

Using Manufacturing and Logistics Labor Market Information to Align Economic and Workforce Development



Nevada Governor's Office of
ECONOMIC DEVELOPMENT

Nevada Governor's Office of
ECONOMIC DEVELOPMENT

Nevada's Economic Development Sectors

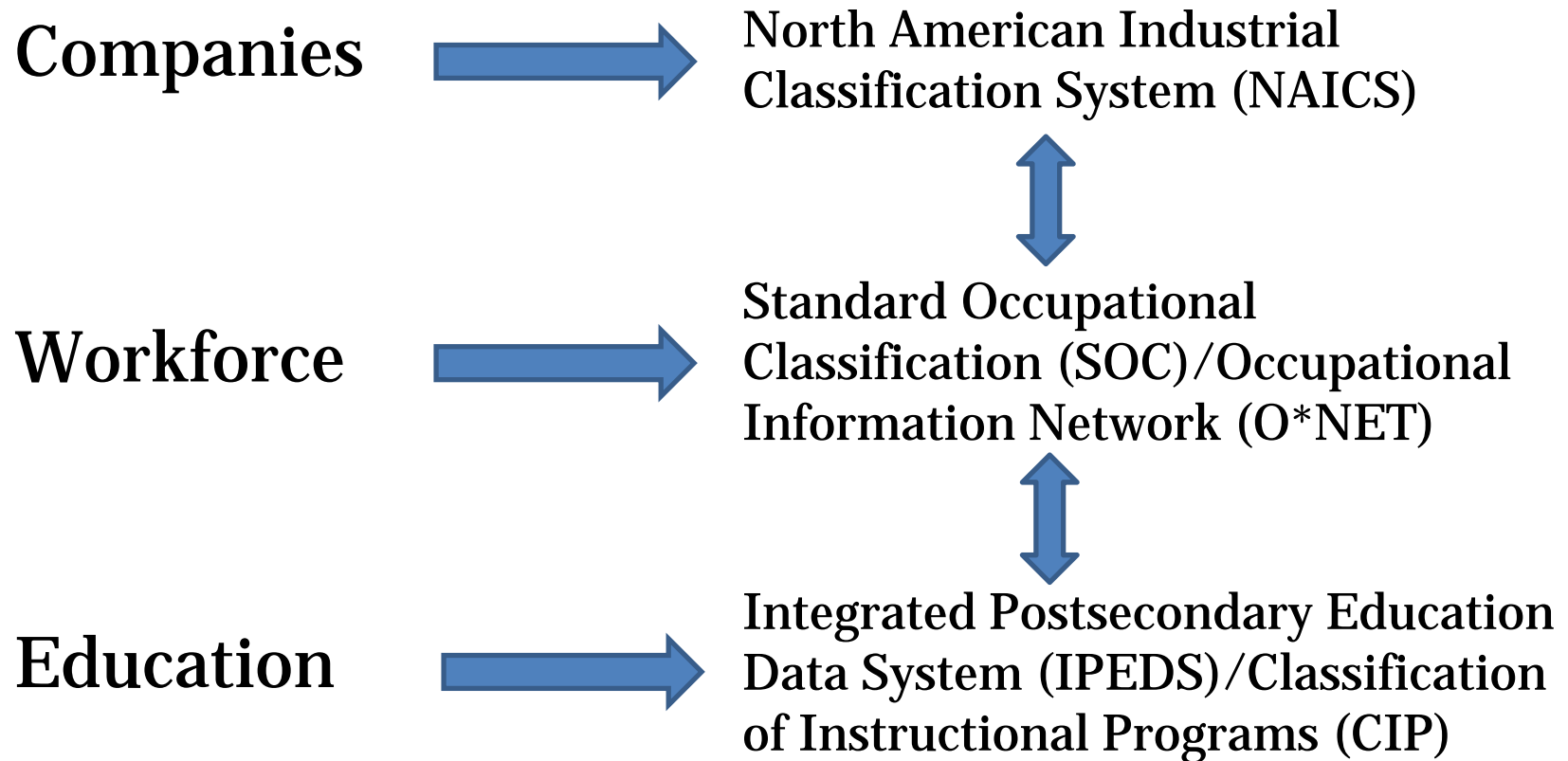
Sector	Nevada's Economic Development Sectors			Jobs Multiplier	Location Quotient	Percent above or below National Concentration
	Number of Jobs	Percent of All Nevada Jobs	Average Annual Wage*			
Aerospace and Defense	13,110	1.0%	\$96,207	2.04	0.67	-33%
Business Information Technology Ecosystems	59,367	4.5%	\$55,949	2.11	0.67	-33%
Health and Medical Services	106,222	8.1%	\$65,123	1.81	0.66	-34%
Natural Resources	49,052	3.8%	\$76,333	2.69	0.63	-37%
Manufacturing and Logistics	116,631	8.9%	\$69,497	2.68	0.59	-41%
Manufacturing	42,480	3.2%	\$71,760	2.85	0.39	-61%
Logistics & Operations	74,151	5.7%	\$68,201	2.23	0.82	-18%
Mining	14,028	1.1%	\$107,221	2.29	2.35	135%
Tourism, Gaming, and Entertainment	408,856	31.3%	\$37,047	1.82	2.45	145%

