Clearing the Haze Surrounding Marijuana Employment

Brian Rooney, Regional Economist, Brian.T.Rooney@oregon.gov, (541) 359-9546

Marijuana use was first legalized in Oregon to some extent when the Oregon Medical Marijuana Program (OMMP) was approved in 1998. More recently, Oregon’s new recreational marijuana laws went into effect July 1, 2015. The law allows people 21 years of age and older to possess and use recreationally in a private household. It also allows the sale of recreational marijuana through licensed retailers. Soon after the legalization of recreational marijuana, the Oregon Employment Department received several inquiries about how much employment there is in marijuana-related businesses. Although it’s too early to say where employment levels will settle out, we do have some early indications.

Difficult to Determine Employment and Wages at this Time

The most basic way that the Oregon Employment Department tracks employment and wages is through the Unemployment Insurance (UI) program, which collects data from employers subject to UI law to produce our Quarterly Census of Employment and Wages (QCEW). Each firm is assigned to an industry based on their primary activity. Industry definitions are set by the U.S. Department of Labor, which has made recommendations for the industries that marijuana-related firms are categorized in. There are currently eight industries that include some portion of activities related to marijuana cultivation, production, processing, wholesaling, and retailing. The industries include many types of establishments, not just those growing, selling, or otherwise working with marijuana. In the future, there may be separate industry codes for marijuana-related firms as there are for other commodities. But, for the time being, marijuana employment and wage breakdowns based on current industry classifications alone are not possible.

Indicators of Employment

In other industries where some of the employment is not subject to UI laws such as commercial fishing and real estate, we can use licensing or other records as an indicator of the level of employment.

As of October 1, 2015, sales were allowed to recreational users to purchase seeds, immature marijuana plants, and dried leaves and flowers from approved medical dispensaries. Supply for these dispensaries is the excess from medical patients and caregivers.

Records of approved dispensaries are kept with the Oregon Liquor Control Commission (OLCC), which did a survey to provide insight into current business practices. The survey was conducted between February and...
March of 2015. At the time, there were 230 certified dispensaries in Oregon. At the time of writing this article, there were 413 registered dispensaries, 326 of which are certified for retail recreational sales.

The survey found that the average dispensary employed six workers, with an average of 186 weekly hours worked per dispensary. The average wage per employee was $11.96 per hour and 9.6 percent of employees were covered by employer health insurance. Although there is an error range to any survey data, this survey suggested about 2,478 full- and part-time employees in dispensaries at the time of the survey.

Many dispensaries are vertically integrated, meaning they may act as a warehouse, processor, a wholesaler and a retailer all at the same location. So, many occupations are represented in the employment and wage estimates.

The wage rate from the survey is influenced by several occupations working in the same establishment. In addition, anecdotally, we know that some workers, especially processors, are paid at least partially with product, which may lower money wage rates.

Currently, medical dispensaries are the only retail establishments that can sell recreational marijuana. Medical dispensaries will be able to sell small amounts until December 31, 2016. Afterward, a dispensary will have to be either a certified medical dispensary or a licensed recreational retail store.

### Oregon Dispensary Survey Results: Wage and Hour

<table>
<thead>
<tr>
<th>Question</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees per Dispensary</td>
<td>6</td>
</tr>
<tr>
<td>Average Hours Worked per Dispensary</td>
<td>186</td>
</tr>
<tr>
<td>Average Wage per Employee</td>
<td>$11.96</td>
</tr>
<tr>
<td>Health Insurance Coverage Rate</td>
<td>9.6%</td>
</tr>
</tbody>
</table>

*Source: Oregon Liquor Control Commission*

**Onward**

More complete data will be available as the OLCC begins issuing licenses for recreational marijuana. As of January 1, 2016, the OLCC began accepting applications for licenses for labs, processors, producers, retailers and wholesalers. A separate license is needed for each activity and a nonrefundable application fee applies.

The definition of activities that may not be self-explanatory follows:

- A lab license is for a laboratory to test marijuana for things like adulteration (pesticides, mold, etc.) and potency.
- A processor is a business that will transform the raw marijuana into another product or extract. Processors are also responsible for packaging and labeling.
- A producer is a grower.

The table lists the total applications for each activity as of 8:00 AM March 4, 2016. At this point the producer license is the most sought after followed by the retail, processor and wholesale licenses. License applications for labs are relatively small at four.

OLCC also separates license applications by county. The top counties at the writing of this article were Multnomah (113), Lane (79), Clackamas (75), Jackson (74) and Washington (71).

OLCC plans to start issuing licenses to outdoor growers first, possibly by sometime in April 2016.


An online library of labor force data can be found at [www.QualityInfo.org](http://www.QualityInfo.org). It offers instant access to employment and unemployment figures from 1948 onward. This feature includes the unemployment rate, total labor force, employed, and unemployed.

You can choose annual or monthly reports for any period between 1948 and the present. The tool produces both statewide and local area reports.

Find the labor force data tool by visiting [www.QualityInfo.org](http://www.QualityInfo.org) and clicking on “Unemployment Rates (LAUS)” under the “Economic Data” section.
Oregon’s Unemployment Rate Drops to 4.8 Percent in February

David Cooke, Economist, David.C.Cooke@oregon.gov, (503) 947-1272

Oregon’s unemployment rate dropped to 4.8 percent in February, from 5.1 percent in January. The last time Oregon’s unemployment rate was this low was in April 1995, when the rate was also 4.8 percent. A year ago, in February 2015, Oregon’s unemployment rate was 5.8 percent.

Oregon’s labor force has grown rapidly. During the past two years, Oregon’s labor force grew by nearly 100,000 individuals to reach an all-time high of 2,018,000 in February 2016. Key factors boosting the labor force include rapid job growth, in-migration, and growth in new entrants to the labor force.

In January, Oregon tied for second in the nation for over-the-year job growth, with a 3.4 percent gain. Idaho, which grew 3.9 percent, was the fastest-growing state. Following close behind were Tennessee (3.4%), Florida (3.3%), Utah (3.0%), and Washington (3.0%). Six states, mostly in oil and natural gas producing areas, actually lost jobs in the past year. This comparison is for nonfarm payroll employment growth between January 2015 and January 2016, which is the most recent 12-month period available for all states.

Oregon’s payroll employment grew by 4,300 in February, following a gain of 9,300, as revised, in January. The February gain was close to the average monthly pace seen over the past three years.

In February, rapid growth continued in several of the major industries that have expanded the fastest over the year. Construction added 1,900 jobs in February and gained 4,200, or 5.1 percent, since February 2015. Professional and business services added 1,400 in February and 11,700 in the past 12 months. Health care and social assistance added 1,400 over the month and 9,200 over the year.

Meanwhile, three major industries cut jobs in February: private educational services (-1,500 jobs), manufacturing (-700), and other services (-600). Each of these industries has expanded since February 2015, but at a slower rate than the overall private sector.
The Other Food Manufacturing Group: Starring Snack Food, Coffee, and Tea

Dallas Fridley, Regional Economist, Dallas.W.Fridley@oregon.gov, (541) 645-0005

You don’t really need them (some of us do), but the temptation is too great: snack food employment rose by 33 percent from 2010 to 2015, while coffee and tea brewed up a mean pot of its own, rising by 34 percent.

