Docket Item:

Oregon Employment Department, Workforce and Economic Research Division

Strategic Plan Goals:

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

GOAL 1: Customer Centric
Create a customer-centric workforce system that is easy to access, highly effective, and simple to understand.

GOAL 2: Customized Solutions
Provide business and industry customized workforce solutions to prepare and deliver qualified and viable candidates and advance current workers.

GOAL 3: Career Momentum
Invest in Oregonians to build in-demand skills, match training and job seekers to opportunities, and accelerate career momentum.

GOAL 4: Engage Youth
Create and develop talent by providing young young people with information and experiences that engage their interest, spur further career development, and connect to Oregon employers.

Summary:

At the September and December 2018 WTDB meetings discussions took place amongst board members around the relevancy of the current High-Wage Definition in Oregon. There was a collective sense that it should be a priority item for the board and that
additional information on the High-Wage Definition should be provided to members for further review and discussion.

As follow up to these meetings, staff from the Workforce & Economic Research Division of the Employment Department will be presenting on this topic. The expectation is that this presentation will provide, in part, substantive information to assist board members in determining whether or not to formally make a recommendation to the Governor’s Office to revise how Oregon defines and calculates High-Wage Occupations.

As a reminder, the Workforce & Economic Research Division division is charged with collecting, analyzing and sharing information that describes the state’s current economic situation, the diversity and health of the economy and the immediate and long-term trends impacting employment, wages and the labor workforce in Oregon.

This division provides information that includes:

- Unemployment rates
- Job growth or loss estimates
- Wage and occupational data
- Long-term employment trends
- Customized business survey results
- Educational requirements for Oregon's jobs
- Income trends
- Job vacancy reports

**Docket Material:**

Power Point Presentation

**Staff Recommendation:**

Staff recommends to move this topic, information presented, and insight captured from the workgroup sessions to the WTDB Executive Committee for further review, strategic discussion, and a potential formal recommendation to the Governor’s Office.
Job Vacancies Update & What’s a High-Wage Job?

Nick Beleiciks, State Employment Economist

March 8, 2019
Presentation to the Workforce and Talent Development Board
There are a lot of unfilled job vacancies.

Oregon Job Vacancies, Fall 2018

- Vacancies: 60,508
- Average Hourly Wage: $18.77
- Full-time Positions: 79%
- Permanent Positions: 85%
- Requiring Education Beyond High School: 35%
- Requiring Previous Experience: 58%
- Difficult to Fill: 55%

The fall vacancy total declined slightly (-5%) compared with summer 2018, and rose by 11 percent compared with fall 2017.

A typical job vacancy tends to be for a full-time, permanent position.
By Industry – health care didn’t top the list.

Oregon Job Vacancies by Industry, Fall 2018

<table>
<thead>
<tr>
<th>Industry</th>
<th>Vacancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industries</td>
<td>60,508</td>
</tr>
<tr>
<td>Leisure and hospitality</td>
<td>8,799</td>
</tr>
<tr>
<td>Construction</td>
<td>7,513</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>7,076</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6,543</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>6,319</td>
</tr>
<tr>
<td>Retail trade</td>
<td>4,818</td>
</tr>
<tr>
<td>Management, administrative, and waste services</td>
<td>3,407</td>
</tr>
<tr>
<td>Other services</td>
<td>3,382</td>
</tr>
<tr>
<td>Financial activities</td>
<td>3,162</td>
</tr>
<tr>
<td>Transportation, warehousing, and utilities</td>
<td>2,438</td>
</tr>
<tr>
<td>Information</td>
<td>1,987</td>
</tr>
<tr>
<td>Natural resources and mining</td>
<td>1,806</td>
</tr>
<tr>
<td>Professional, scientific, and technical services</td>
<td>1,668</td>
</tr>
<tr>
<td>Private education services</td>
<td>1,590</td>
</tr>
</tbody>
</table>

- First time that health care did not top the list of industries by total number of vacancies. Will this last?
- Leisure and hospitality - restaurants and ski areas reported strong seasonal hiring.
- Construction - vacancies bounced back after two relatively weak quarters in the vacancy survey data.
The occupations with the largest number of vacancies included:

- Truck drivers
- Retail salespersons
- Personal care aides
- Combined food and prep workers
- Cashiers
- Wholesale and retail buyers
Offering starting wages averaged $18.77 per hour.

- Job vacancies rose across all three wage categories.
- Largest rate of growth in job vacancies with starting wages between $15 and $25 (+24%).

### Oregon Job Vacancies by Hourly Wage Range

<table>
<thead>
<tr>
<th>Wage (per hour)</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Wage Ranges</td>
<td>54,329</td>
<td>60,508</td>
</tr>
<tr>
<td>Less than $15</td>
<td>22,533</td>
<td>25,436</td>
</tr>
<tr>
<td>$15 through $24.99</td>
<td>13,142</td>
<td>16,292</td>
</tr>
<tr>
<td>$25 and up</td>
<td>8,118</td>
<td>8,528</td>
</tr>
</tbody>
</table>

*unknown excluded*
Businesses in both Clackamas and the East Cascades reported relatively strong seasonal hiring in leisure and hospitality.

### Oregon Job Vacancies by Region, Fall 2018

<table>
<thead>
<tr>
<th>Region</th>
<th>Vacancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon Statewide</td>
<td>60,508</td>
</tr>
<tr>
<td>Portland Metro</td>
<td>12,906</td>
</tr>
<tr>
<td>Clackamas</td>
<td>10,282</td>
</tr>
<tr>
<td>Central Oregon/East Cascades</td>
<td>6,980</td>
</tr>
<tr>
<td>Lane</td>
<td>6,405</td>
</tr>
<tr>
<td>Mid-Valley</td>
<td>6,236</td>
</tr>
<tr>
<td>Rogue Valley</td>
<td>6,055</td>
</tr>
<tr>
<td>Northwest Oregon</td>
<td>2,657</td>
</tr>
<tr>
<td>Eastern Oregon</td>
<td>2,467</td>
</tr>
<tr>
<td>Southwestern Oregon</td>
<td>2,193</td>
</tr>
</tbody>
</table>

*multi-area or unknown excluded*
What’s A High-Wage Job?
Tools For Describing Occupational Wages

• Wage distributions for 755 occupations, statewide.
• Wage distributions for all nine local workforce areas.
  – Available for fewer occupations at the local level.
• Percentiles: 10\(^{th}\), 25\(^{th}\), 50\(^{th}\) (median), 75\(^{th}\), 90\(^{th}\)
• Averages.
• Based on survey of employers.
  – Oregon has one of the best response rates in the nation!
## Wage Distribution for All Occupations

<table>
<thead>
<tr>
<th>Workforce Region</th>
<th>10th Percentile</th>
<th>25th Percentile</th>
<th>50th Percentile (Median)</th>
<th>75th Percentile</th>
<th>90th Percentile</th>
<th>Mean (Average)</th>
<th>2018 Annual Mean FTE (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon Statewide</td>
<td>$11.41</td>
<td>$13.18</td>
<td>$19.09</td>
<td>$30.32</td>
<td>$46.78</td>
<td>$25.18</td>
<td>$52,380</td>
</tr>
<tr>
<td>Clackamas</td>
<td>$12.29</td>
<td>$13.67</td>
<td>$19.88</td>
<td>$30.47</td>
<td>$47.44</td>
<td>$25.88</td>
<td>$53,826</td>
</tr>
<tr>
<td>East Cascades</td>
<td>$11.31</td>
<td>$12.53</td>
<td>$17.33</td>
<td>$25.70</td>
<td>$39.35</td>
<td>$22.15</td>
<td>$46,074</td>
</tr>
<tr>
<td>Eastern Oregon</td>
<td>$11.22</td>
<td>$12.20</td>
<td>$16.36</td>
<td>$24.07</td>
<td>$34.61</td>
<td>$20.27</td>
<td>$42,143</td>
</tr>
<tr>
<td>Lane</td>
<td>$11.45</td>
<td>$12.51</td>
<td>$17.80</td>
<td>$27.04</td>
<td>$40.19</td>
<td>$22.88</td>
<td>$47,587</td>
</tr>
<tr>
<td>Mid-Valley</td>
<td>$11.48</td>
<td>$12.62</td>
<td>$18.18</td>
<td>$27.86</td>
<td>$41.14</td>
<td>$23.18</td>
<td>$48,220</td>
</tr>
<tr>
<td>Northwest Oregon</td>
<td>$11.40</td>
<td>$12.31</td>
<td>$17.35</td>
<td>$26.67</td>
<td>$41.32</td>
<td>$22.74</td>
<td>$47,290</td>
</tr>
<tr>
<td>Portland-Metro</td>
<td>$12.31</td>
<td>$14.35</td>
<td>$21.70</td>
<td>$35.38</td>
<td>$52.82</td>
<td>$28.39</td>
<td>$59,054</td>
</tr>
<tr>
<td>Rogue Valley</td>
<td>$11.41</td>
<td>$12.26</td>
<td>$16.43</td>
<td>$24.22</td>
<td>$37.70</td>
<td>$21.38</td>
<td>$44,474</td>
</tr>
<tr>
<td>Southwestern Oregon</td>
<td>$11.17</td>
<td>$12.08</td>
<td>$16.53</td>
<td>$23.80</td>
<td>$34.93</td>
<td>$20.63</td>
<td>$42,914</td>
</tr>
</tbody>
</table>

Source: Oregon Employment Department, Oregon Wage Information 2018
“Above Median” to Describe High-Wage Occupations

• We’re not required to use the median for high wage.
  – Any amount could be used.
• Using “above median” for high-wage occupations lists since 2007.
  – Oregon Workforce Investment Board
  – Department of Education Professional Technical staff
• Easy to understand, explain, and measure.
• Broad. Using the median sets some parameters.
Nick Beleiciks, State Employment Economist

Nick.J.Beleiciks@Oregon.gov
503-947-1267

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Join the conversation:
OregonEmployment.Blogspot.com
Twitter @OED_Research
Docket Item:

High-Wage and Benefits/Compensation Discussion
Workgroups and Report Outs

Strategic Plan Goals:

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

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Create and develop talent by providing young people with information and experiences that engage their interests, spur further career development, and connect to Oregon employers.

Summary:

At the September and December 2018 WTDB meetings discussions took place amongst board members around the relevancy of the current High-Wage Definition in Oregon. There was a collective sense that it should be a priority item for the board and that additional information on the High-Wage Definition should be provided to members for
further review and discussion. Other resources were recommended by board leadership as useful information to consider in discussions around this work.

WTDB staff and key board leadership determined that the purpose of this agenda item is for board members to form workgroups and review some related, relevant resources. Workgroups will then discuss opportunities, issues and potential solutions pertaining to the definition of high-wage jobs and worker compensation in Oregon. Groups will report out on what they have learned to the larger board. WTDB member, Portland Business Journal 2018 Executive of the Year, and Executive Director of Dress for Success, Shari Dunn will lead this session.

Docket Material:

The Asset Limited, Income Constrained, Employed (ALICE) - Report Executive Summary
The Caring Company
HR’s New Challenge: Whole Family Care

Staff Recommendation:

Staff again recommends that this topic, information presented, and insight captured from the workgroup sessions be moved to the WTDB Executive Committee. The committee will review the information further and strategize on a formal recommendation to the Governor’s Office.
THE UNITED WAYS OF OREGON

Greater Douglas United Way
Jefferson County United Way
Tillamook County United Way
United Way of Benton & Lincoln Counties
United Way of Clatsop County
United Way of Columbia County
United Way of Deschutes County
United Way of Eastern Oregon
United Way of Jackson County
United Way of Lane County
United Way of Linn County
United Way of Southwestern Oregon
United Way of the Columbia Gorge
United Way of the Columbia-Willamette
United Way of the Klamath Basin
United Way of the Mid-Willamette Valley
United Way of Umatilla and Morrow Counties

Note: In addition to the corporate sponsorships, this Report was made possible by the United Ways noted above in bold.

