Oregon’s jobs recovery began in the latter part of 2010. Employment growth gained more momentum in 2013 and intensified through 2014 and 2015. By 2016, Oregon ranked eighth highest among all states for job growth. Economic expansion has been accompanied by more job vacancies and fewer unemployed Oregonians. In a tighter labor market, vacancies have become increasingly difficult to fill for businesses in Oregon, especially due to a lack of applicants.

Key Findings

- Oregon businesses reported 50,800 job vacancies in 2016. Of these, 32,700 (64%) job openings were difficult to fill.

- Seven out of 10 difficult-to-fill job vacancies require some work experience, while less than half (45%) of vacancies filled without difficulty require previous experience.

- Eight out of 10 difficult-to-fill job vacancies do not require any additional education beyond high school. Those with higher education requirements offer higher wages, and are more likely to require previous work experience.

- In a relatively fast-growing economy with unemployment near record lows, a lack of applicants is the greatest challenge businesses face in filling job openings.

- Vacancies with higher education requirements are more likely to be difficult to fill due to a lack of applicants or qualified candidates. Those with lower education requirements are more likely to report unfavorable working conditions or low wages.

- Previous work experience requirements reduce an already small applicant pool. Often businesses face more difficulty with vacancies requiring previous experience than those without experience requirements for jobs in the same occupation.

- Health care and social assistance reported the largest number of vacancies – both difficult-to-fill and overall – in 2016. Industries with the largest shares of difficult-to-fill vacancies included construction and natural resources and mining.

- The top occupations with difficult-to-fill vacancies vary from construction laborers to personal care aides, nursing assistants, restaurant cooks, truck drivers, registered nurses, and plumbers.

- Businesses in Eastern Oregon and Southern Oregon reported greater difficulty filling vacancies in 2016 than businesses in other areas.

- The majority (59%) of difficult-to-fill job vacancies occur for reasons that are tough to address through workforce development: a lack of applicants, unfavorable working conditions, low wages, the location of the job, or specific business culture or personality characteristics that are the “right fit” for a position.

Characteristics of Difficult-to-Fill Vacancies

The Majority of Job Vacancies Are Difficult to Fill

Oregon employers reported 50,800 vacancies in 2016. These vacancies offered an average wage of $16.97. The majority of vacancies were for full-time positions (72%), permanent positions (90%), and openings that required previous work experience (61%). Relatively few vacancies required education beyond high school (21%).
Businesses reported difficulty filling 32,700 vacancies in 2016, a majority (64%) of all job openings last year. Difficult-to-fill vacancies showed similar shares of full-time (74%) and permanent (91%) positions compared with their non-difficult counterparts.

Difficult-to-fill vacancies paid more, an average of $17.81 per hour compared with $14.94 for non-difficult vacancies. Seven out of 10 vacancies required previous work experience, compared with fewer than half (45%) of vacancies with no reported difficulty filling the job opening.

Vacancies Are Difficult to Fill for Many Reasons

For each of their difficult-to-fill vacancies, employers offered open-ended responses to identify the primary reason for the unfilled opening. These responses were then sorted into 12 categories (see Appendix A for definitions and examples).

Just four of these reasons accounted for nearly three-fourths (73%) of all difficult-to-fill vacancies in Oregon during 2016. They were a lack of applicants (38%), a lack of qualified candidates (16%), unfavorable working conditions (11%), and low wages (9%).

<table>
<thead>
<tr>
<th>Difficult-to-Fill Categories for Employer-Provided Responses</th>
<th>Difficult-to-Fill Vacancies</th>
<th>Share with Reasons Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of applicants</td>
<td>12,067</td>
<td>38%</td>
</tr>
<tr>
<td>Lack of qualified candidates</td>
<td>4,953</td>
<td>16%</td>
</tr>
<tr>
<td>Unfavorable working conditions</td>
<td>3,554</td>
<td>11%</td>
</tr>
<tr>
<td>Low wages</td>
<td>2,724</td>
<td>9%</td>
</tr>
<tr>
<td>Lack of work experience</td>
<td>2,324</td>
<td>7%</td>
</tr>
<tr>
<td>Lack of soft skills</td>
<td>1,853</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>1,762</td>
<td>6%</td>
</tr>
<tr>
<td>Lack of certification</td>
<td>860</td>
<td>3%</td>
</tr>
<tr>
<td>Location</td>
<td>588</td>
<td>2%</td>
</tr>
<tr>
<td>Lack of technical skills</td>
<td>583</td>
<td>2%</td>
</tr>
<tr>
<td>Right fit</td>
<td>547</td>
<td>2%</td>
</tr>
<tr>
<td>Lack of training</td>
<td>133</td>
<td>less than 1%</td>
</tr>
<tr>
<td>Reason not provided</td>
<td>733</td>
<td></td>
</tr>
<tr>
<td>Total with reasons provided</td>
<td>31,948</td>
<td></td>
</tr>
<tr>
<td>Total all difficult-to-fill vacancies</td>
<td>32,681</td>
<td></td>
</tr>
</tbody>
</table>

Businesses indicated a lack of applicants as the most common primary reason for difficulty, which accounted for 12,000 vacancies. In a relatively fast-growing economy with unemployment rates near record lows, this posed the greatest challenge to businesses statewide. These were not job openings where applicants lacked specific skills or training. In 2016, two out of every five (38%) difficult-to-fill job vacancies and almost one-fourth (23%) of all vacancies in Oregon had an insufficient number of applicants or no applicants at all.