*The average earnings per worker in the region. Includes wages, salaries, supplements (additional employee benefits), and proprietor income.

Strategic Location Drivers

- Availability of a Qualified Workforce
- Competitive Cost Environment
 - Labor, Utilities, Real Estate, Transportation, Taxes
- Favorable Logistics/Accessibility
 - Air, Highway, Rail, Port
- Favorable Business Environment
 - Taxes, Incentives, Permitting
- Quality of place
 - Ability to recruit/relocate key workforce

The Economic and Workforce Information and Data Pipeline



Tying Economic and Workforce Development Together

Identifying high demand occupations

- Employment Projections
- Burning Glass Technologies
- Target Sector approach
- Job Openings
- Brookings STEM Score

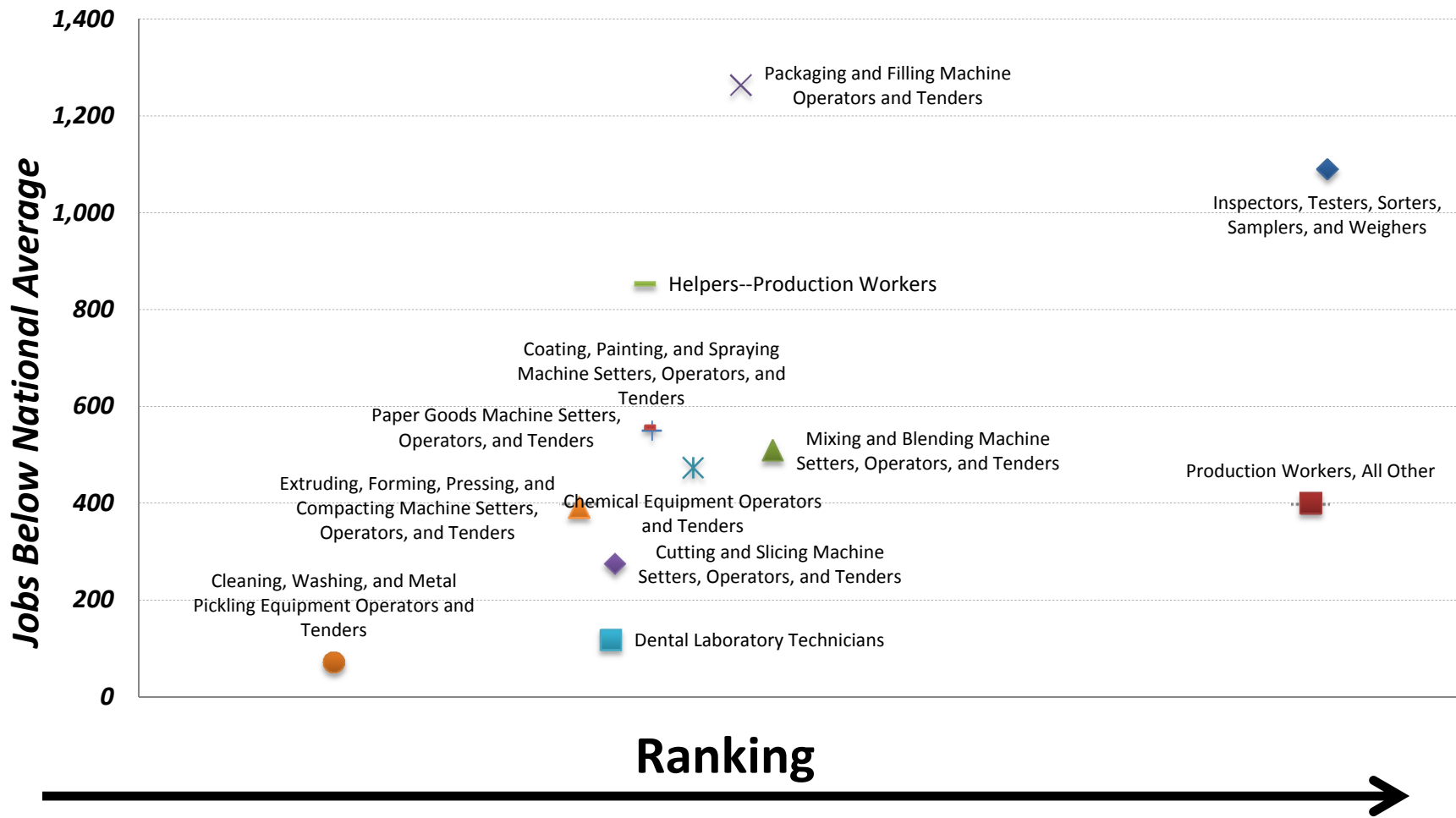
Top 20 High Demand Manufacturing and Logistics Occupation Groups