Learn more here: https://www.uwpnw.org/alice_in_pnw

NATIONAL ALICE ADVISORY COUNCIL

The following companies are major funders and supporters of the United Way ALICE Project.

Aetna Foundation  ■  AT&T  ■  Atlantic Health System  ■  Deloitte  ■  Entergy
Johnson & Johnson  ■  KeyBank  ■  Novartis Pharmaceuticals Corporation  ■  OneMain Financial
RWJBarnabas Health  ■  Thrivent Financial Foundation  ■  Union Bank & Trust  ■  UPS  ■  U.S. Venture

Erratum note: In the original publication of the 2018 United Way ALICE Report for Oregon, the cost of a car was erroneously used instead of the cost of public transportation in calculating the Household Survival Budget for Multnomah County. This revised Report now reflects the accurate budget and ALICE demographics. We apologize for any confusion or inconvenience.
LETTER TO THE COMMUNITY

Dear Pacific Northwesterners,

Just three years ago, our region was first introduced to a population that many of us were aware of, if not part of: ALICE. ALICE households work hard, sometimes in two or three jobs, but still cannot afford to make ends meet. The first United Way ALICE Report helped identify and highlight the struggles of ALICE in the Pacific Northwest. But awareness is only the first step. We need to do more to help ALICE families achieve financial stability, which in turn strengthens our communities.

However, this won’t be an easy task. This Report shows that the percentage of people who are ALICE or living in poverty in the Pacific Northwest has increased in the past few years: up to 41 percent in Oregon, 40 percent in Idaho, and 37 percent in Washington. The truth is, nobody in these three states should be that surprised. Most of us, especially those living in urban areas, see people on a daily basis huddled in doorways or living in encampments under the freeways, and it’s hard not to notice the longer lines at local food banks. Yet what we see is just the tip of the iceberg. As this report shows, there are hundreds of thousands more who are one unexpected expense away from losing their home, or not being able to pay for heat, for food, or medical bills.

As upsetting as it is to see ALICE in front of us in our daily lives, in greater and greater numbers, I’m also hopeful that these experiences – backed up by the data in this Report – will motivate more of us to take action.

We must do more. And many of us have. Nonprofit organizations have been using these ALICE reports to help tell their stories and to get funding for programs that can positively impact this population. We have made strides in improving access to early education and reducing the burden of health care costs, which translates into improved situations for ALICE. Thanks to the Report, our member United Ways are more relevant in the conversation to end poverty. In fact, several have been appointed to serve on state or local government task forces, where they are in a position to influence policy.

Significant changes in our region are also a sign of hope; our cities are growing, communities are building, medium to large businesses are growing, and all these changes create jobs. We have also seen an increase in minimum wage in two of the three states. But as this report demonstrates, this progress hasn’t kept pace with the rising cost of the average household budget.

We have to do more. Whether as individuals or as part of an organization or government agency, we all need to figure out what part we can play. There are many ways to help, such as engaging with United Ways, volunteering with your faith community, working at a food bank, writing letters to your local, state, and federal legislators, or simply becoming more engaged and involved in your own neighborhood.

I hope that you’ll join me in rolling up our sleeves to get some work done to improve life for the people and communities of the Pacific Northwest.

Sincerely,

Jim Cooper, President & CEO, United Way of Pacific Northwest
THE UNITED WAY ALICE PROJECT

The United Way ALICE Project provides a framework, language, and tools to measure and understand the struggles of a population called ALICE – an acronym for Asset Limited, Income Constrained, Employed. ALICE the growing number of households in our communities that do not earn enough to afford basic necessities. This research initiative partners with state United Way organizations to present data that can stimulate meaningful discussion, attract new partners, and ultimately inform strategies for positive change.

Based on the overwhelming success of this research in identifying and articulating the needs of this vulnerable population, the United Way ALICE Project has grown from a pilot in Morris County, New Jersey in 2009, to the entire state of New Jersey in 2012, and now to the national level with 18 states participating. The Pacific Northwest United Ways are proud to join the more than 540 United Ways in these states that are working to better understand ALICE’s struggles. Organizations across the country are also using this data to address the challenges and needs of their employees, customers, and communities. The result is that ALICE is rapidly becoming part of the common vernacular, appearing in the media and in public forums discussing financial hardship in communities nationwide.

Together, United Ways, government agencies, nonprofits, and corporations have the opportunity to evaluate current initiatives and discover innovative approaches that give ALICE a voice, and create changes that improve life for ALICE and the wider community.

To access reports from all states, visit UnitedWayALICE.org

States With United Way ALICE Reports
THE ALICE RESEARCH TEAM

The United Way ALICE Project provides high-quality, research-based information to foster a better understanding of who is struggling in our communities. To produce the United Way ALICE Report for the Pacific Northwest, a team of researchers collaborated with a Research Advisory Committee, composed of 14 representatives from across the Pacific Northwest, who advised and contributed to the Report. This collaborative model, practiced in each state, ensures each Report presents unbiased data that is replicable, easily updated on a regular basis, and sensitive to local context. Working closely with United Ways, the United Way ALICE Project seeks to equip communities with information to create innovative solutions.

Lead Researcher

Stephanie Hoopes, Ph.D. is the lead researcher and director of the United Way ALICE Project. Dr. Hoopes began this effort with a pilot study of a more accurate way to measure financial hardship in Morris County, New Jersey in 2009. Since then, she has overseen its expansion into a broad-based, state-by-state research initiative now spanning 18 states across the country. Her research on the ALICE population has garnered both state and national media attention.

Before joining United Way full time in 2015, Dr. Hoopes taught at Rutgers University and Columbia University. Dr. Hoopes has a doctorate from the London School of Economics, a master’s degree from the University of North Carolina at Chapel Hill, and a bachelor’s degree from Wellesley College.

Dr. Hoopes is on the board of directors of the McGraw-Hill Federal Credit Union, and she received a resolution from the New Jersey Assembly for her work on ALICE in 2016.

Research Support Team

Andrew Abrahamson  Madeline Leonard  Dan Treglia, Ph.D.

ALICE Research Advisory Committee for the Pacific Northwest

Fred Abousleman, M.P.A.  Larry Geri, M.P.A.  Alivia Metts, B.S.
Oregon Cascades West Council of Governments  The Evergreen State College, Master of Public Administration Program  The Metts Group
Charity Bergman  Patrick Jones, Ph.D.  Ali Modarres, Ph.D.
United Way of North Central Washington  Eastern Washington University, Institute for Public Policy & Economic Analysis  University of Washington, Tacoma, Urban Studies
Mark Edwards, Ph.D.  Kim Matson  Will Summers, B.S.
Oregon State University, School of Public Policy  Idaho Department of Health and Welfare  Oregon Employment Department
Katie Fitzpatrick, Ph.D.  Jennifer McKinney, Ph.D.  Kathryn Tacke, M.A.
Seattle University, Albers School of Business and Economics  Seattle Pacific University, Sociology Department  Idaho Department of Labor

Aimee White, M.Ed.
Custom Evaluation Services
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EXECUTIVE SUMMARY

In Oregon, 639,102 households – 41 percent – could not afford basic needs such as housing, child care, food, health care, and transportation in 2016.

This update of the United Way ALICE Report for Oregon provides the most comprehensive look at the population called ALICE – an acronym for Asset Limited, Income Constrained, Employed. ALICE households have incomes above the Federal Poverty Level (FPL) but struggle to afford basic household necessities.

The Report describes the cost of basic needs for each county in Oregon, as well as the number of households earning below this amount – the ALICE Threshold – and focuses on how households have fared since the Great Recession ended in 2010.

Despite overall improvement in employment and gains in median incomes, the economic recovery in Oregon has been uneven. Many ALICE families continue to face challenges from low wages, reduced work hours, depleted savings, and increasing costs. For the many families who earned just above the ALICE Threshold in the past, the increases in the cost of living have pushed them below the Threshold and into financial hardship. In fact, the total number of Oregon households that cannot afford basic needs increased 16 percent from 2010 to 2016.

This report focuses on trends in Oregon that led to more families becoming unable to make ends meet. Key findings include:

- **Households continue to struggle**: Of Oregon’s 1,571,301 households, 13 percent lived in poverty in 2016 and another 28 percent were ALICE. Combined, 41 percent (639,102 households) had income below the ALICE Threshold, an increase of 16 percent since 2010.

- **Basic cost of living still on the rise**: The cost of basic household expenses increased steadily in Oregon to $62,484 for a family of four (two adults with one infant and one preschooler) and $21,384 for a single adult, significantly higher than the 2016 FPL of $24,300 for a family and $11,880 for a single adult. The cost of the family budget increased by 34 percent from 2010 to 2016, much higher than the 9 percent national rate of inflation during that time period.

- **Changes in the workforce**: Although unemployment rates are falling, ALICE workers are still struggling. Low-wage jobs dominate the landscape, with 58 percent of all jobs paying less than $20 per hour, while an increase in contract jobs and on-demand jobs has created less stability. Gaps in wages persist and vary based on the type of employer as well as the gender, education, race, and ethnicity of workers.

- **Emerging trends**: Several trends could change the economic landscape for ALICE families:
  - *The changing American household* – The aging of baby boomers; the millennials, who are making different lifestyle and work choices than previous generations; and the shifting patterns of domestic and foreign migration are all changing the household composition. These trends change demands for goods and services, and will have the biggest impact on the infrastructure and on caring for the elderly.
  
  - *Market instability* – A globally connected economy means that economic disruptions and natural disasters in one part of the world will increasingly have an impact on ALICE workers in the U.S., contributing to employment instability, shifting supply and demand, and disruption in traditional modes of operation.

  - *Health inequality* – As advances in medical care outpace the ability of many households to afford them, there will be increasing disparities in health and longevity based on income.

The United Way ALICE Report for Oregon offers an enhanced set of tools for stakeholders to measure the real challenges ALICE households face in trying to make ends meet. This information is presented to enable communities to move beyond stereotypes of “the poor” and an outdated FPL, and instead use unbiased data to inform programmatic and policy solutions for ALICE and communities, now and for the future.
A new approach, based on innovative principles used in healthcare, can help companies lower turnover and boost productivity.

by Keith Fengler, Joseph Fuller, and Scott Olsen

On Mother’s Day 2016, Sheryl Sandberg, COO of Facebook and author of *Lean In*, wrote a notable Facebook post: “I did not really get how hard it is to succeed at work when you are overwhelmed at home.” Sandberg was specifically talking about single mothers (her husband died unexpectedly in 2015). But she could have been speaking for the millions of Americans who struggle to balance the responsibilities of work and family life.

Some of Sandberg’s critics saw her candor as a refreshing change of heart. After all, the central thesis of *Lean In* is that women need to be bolder and more ambitious at work if they want to get ahead. But critics had pointed out that many people (particularly women) are prevented from devoting themselves more fully to their careers for a simple reason: They’re taking care of family members.

This highlights a defining conundrum of our age. Changes in demographics and social dynamics have made employees increasingly responsible for members of their extended family. Compounding
HR’s New Challenge: Whole-Family Care

the problem, skilled professional caregivers — both for children and for elderly people — are in short supply in many markets. And the onus is almost always on employees to find the best solution for their needs, and then to try to pay for it.