Employers cited a lack of qualified candidates as the primary reason for difficulty filling 5,000 vacancies. Various unfavorable working conditions combined as the third most common reason businesses provided, and accounted for 3,600 vacancies. Businesses responded offering low wages for 2,700 job openings. In past years, employers rarely indicated low wages as a challenge in filling their job openings. In 2016, Oregon employers said the low wages they offered for the job was the primary challenge for roughly one out of 10 difficult-to-fill vacancies.

Job characteristics differed among the most common reasons for difficulty filling job vacancies. Those with a lack of applicants and lack of qualified candidates generally paid higher average wages. Job openings with a lack of applicants offered $18.21 per hour on average, while vacancies with a lack of qualified candidates averaged $22.49 per hour. Difficult-to-fill vacancies with a lack of qualified candidates were also more likely to require education beyond high school, and nearly all required previous work experience.

By comparison, difficult-to-fill vacancies with unfavorable working conditions – which included business responses such as part-time work or inconsistent work shifts – had the lowest share of full-time openings.
(45%) and a relatively low share of permanent positions (75%). They also offered an average wage more than $3 per hour below the average for all difficult-to-fill vacancies. As expected, the job openings citing low wages offered the lowest average wage ($12.32). They also included a relatively low share of full-time positions (67%). One out of 10 difficult-to-fill vacancies with low wages required education beyond high school, and roughly one-third (33%) required previous experience.

Difficult-to-Fill Reasons Vary by Educational Requirements

Vacancies at all education requirement levels cited a lack of applicants, a lack of qualified candidates, unfavorable working conditions, or low wages as primary reasons for difficulty filling some openings. As education requirements for vacancies increased, businesses more often faced a lack of applicants or a lack of qualified candidates. Meanwhile difficult-to-fill job vacancies with high school or no requirements posed greater challenges due to unfavorable working conditions or low wages.

Almost 9,500 difficult-to-fill vacancies in Oregon had no education requirement in 2016. One-third cited lack of applicants as the reason for difficulty, followed by unfavorable working conditions (13%), low wages (13%), and a lack of qualified candidates (6%).

Difficult-to-fill vacancies with a high school diploma requirement reported a similar share with a lack of applicants (36%) and more with a lack of qualified candidates (14%). They also included similar shares of vacancies with unfavorable working conditions (12%) and low wages (10%) as those with no education requirement.

Almost half (45%) of all difficult-to-fill vacancies with postsecondary education requirements – meaning an associate degree or some specific credential beyond high school completion – lacked applicants. Another 26 percent lacked qualified candidates. These shares looked similar for difficult-to-fill vacancies with bachelor’s or advanced degree requirements, and sat well above the combined totals with a lack of applicants or lack of qualified candidates in the high school (50%) and no requirement (39%) categories.

More Education, More Experience, More Money

Seven out of 10 difficult-to-fill vacancies in Oregon required previous work experience in 2016. The share of difficult-to-fill vacancies with prior experience requirements became even more prominent as education requirements rose. Roughly half (51%) of difficult-to-fill job vacancies with no education requirement required work
Industry Difficulty Filling Vacancies

Health Care Tops Industries with Difficult-to-Fill Vacancies

In 2016, health care and social assistance employers reported the largest number of difficult-to-fill vacancies (7,300), as well as the largest number of total job vacancies (10,200). Health care often tops the list of job vacancies in Oregon, as it has been a large industry with consistent job growth since at least 1990, regardless of economic conditions. Industries with the greatest difficulty filling vacancies were construction and natural resources and mining. These two sectors reported challenges with at least eight out of 10 job openings.

Two employer challenges filling vacancies were more prominent in health care than all industries on average. Nearly half (49%) of all difficult-to-fill health care vacancies lacked applicants. Low wages was the second most common reason, which accounted for 15 percent of difficult-to-fill health care job openings in 2016. Businesses noted competition for nurses and worker shortages for various types of jobs, along with relatively lower wages making competition tough in rural areas. Some also mentioned difficulty competing with hospital wages.

Two industries with different workforce needs reported the largest shares of difficult-to-fill job vacancies with a lack of qualified candidates. Two out of every five difficult-to-fill job openings in transportation, warehousing, and utilities and professional and technical services lacked qualified candidates. Transportation firms cited difficulty finding qualified CDL truck drivers. Professional and technical services responses indicated many vacancies requiring a specialized set of skills.

Unfavorable working conditions accounted for an oversized share of difficult-to-fill vacancies in private educational services (54%) and nat-
ural resources and mining (29%) compared with all industries (11%). The private educational services vacancies with unfavorable working conditions largely cited inconsistent work shifts or relatively few hours per week for the job. The natural resources jobs indicated difficult, physical labor in outdoor conditions and long working hours.

