

HOW OREGON WORKS

A SPECIAL SERIES ON OREGON'S WORKFORCE

OREGON'S WORKFORCE
AND THE JOBS AND SKILLS

MANUFACTURING

GAP



UPCOMING TOPICS

EDUCATING THE FUTURE WORKFORCE



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OREGON'S WORKFORCE AND THE JOB AND SKILLS GAP



▶ TABLE OF CONTENTS

Pages 22-28	COVER STORY Daimler is veering into high-tech's lane when it comes to workforce recruitment.
Pages 30-33	INSIDE THE DATA A dive into gaps, wages and trends of Oregon's manufacturing workforce now and in the future.
Pages 34-36	A PROGRESSIVE PARTNERSHIP PCC and Madden Industrial are teaming on a unique apprenticeship program.
Page 38	BACK TO SCHOOL All Hands Raised is working with area high schools to train students for jobs in the trades.
Pages 40-46	TRAINING & RESOURCE GUIDE Education, networking and resources for job seekers
Pages 47-49	T H E L I S T ▶ Top manufacturers in Oregon and S.W. Washington

FROM OUR SPONSORS



As you'll read in the next several pages of "How Oregon Works," manufacturing is a field undergoing massive technological evolution and offering dynamic growth potential. And because it's integral to Oregon's economic success, the number of manufacturing job openings is expected to spike.

In my role at Portland Community College, I regularly hear from business and industry – often, those in manufacturing – and their need for skilled, trained personnel. This is where PCC shines. We serve as the bridge between these employers and students looking to improve their lives through education, in career technical fields like manufacturing that offer high wages and professional advancement.

To do this as successfully as possible, Oregon's community colleges need sufficient financial support from the state. We thread the needle from grooming the next generation of Oregon's workforce, to supporting business needs and infusing the local economy.

An investment in community colleges is an investment in the well-being of Oregon's future.

MARK MITSUI
President
Portland Community College



Stoel Rives appreciates the vital role manufacturers play in Oregon's economy. Your businesses employ hundreds of thousands of Oregonians, making products essential to maintaining and improving our quality of life. From wood and paper products to precision-machined aerospace parts, sporting goods and micro-processors, the vibrancy and breadth of our manufacturing sector makes Oregon unique.

Since our founding over 100 years ago, Stoel Rives has dedicated itself to representing Oregon's manufacturers. We are proud to count Oregon's manufacturers, large and small, as our clients and friends.

We understand that, as times change, Oregon's manufacturing businesses will evolve. We are committed to evolving with you to achieve a successful future. Our attorneys differentiate themselves by employing a team-based approach that combines deep industry knowledge with legal insight, creativity, strategic thinking and problem-solving experience.

Stoel Rives is and will remain positioned to provide the full suite of legal services that manufacturers need—including formation and financing, intellectual property protection, workforce management, product marketing, regulatory compliance, litigation and effecting strategic transactions to grow revenue and expand markets.

We applaud the Portland Business Journal's in-depth focus on the importance of manufacturing to Oregon's future.

GEOFF TICHENOR
Partner, Stoel Rives LLP



October is National Manufacturing Month and we are fortunate to have such a vibrant manufacturing presence in our region. We have convened industry many times over the years to discuss their workforce needs and one issue has come up over and over again: making manufacturing a career of choice for area young people so a pipeline of skilled workers is available to fill jobs now and in the future. This means increasing exposure to this exciting industry for youth and the individuals who influence their career decisions.

In the past, we have participated in Manufacturing Day, sending hundreds of middle and high school students to different manufacturing sites in our region on the first Friday in October. The event became so popular that we struggled to meet the demand for tours on that one single day. We now support activities throughout the month of October focused on increasing the interaction between manufacturers and educators and exposing youth to career opportunities. Events include company tours, job fairs and support for class projects to help future "makers" learn more about this exciting industry.

ANDREW MCGOUGH
Executive Director, Worksystems



PSU has earned a reputation for educating career-ready graduates. Our students have developed an understanding that living-, learning- and working-landscapes blend together. This is because we give students real-world experience working and volunteering with hundreds of community partners, from Intel to Nike. Students naturally become engaged in the region that has invested so much in them: More than 100,000 PSU alumni live and work in the Portland Metro area.