Today’s workforce is not only more diverse in terms of gender and ethnicity than it was several decades ago, it is far more diverse in terms of life circumstances, with employees who — in general — must deal with much greater family responsibilities. In the past, child care was typically handled by mothers while fathers worked. Chronic medical conditions such as diabetes, Alzheimer’s disease, and obesity weren’t as prevalent, and the healthcare system was easier to navigate. As a result, companies were able to treat those issues in situationally specific ways. An employee might need special accommodations for a short time, and that was it. In today’s more complex environment, that kind of ad hoc approach is falling short. Most employees confronting such circumstances are unsupported and ill equipped for their caregiving responsibilities.

And yet many companies continue to rely on HR policies and employee benefits programs built to suit the needs of two generations ago, when most private-sector workers were male and married to stay-at-home wives. The result is that many companies are not getting the most out of their talent, even as they struggle to compete for college-educated workers.

To adjust to the new realities, companies must implement new policies and adopt a new mind-set. They should do a better job of supporting employees in fulfilling their caregiver responsibilities outside the office. That will reduce voluntary turnover and allow employees to focus on their job when they’re at work. This approach, which we call “whole-family care,” is an integrated program that helps employees meet the needs of their family in a comprehensive, seamless manner. The goal is to reassure employees that the right person will deliver the right care or service at the right time, relieving them of the burden of assembling, coordinating, and managing such resources. This complex idea boils down to three core elements: more-tailored benefits packages, improved coordination and communication, and superior technology.

Forward-thinking companies such as Google and Facebook are already revolutionizing employee benefits by applying such principles. As a result, they’re attracting top talent. Of course, those
companies have the financial means to offer gold-plated benefits packages. Moreover, they operate in an industry (technology) and geographic market (the San Francisco Bay Area) where the competition for talent is especially fierce. Yet we believe that virtually all companies can — and should — apply some aspects of whole-family care to their benefits. The right combination will vary from one company to the next, depending on industry and geographic region. Instituting some form of whole-family care will allow them to better meet the needs of their employees, increase retention, and ultimately improve company performance.

Absent — or Barely There

U.S. businesses forgo up to an estimated US$33.6 billion per year in lost productivity from full-time workers because of their caregiving obligations, according to a 2012 study by the AARP’s Public Policy Institute. Much of that loss stems from absenteeism — i.e., when people need to time off to care for a sick child or drive an elderly parent to a doctor’s appointment. Of the $74 billion in total costs due to absenteeism in 2013, about one-fourth came from providing care for others. Only employees’ personal illness cost more. Beyond absenteeism, “presenteeism” — in which employees who are at the office are not fully focused on work — is potentially an even bigger factor. Although the phenomenon is not as well studied, a 2004 Harvard Business Review article estimated presenteeism as a $150 billion problem. Take a walk around most office settings today and you’ll see it firsthand.

Many factors contribute to employee distraction: the Internet, shortened attention spans, poor morale, and such ever-present temptations as solitaire and Candy Crush. Yet for employees with families, caregiving responsibilities are clearly highly distracting. We know, for example, that child-care issues cause more absenteeism than any other family-related matter, accounting for 72 percent of all absenteeism.

Our research indicates that care-related concerns contribute substantially to presenteeism as well. According to a survey we conducted last fall, employers recognize that caregiving responsibilities have a negative impact on productivity. About half of survey respondents said caring for a newborn or an ill or disabled family member leads to the biggest drop in employee productivity. In addition, 13 percent responded that such responsibilities also led to significant levels of voluntary turnover.
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Changes in the composition of the private-sector workforce have made these issues inevitable. Women, the traditional source of caregiving for children, the infirm, and the aged, moved into the workplace without mechanisms for offsetting the loss of time available to spend on care obligations. In 1955, according to the Bureau of Labor Statistics, women made up just 32 percent of the workforce in the United States. By 2016, that proportion had increased to 47 percent.

In addition, the average age of first-time mothers has risen by more than three years since 1980, to 27. Many women now have children into their 40s, and the birth rate among mothers in this age group almost doubled over the last three decades, according to the Centers for Disease Control and Prevention. Because older women are more likely to have senior positions, with greater responsibility and higher salaries, their absence due to caregiving responsibilities carries greater implications.

In addition to caring for young children, many employees now take care of other members of their extended family. Older people live longer than they used to; the U.S. population older than 85 more than doubled in the past two decades (although life expectancies have declined for some demographic groups recently). As a result, many people require longer periods of care from family members, sometimes due to serious, chronic medical conditions such as heart disease and high blood pressure. According to the Alzheimer’s Association, currently, 5.4 million people have Alzheimer’s, or one in nine people age 65 and older. In 2015, more than 15 million caregivers provided roughly 18 billion hours of unpaid care for people with the disease. And projections call for the number of those with Alzheimer’s disease to nearly triple by 2050, to almost 14 million. Some 42 percent of U.S. workers provided care for an aging relative or friend between 2005 and 2010; the number is almost certainly higher today.

**Fragmented Supply**

There are simply not enough trained caregivers in the United States. Supply does not meet demand, and the supply that does exist is highly fragmented. That leads to high costs in urban areas (where some employees have the means to pay more) and no available options in others. Quality of care can also vary widely, not only among facilities but even among individual providers. The imbalance is not
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likely to change — economists predict a gap of more than 1.3 million certified caregivers in the next decade.

In many fields, such a shortfall would lead to a rise in wages, and to people rushing in to fill those roles. However, the “caregiver” role is not a defined career path in the U.S. (as it is in many other countries). The wages and benefits for caregivers can vary widely depending on where they work — and who they work for. But in general, the pay is close to minimum wage, with few additional benefits such as paid time off for vacations or sick days. As a result, there’s not enough incentive for new people to become caregivers and meet demand.

Technology is starting to connect supply with demand. National care platforms, such as Care.com and UrbanSitter, and smaller to midsized agencies such as Poppy and Helpr, connect individuals with caregivers. Although such platforms are helpful, they still put the burden on employees to find, evaluate, and hire caregivers — and to figure out a way to pay for it all. Moreover, there is no certified vetting process beyond user reviews, even though these are complex services that require more insight than a Yelp-style review from recent customers.

Owing to the high costs associated with child care and eldercare — and the lack of providers in some areas — many employees, especially women, opt to simply leave the workforce and take on the task themselves. Voluntary turnover has a negative impact on productivity and skill sets, and triggers transaction costs for the employer in replacing the departed worker. Direct expenses include exit costs, recruiting, interviewing, hiring, orientation, and temporary staffing. Indirect costs include lower productivity due to temporary staff, reduced quality while a new employee learns his or her job, lower morale, and lost institutional knowledge and relationships. The Center for American Progress estimates that the average cost to replace an employee is 16 percent of his or her annual salary for low-paying jobs, 20 percent of the salary for midrange positions, and more than twice the annual salary for highly compensated executive positions.
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The Solution: Whole-Family Care

Human resource functions have not been oblivious to these changes, but their response has been fragmented. Employers may offer options such as paid or unpaid parental leave, reduced work hours, or telecommuting opportunities. Such benefits may enable an employee to remain in the workforce, but they do not address the larger issues that affect an ever-growing percentage of the workforce.

Employers need to reevaluate their benefits programs using a new standard: Do they provide a basis for staying with the company to valued employees who wish to stay employed but confront serious care-related life events? To help employees meet those caregiving responsibilities, HR departments can borrow an idea that’s gaining momentum among doctors and insurers: whole-person care. The idea behind whole-person care is that many people have complex medical needs that can’t be addressed through the traditional approach to medicine of taking a trip to the doctor and getting a prescription.

Consider a patient with diabetes and obesity, two conditions that can exacerbate each other. Such patients, particularly those with low incomes or other sources of instability in their lives, frequently end up in the emergency room for some urgent health crisis. They’re typically admitted for a few nights and then sent home with new prescriptions and a follow-up appointment weeks later. Yet no one addresses the underlying cause of the problem. Maybe the patient doesn’t take her medication according to instructions. Maybe she doesn’t have a reliable car with which to get to the doctor. Maybe she does not know how to cook for herself, so she eats fast food multiple times a day. Traditional healthcare models don’t consider these complicating factors, so the patient enters a cycle of treat–release–repeat. A month later, she ends up back in the emergency room.

Whole-person care, as the name suggests, seeks to treat people in a more comprehensive fashion. It consists of several elements, starting with a care coordinator who oversees all aspects of the person’s care — not only medical, but also behavioral and long-term care. External groups such as government agencies, faith-based groups, and the patient’s family and friends play a role. Wearables and analytics are used to help monitor the patient’s health and communicate metrics, such as weight, vital signs, and insulin levels, to doctors. This is a challenging approach, because it requires an up-front investment and a lot of coordination. And the healthcare industry is in many ways just
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embarking on this journey. But it may lead to demonstrably better results for patients, and at much lower costs over the long term.

The HR equivalent — whole-family care — applies the same kind of multifaceted approach for employees with caregiving needs. Specifically, it entails three elements: (1) tailored benefits packages that help employees meet their responsibilities outside the office; (2) better coordination and communication with employees regarding available benefits; and (3) the use of technology to help employees meet their caregiving responsibilities.

Tailored Benefits

To attract and retain top talent, employers need to provide additional, differentiating benefits beyond a competitive salary and some health insurance options. A first step is to assess employee demographics to determine the caregiving issues that workers confront. Part of the reason whole-person care works in treating medical conditions is that people with the same condition have highly similar needs. The same logic applies to the whole-family care model. In any given workforce, some common and important life events will be shared by workers (a newborn baby, a spouse with a life-threatening illness, an elderly parent who can no longer live independently). Companies should identify such shared patterns for the most important members of the workforce and enhance the benefits available to employees experiencing those events.

Employers may also want to survey former employees who left the firm voluntarily in response to such events, or recruits who decline job offers. Asking why productive colleagues left the company and what, if anything, might have been done to make staying with the firm more should shed light on areas for improvement and benefit design enhancements.

Once companies have made a list of needs, they can start to prioritize those needs. For example, instituting flextime or condensed workweeks — e.g., four 10-hour shifts rather than five eight-hour shifts — is a fairly straightforward way to give individuals more control over their work and meet their responsibilities outside the office. Companies such as allow employees to adjust their hours around their children’s schedules or telecommute, and some even offer career breaks and reentry options. Researchers at the University of Minnesota — in conjunction with a corporate initiative
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called the Results Only Work Environment — found that employees with flexible hours don’t work less or at lower quality levels. Rather, workers experience better overall well-being and higher job satisfaction. Another study that was focused on high-profile consultants with flexible work schedules found that these employees outperformed their coworkers, earning more frequent promotions and better performance reviews.

Better Coordination and Communication

Ensuring that employees understand what benefits are available to them, what other services they should consider, and what the associated costs are is critical to making such programs work, which is why the whole-person model of healthcare starts with coordinators who reach out to patients with complex medical needs and guide them in coordinating various aspects of care. The HR equivalent requires coordination as well, which in turn requires employers to change the nature of the dialogue with affected employees.

Rather than relying on employees to sort through the various combinations of services that might address their needs, companies should provide the type of informed guidance that physicians provide to patients under whole-person care. Throughout the process, an HR rep is a single point of contact who identifies required services, ensures that the employee receives them, and monitors the quality of care. In this way, the HR rep becomes a kind of “sherpa” who guides employees through all aspects of a particular life experience. In larger organizations, such integrated guidance could be provided by HR professionals who specialize in specific life path events, such as caring for a chronically ill parent.

An HR rep is a single point of contact that identifies required services, ensures the employee receives them, and monitors quality of care.