Overall, low wages were reported as the primary challenge for about one out of 10 difficult-to-fill vacancies. However, one-fifth of difficult-to-fill vacancies in other services and retail trade indicated low wages for the job. Businesses in other services – such as automotive repair and maintenance, personal care services, and civic organizations – self-reported low wages or a low pay scale for jobs. Retail trade businesses cited a lack of applications due to expected salary, and an inability to raise wages without also raising prices to consumers. They also noted high turnover due to pay, which was dependent upon experience.

Of all the “other reasons” for difficulty filling job vacancies, the information sector – which includes telecommunications, newspaper and software publishers, and radio broadcasting – reported a disproportionally large share of difficult-to-fill vacancies (70%) as challenging because applicants lacked work experience.

Work Experience Requirements Increase Difficulty Filling Vacancies

Aside from the information sector, an interesting and seemingly disparate result in the job vacancy survey is that seven out of 10 difficult-to-fill job openings require previous work experience, while roughly one out of 10 cites a lack of work experience as the key reason for difficulty filling a vacancy. In 2016, Oregon’s unemployment rate was 4.9 percent, the lowest since 1995, and significantly below the long-run average unemployment rate of 6.8 percent from 1990 to 2016. In an economy where nearly all who want a job can find one, businesses have a smaller pool of candidates for job openings than back in 2009 and 2010 when there was an unusually large labor surplus and record numbers of unemployed Oregonians.

Businesses reported difficulty filling 61 percent of job vacancies with no required work experience. By comparison, they reported 79 percent of job openings that required more than five years of experience as hard to fill. Previous work experience requirements serve as a filter that narrows an already small pool of candidates. Few employers reported a lack of work experience as their primary problem with job openings, and those with previous experience requirements for vacancies reported more difficulty than employers hiring for difficult-to-fill vacancies with no experience requirements. In some cases it may be essential for a successful candidate to start the job with skills and knowledge gained from previous experience. If not, requesting prior work experience can make an employer’s effort to fill that vacancy tougher.
Difficult-to-Fill Job Openings in Variety of Occupations

Employers faced challenges filling job openings across the economy in 2016. The top occupations by number of difficult-to-fill vacancies varied from construction laborers to personal care aides, nursing assistants, restaurant cooks, truck drivers, retail salespersons, and production workers.

As with industries, the prominent reason for difficulty filling vacancies differed from one occupation to the next. Many of the top difficult-to-fill occupations reported outsized shares of job openings with a lack of applicants. Most notable among them were registered nurses (66%), nursing assistants (64%), customer service representatives (63%), and plumbers (56%).

Difficult-to-fill truck driver vacancies stood out for the large share lacking qualified candidates (41%) as employers seek more workers with CDLs. Meanwhile, businesses reported large shares of difficult-to-fill job openings with unfavorable working conditions for maids and housekeeping cleaners (39%) and

Top 10 Difficult-to-Fill Occupations in Oregon by Primary Reason

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Lack of applicants</th>
<th>Lack of qualified candidates</th>
<th>Unfavorable working conditions</th>
<th>Low wages</th>
<th>All other reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Occupations</td>
<td>38%</td>
<td>16%</td>
<td>11%</td>
<td>9%</td>
<td>27%</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>63%</td>
<td>3%</td>
<td>17%</td>
<td>3%</td>
<td>11%</td>
</tr>
<tr>
<td>Nursing Assistants</td>
<td>64%</td>
<td>1%</td>
<td>17%</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>63%</td>
<td>10%</td>
<td>5%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Plumbers, Pipefitters, and Steamfitters</td>
<td>56%</td>
<td>38%</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Laborers</td>
<td>44%</td>
<td>5%</td>
<td>38%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Personal Care Aides</td>
<td>43%</td>
<td>9%</td>
<td>26%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Retail Salespersons</td>
<td>41%</td>
<td>3%</td>
<td>20%</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Cooks, Restaurant</td>
<td>26%</td>
<td>9%</td>
<td>64%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production Workers, All Other</td>
<td>18%</td>
<td>1%</td>
<td>64%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Heavy and Tractor-Trailer Truck Drivers</td>
<td>15%</td>
<td>41%</td>
<td>6%</td>
<td>33%</td>
<td></td>
</tr>
</tbody>
</table>

Top 20 Occupations by Difficulty Filling Vacancies and Required Work Experience, Oregon, 2016

