transportation and Material Moving	\$63,187
Educational Instruction and Library	\$63,038
Protective Service	\$62,453
Community and Social Service	\$56,926
Arts, Design, Entertainment, Sports, and Media Production	\$52,830
Office and Administrative Support	\$47,789
Farming, Fishing, and Forestry	\$43,188
Health Care Support	\$42,176
Sales and Related	\$37,469
Building and Grounds Cleaning and Maintenance	\$37,431
Personal Care and Service	\$35,653
Food Preparation and Serving Related	\$29,456

Alaska's top jobs, 2019 to 2030

	Employment					Average annual openings, 2020-2030			Training** required	Work exp required	Wage*** quartile
	2019	2020	2030	Pct chg 2019-30	Pct chg 2020-30	Structural growth*	Sepa- rations	Total* openings			
Bachelor's degree											
Registered Nurses	5,778	5,682	6,495	12.4%	14.3%	72	315	387	None	None	\$\$\$
General and Operations Managers	4,398	3,984	4,561	3.7%	14.5%	16	350	366	None	5+ years	\$\$\$
Elementary School Teachers, Except Special Education	2,230	2,053	2,213	-0.8%	7.8%	0	150	150	None	None	\$\$
Airline Pilots, Copilots, and Flight Engineers	2,080	1,915	2,320	11.5%	21.2%	24	227	251	Moderate OJT	<5 years	\$\$\$
Accountants and Auditors	1,944	1,858	2,014	3.6%	8.4%	7	169	176	None	None	\$\$\$
Chief Executives	1,706	1,589	1,773	3.9%	11.6%	7	114	121	None	5+ years	\$\$\$
Secondary School Teachers, Except Special and Career/Tech Education	1,656	1,522	1,642	-0.8%	7.9%	0	106	106	None	None	\$\$
Administrative Services and Facilities Managers	1,236	1,147	1,288	4.2%	12.3%	5	96	101	None	<5 years	\$\$\$
Financial Managers	1,134	1,071	1,164	2.6%	8.7%	3	79	82	None	5+ years	\$\$\$
Construction Managers	1,021	947	1,061	3.9%	12.0%	4	72	76	Moderate OJT	None	\$\$\$
Civil Engineers	1,018	978	1,024	0.6%	4.7%	1	70	71	None	None	\$\$\$
Medical and Health Services Managers	961	945	1,078	12.2%	14.1%	12	76	88	None	<5 years	\$\$\$
Computer and Information Systems Managers	931	922	972	4.4%	5.4%	4	69	73	None	5+ years	\$\$\$
Zoologists and Wildlife Biologists	913	911	952	4.3%	4.5%	4	81	85	None	None	\$\$
Sales Managers	807	750	817	1.2%	8.9%	1	65	66	None	<5 years	\$\$\$
Network and Computer Systems Administrators	745	718	777	4.3%	8.2%	3	48	51	None	None	\$\$\$
Compliance Officers	732	728	757	3.4%	4.0%	3	58	61	Moderate OJT	None	\$\$\$
Buyers and Purchasing Agents	691	663	712	3.0%	7.4%	2	67	69	Moderate OJT	None	\$\$
Environmental Scientists and Specialists, Including Health	629	598	644	2.4%	7.7%	2	59	61	None	None	\$\$
Human Resources Specialists	619	597	654	5.7%	9.6%	4	59	63	None	None	\$\$
Clinical Laboratory Technologists and Technicians	601	590	678	12.8%	14.9%	8	40	48	None	None	\$\$
Management Analysts	522	519	550	5.4%	6.0%	3	48	51	None	<5 years	\$\$\$
Associate degree											
Dental Hygienists	701	678	779	11.1%	14.9%	8	44	52	None	None	\$\$\$
Civil Engineering Technologists and Technicians	647	623	642	-0.8%	3.1%	0	58	58	None	None	\$\$
Paralegals and Legal Assistants	528	525	515	-2.5%	-1.9%	-1	55	54	None	None	\$\$
Postsecondary nondegree award or some college, no degree											
Aircraft Mechanics and Service Technicians	1,480	1,313	1,538	3.9%	17.1%	6	115	121	None	None	\$\$
Telecommunications Equip Installers and Repairers, Except Line Install	738	723	789	6.9%	9.1%	5	84	89	Moderate OJT	None	\$\$\$
Captains, Mates, and Pilots of Water Vessels	666	526	701	5.3%	33.3%	4	61	65	None	<5 years	\$\$\$
Massage Therapists	540	496	598	10.7%	20.6%	6	61	67	None	None	\$\$
High school diploma or equivalent											
Operating Engineers and Other Construction Equipment Operators	2,874	2,627	2,946	2.5%	12.1%	7	291	298	Moderate OJT	None	\$\$
Carpenters	2,284	2,206	2,388	4.6%	8.3%	10	210	220	Apprentice	None	\$\$
First-Line Supervisors of Office and Administrative Support Workers	2,068	1,940	2,163	4.6%	11.5%	10	201	211	None	<5 years	\$\$
Electricians	1,819	1,694	1,881	3.4%	11.0%	6	183	189	Apprentice	None	\$\$
Plumbers, Pipefitters, and Steamfitters	1,342	1,242	1,383	3.1%	11.4%	4	132	136	Apprentice	None	\$\$\$
Police and Sheriff's Patrol Officers	1,284	1,276	1,298	1.1%	1.7%	1	97	98	Moderate OJT	None	\$\$\$
Correctional Officers and Jailers	1,283	1,268	1,289	0.5%	1.7%	1	117	118	Moderate OJT	None	\$\$
Sales Reps, Wholesale and Manufacturing, Except Tech and Sci Products	1,180	1,103	1,162	-1.5%	5.4%	0	110	110	Moderate OJT	None	\$\$
Commercial Pilots	924	799	984	6.5%	23.2%	6	96	102	Moderate OJT	None	\$\$\$