In all instances, employers should help employees understand the financial consequences of such life path events and the associated solutions. Many employees at all income levels already feel they
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are under financial duress. According to PwC’s 2016 Financial Wellness survey findings, 40 percent of employees find it difficult to pay their monthly expenses; 51 percent carry balances on their credit cards; and 36 percent have a difficult time paying the minimum credit card payment each month. Many millennials enter the workforce with heavy student loan debts. A major life event only adds to that financial stress.

Superior Technology

The first two elements of whole-person care — tailored benefits packages and better coordination — will almost certainly require an investment on the part of companies. This investment will yield returns over time, as employee productivity and retention increase and absenteeism and presenteeism decline. However, technology can help companies implement whole-person care even more efficiently. At the most basic level, technology can free people from the physical constraints of the office, allowing them to work remotely during non-business hours, even collaborating on team projects. As a result, they can better meet the needs of family members.

Advanced digital tools and apps are emerging that can help. For example, as noted above, online talent platforms can help match supply and demand. Companies have already rolled out services that help employees monitor their own stress levels, physical activity, diet, and even ergonomics, and offer incentives to reward progress. Similar tools are increasingly available to help care for children and the elderly. Other emerging technologies:

• Personal emergency response systems allow users to press a button and be connected to a call center that can dispatch help and notify caregivers. Many also contain GPS functions.

• Home activity tracking systems use discreet wireless sensors placed in the home to track the movements and activities of a loved one. The caregiver can check in at any time using a private, secure Web page. If there are any disruptions to the daily routine, the caregiver can opt to receive an alert by phone, email, or text.
• Programmable alerts use buzzers, bells, or email to remind recipients to take their medications. They can also inform caregivers about missed doses.

• Applications such as Total Baby and My Kid’s Health provide a single, consolidated means of tracking children’s health events such as vaccination schedules, doctor and dentist appointments, growth and illness histories, feedings, naps, diaper changes, and more.

Because technology is advancing so rapidly, it’s unrealistic to expect employees to know everything that’s available or relevant for their needs (let alone figure out how to use specific apps and tools). Monitoring this technology and understanding its applicability to specific segments of the workforce is an appropriate role for the HR sherpa.

Investing in the Whole Family

The war for talent will be won on the basis of how well a company stands behind its people. Rather than treating them solely as a way of maximizing financial returns, companies should invest in employees as a genuine resource. The whole-person healthcare model is already leading to better results at lower costs, and whole-family care coordination can achieve similar gains for employees with significant family responsibilities. Beyond paying for themselves by lowering absenteeism, presenteeism, and turnover, these policies will signal to workers that they work for a company that supports them when they truly need it.

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Link to Online Article:

https://www.strategy-business.com/article/HRs-New-Challenge-Whole-Family-Care
The Caring Company

How employers can help employees manage their caregiving responsibilities—while reducing costs and increasing productivity

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About the authors
Joseph B. Fuller is a Professor of Management Practice in General Management, at Harvard Business School (HBS). He co-chairs the HBS Project on Managing the Future of Work and is a visiting fellow at the American Enterprise Institute. Manjari Raman is Program Director and Senior Researcher for the HBS Project on U.S. Competitiveness and Project on Managing the Future of Work.

The views expressed in this paper are the sole responsibility of the authors and not meant to represent the views of Harvard Business School or Harvard University.

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Executive Summary

American companies are facing a caregiving crisis—they just refuse to acknowledge it. Rising health care and professional caregiving costs and changing demographics over the past few decades have put great pressure on American employees as they try to balance work and care responsibilities. Yet many employers remain largely oblivious to the growing costs of this hidden “care economy”—costs that hurt employers and employees alike.

While companies spend money, time, and effort on providing benefits, often those benefits are of little use to employees. By not offering benefits that employees actually want—and by not encouraging employees to use the benefits they do offer—companies incur millions of dollars of hidden costs due to employee turnover, loss of institutional knowledge, and temporary hiring, in addition to substantial productivity costs such as absenteeism and presenteeism.

The spectrum of care, from childcare to eldercare, ranges across every demographic in the organization. Workers of all ages and levels of seniority are affected. Given the lack of support at work, many employees hide the growing burden of caregiving responsibilities. They struggle to balance the responsibilities of work and caregiving, often dealing with the unexpected and recurring care obligations that require mental, physical, and financial resources to address them. Individual productivity suffers accordingly, inflicting a cost on the employer. Then, when the emotional and physical stress becomes too much, their capacity for work becomes impaired. Some respond by reining in their ambitions; others reduce their working hours; still others drop out of the workforce altogether. Eventually, employers often pay another major cost: They lose talented, trained employees.

This neglected care crisis is only going to worsen. The frequency and intensity of care obligations are sure to increase, putting more pressure on employees and employers in at least three ways. One, with the rising number of single-parent, two working parents, and other non-traditional families, employees have fewer resources to turn to as they shoulder greater caregiving responsibilities. Two, both women who work outside the home and those who work within the home shoulder a disproportionate share of caregiving responsibilities. That impedes them in several ways: in their ability to participate in the workforce as traditionally defined, in their ability to remain in the workforce, and in their ability to maximize their level of achievement in the workplace. All that depletes the talent pool of educated, experienced, and productive resources. Three, as more Americans enter the “sandwich” generation—in which they will provide care for both children and seniors simultaneously—the physical, emotional, and financial burdens of workers entering their prime earning years will grow markedly.

Many employers remain strangely unaware of the magnitude and impact of the changing demographics of care and their economic consequences. Surveys of U.S. employer and employee attitudes about caregiving reveal that there is a gross misalignment between what companies currently provide and what employees need. Consider the findings:

Employers do not measure and thus do not realize the extent to which employees are burdened by care: Many employers (52%) do not track data on their employees’ caregiving responsibilities. Few employers, therefore, know the significant impact that caregiving has on the productivity of employees. In the employee survey, three out of four (73%) employees reported having some type of current caregiving responsibility.

In the absence of a supportive “care culture,” employees worry that admitting to caregiving responsibilities penalizes their career growth: Few employees are willing to admit to their organizations that they are caregivers for fear that it will undermine their career prospects. Among self-professed caregivers, only 28% were willing to admit that caregiving harmed their careers. These caregivers perceived harmful consequences, such as demotivation due to a lack of challenging assignments (54%), lower salary increases or bonuses (50%), and an unsatisfactory career path (46%).

Employers do not realize the extent to which caregiving affects employee performance: Only a minority of employers (24%) responded that caregiving influenced workers’ performance. In contrast, more than 80% of employees with caregiving responsibilities admitted that caregiving affected their productivity—specifically, their ability to perform their best at work all the time (33%), most of the time (14%), and sometimes (36%).

Employers grossly underestimate the direct and indirect costs of caregiving: The employee survey revealed that 32% of all employees had voluntarily left a job during their career due to caregiving responsibilities. Caregiving contributed greatly to the churn of younger employees:
50% of employees aged 26–35 years and 27% of employees aged 18–25 reported that they had already left a job due to caregiving responsibilities. The costs of turnover, when combined with the costs associated with reduced productivity, combine to form a substantial hidden cost of care for many employers.

**Employers’ higher-titled and more responsible employees are most likely to be affected:** Within each of the age groups 18–25, 26–35, and 35–45, many more employees with titles like vice-president and higher had left a position due to caregiving conflicts. For example, in the 26–35 group, the percentage of people who had left a position rose higher at each position level: employee (23%); manager of employees (44%); manager of managers (53%); senior leaders (61%). Likewise, these age groups and positions were most likely to report that their productivity was frequently undermined.

**Employers underestimate the spectrum of care responsibilities affecting the different demographics in the organization:** Caregiving obligations arise with metronome-like regularity during an adult’s working life. Employees cited caregiving in different stages of their careers. Employers frequently placed significant focus on maternity and adoption events. While the top reasons employees cited for leaving an organization were to take care of a newborn or adopted child (57%), followed by ensuing events like caring for a sick child (49%) or managing a child’s daily needs (43%), the consequences of care went far beyond child-rearing. A third of employees who left a position reported taking care of an elder with daily living needs as a reason for leaving their job. Almost 25% did so to care for an ill or disabled spouse, partner, or family member.

**Employers know that caregiving impedes employees’ careers:** Employers identified unplanned absences and missed days of work (33%), late arrival at work (28%), and early departure from work (17%) as the top three behaviors that always undermine career progression. Those are all behaviors that frequently arise due to an employee’s need to respond to a caregiving obligation.

**Employers do not provide the benefits that are valued by employees:** Across 16 benefits examined, usage patterns were consistently and often woefully low. The benefit with the highest usage reported by employers was for paid time off, yet only 55% of eligible employees utilized the benefit, and only 59% of all employers surveyed offered the benefit. The most significant factors that contributed to workers quitting were: the unaffordable costs of paid help (53%); the inability to find trustworthy and qualified paid help (44%); the inability to meet work responsibilities due to increased caregiving responsibilities (40%)—all areas where employers could conceivably provide guidance, infrastructure, or support. Companies can and must do better—for themselves as well as their employees.

Employers must view the issue of caregiving through the lens of talent management, rather than exclusively as another potential expensive benefit. Moreover, they must accept that the tension between work and caregiving expresses itself both financially and culturally within the organization. Companies incur substantial and recurring costs due to a failure to account for their employees’ caregiving obligations in terms of designing career paths, job descriptions, and benefits packages. Similarly, companies that do not acknowledge the near-universality of care concerns in their workforce create a culture in which employees are reluctant to make their caregiving obligations too apparent lest they pay a price for the disclosure.

In a “caring company,” management will have to demonstrate commitment both by acknowledging its employees’ care concerns and by investing in innovative solutions. It will require buying into a culture of care, an investment that goes beyond dollars to include time and leadership. By highlighting success stories and putting genuine effort into communicating with the workforce, providing benefits that address the actual needs of colleagues, and ensuring their utilization, caring companies can greatly enhance the effectiveness of their talent management.

Companies can make a start by conducting a regular care census. This critical first step would be to identify the magnitude and nature of a company’s workforce’s care needs; evaluate the relevance of its existing benefits package, and explore the plausibility of expanding the benefits or developing customized solutions; and to capture the returns associated with boosting employee retention and productivity. A care census would also help the company update its standard career paths to reflect the life paths of 21st-century employees. Such an approach would help employees better accomplish their predictable and unpredictable life events, while allowing companies to manage their talent pipelines more productively and predictably.

Committing to a caring company strategy and designing the tactics required to execute it well should be neither hard nor, ultimately, costly. The marginal return on investment, when calculated to include the all-in economics associated with reduced turnover and improved productivity, places a care-led strategy well within the reach of many companies. For caring companies, the care advantage goes well beyond improving employee engagement. It has the potential to be an important source of competitive advantage.
Docket Item:
Apprenticeships and Employer Engagement

Strategic Plan Goals:

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

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<th>GOAL 1: Customer Centric</th>
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<td>Create a customer-centric workforce system that is easy to access, highly effective, and simple to understand.</td>
<td>Provide business and industry customized workforce solutions to prepare and deliver qualified and viable candidates and advance current workers.</td>
<td>Invest in Oregonians to build in-demand skills, match training and job seekers to opportunities, and accelerate career momentum.</td>
<td>Create and develop talent by providing young people with information and experiences that engage their interests, spur further career development, and connect to Oregon employers.</td>
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Summary:

Industries in every state are struggling to find qualified applicants for jobs, while job seekers too often find they lack the skills needed to enter or move along a career pathway to a good job. Preparing a workforce that is poised to meet the needs of businesses and ultimately to make the state more economically competitive is a top priority for many governors. Many of them, including ours, are exploring ways to
increase opportunities for high-quality, demand-driven work-based learning strategies as a proven way to prepare their citizens for the modern workforce.