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Difficult to Fill</th>
<th>Not Difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vacancies</td>
<td>% Require Experience</td>
</tr>
<tr>
<td>Construction Laborers</td>
<td>1,548</td>
<td>72%</td>
</tr>
<tr>
<td>Personal Care Aides</td>
<td>1,421</td>
<td>48%</td>
</tr>
<tr>
<td>Nursing Assistants</td>
<td>1,132</td>
<td>63%</td>
</tr>
<tr>
<td>Cooks, Restaurant</td>
<td>988</td>
<td>79%</td>
</tr>
<tr>
<td>Heavy and Tractor-Trailer Truck Drivers</td>
<td>945</td>
<td>89%</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>754</td>
<td>83%</td>
</tr>
<tr>
<td>Plumbers, Pipefitters, and Steamfitters</td>
<td>735</td>
<td>79%</td>
</tr>
<tr>
<td>Retail Salespersons</td>
<td>732</td>
<td>46%</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>678</td>
<td>79%</td>
</tr>
<tr>
<td>Production Workers, All Other</td>
<td>587</td>
<td>30%</td>
</tr>
<tr>
<td>Carpenters</td>
<td>563</td>
<td>98%</td>
</tr>
<tr>
<td>Maids and Housekeeping Cleaners</td>
<td>550</td>
<td>18%</td>
</tr>
<tr>
<td>Security Guards</td>
<td>504</td>
<td>95%</td>
</tr>
<tr>
<td>Cashiers</td>
<td>432</td>
<td>27%</td>
</tr>
<tr>
<td>Counter and Rental Clerks</td>
<td>403</td>
<td>52%</td>
</tr>
<tr>
<td>Dental Assistants</td>
<td>367</td>
<td>88%</td>
</tr>
<tr>
<td>Electricians</td>
<td>367</td>
<td>93%</td>
</tr>
<tr>
<td>Mental Health Counselors</td>
<td>361</td>
<td>8%</td>
</tr>
<tr>
<td>Automotive Service Technicians and Mechanics</td>
<td>360</td>
<td>100%</td>
</tr>
<tr>
<td>Automotive and Watercraft Service Attendants</td>
<td>349</td>
<td>2%</td>
</tr>
</tbody>
</table>
retail sales positions (20%). Low wages were cited as the primary challenge for the majority (64%) of difficult-to-fill production worker vacancies. More than one-fourth (26%) of difficult-to-fill job openings for personal care aides also reported low pay.

**Work Experience by Occupation**

Employers reported difficulty filling 69 percent of vacancies that required previous work experience, while less than half (45%) of job openings with no previous experience posed a challenge. This was also the case for many occupations: larger shares of job openings requiring previous work experience were difficult to fill than vacancies in the same occupation with no experience needed.

In some cases, vacancies with no work experience requirement were less difficult to fill even with a lower average hourly wage. For example, businesses cited difficulty filling 72 percent of construction laborer vacancies that required experience. They offered an average of $18.26 per hour. By comparison, 54 percent of construction laborer job openings without experience were difficult to fill, at an average wage of $13.82 per hour.

For 30 of the top 40 occupations with difficult-to-fill vacancies, businesses reported less trouble filling vacancies when they did not require previous experience, across professional, technical, production, and trade occupations alike. Of course the construction example was not universal among occupations, and regional considerations were at play in addition to experience and wages.

**Reasons for Difficulty Vary Across the State**

**Greater Difficulty Filling Vacancies in Eastern and Southern Oregon**

Businesses in Southern Oregon and Eastern Oregon reported a greater degree of difficulty filling vacancies than elsewhere in the state. Businesses in Eastern Oregon reported almost three-fourths (74%) of all job vacancies as difficult to fill. Similar shares of job openings posed challenges for employers in Southwestern Oregon (72%) and the Rogue Valley (71%).

The combined eight-county area in Eastern Oregon had 660 difficult-to-fill job vacancies at any given time in 2016. Together, health care, leisure and hospitality, and retail trade accounted for more than half (56%) of them. Eastern Oregon vacancies in these three sectors paid between $3 and $5 per hour less than all difficult-to-fill job openings in the region. Vacancies in these industries were also less likely to be full-time positions, and more likely to require education beyond high school.

The majority (59%) of the 780 difficult-to-fill job vacancies in the Southwestern Oregon counties of Coos, Curry, and Douglas were found in construction, health care, and leisure and hospitality. Construction vacancies paid relatively high wages; all required previous experience. An above-average share of difficult-to-fill health care vacancies (40%) required education beyond high school. Experience and education beyond high school were rarely needed for leisure and hospitality vacancies in the area. These job openings were mostly part time, and paid near minimum wage.

In the Rogue Valley, construction and health care stood apart from other sectors with larger numbers of difficult-to-fill vacancies. Together these two industries accounted for 43 percent of the regional total. Challenging job openings in con-
Construction paid relatively high wages, and few required education beyond high school. The vast majority (84%) required previous experience. Only half (49%) of health care vacancies in the area required experience, but a large share (63%) required education beyond high school.

### Challenges Filling Vacancies Differ by Region

The Portland Metro area, made up of Multnomah and Washington counties, reported the largest number of difficult-to-fill vacancies in 2016 (14,600). Occupations with the largest number of difficult-to-fill vacancies included construction laborers, restaurant cooks, nursing assistants, and registered nurses. Reasons for difficulty filling vacancies in Portland generally mirrored Oregon statewide. Portland employers were slightly less likely to indicate a lack of applicants (33%).