Part of the “other food manufacturing” group, snack food manufacturing, and coffee and tea manufacturing have followed similar growth trends and share other qualities. Firm size wasn’t one of those features – snack food manufacturing included 18 employer units in 2015 (first quarter), but it was dominated by a few large employers. Coffee and tea manufacturing enjoyed a much wider disbursement geographically, and a much smaller firm size, with 55 units in 2015.

Coffee and Tea

Coffee and tea manufacturers roast coffee, blend tea, and manufacture coffee and tea concentrates. The industry was spread across 14 Oregon counties in 2015. Multnomah County led the industry with 26 employers, followed by Lane and Washington counties with seven units each. Multnomah County represented about two-thirds of the state’s coffee and tea manufacturing in 2015 with an average firm size of about 26 jobs. The remaining one-third of the industry’s jobs was dispersed across 13 counties with an average size of around 10 jobs. Employment rose by nearly 8 percent in 2015, a gain of about 70 jobs. Since 2010, employment in coffee and tea manufacturing has risen by about 350 jobs.

Oregon represented 5 percent of U.S. coffee and tea manufacturing employment in 2014. Just 30 states disclosed employment in 2014, and Oregon ranked fifth nationally. Oregon’s location quotient (LQ) relative to the U.S. hovered at about 4.0 in 2014. An industry’s location quotient measures the concentration of employment in one area relative to a larger reference area. Multnomah County’s LQ was more than double that level, at 9.4, followed by Lane County (5.2) and Washington County (2.7).

Payrolls in coffee and tea manufacturing totaled $39.3 million in 2014, representing about 4 percent of Oregon’s food manufacturing industry payrolls. Wages in coffee and tea manufacturing, at $41,237, exceeded the average food manufacturing industry wage by more than $4,300.

Snack Foods

We all have our favorites: (1) salted, roasted, dried, cooked, or canned – nuts of course; (2) processed grains or seed snacks; (3) peanut butter; and (4) potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks. Not many industries can boast the “can’t eat just one” consumption model, mocking the law of declining marginal utility. Snack food manufacturers operated from 11 Oregon counties, although the industry’s employment profile was dominated by a few large firms. With 930 jobs and 18 employer units in 2015, the average firm size was about 51. The industry’s employment rose by about 100 jobs or 12 percent in 2015. Since 2010, employment in snack food manufacturing has risen by about 310 jobs.

Relative to the U.S., snack food manufacturers in Oregon produced a location quotient of 1.25 in 2014. Oregon was one of 36 states that disclosed snack food manufacturing employment in 2015.
2014, representing roughly 2 percent of the U.S. industry total.

Payrolls in snack food manufacturing totaled $32 million in 2014, representing about 3.2 percent of Oregon’s food manufacturing industry payrolls. Wages in snack food manufacturing, at $38,759 exceeded the average food manufacturing industry wage by nearly $1,900.

**Literally, All Other Food Manufacturing**

Yum, time to serve up a portion of “all other food manufacturing,” the largest subsection of the other food manufacturing group based on employment. Two remaining industries in the other food manufacturing group, “flavorings, syrup and concentrates” and “seasoning and dressing,” receive confidential treatment due to disclosure limitations.

The all other food manufacturing group represents establishments engaged in manufacturing and packaging (for individual resale) perishable prepared foods and meals. Examples include prepackaged salads, coleslaw, egg substitutes, cake and pie filling and sandwiches as well as dry foods and powdered mixes like powdered drink mixes, rice mixes and yeast. Over the 2010-2015 period, all other food manufacturing employment rose by 31 percent, adding more than 700 jobs.

Other food manufacturing produced more than 2,300 jobs in 2015 from 52 employer units. Other food manufacturers operated from 11 Oregon counties with an average size of 42 jobs. Multnomah County led the industry with 28 employer units followed by Washington County with eight. Multnomah County hosted about two-thirds of the industry’s jobs in 2015 with an average size of 36. Employment rose across 10 counties with an average of the industry’s jobs was dispersed across 10 counties with an average size of around 36. Employment rose by nearly 10 percent in 2015, a gain of about 200 jobs.

Oregon represented just over 3 percent of U.S. employment in all other food manufacturing during 2014. Across the U.S., 45 out of 50 states disclosed employment in all other food manufacturing for 2014. Oregon’s location quotient (LQ) relative to the U.S. measured 2.4 in 2014, while Multnomah County’s LQ was about double that level, at 4.8.

Payrolls in all other food manufacturing totaled $66.4 million in 2014, representing about 6.7 percent of Oregon’s food manufacturing industry payrolls. Wages in all other food manufacturing, at $31,517, fell about $5,400 shy of the average food manufacturing industry wage.

**Worker Characteristics**

Workers employed in other food manufacturing tend to be younger, with 59 percent of its jobs held by workers age 19 to 44, compared with 54 percent for all other industries. Males held 58 percent of other food manufacturing’s jobs in 2014 compared with about 51 percent for all other industries.

The turnover rate for other food manufacturing, at 8.5 percent, was below the all industry average of 9.2 percent.

Production occupations dominated other food manufacturing, representing five of its top 10 based on 2012 employment, while transportation and material moving represented four of its top 10. Close to 40 percent of other food manufacturing’s jobs were in the production occupations group and about 22 percent of the jobs were found in material moving.

Packaging and filling machine operators and tenders was the top occupation in other food manufacturing with 355 jobs in 2012, 9 percent of the industry’s total. Food mixing and blending machine operators and tenders ranked second with 264 jobs, or close to 7 percent, followed by laborers and freight, stock and material movers with 176, or 4.5 percent. Graders and sorters, associated with the farming, fishing and forestry group, ranked fourth with 152 jobs (3.9%), tied with packers and packagers (3.9%).

Just 14 percent of the jobs in other food manufacturing required a bachelor’s degree or higher level of training to be competitive. A high school diploma represented the competitive requirement for about 71 percent of other food manufacturing’s jobs, postsecondary training covered 10 percent and an associate’s degree about 5 percent.

**Summary**

Other food manufacturing includes a wide variety of products ranging from roasted coffee and blended teas to salted nuts and prepackaged individual serving salads. Coffee and tea manufacturing, in particular, stands out as a uniquely Oregon industry, with a location quotient of 4.0 relative to the U.S. or four times its employment concentration. Other food manufacturing has enjoyed an impressive growth spurt since 2010 – a trend that was shared by each of its component industries, coffee and tea (34%), snack food (33%), and all other food manufacturing (31%).

---

Bud Tender: An Emerging Occupation in Oregon

Guy Tauer, Regional Economist, Guy.R.Tauer@oregon.gov, (541) 816-8396

In July 2015, with the passage of ballot measure 91, adults 21 and older could legally possess and consume cannabis within private residences. Starting in October 2015, medical marijuana dispensaries were allowed to sell limited quantities of cannabis flowers or “buds” to any adult 21 and older. We joined Washington and Colorado and most recently Alaska as the only states where adults could possess and consume limited quantities marijuana without fear of prosecution by law enforcement.

Now that Oregon voters have approved legalization, and the federal government, so far, has allowed states to adopt their own laws regarding cannabis, there are currently 413 registered dispensaries where marijuana can be obtained as of March 2016, according to a database maintained by the Oregon Health Authority who oversees the OMMP. Currently, medical dispensaries are allowed to sell to recreational customers. The Oregon Liquor Control Commission is charged with establishing rules and regulations regarding the recreational marijuana industry.