Typical Entry Level Education/On-The-Job Training

Bachelor's degree
Associate's degree/Postsecondary non-degree award
High school diploma/Postsecondary non-degree award with OJT
High school diploma/Less than high school with OJT

Occupation Group Description	Consensus Rank	2016 Jobs	Jobs Above or Below National Average	Median Hourly Earnings
Other Production Occupations	1	6,181	(5,869)	\$15.74 ←
Metal Workers and Plastic Workers	2	4,902	(7,561)	\$17.30 ←
Business Operations Specialists	3	2,814	(1,201)	\$27.40 ←
Computer Occupations	4	1,523	(1,553)	\$34.54
Operations Specialties Managers	5	2,270	(686)	\$41.66
Other Installation, Maintenance, and Repair Occupations	6	3,143	243	\$22.82
Material Moving Workers	7	16,792	(1,401)	\$13.12
Material Recording, Scheduling, Dispatching, and Distributing Workers	8	9,421	706	\$15.10
Engineers	9	1,126	(1,376)	\$40.73
Food Processing Workers	10	1,502	(631)	\$14.11
Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	11	2,260	(26)	\$22.77
Information and Record Clerks	12	5,551	317	\$14.65
Motor Vehicle Operators	13	12,659	1,766	\$16.35
Construction Trades Workers	14	914	184	\$22.26
Other Office and Administrative Support Workers	15	3,846	294	\$14.50
Financial Clerks	16	2,117	(130)	\$16.49
Drafters, Engineering Technicians, and Mapping Technicians	17	666	(198)	\$27.29
Retail Sales Workers	18	1,539	249	\$10.98
Other Sales and Related Workers	19	362	70	\$17.96
Assemblers and Fabricators	20	5,056	(5,808)	\$12.48 ←