### Difficult-to-Fill Vacancies by Area, 2016

<table>
<thead>
<tr>
<th>Area</th>
<th>Vacancies</th>
<th>Average Wage</th>
<th>Full time</th>
<th>Permanent</th>
<th>Require Education Beyond HS</th>
<th>Require Previous Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>32,681</td>
<td>$17.81</td>
<td>74%</td>
<td>91%</td>
<td>22%</td>
<td>69%</td>
</tr>
<tr>
<td>Portland Metro</td>
<td>14,582</td>
<td>$18.94</td>
<td>70%</td>
<td>96%</td>
<td>26%</td>
<td>76%</td>
</tr>
<tr>
<td>Mid-Valley</td>
<td>4,945</td>
<td>$16.06</td>
<td>80%</td>
<td>89%</td>
<td>15%</td>
<td>63%</td>
</tr>
<tr>
<td>Clackamas</td>
<td>3,065</td>
<td>$17.17</td>
<td>83%</td>
<td>92%</td>
<td>17%</td>
<td>71%</td>
</tr>
<tr>
<td>East Cascades</td>
<td>2,864</td>
<td>$19.34</td>
<td>70%</td>
<td>80%</td>
<td>14%</td>
<td>63%</td>
</tr>
<tr>
<td>Rogue Valley</td>
<td>2,118</td>
<td>$14.94</td>
<td>86%</td>
<td>83%</td>
<td>23%</td>
<td>62%</td>
</tr>
<tr>
<td>Lane</td>
<td>1,820</td>
<td>$17.38</td>
<td>71%</td>
<td>90%</td>
<td>36%</td>
<td>75%</td>
</tr>
<tr>
<td>Northwest Oregon</td>
<td>1,454</td>
<td>$15.39</td>
<td>58%</td>
<td>87%</td>
<td>11%</td>
<td>54%</td>
</tr>
<tr>
<td>Southwestern Oregon</td>
<td>776</td>
<td>$16.24</td>
<td>75%</td>
<td>87%</td>
<td>23%</td>
<td>66%</td>
</tr>
<tr>
<td>Eastern Oregon</td>
<td>661</td>
<td>$16.04</td>
<td>66%</td>
<td>93%</td>
<td>31%</td>
<td>54%</td>
</tr>
</tbody>
</table>

*Multi-area or unknown excluded*

### Difficult-to-Fill Vacancies by Area and Primary Reason, 2016

<table>
<thead>
<tr>
<th>Area</th>
<th>Lack of applicants</th>
<th>Lack of qualified candidates</th>
<th>Unfavorable working conditions</th>
<th>Low wages</th>
<th>All other reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>38%</td>
<td>16%</td>
<td>11%</td>
<td>9%</td>
<td>27%</td>
</tr>
<tr>
<td>East Cascades</td>
<td>49%</td>
<td>11%</td>
<td>6%</td>
<td>3%</td>
<td>32%</td>
</tr>
<tr>
<td>Mid-Valley</td>
<td>47%</td>
<td>11%</td>
<td>14%</td>
<td>8%</td>
<td>19%</td>
</tr>
<tr>
<td>Northwest Oregon</td>
<td>45%</td>
<td>16%</td>
<td>7%</td>
<td>4%</td>
<td>29%</td>
</tr>
<tr>
<td>Eastern Oregon</td>
<td>44%</td>
<td>8%</td>
<td>7%</td>
<td>3%</td>
<td>38%</td>
</tr>
<tr>
<td>Lane</td>
<td>41%</td>
<td>25%</td>
<td>10%</td>
<td>2%</td>
<td>22%</td>
</tr>
<tr>
<td>Clackamas</td>
<td>39%</td>
<td>18%</td>
<td>15%</td>
<td>6%</td>
<td>23%</td>
</tr>
<tr>
<td>Southwestern Oregon</td>
<td>38%</td>
<td>15%</td>
<td>7%</td>
<td>2%</td>
<td>38%</td>
</tr>
<tr>
<td>Portland Metro</td>
<td>33%</td>
<td>16%</td>
<td>11%</td>
<td>13%</td>
<td>27%</td>
</tr>
<tr>
<td>Rogue Valley</td>
<td>26%</td>
<td>20%</td>
<td>11%</td>
<td>4%</td>
<td>39%</td>
</tr>
</tbody>
</table>

0% 100%  Share of Difficult-to-Fill Vacancies
They had a slightly greater share of difficult-to-fill vacancies with low wages, which were generally for job openings near minimum wage with no education beyond high school.

Much like Multnomah and Washington counties, the 3,100 hard-to-fill vacancies in neighboring Clackamas County also generally mirrored Oregon’s. Clackamas businesses did report a slightly greater share of job openings with unfavorable working conditions (15%). Occupations with the largest number of challenging job vacancies included carpenters, personal care aides, nursing assistants, production workers, truck drivers, and restaurant cooks.

Employers in the combined Mid-Willamette Valley area reported 4,900 difficult-to-fill vacancies. Businesses noted difficulty filling a diverse set of occupations: those with the largest numbers included personal care aides; counter and rental clerks; customer service representatives; supervisors of food preparation workers; construction laborers; and nursing assistants. A lack of applicants topped the list of reasons for difficulty at 47 percent. The Mid-Valley also reported a slightly lower share of vacancies with a lack of qualified candidates (11%), and a slightly larger share of job openings with unfavorable working conditions (15%).

Lane County reported the largest share of difficult-to-fill with a lack of qualified candidates (25%) of any area in the state. Among the region’s 1,800 difficult-to-fill job openings, the top occupations included truck drivers, personal care aides, nursing assistants, retail salespersons, construction laborers, and electricians.