Oregon’s Bureau of Labor and Industries (BOLI) and its Apprenticeship and Training Division (ATD) oversees registered apprenticeship in a number of trades and occupations, working with business, labor, government and schools to increase training and employment opportunities. Apprenticeship is occupational training that combines supervised work-based learning experience with classroom training.

Industry and individual employers design and control the training programs and pay apprentices' wages. ATD works with local apprenticeship committees across the state to ensure that apprenticeship programs provide quality training and equal employment opportunities, particularly for women and minorities in technical and craft occupations.

The purpose of this panel is to inform board members about how traditional and innovative, new models of apprenticeship can “increase opportunities for—high-quality, demand-driven work-based learning to prepare workers in Oregon for the modern workforce”. The WTDB will learn from panelists about the most recent developments and successes at both the state and local community level. Board members will also better understand the importance of employer engagement in the development, sustainability, and continuous improvement of new and existing apprenticeship programs.

**Docket Material:**
Panel Discussion

**Staff Recommendation:**
Informational Only
Apprenticeship and Employer Engagement

Kristina Payne - Executive Director, Lane Workforce Partnership
Ken Madden - Chair, Workforce and Talent Development Board
Steve Simms - Director, Apprenticeship and Training Division, BOLI

March 8, 2019
Docket Item:

Customized Workforce Solutions

Strategic Plan Goals:

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

Summary:

Easterseals Oregon programs connect best to Strategic Plan Goal 3. We serve a diverse population of job seekers which includes; Veterans, Mature Workers, Individuals with Disabilities and Individuals with English as a Second Language (ESL). We match job seekers with employment development, barrier removal, job placement and retention services. We also assist job seekers with a full array of other services such as; housing,
social service referrals, temporary financial assistance and other employment driven training opportunities (On-the-Job trainings, Apprenticeships).

This presentation will introduce Easterseals Oregon and our workforce programs. Our programs serve 18 Counties and we’re co-located in 15 WorkSource Centers. We also have five additional offices that provide program and administrative services that aren’t co-located in WorkSource Centers.

Our Service Areas - Multnomah, Washington, Clackamas, Columbia, Clatsop, Tillamook, Lincoln, Marion, Polk, Linn, Benton, Yamhill, Lane, Douglas, Jackson, Josephine, Coos & Curry.

Job Seekers served in PY17/18:

Veterans Programs - 528
Senior Community Service Employment Program - 484
Connecting Communities - 665

Docket Material:
PowerPoint Presentation- Easterseals Oregon

Staff Recommendation:
None. Informational item.
Employment Services

Homeless Veteran Reintegration Program (HVRP)

Supportive Services to Veteran Families (SSVF)

Senior Community Service Employment Program (SCSEP)

Connecting Communities Program
Homeless Veterans Reintegration Program
Program Highlights

- Funded by US Department of Labor VETS
- Serving veterans who are homeless or at risk of becoming homeless
- Veterans must have been discharged under other than dishonorable circumstances
- Veteran must have at least one day of Federal active duty service
- Veterans must be employable and willing to actively seek employment
- Co-located in five WorkSource Centers
Services Provided to Veterans

- Person-Centered Focused Case Management
- Employment Driven Training
- Supportive Services
- Employment Development And Placement
- 1 Year of Retention Services after Placement
- Referral to Additional Resources
Program Highlights

- Funded by the US Department of Veterans Affairs
- Serving veterans who are homeless or imminent risk homelessness
- Veterans must have been discharged under other than dishonorable circumstances
- Veteran must have at least one day of Federal active duty service
- Service Area Marion & Polk Counties
Supportive Services to Veteran Families

Services Provided to Veteran/Family

- Person-Centered Focused Case Management
- Housing Assistance to increase housing stability
- Temporary Financial Assistance
- Employment Development And Placement
- Assistance with Social Security/Disability Benefits
- Referral to Additional Resources
Program Highlights

- Funded by Department of Labor ETA
- 55 years of age or older
- Experience barriers to employment
- Income based eligibility
- Currently unemployed
- Service Area covers 18 Counties
- Co-located in 13 WorkSource Centers
Services Provided to Mature Workers

- Person-Centered focused case management
- Participants are provided 20 hours per week of paid internships at non-profit agencies
- Employment Driven Training
- Employment, Development, Placement and 1 year Retention Services
- Supportive Services
Program Highlights

- Funded by Oregon Vocational Rehabilitation Services
- Age 18 and older
- Able to work legally in the United States
- Reside in one of five authorized counties
- Services provided to Minorities that speak English as a second language
- Documented disability
Services Provided to Participants

- Job Placement
- Employment Readiness Training
- Workplace Vocabulary Classes
- Computer Classes
- Job Coaching, Job Development and Job Retention
- On-the-Job Training
- Support services including clothing for interview and other accommodations to employment.
Benefits to Participants

- Team Support
- Employment Specialist - Stabilization, Training, Supportive Services
- Employment Developer - Professional Development

Program Benefits

- Leverage of Funds
- On the Job Training
- Memorandum of Understanding Agreements
- Increased Networking Opportunities

Partner Benefits

- Economic Development
- Leverage of Funds
- Increased Visibility
Program Specific Retention Services
Prescreened Applicants
Workforce Diversity Assistance
Saving Your Business Time & Money
Thank you!

Catherine Todd
Director of Workforce Solutions
ctodd@or.easterseals.com
971-678-7463
Docket Item:
Community College Investments

Strategic Plan Goals:

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

GOAL 1: Customer Centric
Create a customer-centric workforce system that is easy to access, highly effective, and simple to understand.

GOAL 2: Customized Solutions
Provide business and industry customized workforce solutions to prepare and deliver qualified and viable candidates and advance current workers.

GOAL 3: Career Momentum
Invest in Oregonians to build in-demand skills, match training and job seekers to opportunities, and accelerate career momentum.

GOAL 4: Engage Youth
Create and develop talent by providing young people with information and experiences that engage their interests, spur further career development, and connect to Oregon employers.

Summary:

Oregonians are served by 17 community colleges, with over 60 campuses and centers throughout the state. Collectively, community colleges are the largest provider of education via distance technology, enabling remote study for job preparation or the accumulation of credits for transfer to a four-year university or degree track courses at the community colleges themselves.
As the largest post-secondary institution in Oregon, Portland Community College serves nearly 73,000 full-time and part-time students. PCC offers high-quality education and opportunities for its students, which in turn contributes to the vibrancy of Portland's economic community.

PCC aims to educate a skilled workforce, prepare students to successfully transfer to four-year schools, enrich the community through lifelong learning, build a greener workforce and shrink our carbon footprint, and be a sound financial steward of public dollars.

The purpose of this presentation is for board members to hear from WTDB member, Portland Business Journal 2018 Executive of the Year, and PCC President Mark Mitsui about some of the exciting developments that are occurring under his leadership and about other investments, and potential investments, within the community college system.

Docket Material:
None

Staff Recommendation:
None. Informational Only
Docket Item:

Investments in Oregonians: Southern Oregon Workforce Investment Board

Strategic Plan Goals:

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

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Create and develop talent by providing young people with information and experiences that engage their interests, spur further career development, and connect to Oregon employers.

Summary:

An overview of the healthcare sector initiatives currently being implemented in Coos, Curry, and Douglas counties through a collaboration between the Southwestern Oregon Workforce Investment Board (SOWIB) and the Southwestern Oregon Healthcare Industry Partnership (SOHIP).
Docket Material:

OWTDB Presentation (powerpoint)

SOWIB MA Case Study

Staff Recommendation:

None. Informational Item.
SOWIB Healthcare Sector Initiatives
SOHIP

- Southwestern Oregon Healthcare Industry Partnership
- Established in 2016 utilizing a grant from the state and includes employers from all three SOWIB counties
- Industry partners identified opportunities for collective action that would benefit the sector as a whole
- Southwestern Oregon Healthcare Workforce Summit in August 2018 had over 125 attendees, including industry leaders, community support agencies, state partners, and local elected officials
Opportunities for Collective Action

1. Identify and prioritize critical need occupations
2. Develop “grow our own” strategies, including the use of earn & learn training models
3. Prepare a future talent pipeline by creating career pathways starting at the high school level
Medical Assistant Apprenticeship

- Phase II of a two-step solution to address the issue of uncertified MAs in our area
- Phase I created a path to certification for over 225 already working MAs
- First Registered Apprenticeship program in the healthcare sector in the state
- Started in April 2018 in Coos County and has since spread to Curry and Douglas counties
Medical Assistant Apprenticeship

- Currently have 34 registered apprentices spread across 8 “training agent” sites
- Started with funding from the local CCO, SOWIB received a $350,000 apprenticeship expansion grant to fund project through October 2020
- In the process of trying to gauge interest in statewide model
Nurse Faculty Shortage

- Most recent project identified by SOHIP
- Seeks to address the critical nursing shortage by helping CCs increase capacity with additional faculty
- Incentives practicing nurses to consider teaching by closing wage gap – based on model implemented in Maryland
Nurse Faculty Shortage

- $375,000 received from OHA for a three year pilot; hope is to serve as a model for the rest of the state if proven successful
- If successful, it would more than double the number of students accepted into SWOCC program and increase UCC enrollment by around 50%
Surg Tech Apprenticeship

- In the process of starting an apprenticeship for Surgical Techs, in partnership with Linn-Benton CC and two other local workforce boards
- Targeted start date of April 2019
Other Projects and Initiatives

- Invested in the start up of a CNA program
- Hosted an after-hours networking event around recruitment best practices
- Bay Area Healthcare Pathway Certificate (BAHCPC)
- Roseburg Allied Health College
The three counties served by Southwestern Oregon Workforce Investment Board (SOWIB) have some of the highest unemployment rates in the state. In 2017, 5.7% of workers in the tri-county area were jobless, despite high demand for healthcare workers in the region.\(^1\)

Unfortunately, because of limited education options, hospitals and clinics had no choice but to hire uncredentialed allied health personnel and invest heavily in on-the-job training.

So when the Centers for Medicare and Medicaid Services (CMS) released Meaningful Use, now MACRA (Medicare Access and CHIP Reauthorization Act) quality incentives, it required that medical assistants (MAs) needed to be nationally credentialed in order to work within an electronic health records (EHR) system and receive appropriate reimbursements.

The success of the first group of candidates helped gain additional funding from the clinics, to double the total investment. This initiative has empowered 196 candidates to pursue their CCMA certification with a 95% pass rate — 22% above average for NHA testers during the same time frame.

Upon completion of phase one, a second phase was implemented in order to prevent the shortage of MAs from reoccurring.

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\(^*\) The purchase of NHA exam preparation materials is not required to sit for any NCCA-accredited certification exam and use does not guarantee a passing score on an exam. All NHA exams are NCCA-accredited.

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TO LEARN MORE, VISIT NHANOW.COM.
During the development process they discovered some key areas that needed attention:

- Restructuring of current onboarding process in order to better identify apprenticeship candidates.
- Maintenance of high-level, on-the-job training and technical instruction that followed a standardized curriculum.
- Register SOWIB as an NHA proctor site so candidates have access to a centralized testing location.

Implementation toward Better Outcomes

The registered apprenticeship program is benefiting both the employer sponsors and the apprentices.

In the SOWIB apprenticeship program — which started with five employee sponsors to start — participants are paid by the employers for their 2,000 hours of hands-on training. They must also complete 156 hours of mostly online studies. Once each month, all the apprentices come together for an in-person session in which skills acquired from the field are reinforced.