Introducing … the Bud Tender

Marijuana dispensaries are the storefront of the marijuana industry, and the occupation most common in those establishments is a cannabis dispensary technician, also known as a “bud tender.” Those are the people who stand behind the counter with a dizzying array of cannabis flower varieties that are available for sale. But if you want a job as bud tender, don’t think just because you have smoked a lot of pot for many years, you have what it takes to sell weed, legally.

According to dispensary owners, at the end the day, it’s a retail business and the same attributes you would want in someone selling shoes at a shoe store are similar to what you would want in someone working behind the counter at a marijuana store. Employers expect their bud tenders to have excellent customer service skills and be very knowledgeable about the products they are offering.

Wade Hall, the owner of Top Shelf Wellness Center in Phoenix, discussed his employee handbook, which not only covers the usual rules and regulations that any business would expect his employees to know, but also the complex and quickly evolving rules and regulations that apply to the cannabis industry in Oregon. He also tests the knowledge of his employees about regulations and the marijuana industry in general. His bud tenders need to understand the software and computer system that tracks customers and sales, making sure that they abide by laws limiting sales to seven grams per person per day, and that they are collecting accurate taxes on recreational sales as required by the State of Oregon.

One of the rewarding aspects of Mr. Hall’s new business is seeing how cannabis has proven to help his customers, either for pain suppression, appetite increase, or in one instance he told about seizure relief that was previously not obtained through traditional pharmaceutical remedies and prescription drugs. Recall that for recreational use, customers must be 21 and older. In this instance, a younger person had been plagued for years with constant seizures, and had gained weight and had poor quality of life with little relief from traditional medicine. With a doctor’s prescription, he was able to obtain medical cannabis and regained much of the quality of life, had remained seizure free for many months, and lost the weight that was a side effect of the prescription medication he had been taking previously. The strain this customer was obtaining was very low in tetrahydrocannabinol (THC) – the psychoactive chemical in cannabis – but had more of the cannabidiol (CBD) chemical associated with some of the medicinal qualities of cannabis. All the bud tenders I spoke to talked about how rewarding it was to be able to help people and legally obtain relief for some conditions they were plagued by.

I asked Mr. Hall about difficulty in finding workers or challenges in hiring. He said he doesn’t have to recruit because he gets many inquiries regarding employment opportunities at his business. In his employees, Mr. Hall looks for people who are personable and make his customers comfortable in this business. He said like any business, he expects his employees to keep up on cleaning, making sure that his business runs well and projects a professional image to customers and his business neighbors.

One of the Top Shelf Wellness Center employees, Dale Nielson III, spoke at length about really understanding how different strains of cannabis, based on their genetics and strain, would affect those who consume it. He had a detailed notebook of chemical compounds that different strains possessed, whether it was an “Indica” or “Sativa” strain, and percentages of compounds such as THC and CBD — acronyms for some of the chemicals in cannabis that induce an uplifting feeling, or more of a relaxing sensation. He discussed some strains known to suppress appetites, which he said would not be recommended for someone such as a cancer patient who was experiencing nausea as a side effect from treatment, but he could point them to different strains that would increase appetite, or give “the munchies” as it’s more commonly known.

Mr. Nielson also noted that not every person will have the same reaction to different strains of cannabis flowers. Every person’s body chemistry...
is slightly different, so working with customers to find out what works best for the effect they would like is an important part of a bud tender’s job. One of his responsibilities is keeping current about new products and strains of marijuana that they offer. I asked about career path possibilities, and he thought that at some point, he would consider possibly going into business for himself.

**Trends in Sales and Customers**

I also asked about what demographic most of the bud tenders served. Most said it was an “older” crowd of 30 and up. I had to laugh when 30s was considered “older.” They felt that maybe younger people couldn’t afford the slightly higher prices that dispensaries charged due to having the overhead expenses of a storefront, in addition to the 25 percent tax now levied on recreational sales. For those that were “older,” they thought that the benefits of dispensary shopping included the many varieties that were offered, and the ability to avoid participation in black market or illegal sales transactions. He also felt that Oregon’s testing program for unwanted pesticides, mold and other impurities was a benefit that their customers are willing to pay a bit more for.

Overall, the recent introduction of the sales tax seemed to slow sales slightly, but it was a temporary trend. Ben, a bud tender employed at Fireside Dispensary, explained that once people understood that much of the tax was dedicated toward school funding and providing additional resources for addiction treatment and services, they accepted the rise in the retail price. Medical marijuana is not subject to the 25 percent current tax.

**Employment and Wage Measures Are Behind the Times**

The Oregon Employment Department doesn’t yet have a lot of hard data on this new industry and the bud tender occupation. However, most dispensaries in the local area had between five and 10 bud tenders employed. Conservatively extrapolating that small sample to the 413 registered dispensaries on the OMMP database means there are likely around 2,000 to 2,500 bud tenders currently working in Oregon. Wages mentioned for local bud tenders ranged from the most common rate of $10 to $11 per hour, up to $17 plus additional tips that customers are welcome to give if so inclined.

For more information about the field of bud tenders, one firm offering a training course is Kenevir Research. They serve Oregon medical marijuana dispensaries, producers and consumers with laboratory services and consulting for cannabis and cannabis businesses. There is also a Facebook page, The BUDtender Society, that was mentioned by a few businesses as a resource for those wanting more information. Another website mentioned was Leafly.com, which has additional information pertinent to the occupation.

Of course, marijuana is still illegal under federal law and cannot be shipped by the postal service, or possessed on national parks or other federal land. And like any substance, it has the potential to be misused and abused. This article shouldn’t be construed as supporting consumption or use of cannabis. But Oregon and some other states’ prohibition of marijuana have ended and a new industry and job opportunities have arisen from these changes. As we measure employment and wages in Oregon and its local areas, we are just trying to keep up with this newly budding sector of the economy.

---

**Tweet! Tweet!**

Keep up with the latest Workforce & Economic Research news – follow us on Twitter!

www.twitter.com/OrEmployment

Each week we provide information about employment at the national, state, and local levels.
The 1960s: Oregon’s Creative Decade

Christian Kaylor, Workforce Analyst, Christian.R.Kaylor@oregon.gov, (503) 545-1709

The 1960s were a vibrant and creative decade for Oregon when the accomplishments of notable Oregonians first brought us out of the woods and inspired the world. In 1962, Ken Kesey published One Flew Over the Cuckoo’s Nest. Two years later, the iconoclastic Senator Wayne Morse, the first U.S. Senator to change political parties while in office, led the opposition to starting the Vietnam War. That same year, a small Eugene company sold 1,300 pairs of shoes labeled Nike out of the trunk of a car. In 1969, Steve Prefontaine joined the University of Oregon track team, beginning a career that would establish him as the greatest distance runner in history.

Those events helped define the Oregon we know today. Examining the economy in the 1960s may seem like a silly exercise in nostalgia. But, economists are often asked to peer into the crystal ball and forecast the conditions of the future. While no one can really know the future, we can look back at where we were decades ago and marvel at the changes that have occurred. By looking at the road we have traveled, perhaps we can gain some insight into the challenges we face in the decades ahead.