Our students can choose from one of our 14 pre-health tracks, our pioneering entrepreneurial program, our culturally responsive school of education, or our innovative school of engineering and computer science. They study in state-of-the-art facilities, benefit from expert advisers, and build leadership skills through student organizations.

I am particularly proud of our strong alliance with Oregon Health & Science University, including the joint OHSU-PSU School of Public Health. OHSU accepts more students from PSU than from any other university.

Through PSU CO-OP, which will be introduced this fall, PSU will further show how a cooperative, experiential education model can serve the needs of students and regional employers and address affordability.

We are pleased to sponsor How Oregon Works and proud to educate a workforce that thinks critically, communicates clearly and adapts to new people, challenges and goals.

PROF. RAHMAT SHOURESHI
President, Portland State University



GUIDING OREGON TO THE SUMMIT OF MANUFACTURING

Stoel Rives' multi-disciplinary legal team offers our **Manufacturing** clients innovative strategies to navigate a complex legal and regulatory environment.



www.stoel.com

APPRENTICESHIPS

proof of high school graduation or GED equivalent. Must also complete at least one year of high school algebra or equivalent post-high school algebra course with a passing grade of C, or provide equivalent math placement test results. Apprenticeship committees may require additional qualifications.

Length of apprenticeship: 144-180 classroom hours; 8,000 on-the-job training hours

NECA-IBEW ELECTRICAL JATC (UNION)

Apprentice wages: 40% of the \$40.20/hour journey rate

Current openings: Area 1, 6

www.nietc.org

503-262-9991 x5059

AREA I INSIDE ELECTRICAL JATC (NON-UNION)

Apprentice wages: 40% of the \$36.20/hour journey rate

Current openings: Area 1, 6 and

Washington

www.nwelectricaltech.com

503-459-4056

NORTH COAST ELECTRICAL JATC (NON-UNION)

Apprentice wages: 40% of the \$34.63/hour journey rate

Current openings: Area 1

midoregon@aol.com

541-344-6473

AREA II INSIDE ELECTRICAL JATC (NON-UNION)

Apprentice wages: 40% of the \$33.71/hour journey rate

Current openings: Area 1, 2

www.iecoregon.org

503-598-7789 or 800-729-2040

CENTRAL ELECTRICAL JATC (UNION)

Apprentice wages: 40% of the \$38.70/hour journey rate

Current openings: Area 1, 2, 3, 7

www.cjatc.org

541-917-6199

AREA III INSIDE ELECTRICAL JATC (NON-UNION)

Apprentice wages: 40% of the \$34.13/hour journey rate

Current openings: Area 3

midoregon@aol.com

541-344-6473

PACIFIC INSIDE ELECTRICAL JATC (UNION)

Apprentice wages: 40% of the \$38.55/hour journey rate

Current openings: Area 2, 3, 4

541-756-6997

AREA IV (COOS BAY) INDEPENDENT TAC (NON-UNION)

Apprentice wages: 40% of the \$32.33/hour journey rate

Current openings: Area 4

midoregon@aol.com

541-344-6473

AREA IV (ROSEBURG) INSIDE ELECTRICAL JATC (NON-UNION)

Apprentice wages: 40% of the \$27.92/hour journey rate

Current openings: Area 4

www.umpqua.edu

541-440-4675

CRATER LAKE ELECTRICAL JATC

(UNION)

Apprentice wages: 40% of the \$31.57/hour journey rate

Current openings: Area 4, 5, 7

541-773-5888

AREA V INSIDE ELECTRICAL JATC (NON-UNION)

Apprentice wages: 40% of the \$26/hour journey rate

Current openings: Area 5

www.roguecc.edu/workforce

541-245-7912

ONTARIO TATC (NON-UNION)

Apprentice wages: 40% of the \$25.63/hour journey rate

Current openings: Area 6

208-452-4970

AREA VI INSIDE ELECTRICAL JATC (NON-UNION)

Apprentice wages: 40% of the \$32.14/hour journey rate

Current openings: Area 6, 7

www.bluecc.edu/

541-278-5854

SW IDAHO-MALHEUR COUNTY JATC (UNION)

Apprentice wages: 40% of the \$29.26/hour journey rate

Current openings: Area 6

208-384-0538

AREA VII INSIDE ELECTRICAL JATC (NON-UNION)

Apprentice wages: 40% of the \$33.52/hour journey rate

Current openings: Area 7

www.highdesertapprenticeship.com

541-410-7278

KLAMATH BASIN INSIDE ELECTRICIAN JATC (NON-UNION)

Apprentice wages: 40% of the \$25.80/hour journey rate

Current openings: Area 5

541-880-2234

LIMITED RENEWABLE ENERGY TECHNICIAN

Install, maintain, finish and remove renewable energy systems, including wind, solar, micro-hydroelectricity, fuel cells, and engine generators for off-grid systems. Work may include rooftop work, heavy lifting, and other physical labor.