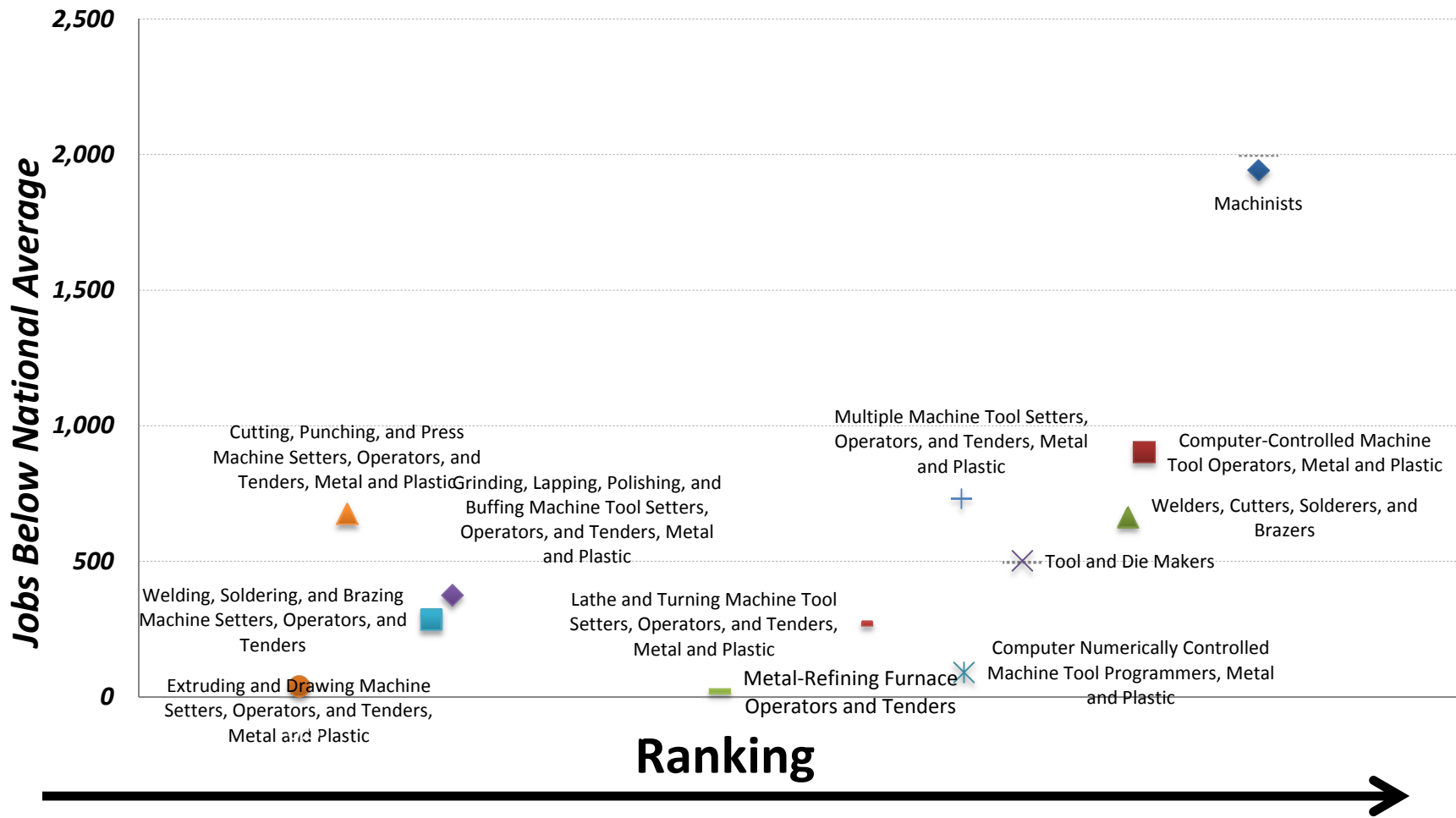
Drilling Down into the Detail: Other Production Occupations