A word of warning: Just as the Oregon economy has changed in fundamental ways since the 1960s, how we measure and categorize that economy has also changed significantly. There have been many changes in how we count economic activity. This makes a simple direct comparison unreliable. Breaks in the time series are inevitable. Keep this in mind when examining the past through a modern lens.

Demographics

The Oregon we know today is much larger than it was 50 years ago. Our population was just 2 million people, half of what it is today. Little has changed since 1960. According to the U.S. Census that year, in only eight states were natives a minority. Then, as now, Oregon was one of those rare states, with 48 percent of the population having been born in Oregon. In the 1960s, Oregon was full of folks who had moved here seeking a better life, a defining trait that Oregon has enjoyed for generations.

Oregon is also well known for attracting migrants from around the United States. Most Americans live in the same state they were born in. However, in Oregon natives are a minority of the population. According to the 2014 U.S. Census, only 46 percent of Oregonians were born in Oregon. That makes Oregon one of only 14 states where natives are a minority.

Income Trends

The Oregon we know today is noticeably wealthier than we were in the 1960s. Taking the total annual income for all Oregonians and averaging that amount across the total population gives us the Per Capita Personal Income (PCPI) statistic. This is a widely used measure of economic prosperity. In 1964, Oregon’s PCPI was just $2,750. Adjusting for inflation, that would be $21,010 in current dollars. In 2014, the PCPI for Oregon was double that amount at $41,220. Fifty years ago, that was 20 percent more than the average Oregon worker. In 2014, the average wage for a worker in the “Computer and electronic product manufacturing” segment of manufacturing was $122,879.

Manufacturing Trends

In 1964, Oregon’s economy was dominated by the timber industry. A little more than half of all manufacturing jobs were in timber related sectors: lumber mills, paper mills and wood furniture. With about one out of six non-farm jobs in a factory or mill that processes wood, the timber industry was undoubtedly the most powerful force in the economy. In 2015, the wood product manufacturing sector employed 22,500 workers, representing about 12 percent of all manufacturing employment.

More impressive, manufacturing itself represented about one-third of all jobs in Oregon in the mid-1960s. That extraordinary ratio was mostly inline with the rest of the United States in 1964, when 29 percent of all jobs were in manufacturing. Today, less than 11 percent of workers are employed in the manufacturing industry in the United States.

Today, the high-tech sector employs many more manufacturing workers than wood product manufacturing in Oregon. The high-tech sector of Oregon manufacturing in 1964 was small but emerging. Less than 5,000 people worked in the “Electric measuring instruments and test equipment” segment of manufacturing. Those workers earned an average of $6,217 a year in 1964. Adjusted for inflation, that works out to about $48,000 a year today. Fifty years ago, that was 20 percent more than the average Oregon worker. In 2014, the average wage for a worker in the “Computer and electronic product manufacturing” segment of manufacturing was $122,879.

The Oregon we know today is much larger than it was 50 years ago. Our population was just 2 million people, half of what it is today.

Income Trends

The Oregon we know today is noticeably wealthier than we were in the 1960s. Taking the total annual income for all Oregonians and averaging that amount across the total population gives us the Per Capita Personal Income (PCPI) statistic. This is a widely used measure of economic prosperity. In 1964, Oregon’s PCPI was just $2,750. Adjusting for inflation, that would be $21,010 in current dollars. In 2014, the PCPI for Oregon was double that amount at $41,220. Fifty years ago, that was 20 percent more than the average Oregon worker. In 2014, the average wage for a worker in the “Computer and electronic product manufacturing” segment of manufacturing was $122,879.

Manufacturing Trends

In 1964, Oregon’s economy was dominated by the timber industry. A little more than half of all manufacturing jobs were in timber related sectors: lumber mills, paper mills and wood furniture. With about one out of six non-farm jobs in a factory or mill that processes wood, the timber industry was undoubtedly the most powerful force in the economy. In 2015, the wood product manufacturing sector employed 22,500 workers, representing about 12 percent of all manufacturing employment.

More impressive, manufacturing itself represented about one-third of all jobs in Oregon in the mid-1960s. That extraordinary ratio was mostly inline with the rest of the United States in 1964, when 29 percent of all jobs were in manufacturing. Today, less than 11 percent of workers are employed in the manufacturing industry in the United States.

These days, the high-tech sector employs many more manufacturing workers than wood product manufacturing in Oregon. The high-tech sector of Oregon manufacturing in 1964 was small but emerging. Less than 5,000 people worked in the “Electric measuring instruments and test equipment” segment of manufacturing. Those workers earned an average of $6,217 a year in 1964. Adjusted for inflation, that works out to about $48,000 a year today. Fifty years ago, that was 20 percent more than the average Oregon worker. In 2014, the average wage for a worker in the “Computer and electronic product manufacturing” segment of manufacturing was $122,879.
Today, Oregon has slipped to 32nd in the income rankings among the 50 states. Oregon’s PCPI of $41,220 is 10 percent less than the U.S. average of $46,049 and 15 percent less than Colorado. While every U.S. state has seen noticeable income gains over the past 50 years, Oregon has grown noticeably slower than the vast majority of U.S. states. Only seven U.S. states have seen slower income growth over the past 50 years.

Looking at income by geography within Oregon, income trends from the 1960s haven’t changed much in the last 50 years. The Portland area counties — Multnomah, Washington, and Clackamas — had the highest per capita personal income levels in 1964, earning about 15 percent more than the average Oregonian. On the other end of the spectrum, a handful of counties had incomes about 15 percent less than Oregon’s average: Coos, Curry, Tillamook, and Lincoln counties on the coast; Jefferson and Josephine counties in Southern Oregon; and a few counties in the Willamette Valley and Northeastern Oregon.

Fast-forward 50 years and the Portland area counties still enjoy the highest per capita personal income levels, while rural counties in eastern Oregon tend to have the lowest income levels. Only two Oregon counties have moved from below average in the 1960s to above average today: Wallowa County in Northeastern Oregon and Deschutes County in Central Oregon.

Looking Ahead

In many ways, Oregon hasn’t changed much in the past two generations. We are a western state that features mountains and coasts, forests and deserts. A reputation for excellent quality of life drives our population growth. Most Oregonians are known for a passion Oregonians are known for will be a fundamental driver of economic growth for decades to come.

Drinking Water and Wastewater Operators, the Work Behind our Water

Felicia Bechtoldt, Employment Economist, Felicia.Bechtoldt@oregon.gov, (503) 947-1274

Today, drinking water and wastewater operators use computerized systems to monitor plant processes, operate equipment to purify water, and process and dispose of wastewater. Water is pumped or gravity fed from a natural source to a water treatment plant, where the water is purified prior to being sent into a water distribution system, eventually arriving at your faucet. (For people living a few miles outside of a town, water is directly pumped from an underground aquifer into the household.) When the water flows down your drain, it enters a collection network, which conveys wastewater to wastewater treatment plants. The treatment plants then treat the wastewater, so it can be safely released to the environment. At both plants drinking water and wastewater operators work quietly behind the scenes to ensure the water we drink is safe and the wastewater we generate returns safely back to the environment.