Apprentices are empowered to reach their career goals. They no longer have to drop out of the workforce for two years — something that’s simply not an option for many — to gain access to training and certification and enter a fulfilling career in healthcare.

“The apprenticeship program has given me so much more confidence in my current career,” says Caitlin. “Not only do I have the skills, but now I also have the education to be able to assist patients and my employer the best way possible. It’s incredibly empowering to have this opportunity. I look forward to seeing how it continues to change my career and life for the better.”

While still underway, the program has been so well received that SOWIB is already looking to expand the apprenticeship program and add additional occupations.

NHA offers eight nationally recognized, NCCA-accredited allied health certifications that can fit into a registered apprenticeship model and help empower employers and future healthcare workers, all with the goal of improving patient care.

“The medical assistant apprentices have been incredibly engaged in the didactic (classroom instruction) program. It is obvious that critical thinking is being developed as they compare the learning materials to their on-the-job experiences.”

— Angie Webster, In-person training instructor

Phase 2: Train & Certify New CCMAs

“We knew we needed to grow our own [CCMAs] and build a training program around folks who are already living here and could fill some of these jobs,” says McClelland.

A Registered Apprenticeship program seemed to be the ideal solution. The program, supported by the United States Department of Labor, connects potential employees looking to learn new skills and attain high-paying jobs with employers in need of qualified, highly-trained workers. It’s a flexible system that combines technical instruction with on-the-job training in order to keep pace with advancing technologies.

“

There’s a big push across the country to expand apprenticeship beyond the typical construction and manufacturing industry. One of those industries is healthcare.

”

— Jake McClelland, Executive Director of SOWIB

With additional funding secured from the local Coordinated Care Organization (CCO), SOWIB sat down with its partners, including NHA, to start building out the state’s first ever healthcare-based Registered Apprenticeship program.

“With NHA’s help we started reaching out to programs across the country who are either doing apprenticeships or have already done it to find out what works,” McClelland says. “It’s been a great experience.”
**Docket Item:**
Oregon Youth Conservation Corps

**Strategic Plan Goals:**

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

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**Summary:**

The Oregon Youth Conservation Corps (OYCC) was created by the 1987 Oregon Legislature to emulate the Civilian Conservation Corps of the 1930’s. OYCC builds on strong connections between positive work experiences, work skills, personal responsibility, commitment to education, and future employment for Oregon’s youth.
OYCC is housed within the Higher Education Coordinating Commission, Office of Workforce Investments. The goal of this annual report is to provide a broad overview of the activities performed throughout the grants administered by the OYCC, give insight into the populations served and why this work is so important, and to highlight the benefits to all Oregon communities resulting from the many accomplishments of the youth that we serve. On behalf of OYCC, thank you to all who have helped contribute and provide support throughout 2018. Contributions by those listed and those that were inadvertently left off, along with all program grantees, have helped empower youth by providing outdoor work and stewardship experiences throughout Oregon.

**Docket Material:**

One-page flyer.

**Staff Recommendation:**

WTDB and OYCC dual-membership for improved alignment and effectiveness.
Docket Item:

Talent Development in Oregon’s Youth

Strategic Plan Goals: Goal 4 Talent Development in Oregon’s Youth

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

Summary:

I will be sharing the local model used in Central Oregon to increase the number of young people who benefit from an internship. The initiative is called Youth Career Connect and it is a decentralized model wherein Chambers of Commerce and Economic Development entities host an Internship Coordinator whose role it is to cultivate internships for youth aged 16-24 years who are in school or recently completed their
education (secondary and post-secondary). The education entities refer students or recent grads to the Internship Coordinator in their geographic area for placement. Currently we have coordinators in Madras, Redmond, Sisters, Prineville and Bend.

Additionally, I will share the common infrastructure (local board model) across the state that allows local areas to implement work-based learning models that best fit their community’s needs and leverages their assets through partnership.

Docket Material:

PowerPoint Presentation - East Cascades Works

Staff Recommendation:

None. Informational.
10 counties along the east slope of cascades

East Cascades Sector Partnerships

- **Active:** Manufacturing
- **Active:** Healthcare
- **Active:** Construction
- **Active:** Tech
Local workforce boards are private sector lead
Ridgeview High School senior Logan H, 17, shoots and edits training videos for Composite Approach’s new employees — a job that uses his talents honed from a young age.

“It’s just kind of crazy that something that I did as a kid was able to come full-circle, and I can apply that to a job now,” he said.
**Docket Item:**

**Maritime Sector and Workforce Development**

**Strategic Plan Goals: Goals 2 and 3**

The four key goals critical to successfully achieving Oregon Workforce and Talent Development Board’s stated vision, as identified in the 2016-2020 Strategic Plan, share the underlying themes of improving equity, efficiency, and accountability to performance and customer needs. With particular attention and priority to communities that are frequently underserved, the WTDB assesses current and future programs to ensure job seekers are put on a trajectory to break the cycle of poverty through placement in high wage, high demand jobs and/or jobs with robust training, a career ladder, and advancement opportunity. The WTDB ensures that engaged businesses are aligned with existing state priorities and strategic plans, and that businesses invest in workforce training and contribute to long-term economic growth.

**Summary:**

Senate Bill 867 established the Task Force on Maritime Sector Workforce Development, and directed the task force to study and develop the description of the maritime sector and it’s workforce. The bill also included a requirement that the taskforce develop recommendations for the State Workforce and Talent Development Board to incorporate the maritime sector into the state workforce system plan.
Docket Material:

Presentation: Maritime Sector

Report: Oregon’s Maritime Sector Workforce - Oregon Employment Department

Staff Recommendation:

This presentation provides an update on the work of the Maritime Taskforce and recommends the following three actions to the Workforce Talent and Development Board:

1. Accept Oregon’s Maritime Workforce Sector Report including the “description of the scope and extent of the maritime sector and the maritime sector workforce in Oregon. (SB 867)”

2. Modify the existing Unified Plan for a Statewide Workforce Investment System (ORS 660.324) to include a new sector of maritime, as defined in Oregon’s Maritime Workforce Sector Report.

3. Move this topic, information presented, and insight captured from any discussions to the WTDB Executive Committee. The committee will review the information further and strategize on a formal recommendation to the Governor’s Office.
MARITIME SECTOR
WORKFORCE EDUCATION
INVESTMENT INITIATIVE

GOVERNOR’S TASKFORCE ON MARITIME SECTOR WORKFORCE DEVELOPMENT (SB 867, 2017)

March 8, 2019
**MARITIME SECTOR CLUSTERS AND ACTIVITIES:**

Maritime Means: Related to the sea and inland waters including water-side & upland activities.
Maritime careers span a wide range of opportunities from deep sea to shore side positions.

**Port Operations**
- Cargo Loading and Unloading
- Longshoremen
- Stevedores
- Passenger Loading and Unloading
- Distribution of Cargo (Arrival/Departure)
- Multimodal Distribution
- Homeland/Maritime Security
- Marine Logistics (Cargo Distribution)
- Spill Response

**Transportation**
- Cargo (dry and liquid)
- Passenger (ferry and cruise)
- Tug/Towboats (ship assist, tow, bunkering)
- Recreational

**Maritime-Related Professions**
- Marine Engineering
- Naval Architects
- Admiralty Lawyers and Staff
- Risk Managers/Insurers/Surveyors
- Marine Chemists
- Merchants Exchange Members

**Shipbuilding and Repair**
- Ship Repair Operations
- Tug and Barge Construction
- New Vessel Construction
- Recreational Boat Construction and Repair
- Ship Engineering and Design

**Offshore Exploration and Support**
- Scientific and Oceanographic Research
- Commercial
- Academia

**Marine Manufacturing & “Blue Technology”**

**Tourism**

**Academia**

**Wave Energy Industry**

**Not-for-Profit/Non-Governmental Organizations**

**Fishing and Crabbing**
- Commercial Fishers
- Commercial Crabbers
- Sport & Charter
- Recreational
- Operations/Engineering/Logistics Support
- Catch Operations
- Processing
- Marine Hardware and Chandlery
- Distant Waters Operations

**Maritime Workforce Deployed around the Globe**
- US Commercial Mariners on ships of many flags
- US Merchant Marine & Military Sealift Command
- Tug & Tow Mariners
- Local Fishers and Crabbers
- Distant Waters Fishing and Crabbing Fleet
- Oil & Gas Operations Fleet
- Research Vessel Fleet and US NOAA
- US Coast Guard
- US Navy & Marine Corps
- Ocean and River Pilots

*Note: ~9,000 distinct USCG licenses are domiciled in Oregon*
SB 867

Senate Bill 867 established the Task Force on Maritime Sector Workforce Development. Directs task force to study and develop description of maritime sector and maritime sector workforce in Oregon and develop recommendations for State Workforce Investment Board to incorporate consideration of maritime sector into statewide workforce investment system plan.
<table>
<thead>
<tr>
<th>LEGISLATIVE TASK FORCE MEMBERS</th>
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<tr>
<td><strong>Senate Appointment</strong></td>
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<td><strong>Recreational Fishing Interests</strong></td>
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<td><strong>Commercial Fishing Interests</strong></td>
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<td><strong>Marine Construction or Repair</strong></td>
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<tr>
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<td><strong>Marine Transportation or Transit</strong></td>
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<td><strong>Technical Advisory</strong></td>
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<td><strong>Oregon Coast Community College</strong></td>
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<td><strong>Oregon State University</strong></td>
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THREE RECOMMENDATIONS FROM TASKFORCE

1. Accept Oregon’s Maritime Workforce Sector Report including the “description of the scope and extent of the maritime sector and the maritime sector workforce in Oregon. (SB 867)”

2. Modify the existing Unified Plan for a Statewide Workforce Investment System (ORS 660.324) to include a new sector of maritime, as defined in Oregon’s Maritime Workforce Sector Report.

3. Prioritize current workforce development funding (federal and other) to support the maritime workforce sector.
The State of Oregon Employment Department went beyond the usual labor market information to describe the scope and extent of Oregon’s maritime sector.

The report measures the commercial and saltwater recreational fishing workforce, Oregon’s distant waters commercial fishing workforce, charters, mariners with U.S. Coast Guard Credentials, National Oceanic and Atmospheric Administration workforce, and Coast Guard and Navy service members.

It is the first comprehensive report of its kind to describe Oregon’s full maritime sector workforce.

Skilled Living Wage Jobs

- 19,000 maritime jobs in Oregon in 2017, with an average wage of $61K, 19% higher than Oregon’s overall average wage.
- Oregon’s covered maritime industries paid a total of nearly $608 million in wages in 2017.
- Particularly in rural and/or coastal communities’ maritime jobs are a large portion of total workforce.
- Average annual wages vary depending on industry, ranging from a low of $27,850 in fish and seafood markets to a high of $139,144 in sea and coastal transportation.

Workforce Pipeline Gaps

- Maritime workforce tends to be older than Oregon overall workforce. About 27 percent of jobs in Oregon’s covered fishing, maritime manufacturing, and transportation jobs are held by workers age 55 years and over.
- The maritime sector workforce is expected to expand by 5 percent between 2017 and 2027.
- Critical maritime occupations require specialized post-secondary education & training.
Maritime Sector Covered Jobs and Nonemployers by County
Oregon: 12,036 (0.6% of Total)

Source: Oregon Employment Department (2017) and U.S. Census Bureau, Nonemployer Statistics (2016)
SECURE OREGON’S COMPETITIVE POSITION IN THE GLOBAL MARITIME ECONOMY

Oregon’s maritime sector is growing. All aspects of the maritime sector are in need of skilled workers – from large industries such as Vigor Industrial to commercial and saltwater recreational fishing. However our current education infrastructure is both inadequate to serve employer and industry needs and unable to keep up with the aging workforce.