Drilling Down into the Detail: Other Production Occupations

Occupation Description	Consensus Rank	Jobs	Median Hourly Earnings	Jobs Above or Below National Average	Typical Entry Level Education	Typical On-The-Job Training
Inspectors, Testers, Sorters, Samplers, and Weighers	14	1,228	\$14.91	(1,090)	High school diploma or equivalent	Moderate-term on-the-job training
Production Workers, All Other	15	378	\$19.37	(400)	High school diploma or equivalent	Moderate-term on-the-job training
Mixing and Blending Machine Setters, Operators, and Tenders	86	497	\$16.17	(509)	High school diploma or equivalent	Moderate-term on-the-job training
Packaging and Filling Machine Operators and Tenders	94	765	\$13.24	(1,264)	High school diploma or equivalent	Moderate-term on-the-job training
Chemical Equipment Operators and Tenders	103	64	\$23.41	(473)	High school diploma or equivalent	Moderate-term on-the-job training
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	109	180	\$13.77	(550)	High school diploma or equivalent	Moderate-term on-the-job training
Paper Goods Machine Setters, Operators, and Tenders	112	172	\$14.52	(557)	High school diploma or equivalent	Moderate-term on-the-job training
Helpers--Production Workers	113	939	\$11.51	(854)	No formal educational credential	Short-term on-the-job training
Cutting and Slicing Machine Setters, Operators, and Tenders	118	196	\$18.26	(275)	High school diploma or equivalent	Short-term on-the-job training
Dental Laboratory Technicians	120	117	\$20.60	(118)	High school diploma or equivalent	Moderate-term on-the-job training
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	126	199	\$14.26	(391)	High school diploma or equivalent	Moderate-term on-the-job training
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	158	72	\$13.64	(71)	No formal educational credential	Moderate-term on-the-job training

Drilling Down into the Detail: Metal and Plastic Workers



Drilling Down into the Detail: Metal and Plastic Workers

Occupation Description	Consensus Rank	Jobs	Median Hourly Earnings	Jobs Above or Below National Average	Typical Entry Level Education	Typical On-The-Job Training
Machinists	47	842	\$17.17	(1,943)	High school diploma or equivalent	Long-term on-the-job training
Computer-Controlled Machine Tool Operators, Metal and Plastic	69	413	\$16.28	(903)	High school diploma or equivalent	Moderate-term on-the-job training
Welders, Cutters, Solderers, and Brazers	73	796	\$19.85	(663)	High school diploma or equivalent	Moderate-term on-the-job training
Tool and Die Makers	88	97	\$23.65	(502)	High school diploma or equivalent	Long-term on-the-job training
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	100	113	\$23.97	(91)	High school diploma or equivalent	Long-term on-the-job training
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	101	76	\$13.95	(732)	High school diploma or equivalent	Moderate-term on-the-job training
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	124	72	\$15.19	(269)	High school diploma or equivalent	Moderate-term on-the-job training
Metal-Refining Furnace Operators and Tenders	148	94	\$26.78	(20)	High school diploma or equivalent	Moderate-term on-the-job training
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	172	204	\$14.04	(374)	High school diploma or equivalent	Moderate-term on-the-job training
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	176	104	\$15.87	(286)	High school diploma or equivalent	Moderate-term on-the-job training
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	182	678	\$15.61	(675)	High school diploma or equivalent	Moderate-term on-the-job training
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	183	574	\$13.62	(39)	High school diploma or equivalent	Moderate-term on-the-job training