Opportunity and Transferrable Skills

Drinking water and wastewater operators is an occupation well-suited for those with an interest in mechanics, technology, computers, and hands-on work. Depending on the type and size of a treatment plant, the job duties of an operator can vary significantly. In small plants, there may be only one operator responsible for all operations, laboratory analysis, maintenance, source control, and collection systems. In large plants, multiple operators perform specialized tasks that are small segments of an entire processing operation.
The American Water Works Association projects that almost 50 percent of today’s drinking water and wastewater operators will retire within the next five to 10 years. In Oregon, replacements make up 83 percent of the total annual openings due to the aging labor force and retirements. As retiring operators empty the ranks of the profession, there are great opportunities for workers seeking career advancement, higher wages, benefits, flexible work schedules, choice of employment location, and employer-supported trainings.

“This occupation could be a great fit for veterans that are coming from the military with a lot of transferable skills in mechanics, equipment operation and engineering,” says Mark Ingman, program coordinator at the Oregon Department of Environmental Quality’s Wastewater System Operator Certification Program. Sailors and soldiers have done a lot of mechanical and engineering work and understand the basic principles of operating systems. Ingman, a veteran himself, says that veterans are a good match, because many of the skills veterans gain in the military align with this type of work.

Growth Projected

There were 1,101 drinking water and wastewater operators employed in Oregon in 2012. Given the need for certified drinking water and wastewater operators, about 2,800 individuals were certified by the Oregon Health Authority and the Oregon of Environmental Quality during 2013 and 2014. Additional workers with these certifications are also captured in several management, supervisory and maintenance roles in our occupational data, but those occupations also include other workers in a variety of settings. Drinking water and wastewater operators are employed in high numbers across the state. In 2012, the Portland-Metro and Mid-Valley areas each employed 15 percent (161 and 160 workers, respectively) of the total number of operators in Oregon; Northwest Oregon employed 12 percent (129 workers); and Clackamas employed 11 percent (126). Eastern Oregon and Southwestern Oregon each employed 10 percent (107).

As preceding generations retire, the demand for drinking water and waste-water operators rises in Oregon and the U.S. According to the Oregon Employment Department’s employment projections, the operator workforce will add 85 jobs between 2012 and 2022, and with retirements looming, an estimated 47 total annual openings. This represents a 7.7 percent increase in employment over 10 years, which is the same as the national job growth rate for drinking water and wastewater operators (7.7%). Between 2012 and 2022, the fastest employment growth for this occupation is projected to be in the Portland-Metro area (9.3%), followed by Eastern Oregon (7.5%) and Northwest Oregon (7.0%).

The demand for drinking water and wastewater operators is also influenced by population growth. Oregon’s population is projected to reach almost 5 million by 2035, according to Oregon Office of Economic Analysis’ projections. An increase in population results in a higher demand for water, and therefore a higher need for – and wastewater – treatment services. Another factor contributing to the occupation’s growth is the need to improve aging public works infrastructure. Infrastructure improvements will generate additional jobs for operators.

A Rewarding Job

Because of the high skill level required for this occupation, the wages are also high. In Oregon, wages for drinking water and wastewater operators ranged between a 10th percentile wage of $15.73 and a 90th percentile wage of $32.77. At the 10th percentile wage, 10 percent of workers in the occupation earn less, and 90 percent earn more. The 10th percentile represents entry-level wages in the occupation, while the 90th percentile represents pay after a long career in this high-skill field.

The average annual wage was $50,484, which is defined as a high-wage occupation. Wages for this occupation are high across the state. The highest average wages are in the Portland-Metro area with $54,885, Lane area with $54,697, and Rogue Valley with $52,503. High wages are also paid in Northwest Oregon ($50,546), East Cascades ($50,451), and Mid-Valley ($50,219).

Developing Your Career

Depending on location and the type of job you would like to pursue, there are various certifications that allow one to advance to higher levels in this occupation. Many small communities require their operators to be certified in drinking water and wastewater systems. That is why many operators in smaller communities have both types of certifications. The requirements for drinking water and wastewater operators are captured in several management, supervisory and maintenance roles in our occupational data, but those occupations also include other workers in a variety of settings.
wastewater certifications share similarities. Applicants must hold a high school diploma or GED, be enrolled in a water quality and wastewater treatment management program or have experience in the field.

The Oregon Health Authority’s Drinking Water Services provides two separate types of certification for drinking water operators:

- Distribution and Treatment Systems Levels 1-4 for individuals working in the water treatment and water distribution systems with 150 or more connections; and

- Small Water System Operator for individuals operating water systems with less than 150 connections. For more information on certifications for drinking water system operators, visit https://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/OperatorCertification/Pages/index.aspx.

The Oregon Department of Environmental Quality’s Wastewater System Operator Certification Program provides certifications for wastewater system operators:

- Operator-In-Training pathway to certification
- Provisional Grade I Certificate
- Grade I-IV Collection and Treatment Certificates; and
- Small System Wastewater Operator Certificate.

Operator-In-Training and Provisional Grade I are entry-level certification pathways for individuals that have a high school diploma or GED and don’t have the experience of routine performance of operator duties. They must be enrolled in a water quality and wastewater treatment management program. Such programs are offered by Clackamas Community College and Linn-Benton Community College. Online programs offered by the Office of Water Programs, California State University, Sacramento are an option as well. To learn more about certifications for wastewater operators, visit www.deq.state.or.us/wq/opcert/opcert.htm.

“Certification for wastewater system operators should not be seen as barrier for those interested in working in this field,” says Mark Ingman from the Oregon Department of Environmental Quality. Depending on employers, certifications for wastewater operators may not be required. Some employers may require workers to be certified in six months, others in 12 months, but others may not require a certification at all. “Many of these employers need workers to perform the daily routine tasks under the supervision of a certified operator,” says Ingman. All wastewater systems must at least have one or more operators certified at the sufficient grade in order for the system to remain in operation.

High-Skill Occupation

Drinking water and wastewater operator is a high-skill occupation. Operators carefully monitor flow rates, pressure levels, water level and distribution, and regulate the flow of treated and untreated water into and out of these plants. They are also responsible for complying with strict water quality standards set forth by federal, state and local agencies.

Performing these duties requires knowledge and skills, such as chemistry theory, hydraulics principles, water and ventilation systems, basic plumbing, math and statistics. It also requires the ability to understand operating manuals and plumbing specifications, operate precision measuring devices, and communicate technical information.

In addition, “There is a lot of high-tech going on in this field,” says Ingman. Today, operators can turn on a pump, get alarms, and monitor and control systems remotely from their office through advanced software. Examples of computer programs used in this field are supervisory control and data acquisition (SCADA) software, human machine interface (HMI) software, and wastewater expert control systems.

How to Find Jobs in this Occupation

Most drinking water and wastewater operators are employed by public utilities, cities, and counties. In Oregon, nearly 77 percent of operators were employed in the public sector and about 21 percent were employed in the private sector in 2012. About 28 percent of operators were employed in the water, sewage and other systems industry. Other industries where operators are employed include manufacturing, in particular in food...
Peace Corps – A Launching Pad for a 21st Century Career

Felicia Bechtoldt, Employment Economist, Felicia.Bechtoldt@oregon.gov, (503) 947-1274

I was 15 when I found out that English classes were offered by a group of Americans in my native city – Chisinau. I didn’t know why Americans were in Moldova teaching English, but I jumped at the opportunity to learn English with native speakers. But I learned more than English; I learned about American values, such as tolerance towards minority groups, the concept of community service, and freedom of speech and the press. Soon I discovered that my new educators were members of the Peace Corps. The Peace Corps played an important role in my upbringing and I am grateful to all Peace Corps volunteers that make a difference in people’s lives all over the world.