Businesses in the 10-county swath of Central Oregon offered the highest average hourly wage ($19.34) for difficult-to-fill vacancies. Central Oregon reported slightly lower shares of permanent vacancies, and a relatively small portion required education beyond high school. The region’s average wage for hard-to-fill occupations was driven up in part by large numbers of vacancies in the trades, such as plumbers and electricians. Other occupations with many difficult-to-fill vacancies in Central Oregon included food preparation workers; crop, nursery, and greenhouse farmworkers; customer service representatives; truck drivers; and construction laborers.

More than half (58%) of difficult-to-fill vacancies in Northwest Oregon occurred in health care, leisure and hospitality, or retail trade. Area businesses reported a slightly higher share of difficult-to-fill vacancies with a lack of applicants (45%). The bulk of these vacancies were for maids, personal care aides, plumbers, food preparation workers, and janitors.

Addressing Difficult-to-Fill Vacancies

The share of difficult-to-fill vacancies in Oregon rose from 48 percent in 2013 to 51 percent in 2014, 59 percent in 2015, and again to 64 percent in 2016. In an economy essentially at full employment and still expanding, businesses can anticipate a tight labor market will persist. That means continued or even increasing difficulty filling vacancies, given no changes in economic conditions or vacancy factors such as work experience requirements.

The state’s difficult-to-fill job vacancies in 2016 did not mirror the overall mix of jobs in Oregon’s economy. Difficult-to-fill job vacancies offered an average hourly wage of $17.81 compared with $23.48 for all private jobs. In addition, a smaller share of hard-to-fill job vacancies in 2016 required education beyond high school (22%)...
compared with all jobs in 2014 (37%), the latest year with available data.

Oregon’s businesses always have some number of vacancies, and some portion of those would likely be difficult to fill at any given point in time regardless of the economic situation. Even with historically low unemployment, the question arises as to whether some business difficulty filling vacancies could be eased through training, certification, or workforce program assistance for those who are seeking work.

**Difficulty Likely to Persist**

Among the reasons to expect continued challenges for businesses: six out of 10 difficult-to-fill vacancies generally cannot be addressed through education or workforce training programs. These include vacancies with a lack of applicants, unfavorable working conditions, and low wages. They also include vacancies that pose challenges due to the job location or an employer’s need to find a candidate whose personality is just the “right fit” for the job.

A lack of applicants was the largest reason for difficulty filling vacancies in 2016, and accounted for 12,100 (38%) of the total. As the economic expansion has matured, more employer responses across many sectors have cited competition, a smaller labor pool, or a smaller number of job seekers. Low unemployment has contributed to a lack of applicants for job openings.

Training programs generally have little to no impact on a job’s working conditions or wages offered by employers. Together these two reasons accounted for 6,300 (20%) difficult-to-fill vacancies in Oregon. Unfavorable working conditions varied from physical job requirements to schedule consistency or other challenging aspects of a job. Businesses cited “challenging work” and the “need to be able to carry heavy equipment” and “bad conditions, very seasonal, bad shifts, little respect” as some examples of conditions for hard-to-fill job openings. Many businesses also noted vacancies were for weekends, overnight, or reduced schedules (24 or 30 hours per week), and applicants preferred full-time work.

Low wages might be considered a different type of unfavorable or less favorable working condition. In the health care sector, some care centers cited an inability to pay comparable wages to hospitals as a challenge recruiting and retaining workers. Other types of businesses straightforwardly noted “people want more money”, “people leave for more money”, or “the budgeted pay scale for this job may be too low.”

In recent years businesses have also started to cite difficulty finding someone who’s the “right fit” for a specific job at their company. Seemingly there could be some skills or training to meet this need. However, many business comments for these 550 job vacancies emphasized the company’s culture and “specific criteria” including finding candidates with just the right personal-

##### Business Responses for Lack of Applicants

“Everyone is looking for help.”

“Demand is greater than supply [of workers]”

“Competition from other companies”

“Few applicants; shortage”

“Manual labor jobs aren’t popular.”

“Low availability in geographic area”

##### A Lack of (Uniquely) Qualified Candidates

Workforce training programs and education may or may not be able to alleviate difficulty filling vacancies with a lack of qualified candidates. Businesses reported nearly 5,000 vacancies with a lack of qualified candidates in 2016. Some cited a mix of education, skills, and experience that could be attained through education or training.

Others referenced “very specific qualifications” or “unique experience” for one job at their company, or specialized knowledge within a particular occupation and specific setting. As with businesses that needed a candidate who’s just the “right fit” for a vacancy, the rare or unique position requirements pose challenges unlikely to be obtained through a general field of study or course of training.

##### (Experienced) Help Wanted

A lack of work experience was the primary reason behind 2,300 (7%) difficult-to-fill vacancies. Businesses across Oregon reported more than 100 vacancies with a lack of work experience for five occupations in 2016: restaurant cooks (430), rehabilitation counselors (190), security guards (150), loan officers (130), and construction laborers (120).
One-third (35%) of the hard-to-fill restaurant cook vacancies described a lack of work experience as the primary challenge in filling a job opening. Most of these business responses generally identified a lack of work experience, rather than a specific type of experience needed. Most difficult-to-fill vacancies for cooks required between one and five years of experience; about 120 of them required less than one year of experience.