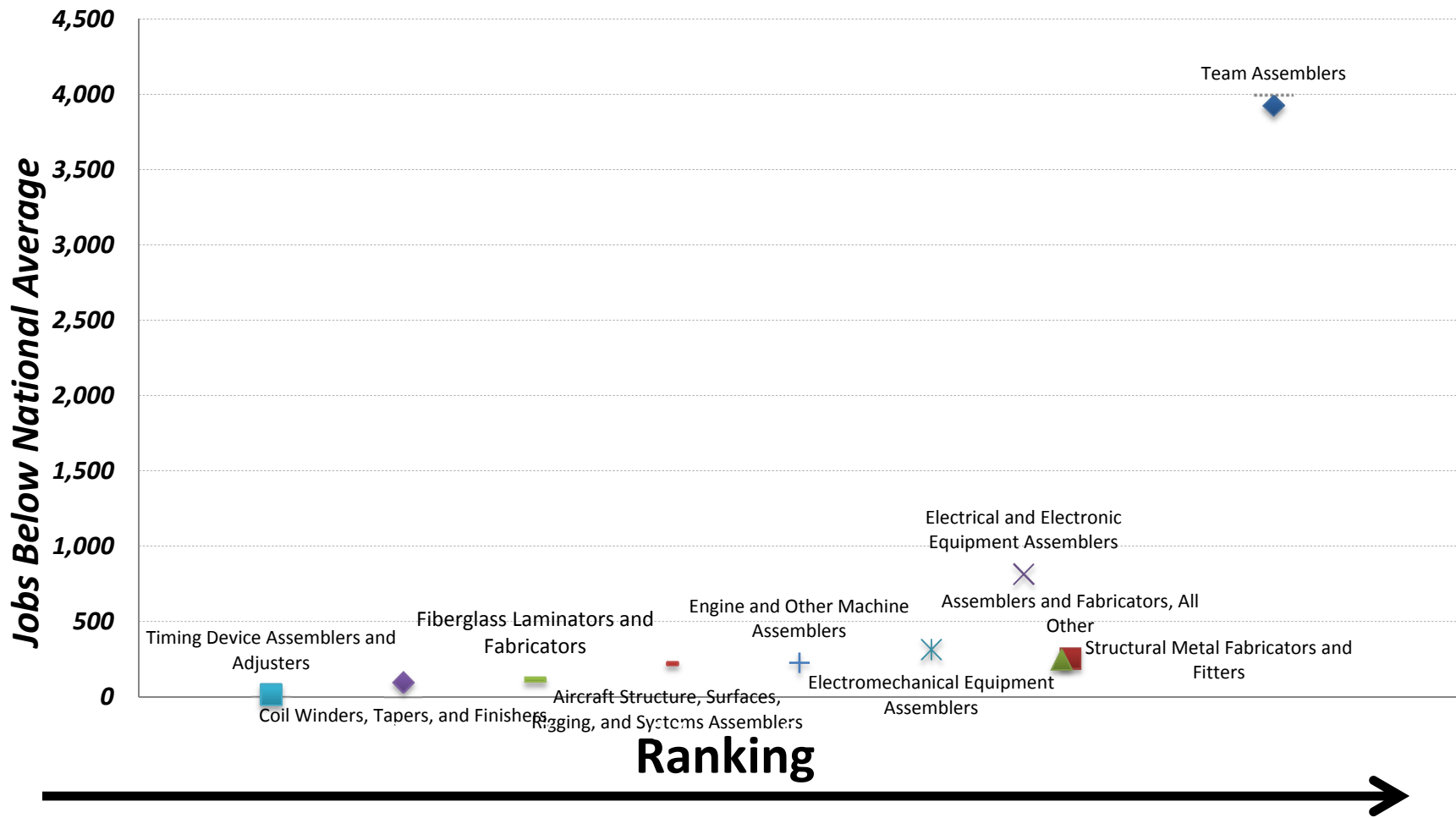
Drilling Down into the Detail: Business Operations Specialists



Drilling Down into the Detail: Business Operations Specialists

Occupation Description	Consensus Rank	Jobs	Median Hourly Earnings	Jobs Above or Below National Average	Typical Entry Level Education	Typical On-The-Job Training
Market Research Analysts and Marketing Specialists	9	300	\$25.71	(334)	Bachelor's degree	None
Management Analysts	16	214	\$35.32	(154)	Bachelor's degree	None
Purchasing Agents, Except Wholesale, Retail, and Farm Products	21	540	\$25.28	(117)	Bachelor's degree	Long-term on-the-job training
Cost Estimators	32	196	\$26.71	10	Bachelor's degree	None
Human Resources Specialists	34	281	\$24.21	(124)	Bachelor's degree	None
Training and Development Specialists	48	176	\$25.20	(28)	Bachelor's degree	None
Business Operations Specialists, All Other	76	489	\$27.66	(183)	Bachelor's degree	None
Logisticians	78	126	\$29.41	(268)	Bachelor's degree	None
Compliance Officers	93	97	\$28.83	(16)	Bachelor's degree	Moderate-term on-the-job training
Wholesale and Retail Buyers, Except Farm Products	139	324	\$21.76	(13)	Bachelor's degree	Long-term on-the-job training
Agents and Business Managers of Artists, Performers, and Athletes	195	0	\$34.66	0	Bachelor's degree	None
Buyers and Purchasing Agents, Farm Products	195	28	\$28.77	(30)	Bachelor's degree	Long-term on-the-job training