Benefits of Joining the Peace Corps

The skills developed by Peace Corps volunteers are important to employers across all sectors of the economy. Acquiring international work experience in a particular area of expertise, as well as cross-cultural competency, leadership skills, professional savvy and fluency in foreign languages prepare Peace Corps graduates for today’s global economy. Most employers regard job applicants with Peace Corps experience very positively. Depending on your work area in the Peace Corps and the job you would like to do, many employers consider Peace Corps service as work experience.

Peace Corps volunteers return home with proof that they enhanced professional abilities in specific areas and overcame challenges, setting them apart from other job applicants. During service, volunteers are given a tremendous amount of responsibility and autonomy. In order to successfully complete their tenure as a volunteer, they must develop the ability to self-manage and solve challenging problems without intensive management from their supervisor, because often their supervisor is located in a different city. They learn to adjust quickly to the needs of the community and implement projects in unknown environments with limited resources and limited experience.

Volunteers develop the ability to embrace ambiguity as their role and tasks can change overnight in the communities they serve. Working in the Peace Corps can be challenging, however. They learn that it takes a long time to see a change in their communities. They become effective communicators, negotiators and change makers of perspectives in the communities they serve. These experiences teach them to be a self-starter, flexible, resilient, and innovative, skills that are highly sought by today’s employers.

A significant employment advantage for volunteers is the one-year noncompetitive eligibility for jobs in the federal government. After completion of service, federal agencies may expedite the hiring process for returned volunteers by hiring them without a vacancy announcement, formal screening, interview or other federal recruitment steps. The decision to hire a returned Peace Corps volunteer, however, remains at the discretion of the hiring agency and the candidate must meet the minimum qualifications for the position.

In addition, when volunteers return home, they earn more than $8,000 (pre-tax) to help with the transition to life back home. Volunteers having public student loans may be eligible for loan forgiveness or deferment as Peace Corps Volunteer Service is qualified for the Public Service Loan Forgiveness Program. Volunteers having Perkins loans may be eligible as well for a 15-70 percent cancellation benefit.

What Programs are Available for Peace Corps Applicants?

Peace Corps applicants can choose from four programs:

- Peace Corps Volunteers
- Peace Corps Response
- Global Health Service Partnership
- University Programs
Peace Corps Volunteers is a two-year assignment, where volunteers work in one of the program sectors shown in the graph. Education is the Peace Corps’ largest program sector with 37 percent of volunteers serving in 2015, followed by health (24%), youth and development (10%), and environment (10%).

Another program that provides targeted assistance to specific areas is the Peace Corps Response, which is a short-term assignment for professionals that have an area of expertise. They work in areas such as food security, information systems, civil engineering, ecotourism, girls’ empowerment, youth entrepreneurship, website development, and vocational education. In 2015, only 4 percent of volunteers took part in the Peace Corps Response.

Global Health Service Partnership is another program focused on building the healthcare capacity in countries that have shortages in healthcare providers. Eligible applicants are physicians and nurses willing to train the next generation of health professionals, enhance the use of high standards of clinical practices, and improve the medical and nursing education in developing countries.

Lastly, there are university programs that allow students to combine Peace Corps service with a graduate degree, or complement undergraduate studies with training that prepares students for the Peace Corps service.

<table>
<thead>
<tr>
<th>Education: Increase local students’ and local teachers’ English language competency and conversational skills.</th>
<th>Health: Develop education strategies and train youth as peer educators in HIV/AIDS education and prevention.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete projects on individualized instruction, classroom management, and resource development for teachers of students with special needs.</td>
<td>Create programs that provide emotional and financial support to families and communities affected by HIV/AIDS.</td>
</tr>
<tr>
<td>Collaborate with local teachers to develop materials and improve teaching techniques.</td>
<td>Educate communities on water sanitation, maternal and child health, nutrition, and basic hygiene.</td>
</tr>
<tr>
<td>Establish English language clubs and resource centers.</td>
<td>Provide support to children orphaned by AIDS.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Youth and Development: Complete projects on engagement and active citizenship, employability, gender awareness, information technology, health and HIV/AIDS education, sporting programs, and environmental awareness.</th>
<th>Environment: Lead grassroots efforts in communities to strengthen an understanding of environmental issues and environmental protection.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Educate communities on environmental degradation and sustainable use of natural resources.</td>
</tr>
<tr>
<td></td>
<td>Empower communities to make their own decisions about local environmental conservation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community Economic Development: Work with local authorities, development banks and nongovernmental organizations to encourage economic opportunities and strengthen infrastructure.</th>
<th>Agriculture: Work with small-scale farmers to increase food security and production and adapt to climate change while promoting environmental conservation practices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help entrepreneurs take advantage of technologies (e-commerce, distance learning), teach basic computer skills.</td>
<td>Work with farmers on projects that focus on livestock management, companion planting, nutrition education, and agroforestry.</td>
</tr>
<tr>
<td>Help business owners develop and market their products.</td>
<td>Educate farmers on techniques that reduce the use of pesticides, prevent soil erosion, and replenish the soil.</td>
</tr>
</tbody>
</table>

Source: Peace Corps
should the students decide to apply for the program.

Master’s International allows students to combine their graduate studies with the Peace Corps. Tim Face-mire is one of the students completing both a Master of Forestry at Oregon State University and a Master’s International with the Peace Corps. When Tim was 13, he decided that one day he would serve in the Peace Corps. One of the reasons for serving in the Peace Corps, Tim explains, is "to understand and gain a new perspective on how the world works outside of the United States". After gaining an undergraduate degree in fire protection engineering and working for three years at a nuclear fire protection consulting agency, Tim decided that his time for Peace Corps has come. This summer Tim will depart for Guinea for 27 months, which was one of the top three projects he selected. Initially, he will have a three-month language and cultural training in Conakry, the capital of Guinea, and then he will be assigned to one of 31 Peace Corps locations in the country.

While Tim is in Guinea, he will receive a monthly stipend for overseas living and housing expenses, compensation for transportation costs, 48 paid vacation days, leave for family emergencies, and full medical and dental coverage. Oregon State University is the only institution in Oregon offering a Master’s International, which is provided by the Engineering, Forestry and Applied Economics Departments.

For undergraduate students, two programs are available: Peace Corps Prep and Campus Ambassadors. Peace Corps Prep is a certificate program that builds the competencies of participants in various program sectors, including intercultural competence, leadership, and proficiency in a foreign language. Campus Ambassadors are university students that act as local experts in raising the Peace Corps’ profile and reaching diverse communities on campus.

Furthermore, returned volunteers seeking to pursue a graduate degree can receive financial aid through Paul D. Coverdell Fellows Program. In Oregon, Willamette University and the University of Oregon offer scholarships to Paul D. Coverdell Fellows for advanced degrees, such as Master in Business Administration, Master in Public Administration, Juris Doctor, Master of Laws, and Master of Legal Studies.

Where do Peace Corps Volunteers Serve?
Currently, Peace Corps volunteers have the opportunity to experience the cultural, linguistic and geographic diversity in 61 countries from Africa, Latin America, Europe, and Asia. Applicants can choose their country of service and program sector. The figure “Peace Corps Destinations” illustrates the countries, where volunteers can serve.