Working conditions: Indoors and outdoors and requires standing, bending and reaching in cold, wet conditions, in confined crawl spaces and at heights. Tools include electrical metering devices, cable pulling devices, electrical hand tools, soldering tools, hammers, drills and side cutters.

Minimum qualifications: Must be at least 17 years of age to apply, and 18 to begin the program and must provide proof of high school graduation or GED equivalent. Must also complete at least one year of high school math or equivalent post-high school placement test or course. Apprenticeship committees may require additional qualifications.

Length of apprenticeship: 144 classroom hours; 4,000 on-the-job training hours

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ATTRACTING AND RETAINING SKILLED EMPLOYEES

Oregon employers face a dizzying array of state-specific requirements for their workers, perhaps not as challenging as California, but notably more so than many other surrounding states. Oregon manufacturing employers are particularly challenged, facing a minimum wage significantly higher than the federal minimum wage, the Oregon Family Leave Act, paid sick leave, and restrictions and requirements on overtime along with other state laws and regulations. Add to that Oregon's unimpressive high school graduation rates and lower rates of technical or vocational education, and the situation becomes even harder. For years, Oregon's employers generally, along with Oregon manufacturers, have reported increasing difficulty in finding, attracting, and retaining employees, a situation which appears unlikely to improve significantly in the near future. One strategy employers often overlook is implementing some of the same perks and benefits that the high-tech and start-up companies offer. While it's unlikely that manufacturing will become a remote workplace anytime soon, there are a myriad of other innovative approaches that are not costly, are not administratively burdensome, and could just help with attracting and retaining a well-trained (and happy) workforce.

Flexible Scheduling - many manufacturing operations continue to run on three eight-hour shifts per day or some other "set in stone" schedule because "that's the way we do it." Have you considered whether and how your operation might use different



Karen O'Connor,
Stael Rives

shifts or approaches? Perhaps some departments could run on, or your employees might prefer, four 10-hour days or three 12-hour shifts. Maybe you have some employees who don't need to be on a fixed shift at all, as long as they work a full shift within some set period of time. With scheduling software (and electronic timekeeping), today's manufacturing employers have many more options available to them today than previously in terms of how they schedule their workforce. After management takes a hard look at this question, consider surveying your workforce about some of your ideas; you might be surprised at the results.

Vacation/Sick Time or PTO - many manufacturing employers still use separate banks of time for vacation and sick time, rather than a combined "paid time off" approach. Combining sick and vacation time into PTO relieves administrative burden, but it also gives your employees more control over their personal time. Employees get to decide when and how to use their time off, and for most employees, the combination of the kinds of time provides them with more time off, not less. At a minimum, a PTO program must meet the requirements of Oregon's paid sick leave requirements, but at one hour for every 30 hours

worked, most PTO programs can be easily adapted to meet those standards.

Classes and Courses - Consider paying for - or partially paying for - the coursework and classes that will help your employees develop their skills. Investing in your employees in this manner will improve their performance, position them to advance in your organization, and improve retention.

Jazz Up the Breakroom - As we have all read about (or maybe experienced), the sexy start-ups have pool tables, ping-pong tables, electric guitars, and free-flowing beer on Fridays. While safety concerns will rule out the breakroom kegerator for manufacturers, think creatively about how you can make the workplace more appealing and, yes, fun. People who enjoy their work and their workplace are more productive, are better co-workers, and are more likely to stick around. Maybe it's a ping-pong table, maybe it's subsidizing the taco truck for Friday lunches, or maybe it's a quarterly bowling night - ask your employees for their ideas.

Too often, when employers consider doing something new or different, they brush it off because "we've never done it that way." Small changes can go a long way in showing your employees that you appreciate their work, that you are invested in their success, and that you want them to stay. In today's environment, taking steps to encourage employee loyalty can pay dividends in the long run.