Drilling Down into the Detail: Assemblers and Fabricators



Drilling Down into the Detail: Assemblers and Fabricators

Occupation Description	Consensus Rank	Jobs	Median Hourly Earnings	Jobs Above or Below National Average	Typical Entry Level Education	Typical On-The-Job Training
Team Assemblers	90	3,447	\$11.84	(3,926)	High school diploma or equivalent	Moderate-term on-the-job training
Assemblers and Fabricators, All Other	116	638	\$11.29	(257)	High school diploma or equivalent	Moderate-term on-the-job training
Structural Metal Fabricators and Fitters	121	230	\$18.58	(251)	High school diploma or equivalent	Moderate-term on-the-job training
Electrical and Electronic Equipment Assemblers	125	614	\$15.50	(816)	High school diploma or equivalent	Moderate-term on-the-job training
Electromechanical Equipment Assemblers	195	42	\$16.78	(316)	High school diploma or equivalent	Moderate-term on-the-job training
Engine and Other Machine Assemblers	195	27	\$18.75	(224)	High school diploma or equivalent	Moderate-term on-the-job training
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	195	22	\$19.94	(220)	High school diploma or equivalent	Moderate-term on-the-job training
Fiberglass Laminators and Fabricators	195	18	\$12.53	(113)	High school diploma or equivalent	Moderate-term on-the-job training
Coil Winders, Tapers, and Finishers	195	15	\$16.38	(95)	High school diploma or equivalent	Moderate-term on-the-job training
Timing Device Assemblers and Adjusters	195	5	\$15.31	(14)	High school diploma or equivalent	Moderate-term on-the-job training

Top 25 High Demand Manufacturing and Logistics Occupations by Consensus Ranking

Description	Consensus Rank	2016 Jobs	Median Hourly Earnings	Jobs Above or Below National Average	Typical Entry Level Education	Typical On-The-Job Training
Mechanical Engineers	1	207	\$36.02	(636)	Bachelor's degree	None
Software Developers, Applications	2	320	\$42.81	(409)	Bachelor's degree	None
Computer Systems Analysts	3	131	\$37.95	(182)	Bachelor's degree	None
Sales Representatives, Wholesale and Manufacturing, ' .	4	885	\$34.83	(1,127)	Bachelor's degree	Moderate-term on-the-job training
Computer User Support Specialists	5	226	\$21.37	(291)	Some college, no degree	None
Electrical Engineers	6	116	\$41.52	(260)	Bachelor's degree	None
Network and Computer Systems Administrators	7	195	\$37.45	(174)	Bachelor's degree	None
Architectural and Engineering Managers	8	215	\$56.37	(172)	Bachelor's degree	None
Market Research Analysts and Marketing Specialists	9	300	\$25.71	(334)	Bachelor's degree	None
First-Line Supervisors of Production and Operating Wor	10	1,489	\$27.55	(1,515)	High school diploma or equivalent	None
First-Line Supervisors of Mechanics, Installers, and Rej	11	421	\$33.65	(104)	High school diploma or equivalent	None
General and Operations Managers	12	3,054	\$40.00	(98)	Bachelor's degree	None
Industrial Production Managers	13	527	\$38.09	(496)	Bachelor's degree	None
Inspectors, Testers, Sorters, Samplers, and Weighers	14	1,228	\$14.91	(1,090)	High school diploma or equivalent	Moderate-term on-the-job training
Production Workers, All Other	15	378	\$19.37	(400)	High school diploma or equivalent	Moderate-term on-the-job training
Management Analysts	16	214	\$35.32	(154)	Bachelor's degree	None
Sales Representatives, Wholesale and Manufacturing,	17	6,950	\$26.97	(2,985)	High school diploma or equivalent	Moderate-term on-the-job training
Accountants and Auditors	18	711	\$27.27	(229)	Bachelor's degree	None
Production, Planning, and Expediting Clerks	19	592	\$19.38	(422)	High school diploma or equivalent	Moderate-term on-the-job training
Heavy and Tractor-Trailer Truck Drivers	20	7,162	\$22.41	(2,909)	Postsecondary nondegree award	Short-term on-the-job training
Purchasing Agents, Except Wholesale, Retail, and Far	21	540	\$25.28	(117)	Bachelor's degree	Long-term on-the-job training
Engineers, All Other	22	98	\$48.15	(60)	Bachelor's degree	None
Maintenance and Repair Workers, General	23	1,534	\$21.82	145	High school diploma or equivalent	Long-term on-the-job training
Secretaries and Administrative Assistants, Except Leg	24	1,225	\$17.21	(595)	High school diploma or equivalent	Short-term on-the-job training
First-Line Supervisors of Office and Administrative Supp	25	979	\$21.94	(182)	High school diploma or equivalent	None