Nearly half of all volunteers (45%) provided technical assistance on girls’ education, prevention of environmental degradation, information technology, democratization process, and HIV/AIDS prevention and education in 27 countries from Africa in 2015. The second largest number of volunteers (22%) served in 15 countries in Latin America and the smallest number of volunteers served in North Africa and the Middle East (3%) and Pacific Islands (3%).

The Peace Corps Demographics
Since the establishment of the Peace Corps, about 220,000 volunteers have served in 141 countries to further the agency’s mission – the promotion of world peace and friendship. In 2014, 6,818 volunteers and trainees served in 64 countries, of which 63 percent were women and 37 percent were men. Men and women over the age of 50 accounted for 7 percent of the volunteer population. The median age for a Peace Corps volunteer was 25. The oldest volunteer that served in the Peace Corps in 2014 was 80 years old.
Oregon ranks eighth in the number of Peace Corps volunteers per capita in the nation with 4.0 volunteers per 100,000 residents in 2015. Vermont leads the country as having the highest number of Peace Corps volunteers per capita with 8.3 volunteers per 100,000 residents. California continues to hold its spot as the largest producer of volunteers with 915 residents in service. Other states that produce large numbers of volunteers are New York (416 volunteers), Washington (319 volunteers), and Florida (299 volunteers). States that had the lowest numbers of Peace Corps volunteers are Delaware (12 volunteers), Mississippi (10 volunteers), and North Dakota (9 volunteers).

Oregon’s universities rank among the top Peace Corps volunteer-producing schools in the U.S. The University of Oregon is positioned number 10 among large colleges and universities (those with more than 15,000 undergraduates) with 44 undergraduate alumni in service. Portland State University is positioned number 4 among graduate schools with 13 graduate alumni serving abroad. In the small colleges and universities category (less than 5,000 undergraduates), Willamette University shares position number 10 with other schools with 11 volunteers, and Lewis & Clark College and the University of Portland share the 20th position with other schools with nine students each.

From government to business to nonprofit sector, Peace Corps volunteers use their experience as a foundation for successful careers. To learn more about how Peace Corps can help you advance your career, visit www.peacecorps.gov.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Characteristic</td>
<td>Volunteers</td>
<td>Percent of Volunteers</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Women</td>
<td>4,321</td>
<td>63%</td>
</tr>
<tr>
<td>Men</td>
<td>2,497</td>
<td>37%</td>
</tr>
<tr>
<td>Racial minorities</td>
<td>1,656</td>
<td>25%</td>
</tr>
<tr>
<td>Seniors (50+)</td>
<td>458</td>
<td>7%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>4,850</td>
<td>75%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>661</td>
<td>10%</td>
</tr>
<tr>
<td>African American</td>
<td>441</td>
<td>7%</td>
</tr>
<tr>
<td>Mixed Ethnicity</td>
<td>237</td>
<td>4%</td>
</tr>
<tr>
<td>Native American</td>
<td>10</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Not Specified</td>
<td>312</td>
<td>N/A</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>6,101</td>
<td>89%</td>
</tr>
<tr>
<td>Married and serving with spouse</td>
<td>371</td>
<td>5%</td>
</tr>
<tr>
<td>Divorced</td>
<td>262</td>
<td>4%</td>
</tr>
<tr>
<td>Married and serving alone</td>
<td>43</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Widowed</td>
<td>31</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Engaged</td>
<td>9</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Married while serving</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>5,586</td>
<td>82%</td>
</tr>
<tr>
<td>30-39</td>
<td>648</td>
<td>10%</td>
</tr>
<tr>
<td>60-69</td>
<td>253</td>
<td>4%</td>
</tr>
<tr>
<td>50-59</td>
<td>158</td>
<td>2%</td>
</tr>
<tr>
<td>40-49</td>
<td>126</td>
<td>2%</td>
</tr>
<tr>
<td>70-80</td>
<td>47</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>


We’re Blogging It!
Get employment news daily with the Research Division’s Employment Blog!

The blog provides information about employment at the national, state, and local levels. Check us out and feel free to post your comments!
Oregon Employment Forecast: Full Steam Ahead

Amy Vander Vliet, Regional Economist, Amy.S.VanderVliet@oregon.gov (971) 804-2099

The recent pace of Oregon’s job growth is reminiscent of the heyday of the mid-nineties. The state added 56,800 jobs in 2015 for a growth rate of 3.3 percent; the fastest pace in nearly 20 years.

Additionally, Oregon retains its traditional job growth advantage relative to the nation. Growth is more than 1 percentage point faster than the U.S. as a whole, and the most recent rankings place Oregon’s 2015 growth at fifth fastest in the nation behind Utah, Florida, Washington, and Idaho.

Oregon’s economy should remain on this trajectory of robust and above-average growth for the next few years, according to the latest Oregon Economic and Revenue Forecast from the Oregon Office of Economic Analysis (OEA). OEA believes the state will continue to benefit from our industry structure. Compared with the average state, Oregon has a larger concentration of some of the industries that are expected to perform well nationally in the near term – management of companies (i.e., headquarters), food and beverage manufacturing, software, and agriculture. Strong in-migration trends will also fuel growth in housing and services.

OEA expects Oregon will add close to 50,000 jobs in 2016 for a growth rate of 2.7 percent. Growth will be dominated by service sector industries such as the large and diverse professional and business services sector (e.g., company headquarters, temp help, computer systems design); leisure and hospitality (e.g., restaurants, golf courses); and private health care. Manufacturing will take a breather after a relatively blistering first half of 2015 due to the slowing global economy and strong U.S. dollar.

However, job growth isn’t the only component of a rosy outlook. OEA has long maintained that Oregon also needs income growth in order to establish and maintain solid economic health. And after years of decline or stagnation, we’re finally there. Average wages today in Oregon have risen to their highest relative point since the brutal recession in the early 1980s, when the bottom dropped out of the high-paying timber industry. Adding to the good news, these gains have been broad-based across most industries and regions. It hasn’t just been, for example, high-wage tech jobs in Portland fueling statewide growth.

The next several years should see Oregon’s job growth outperform the nation, a trend we’ve seen in past expansions. Wage and income growth will also outstrip the nation. Meanwhile the unemployment rate, which tends to be one of the last indicators to improve as the economy recovers, will decline from 5.3 percent (2015) to 4.9 percent by the time the books close on 2016.