Nearly all difficult-to-fill job openings for rehabilitation counselors required less than one year of experience, most with specific types of settings or populations. Meanwhile nearly all challenging security guard and construction laborer vacancies indicated between one and five years of prior work experience were needed. These employers generally referenced a lack of work experience or experienced applicants.

All but a few loan officer vacancies with a lack of work experience requested at least five years on the job. All businesses responses cited a general need for experience in the position, but no specific set of skills or knowledge.

Beyond these top occupations, many employer responses for various difficult-to-fill job openings with a lack of work experience showed similarities to responses with an identified lack of qualified candidates. Businesses noted a lack of work experience specific to their type of firm, facility, or setting as often than the need for general work experience. Examples include medical and health services managers with one to five years of experience specifically in a psychiatric unit, and managers with at least one year of experience in agriculture with particular industry experience. Again, a small number of highly focused vacancies may pose a tougher challenge in terms of education and training to meet employer needs.

There may be some room for programs to help workers gain experience with the employers who need familiarity in their specific environment or role. Those employers would likely need to partner in training in order to develop their pipeline of workers.

**Help Through Workforce and Training Programs**

Some employer-provided reasons for difficulty filling vacancies – such as a lack of certification, training, or soft skills – could merit new or strengthened workforce training, educational programs, or other intervention. About one out of 10 (11% or 3,400 total) difficult-to-fill vacancies in 2016 fell into these categories.

The most prominent of these reasons was a lack of soft skills, which accounted for 6 percent (1,900) of difficult-to-fill vacancies statewide. Examples of business hiring challenges in this area included a lack of work ethic, a lack of trustworthiness, or the inability to pass a drug test. Six occupations reported at least 100 difficult-to-fill vacancies unfilled due to a lack of soft skills: truck drivers (180); retail salespersons (140); restaurant cooks (130); cashiers (110); personal care aides (110); and automotive and watercraft service attendants (100).

A lack of certification was the primary reason responded for almost 900 difficult-to-fill vacancies in 2016. Businesses reported at least 100 difficult-to-fill vacancies due to a lack of certification in two occupations: accountants and auditors (240); and pest control workers (190). Businesses primarily cited the lack of applicants with proper, mandatory licenses for these vacancies. Other examples of certification needs cited by businesses included commercial drivers’ licenses, a lack of certified tradespeople, and other general references to a lack of certified applicants.

One occupation, customer service representatives, accounted for 125 of the nearly 600 difficult-to-fill vacancies due to a lack of technical skills (such as collections, phone, and office). All reports of difficulty filling vacancies due to a lack of training totaled 130 job openings. The top occupation in this category was nurse midwives.

**Hiring Difficulty, Economic Conditions, and Expectations**

Oregon businesses reported vacancies in 394 occupations in 2016, and various challenges filling vacancies in a total of 331 different occupations. At every level of educational requirement, and for 10 of 14 industry sectors, a lack of applicants showed to be the most prominent reason for difficulty filling job openings. Employers had at least one difficult-to-fill vacancy with a lack of applicants in 176 different occupations. Given almost record
lows in unemployment and rates of job growth not seen since the 1990s, businesses faced more competition – and difficulty – finding workers to fill job vacancies in 2016.

In a mature economic expansion, additional requirements and expectations for job openings narrow an already relatively small labor pool. For 30 of the 40 top difficult-to-fill occupations, businesses faced greater challenges filling job openings with required experience than vacancies with no experience requirements. While some knowledge and skills necessary for jobs undoubtedly require previous experience, that filter reduced the number of applicants for job openings.

As Oregon reaches full employment and continues adding jobs, businesses can expect the labor market to remain tight. That means continuing or even more difficulty filling vacancies, given no changes in economic conditions or vacancy factors such as work experience requirements, wages, or other work conditions or benefits.

More information about Oregon’s job vacancies, including quarterly and annual indicators for Oregon and sub-state areas, can be found at QualityInfo.org under the Job Vacancy Survey section of the Publications page.
Appendix A
Reasons for Difficulty Filling Vacancies: Definitions and Illustrative Examples

Categorized Reasons for Difficulty Filling Job Vacancies with Illustrative Examples from Business Survey Responses

**Lack of applicants:** too few or no applicants for a vacancy
- Demand is greater than supply
- Everyone is looking for help
- Not many applicants
- No applicants
- Shortage of workers

**Lack of qualified candidates:** lacking necessary education or specific job requirements
- No well-qualified applicants
- Position with specific industry knowledge needed
- Requires very specific skills sets based on each practice within the firm
- Specialized experience in materials engineering with plastic films
- Unique experience

**Unfavorable working conditions:** inconsistent or part-time shifts, physical job demands
- Hard work; physical job, standing for long periods of time
- Night on-call shift
- No guarantee of hours
- Seasonal, part-time position
- The work is too hard for most applicants