Top 25 High Demand Manufacturing and Logistics Occupations by Jobs Below National Average

Description	Consensus Rank	2016 Jobs	Median Hourly Earnings	Jobs Above or Below National Average	Typical Entry Level Education	Typical On-The-Job Training
Team Assemblers	90	3,447	\$11.84	(3,926)	High school diploma or equivalent	Moderate-term on-the-job training
Sales Representatives, Wholesale and Manufacturing, Heavy and Tractor-Trailer Truck Drivers	17	6,950	\$26.97	(2,985)	High school diploma or equivalent	Moderate-term on-the-job training
Machinists	20	7,162	\$22.41	(2,909)	Postsecondary nondegree award	Short-term on-the-job training
First-Line Supervisors of Production and Operating Workers	47	842	\$17.17	(1,943)	High school diploma or equivalent	Long-term on-the-job training
Industrial Truck and Tractor Operators	10	1,489	\$27.55	(1,515)	High school diploma or equivalent	None
Packaging and Filling Machine Operators and Tenders	36	2,214	\$16.77	(1,352)	No formal educational credential	Short-term on-the-job training
Sales Representatives, Wholesale and Manufacturing, Except Heavy and Tractor-Trailer Truck Drivers	94	765	\$13.24	(1,264)	High school diploma or equivalent	Moderate-term on-the-job training
Inspectors, Testers, Sorters, Samplers, and Weighers	4	885	\$34.83	(1,127)	Bachelor's degree	Moderate-term on-the-job training
Computer-Controlled Machine Tool Operators, Metal and Plastic	14	1,228	\$14.91	(1,090)	High school diploma or equivalent	Moderate-term on-the-job training
Computer-Controlled Machine Tool Operators, Metal and Plastic	69	413	\$16.28	(903)	High school diploma or equivalent	Moderate-term on-the-job training
Industrial Engineers	44	390	\$37.60	(856)	Bachelor's degree	None
Helpers--Production Workers	113	939	\$11.51	(854)	No formal educational credential	Short-term on-the-job training
Electrical and Electronic Equipment Assemblers	125	614	\$15.50	(816)	High school diploma or equivalent	Moderate-term on-the-job training
Packers and Packagers, Hand	107	1,967	\$9.96	(796)	No formal educational credential	Short-term on-the-job training
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Except Hand	184	333	\$12.20	(742)	High school diploma or equivalent	Moderate-term on-the-job training
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	101	76	\$13.95	(732)	High school diploma or equivalent	Moderate-term on-the-job training
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	182	678	\$15.61	(675)	High school diploma or equivalent	Moderate-term on-the-job training
Welders, Cutters, Solderers, and Brazers	73	796	\$19.85	(663)	High school diploma or equivalent	Moderate-term on-the-job training
Mechanical Engineers	1	207	\$36.02	(636)	Bachelor's degree	None
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	24	1,225	\$17.21	(595)	High school diploma or equivalent	Short-term on-the-job training
Paper Goods Machine Setters, Operators, and Tenders	112	172	\$14.52	(557)	High school diploma or equivalent	Moderate-term on-the-job training
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders, Metal and Plastic	109	180	\$13.77	(550)	High school diploma or equivalent	Moderate-term on-the-job training
Sewing Machine Operators	141	286	\$12.54	(520)	No formal educational credential	Short-term on-the-job training
Woodworking Machine Setters, Operators, and Tenders, Except Hand	92	99	\$13.32	(512)	High school diploma or equivalent	Short-term on-the-job training
Mixing and Blending Machine Setters, Operators, and Tenders, Except Hand	86	497	\$16.17	(509)	High school diploma or equivalent	Moderate-term on-the-job training

Governors Office of Economic Development

Bob Potts

Research Director

775-687-9907

bpotts@diversifynevada.com

Nevada Governor's Office of

ECONOMIC DEVELOPMENT