## Oregon Current Labor Force and Industry Employment

### Labor Force Status

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian labor force</td>
<td>2,014,442</td>
<td>1,991,379</td>
<td>1,935,191</td>
<td>23,063</td>
<td>79,251</td>
</tr>
<tr>
<td>Unemployed</td>
<td>105,043</td>
<td>102,059</td>
<td>121,066</td>
<td>2,984</td>
<td>-16,023</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>5.2</td>
<td>5.1</td>
<td>6.3</td>
<td>0.1</td>
<td>-1.1</td>
</tr>
<tr>
<td>Unemployment rate, seasonally adjusted</td>
<td>4.8</td>
<td>5.1</td>
<td>5.8</td>
<td>-0.3</td>
<td>-1.0</td>
</tr>
<tr>
<td>Employed</td>
<td>1,909,399</td>
<td>1,889,320</td>
<td>1,814,125</td>
<td>20,079</td>
<td>95,274</td>
</tr>
</tbody>
</table>

### Other Labor Force Indicators

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor force participation rate, seasonally adjusted</td>
<td>62.0</td>
<td>61.6</td>
<td>60.8</td>
<td>0.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Labor underutilization rate – U-6, seasonally adjusted</td>
<td>9.7</td>
<td>10.3</td>
<td>12.3</td>
<td>-0.6</td>
<td>-2.6</td>
</tr>
</tbody>
</table>

### Nonfarm Payroll Employment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total nonfarm payroll employment</td>
<td>1,797,600</td>
<td>1,787,400</td>
<td>1,740,900</td>
<td>10,200</td>
<td>56,700</td>
</tr>
<tr>
<td>Total private</td>
<td>1,486,800</td>
<td>1,481,300</td>
<td>1,436,600</td>
<td>5,500</td>
<td>50,200</td>
</tr>
<tr>
<td>Mining and logging</td>
<td>7,200</td>
<td>7,200</td>
<td>7,600</td>
<td>0</td>
<td>-400</td>
</tr>
<tr>
<td>Construction</td>
<td>82,300</td>
<td>81,000</td>
<td>77,700</td>
<td>1,300</td>
<td>4,600</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>185,500</td>
<td>185,100</td>
<td>181,400</td>
<td>400</td>
<td>4,100</td>
</tr>
<tr>
<td>Durable goods</td>
<td>129,700</td>
<td>129,700</td>
<td>128,600</td>
<td>0</td>
<td>1,100</td>
</tr>
<tr>
<td>Nondurable goods</td>
<td>55,800</td>
<td>55,400</td>
<td>52,800</td>
<td>400</td>
<td>3,000</td>
</tr>
<tr>
<td>Trade, transportation, and utilities</td>
<td>331,900</td>
<td>334,600</td>
<td>326,200</td>
<td>-2,700</td>
<td>5,700</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>73,400</td>
<td>73,800</td>
<td>73,000</td>
<td>-400</td>
<td>400</td>
</tr>
<tr>
<td>Retail trade</td>
<td>200,900</td>
<td>202,800</td>
<td>195,000</td>
<td>-1,900</td>
<td>5,900</td>
</tr>
<tr>
<td>Transportation, warehousing, and utilities</td>
<td>57,600</td>
<td>58,000</td>
<td>58,200</td>
<td>-400</td>
<td>-600</td>
</tr>
<tr>
<td>Information</td>
<td>34,600</td>
<td>34,600</td>
<td>32,400</td>
<td>0</td>
<td>2,200</td>
</tr>
<tr>
<td>Financial activities</td>
<td>96,900</td>
<td>96,400</td>
<td>92,800</td>
<td>500</td>
<td>4,100</td>
</tr>
<tr>
<td>Professional and business services</td>
<td>232,800</td>
<td>230,400</td>
<td>220,800</td>
<td>2,400</td>
<td>12,000</td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
<td>44,800</td>
<td>44,700</td>
<td>41,600</td>
<td>100</td>
<td>3,200</td>
</tr>
<tr>
<td>Administrative and waste services</td>
<td>97,600</td>
<td>95,900</td>
<td>92,700</td>
<td>1,700</td>
<td>4,900</td>
</tr>
<tr>
<td>Educational and health services</td>
<td>267,400</td>
<td>264,600</td>
<td>257,000</td>
<td>2,800</td>
<td>10,400</td>
</tr>
<tr>
<td>Educational services</td>
<td>38,600</td>
<td>37,500</td>
<td>37,900</td>
<td>1,100</td>
<td>700</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>228,800</td>
<td>227,100</td>
<td>219,100</td>
<td>1,700</td>
<td>9,700</td>
</tr>
<tr>
<td>Leisure and hospitality</td>
<td>187,200</td>
<td>186,300</td>
<td>181,200</td>
<td>900</td>
<td>6,000</td>
</tr>
<tr>
<td>Other services</td>
<td>61,000</td>
<td>61,100</td>
<td>59,500</td>
<td>-100</td>
<td>1,500</td>
</tr>
<tr>
<td>Government</td>
<td>310,800</td>
<td>306,100</td>
<td>304,300</td>
<td>4,700</td>
<td>6,500</td>
</tr>
<tr>
<td>Federal government</td>
<td>26,400</td>
<td>26,300</td>
<td>26,700</td>
<td>100</td>
<td>-300</td>
</tr>
<tr>
<td>State government</td>
<td>90,300</td>
<td>88,700</td>
<td>87,900</td>
<td>1,600</td>
<td>2,400</td>
</tr>
<tr>
<td>State education</td>
<td>35,400</td>
<td>33,900</td>
<td>35,000</td>
<td>1,500</td>
<td>400</td>
</tr>
<tr>
<td>Local government</td>
<td>194,100</td>
<td>191,100</td>
<td>189,700</td>
<td>3,000</td>
<td>4,400</td>
</tr>
<tr>
<td>Local education</td>
<td>104,100</td>
<td>101,700</td>
<td>101,900</td>
<td>2,400</td>
<td>2,200</td>
</tr>
<tr>
<td>Labor-management disputes</td>
<td>200</td>
<td>200</td>
<td>0</td>
<td>0</td>
<td>200</td>
</tr>
</tbody>
</table>

The most recent month is preliminary, the prior month is revised. Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Labor Force Status: Civilian labor force includes employed and unemployed individuals 16 years and older by place of residence. Employed includes nonfarm payroll employment, self-employed, unpaid family workers, domestics, agriculture and labor disputants. Unemployment rate is calculated by dividing unemployed by civilian labor force.

U-6 is the total unemployed plus all persons marginally attached to the labor force plus total employed part-time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force.

Nonfarm Payroll Employment: Data are by place of work and cover full- and part-time employees who worked or received pay for the pay period that includes the 12th of the month. The data exclude the self-employed, volunteers, unpaid family workers, and domestics. These survey-based estimates are revised quarterly, based on more complete information from employer tax records.
Oregon's Unemployment Rate Drops in February
Unemployment Rates, Seasonally Adjusted

Oregon's Employment Rises in February
Oregon Nonfarm Payroll Employment, Seasonally Adjusted

Oregon's Unemployment Rate Drops in February
Unemployment Rates, Seasonally Adjusted

Total Nonfarm Payroll Employment

Consumer Price Index (CPI)
(All urban consumers, 1982-84=100)


Kay Erickson, Acting Director • Graham Slater, Administrator for Workforce & Economic Research

Production Team:
Will Burchard, Gail Krumenauer, Paul Marche, Mark Miller, Jessica Nelson, Kathi Riddell, Brenda Turner

Address Changes:
Workforce & Economic Research • 875 Union Street NE, Rm 207 • Salem, OR 97311
Phone (503) 947-1266 • 1-800-262-3912 ext. 71266 • E-mail: Lmipubs@oregon.gov

Material contained in this publication is in the public domain and may be reproduced without permission. Please credit Oregon Labor Trends, Oregon Employment Department. Any information on individual companies comes from nonconfidential published sources.

WorkSource Oregon is an equal opportunity employer/program • WorkSource Oregon es un programa/empleador que respeta la igualdad de oportunidades.