**Low wages:** low pay for job requirements or market conditions
- Budgeted pay scale may be too low
- Job requirements are often hard to find for the hourly wage
- Low rate of pay
- Low-wage jobs are difficult to fill
- People want more money

**Lack of work experience:** previous experience required
- Can't find anyone with experience
- Finding someone with experience to limit training
- Lack of diverse maintenance experience
- Requires extensive construction experience
- Those that have experience are already employed

**Lack of soft skills:** communication, interpersonal, or social norms for job
- Attention to detail
- Few trustworthy applicants
- Must pass background check and drug screen
- Unable to pass drug test

**Other:** miscellaneous; not able to be categorized elsewhere
- No affordable housing in our community
- Obscure industry
- New recruitment
- Union
- Good help is hard to find

**Lack of certification:** applicants lack necessary license or certification
- Insurance certification required
- No applicants with pesticide license
- Not enough licensed people
- Plumber needs to be licensed

**Location:** the geographic area of the job
- Can't compete with Eugene, Portland; not enough
- Location of office in small rural town
- Location/transportation
- Remote from cities
- Rural location; few applicants

**Lack of technical skills:** measureable or tangible abilities or knowledge used on the job
- Engineer tech and management skills
- Few with needed skills
- Lack of technical skills
- New technology
- Unskilled applicants

**Right fit:** specific personality or personal qualities
- Blend of personality and skill set
- Difficult to find the right fit
- Experience and team fit
- Not a “fit” for company
- Want the right person

**Lack of training:** few or no educational or vocational programs related to the job
- Lack of training
- Lack of vocationally trained candidates
- No school in area
- There are no schools that have this program
- Very steep learning curve and no local training programs
Appendix B
Oregon Job Vacancy Survey

Dear Oregon Employer:

Oregon added jobs at a rapid pace in 2015. This job growth is great for Oregonians seeking new or better jobs. But it’s making life more and more difficult for businesses, as they search for workers with the right education and skills.

Oregon’s workforce, training, and education systems want to help Oregonians get the skills they need to be gainfully employed. And we want to help you find the skilled and reliable workers you need.

In order to do that, we need to fully understand the job vacancies that exist in our state and the reasons you’re having trouble filling those vacancies. So please take a few minutes to provide us with the survey information requested.

Thank you for your help!

Graham Slater,
Research Director
Workforce & Economic Research
Oregon Employment Department

If you have questions about the survey, please contact survey staff at (855) 710-5500 or OED_SURVEYS@OREGON.GOV.

Oregon Employment Department
Workforce & Economic Research
875 Union Street NE
Salem, Oregon 97311
www.QualityInfo.org

Contact Information (please print)
Name: ________________________________
Telephone: ____________________________
Email: _________________________________

Thank You for Participating!

Oregon Job Vacancy Survey

Your Survey ID is: <<SurveyID>>
<<MName>>
<<Attn>>
<<MAddress1>>
<<MAddress2>>
<<MCity>> <<MState>> <<MZip>>

Oregon Job Vacancies


Please report for the location(s) listed on the address label

1. Approximately how many workers do you currently have at this location? ________

2. Do you currently have job vacancies at this location? (Circle one) YES NO

If YES, please continue inside and complete the survey
If NO, STOP HERE and please return the survey
## CURRENT JOB VACANCIES

**JOB TITLES OF VACANT POSITIONS**

Reply online at <<ONLINE_URL>>

- List positions for which you are actively recruiting.
- Include full time, part time, seasonal, temporary, and permanent positions.
- Exclude consultants, outside contractors, and others not considered employees.
- Include only vacancies for locations within Oregon.

Enter number of openings for each position.

Enter one of the following codes:

1. <30 days
2. 30-59 days
3. 60+ days
4. Always Open

If there are multiple openings, report for the oldest one.

Please indicate the previous experience, if any, required for this position.

Enter one of the following codes:

1. None
2. High school diploma or equivalent
3. Postsecondary training
4. Associate’s degree
5. Bachelor’s degree
6. Graduate degree
7. Other (please specify)

Please indicate if monthly, hourly, or annual.

If part time, enter hourly wages only.

Enter actual wage or wage range.

Is this vacancy for a seasonal or temporary position?

Please indicate with a check mark.

Is this position difficult to fill?

Please indicate with a check mark.

If the position has been difficult to fill, please briefly describe the most important reason why.

### FULL TIME

**Example: Registered Nurse**

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<th>LENGTH OF TIME JOB HAS BEEN OPEN</th>
<th>PREVIOUS EXPERIENCE REQUIRED</th>
<th>EDUCATION LEVEL REQUIRED</th>
<th>STARTING WAGE OR SALARY</th>
<th>SEASONAL OR TEMPORARY</th>
<th>DIFFICULT-TO-FILL POSITIONS</th>
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**PART TIME**

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If more space is needed, please contact us for another copy or make a photocopy of this page.

Questions? Contact our surveys team at: (855) 710-5500, (503) 947-1884; Fax: (503) 947-1210; E-mail: OED_SURVEYS@OREGON.GOV

Oregon Employment Department; 875 Union Street NE Salem, OR 97311-0024

January 2016

Your Survey ID is: <<SurveyID>>