Support and investment is needed to:

1) Recruit and train future workforce for these skilled living wage jobs
2) Meet the needs of maritime employers
3) Support other sectors which rely upon maritime industries
INCLUDE THE MARITIME SECTOR IN THE UNIFIED PLAN FOR A STATEWIDE WORKFORCE INVESTMENT SYSTEM (ORS.660.324)

The first step is for the state to recognize the Maritime Sector as part of our workforce investment system.

Three Regional Work Force Investment Boards (WIBs) currently recognize the importance of the Maritime Sector in their regions – Lane; Northwest and Southwest.

These three regions together with the four coastal community colleges in their regions are partnering together to better understand the workforce needs of industry.

The WIBs together with the community colleges and other local partners are ready and committed to steer investment to a coordinated maritime workforce education program. The partners have developed the Maritime Sector Workforce Education Investment Initiative – a phased approach for investment and partnerships to develop a skilled maritime sector workforce with an initial focus on Maritime Construction, Maritime Engineering and developing skilled Mariners.
Task Force Chair: Doug Hunt   dhunt@co.lincoln.or.us

Birgitte.Ryslinge@oregoncoastcc.org
Oregon’s Maritime Sector Workforce Report

In 2017, Oregon Senate Bill 867 called for the creation of a task force on maritime sector workforce development; described Oregon’s maritime sector in general; and directed the task force to “study and develop a description of the scope and extent of the maritime sector workforce in Oregon, which shall include those members of the maritime sector workforce who are Oregon taxpayers but who work outside Oregon.” This report provides labor market information about Oregon’s maritime sector.

Oregon’s maritime sector workforce totaled nearly 19,000 in 2017. This includes Oregon residents and nonresidents who worked in Oregon, as well as Oregon residents who worked out of state. The count includes civilian maritime workers, such as those working in Oregon businesses; commercial fishers in Oregon waters; commercial fishers who live in Oregon and fish in Alaska, California, or Washington; and active mariners with a U.S. Coast Guard officer endorsement or rating who use an Oregon mailing address. The count also includes military service members in U.S. Coast Guard and Navy.

Measuring Oregon’s Maritime Sector Workforce

No single source of data can fully measure employment in Oregon’s maritime sector. Measuring employment in the sector requires data from multiple sources, which are described below. Each source provides different information about Oregon’s maritime workforce.

Some sources of maritime workforce data are counts of jobs (an employer-employee relationship), while other sources are counts of individuals (a license holder or service member). Oregon’s maritime sector workforce totaled 18,981 in 2017 when using this approach of combining data sources. The table below shows Oregon’s maritime sector workforce by data source.
Covered Employment (10,019 jobs) – More than 10,000 maritime sector jobs are “covered” by Oregon’s Unemployment Insurance program. These are jobs where the employer pays unemployment insurance tax on the wages for each worker. The tax information is used to create the Quarterly Census of Employment and Wages (QCEW) data series, the most detailed source for industry employment and wages by location. Covered employment is also the base data series for the age of the workforce, employment projections, and employment by occupation.

Industry employment is based on 15 industries that directly correspond to the description of the maritime sector in Oregon Senate Bill 867. All employment in these industries is counted. The maritime industries totaled 7,042 jobs in 2017. Some maritime businesses and government establishments are classified in other industries, but are an integral part of Oregon’s maritime sector. These establishments have been identified, where possible, and counted as additional maritime sector firms for a total of 2,977 jobs.

The 1999 Legislature passed legislation that impacted a certain segment of the fishing industry. House Bill 3308 excluded from unemployment insurance fishing services performed by workers on boats with crews of less than 10 individuals where the payment is based on the share of the catch. As a result, covered employment data captures less than 10 percent of commercial fishing employment in Oregon. Because of this, the Oregon Employment Department creates separate estimates for commercial fishing employment.

Oregon’s 23 public ports support the maritime sector in multiple ways and their employment is counted in more than one industry, so port employment is not shown as a separate line in the table. However, Oregon’s maritime ports workforce accounted for 772 jobs and a total payroll of nearly $59 million in 2017.
Commercial Fishing in Oregon (3,498 individuals) – Nearly 3,500 commercial fishers worked in Oregon in 2017, as estimated by the Oregon Employment Department. The estimate is based on licenses issued by the Oregon Department of Fish and Wildlife to commercial fishers in Oregon.

Distant Waters Commercial Fishing (1,447 individuals) – Oregon’s nearly 1,500 distant waters commercial fishers work in Alaska, California, and Washington, but live in Oregon. They are counted here based on the number of people with an Oregon address who were issued commercial fishing licenses in those states. There were 1,337 Alaska Commercial Fishermen and Skippers, 86 in California, and 24 in Washington.

Mariners with U.S. Coast Guard Endorsements / Ratings (2,598 individuals) – About 2,600 active mariners had an Oregon mailing address as of December 31, 2017. These mariners have at least one U.S. Coast Guard issued credential. Credentials are the professional qualifications needed to perform specific capacities on a vessel. A few examples are master deck officer, engineer officer, able seaman, and wiper, but there are many more. The average Oregon mariner holds five ratings or officer endorsements. In total, Oregon mariners are certified to perform 12,344 capacities in the maritime sector.

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**Oregon’s Covered Maritime Sector Jobs and Wages by Industry, 2017**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Jobs</th>
<th>Total Wages</th>
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<tbody>
<tr>
<td>Support Activities for Water Transportation</td>
<td>1,589</td>
<td>$115,367,264</td>
<td>$72,604</td>
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<td>Ship Building and Repairing</td>
<td>1,273</td>
<td>$99,934,740</td>
<td>$78,503</td>
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<tr>
<td>Seafood Product Preparation and Packaging</td>
<td>1,172</td>
<td>$40,329,700</td>
<td>$34,411</td>
</tr>
<tr>
<td>Fish and Seafood Merchant Wholesalers</td>
<td>525</td>
<td>$33,407,740</td>
<td>$63,634</td>
</tr>
<tr>
<td>Boat Dealers</td>
<td>434</td>
<td>$20,361,679</td>
<td>$46,916</td>
</tr>
<tr>
<td>Boat Building</td>
<td>385</td>
<td>$16,716,047</td>
<td>$43,418</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>296</td>
<td>$12,717,354</td>
<td>$42,964</td>
</tr>
<tr>
<td>Scenic and Sightseeing Transportation, Water</td>
<td>267</td>
<td>$7,550,460</td>
<td>$28,279</td>
</tr>
<tr>
<td>Finfish Fishing*</td>
<td>234</td>
<td>$15,194,219</td>
<td>$64,933</td>
</tr>
<tr>
<td>Sea, Coastal, and Great Lakes Transportation</td>
<td>232</td>
<td>$32,281,501</td>
<td>$139,144</td>
</tr>
<tr>
<td>Marina</td>
<td>213</td>
<td>$7,606,183</td>
<td>$35,710</td>
</tr>
<tr>
<td>Fish and Seafood Markets</td>
<td>206</td>
<td>$5,737,127</td>
<td>$27,850</td>
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<tr>
<td>Inland Water Freight Transportation</td>
<td>138</td>
<td>$11,269,298</td>
<td>$81,662</td>
</tr>
<tr>
<td>Inland Water Passenger Transportation</td>
<td>44</td>
<td>$1,597,346</td>
<td>$36,303</td>
</tr>
<tr>
<td>Shellfish Fishing</td>
<td>34</td>
<td>$2,053,825</td>
<td>$60,407</td>
</tr>
<tr>
<td>All other identified maritime sector firms</td>
<td>2,948</td>
<td>$185,793,452</td>
<td>$63,024</td>
</tr>
<tr>
<td>Covered jobs without wage data</td>
<td>29</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Includes commercial fishing jobs covered by unemployment insurance (see text).

Source: Oregon Employment Department
Coast Guard and Navy Service Members (1,653 individuals) – Nearly 1,700 service members are involved in Oregon’s maritime military, which consists primarily of the Coast Guard and Navy. According to the 13th Coast Guard District, there are 1,273 active duty and auxiliary personnel serving in Oregon. According to the Navy Operational Support Center at Swan Island, there are 330 Navy reservists in Oregon. According to Navy Recruiting District Portland, there are 50 active duty Navy recruiters in Oregon.

Wages in Oregon’s Covered Maritime Industries

Oregon’s covered maritime industries paid a total of nearly $608 million in wages in 2017. The average annual wage of covered jobs in Oregon’s maritime industry was $60,853. That is 19 percent higher than Oregon’s overall annual wage of $51,117. Average annual wages vary depending on industry, ranging from a low of $27,850 in fish and seafood markets to a high of $139,144 in sea and coastal transportation.

The average annual wage is based on the 10,000 jobs covered by the unemployment insurance program. Wage information is not available for commercial fishing, active mariners, or military service members.

Importance of Maritime Sector Jobs in Rural Communities

Maritime sector jobs are prevalent on the Oregon Coast, of course, but maritime sector jobs can be found in 33 of Oregon’s 36 counties. The only counties without a measureable maritime workforce were Harney, Malheur, and Wheeler counties.

In some communities, maritime sector jobs are a large portion of the total workforce. The counties with the largest portion of workforce in the maritime sector are Sherman (12.9%), Lincoln (6.5%), Clatsop (5.2%), Coos (4.1%), Curry (3.6%), and Tillamook (2.3%). Sherman County tops the list because U.S. Army Corps of Engineers jobs at John Day Dam are part of Oregon’s maritime workforce, and the jobs are a large share of the county’s employment.

The maritime sector jobs of coastal counties totaled 4,840 jobs. Multnomah County has 3,744 jobs, the most maritime jobs of any county, but these jobs were just 0.7 percent of the total workforce.

The number of maritime sector jobs by county is available from the covered employment data. Commercial fishers by county of residence is available from the U.S. Census Bureau’s Nonemployer Statistics and is based on Internal Revenue Service income tax filings. Covered employment and nonemployers are combined for the map of maritime workforce by region.
The Aging of Oregon’s Maritime Sector Workers

The maritime sector workforce tends to be older than Oregon’s overall workforce. About 27 percent of jobs in Oregon’s covered fishing, maritime manufacturing, and transportation jobs are held by workers age 55 years and over. That’s a higher share than the 23 percent of the overall workforce. At least some of these workers will be looking to retire within the next 10 years.

Maritime industries with the most workers nearing retirement are support activities for water transportation (466 jobs), ship and boat building (390 jobs), and seafood product preparation and packaging (316 jobs). The industry with the largest share of workers age 55 years and over is sea and coastal transportation (32%), where 70 jobs are held by workers age 55 years and over.

Information about the age of the workforce is from the U.S. Census Bureau’s Quarterly Workforce Indicators. It is based on covered employment that is combined with the age of individual workers from federal sources. There is less industry detail available from this source, so the age information is limited to eight maritime sectors and covers 55 percent of covered jobs.
Projections of Employment Change through the Year 2027

The maritime sector workforce is expected to expand by 5 percent between 2017 and 2027, according to projections from the Oregon Employment Department. That is a net increase of more than 400 jobs. Fishing is expected to add 160 jobs, the largest gain in the maritime sector. Seafood product preparation and packaging has the second largest gain, with 118 jobs new jobs by 2027.

Industries projected to have fewer jobs in 2027 are support activities for water transportation (-59 jobs); scenic and sightseeing water transportation (-14); and sea and coastal transportation (-2). Although these industries are projected to have fewer jobs in the future than today, they will continue to need more workers due to replacement job openings as current workers change occupations or leave the labor force. The need for replacement openings is reflected in the occupational employment data below.