Alaska's top jobs, 2019 to 2030, continued

	Employment					Average annual openings, 2020-2030			Training** required	Work exp required	Wage*** quartile
	2019	2020	2030	Pct chg 2019-30	Pct chg 2020-30	Structural growth*	Sepa-rations	Total* openings			
High school diploma or equivalent, continued											
Mobile Heavy Equipment Mechanics, Except Engines	842	795	924	9.7%	16.2%	8	84	92	Long OJT	None	\$\$\$
First-Line Supervisors of Construction Trades and Extraction Workers	766	682	807	5.4%	18.3%	4	69	73	None	5+ years	\$\$\$\$
Bus and Truck Mechanics and Diesel Engine Specialists	713	651	727	2.0%	11.7%	1	63	64	Long OJT	None	\$\$\$
1st-Line Supervisors of Transp/Matl Moving Wkrs, Exc Aircraft Cargo	685	654	734	7.2%	12.2%	5	73	78	None	<5 years	\$\$\$
First-Line Supervisors of Mechanics, Installers, and Repairers	681	638	718	5.4%	12.5%	4	60	64	None	<5 years	\$\$\$\$
First-Line Supervisors of Production and Operating Workers	642	590	666	3.7%	12.9%	2	61	63	None	<5 years	\$\$\$\$
Welders, Cutters, Solderers, and Brazers	608	564	642	5.6%	13.8%	3	64	67	Moderate OJT	None	\$\$\$
Food Service Managers	604	492	625	3.5%	27.0%	2	62	64	None	<5 years	\$\$\$
Water and Wastewater Treatment Plant and System Operators	499	489	538	7.8%	10.0%	4	46	50	Long OJT	None	\$\$\$
Miscellaneous Construction and Related Workers	481	455	496	3.1%	9.0%	2	54	56	Moderate OJT	None	\$\$\$
Flight Attendants	458	373	456	-0.4%	22.3%	0	51	51	Moderate OJT	<5 years	\$\$\$\$
Hazardous Materials Removal Workers	409	400	458	12.0%	14.5%	5	51	56	Moderate OJT	None	\$\$\$
No formal educational credential											
Service Unit Operators, Oil and Gas	1,029	820	1,030	0.1%	25.6%	0	109	109	Moderate OJT	None	\$\$\$

Notes: To rank as a “top job,” an occupation must: 1) rank in the top two wage quartiles; AND 2) have total 10-year projected growth of at least 75 jobs and greater percentage growth than all occupations combined, OR be among the 50 occupations with the most projected average annual openings (of those with wages in the top two quartiles). Residual “all other” occupations are excluded.

*Structural growth is typical job growth that comes from stable trends in the economy and does not include recovery of pandemic job losses. The total openings category only includes structural growth openings and separations.

**OJT = on-the-job training. Moderate-term is one to 12 months and long-term is more than 12 months.

***Wages: \$\$\$ = \$60,740 to \$80,520 annually (\$29.20 to \$38.71 hourly), \$\$\$\$ = More than \$80,520 annually (\$38.71 hourly), based on Bureau of Labor Statistics Occupational Employment and Wage Statistics' May 2020 MB3 Estimates for Alaska

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section