The fishing industry employment projection is an annual average count of jobs in order for it to be comparable to other industries. It is conceptually the same group of commercial fishers in Oregon, but measured as jobs instead of individuals.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment All Ages</th>
<th>Employment Age 55+</th>
<th>Share Age 55+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5,513</td>
<td>1,519</td>
<td>27%</td>
</tr>
<tr>
<td>Support Activities for Water Transportation</td>
<td>1,566</td>
<td>466</td>
<td>30%</td>
</tr>
<tr>
<td>Ship and Boat Building</td>
<td>1,687</td>
<td>390</td>
<td>22%</td>
</tr>
<tr>
<td>Seafood Product Preparation and Packaging</td>
<td>1,089</td>
<td>316</td>
<td>22%</td>
</tr>
<tr>
<td>Fishing</td>
<td>260</td>
<td>84</td>
<td>30%</td>
</tr>
<tr>
<td>Scenic and Sightseeing Transportation, Water</td>
<td>263</td>
<td>73</td>
<td>27%</td>
</tr>
<tr>
<td>Sea, Coastal, and Great Lakes Transportation</td>
<td>212</td>
<td>70</td>
<td>32%</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>271</td>
<td>64</td>
<td>24%</td>
</tr>
<tr>
<td>Inland Water Transportation</td>
<td>165</td>
<td>56</td>
<td>30%</td>
</tr>
</tbody>
</table>

Source: Oregon Employment Department, based on U.S. Census Bureau, Quarterly Workforce Indicators (2017 Q1 - 2017 Q4)
Occupations in Oregon’s Maritime Industries

The workforce of Oregon maritime industries consists of more than 100 different occupations. Information about maritime occupations helps to better describe Oregon’s maritime workers using information about hourly wages, projected replacement openings, the educational attainment required for a job applicant to be competitive in the occupation, and other occupational information. However, occupational data is limited to 77 percent of covered maritime jobs.

Replacement openings, the number of job openings created when workers change occupations or leave the labor force, are expected to total nearly 6,600 through the year 2027. This represents the need for workers with the training required to fill those openings. Replacements are a much larger source of workforce need than jobs created due to sector growth. Through 2027, Oregon’s maritime sector will need 16 replacement workers for each new worker needed due to economic expansion. That’s a greater need for replacements than across the economy overall. Oregon projections show nine replacement openings for every opening created due to economic growth. With an older workforce, the maritime sector is going to have openings to fill as current workers retire.

The 10 occupations with the most jobs in Oregon’s maritime sector are shown in the table. An expanded list of occupations is available at the end of this report.

### 10-Year Employment Projections for Oregon’s Maritime Industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>2017</th>
<th>2027</th>
<th>Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>7,644</td>
<td>8,052</td>
<td>408</td>
<td>5%</td>
</tr>
<tr>
<td>Ship and Boat Building</td>
<td>1,651</td>
<td>1,676</td>
<td>25</td>
<td>2%</td>
</tr>
<tr>
<td>Fishing</td>
<td>1,507</td>
<td>1,667</td>
<td>160</td>
<td>11%</td>
</tr>
<tr>
<td>Support Activities for Water Transportation</td>
<td>1,197</td>
<td>1,138</td>
<td>-59</td>
<td>-5%</td>
</tr>
<tr>
<td>Seafood Product Preparation and Packaging</td>
<td>1,172</td>
<td>1,290</td>
<td>118</td>
<td>10%</td>
</tr>
<tr>
<td>Fish and Seafood Merchant Wholesalers</td>
<td>527</td>
<td>585</td>
<td>58</td>
<td>11%</td>
</tr>
<tr>
<td>Boat Dealers</td>
<td>424</td>
<td>491</td>
<td>67</td>
<td>16%</td>
</tr>
<tr>
<td>Scenic and Sightseeing Transportation, Water</td>
<td>247</td>
<td>233</td>
<td>-14</td>
<td>-6%</td>
</tr>
<tr>
<td>Deep Sea, Coastal, and Great Lakes Water Transportation</td>
<td>231</td>
<td>229</td>
<td>-2</td>
<td>-1%</td>
</tr>
<tr>
<td>Marinas</td>
<td>213</td>
<td>225</td>
<td>12</td>
<td>6%</td>
</tr>
<tr>
<td>Fish and Seafood Markets</td>
<td>204</td>
<td>228</td>
<td>24</td>
<td>12%</td>
</tr>
<tr>
<td>Inland Water Transportation</td>
<td>177</td>
<td>190</td>
<td>13</td>
<td>7%</td>
</tr>
<tr>
<td>Animal Aquaculture</td>
<td>94</td>
<td>100</td>
<td>6</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: Oregon Employment Department
Conclusion

Oregon’s maritime sector is widespread and plays a key economic role in many coastal and rural communities. With a workforce totaling nearly 19,000 in 2017 and average wages exceeding most other industries, the maritime sector supports many family-wage jobs in Oregon. The sector is expected to continue adding new jobs, creating the need for more workers. Oregon’s maritime workforce is also aging. A large share of the current workforce will retire or change careers within the next 10 years, creating replacement openings for new workers. These workforce trends represent challenges for employers trying to fill their job vacancies, as well as more job opportunities for Oregonians in the maritime sector.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>7,717</td>
<td>N/A</td>
<td>6,582</td>
<td></td>
</tr>
<tr>
<td>Fishers and Related Fishing Workers</td>
<td>1,472</td>
<td>N/A</td>
<td>1,512</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Meat, Poultry, and Fish Cutters and Trimmers</td>
<td>493</td>
<td>$11.40</td>
<td>443</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Fork Lift, Industrial Truck and Tractor Operators</td>
<td>318</td>
<td>$17.88</td>
<td>222</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Welders, Cutters, Solderers, and Brazers</td>
<td>313</td>
<td>$21.45</td>
<td>167</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Structural Metal Fabricators and Fitters</td>
<td>308</td>
<td>$20.96</td>
<td>213</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Cargo and Freight Agents</td>
<td>261</td>
<td>$23.70</td>
<td>162</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Mobile Heavy Equipment Mechanics, Except Engines</td>
<td>212</td>
<td>$25.00</td>
<td>132</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Sailors and Marine Oilers</td>
<td>201</td>
<td>$27.83</td>
<td>180</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>200</td>
<td>$14.24</td>
<td>198</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Tank Car, Truck, and Ship Loaders</td>
<td>175</td>
<td>$26.19</td>
<td>155</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>All Other Occupations Combined</td>
<td>3,764</td>
<td>N/A</td>
<td>3,218</td>
<td></td>
</tr>
</tbody>
</table>

Note: Wages, replacements openings, and competitive education level based on jobs in all Oregon industries (not just maritime).

Source: Oregon Employment Department
Data Sources

Alaska Department of Fish and Game – email

California Department of Fish and Wildlife – email

Marine and Environmental Research and Training Station (MERTS) – phone call

Oregon Employment Department – 2017-2027 Employment Projections

Oregon Employment Department – Commercial fishing in Oregon estimates are based on licenses from the Oregon Department of Fish and Wildlife.

Oregon Employment Department – Covered maritime sector jobs from Quarterly Census of Employment and Wages (QCEW). Also see Data Sources and Limitations.

Oregon Employment Department – Oregon Wage Information, 2018

Tongue Point Seamanship Program – phone call

U.S. Coast Guard, 13th Coast Guard District - email

U.S. Coast Guard, National Maritime Center, Mariner Information Division - email

U.S. Navy Recruiting District Portland – phone conversation

U.S. Navy Swan Island Naval Reserve – phone conversation

U.S. Census Bureau, Nonemployer Statistics, 2016

U.S. Census Bureau, Quarterly Workforce Indicators, 2017

Washington State Department of Fish and Wildlife - email
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>7,717</td>
<td>N/A</td>
<td>6,582</td>
<td></td>
</tr>
<tr>
<td>Fishers and Related Fishing Workers</td>
<td>1,472</td>
<td>N/A</td>
<td>1,512</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Meat, Poultry, and Fish Cutters and Trimmers</td>
<td>493</td>
<td>$11.40</td>
<td>443</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Fork Lift, Industrial Truck and Tractor Operators</td>
<td>318</td>
<td>$17.88</td>
<td>222</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Welders, Cutters, Solderers, and Brazers</td>
<td>313</td>
<td>$21.45</td>
<td>167</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Structural Metal Fabricators and Fitters</td>
<td>308</td>
<td>$20.96</td>
<td>213</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Cargo and Freight Agents</td>
<td>261</td>
<td>$23.70</td>
<td>162</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Mobile Heavy Equipment Mechanics, Except Engines</td>
<td>212</td>
<td>$25.00</td>
<td>132</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Sailors and Marine Oilers</td>
<td>201</td>
<td>$27.83</td>
<td>160</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>200</td>
<td>$14.24</td>
<td>198</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Tank Car, Truck, and Ship Loaders</td>
<td>175</td>
<td>$26.19</td>
<td>155</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Retail Salespersons</td>
<td>170</td>
<td>$12.34</td>
<td>215</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Captains, Mates, and Pilots of Water Vessels</td>
<td>170</td>
<td>$40.04</td>
<td>114</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Food Processing Workers, All Other</td>
<td>169</td>
<td>$12.01</td>
<td>145</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Truck Drivers, Heavy and Tractor-Trailer</td>
<td>163</td>
<td>$22.05</td>
<td>138</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Maintenance and Repair Workers, General</td>
<td>148</td>
<td>$18.23</td>
<td>121</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>148</td>
<td>$41.37</td>
<td>61</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Office Clerks, General</td>
<td>101</td>
<td>$16.81</td>
<td>119</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Assemblers and fabricators, all other, including team assemblers</td>
<td>96</td>
<td>$15.66</td>
<td>106</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Supervisors and Managers of Production and Operating Workers</td>
<td>92</td>
<td>$26.56</td>
<td>59</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Combined Food Preparation and Serving Workers, Including Fast Food</td>
<td>89</td>
<td>$11.71</td>
<td>158</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Painters, Transportation Equipment</td>
<td>89</td>
<td>$20.13</td>
<td>51</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Supervisors and Managers of Office and Administrative Support Workers</td>
<td>70</td>
<td>$27.22</td>
<td>54</td>
<td>Associate's degree</td>
</tr>
<tr>
<td>Wholesale and Manufacturing Sales Representatives, Except Technical and Scientific Products</td>
<td>69</td>
<td>$28.22</td>
<td>46</td>
<td>Associate's degree</td>
</tr>
<tr>
<td>Electrical and Electronics Installers and Repairers, Transportation Equipment</td>
<td>67</td>
<td>$26.88</td>
<td>33</td>
<td>Associate's degree</td>
</tr>
<tr>
<td>Bookkeeping, Accounting, and Auditing Clerks</td>
<td>61</td>
<td>$19.37</td>
<td>76</td>
<td>Associate's degree</td>
</tr>
<tr>
<td>Supervisors and Managers of Transportation and Material Moving Workers, Except Aircraft Cargo Handling</td>
<td>61</td>
<td>$25.03</td>
<td>66</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Ship Engineers</td>
<td>59</td>
<td>$35.56</td>
<td>47</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Electricians</td>
<td>58</td>
<td>$34.21</td>
<td>40</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Packaging and Filling Machine Operators and Tenders</td>
<td>56</td>
<td>$14.35</td>
<td>53</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Slaughterers and Meat Packers</td>
<td>56</td>
<td>$13.01</td>
<td>50</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Driver/Sales Workers</td>
<td>53</td>
<td>$14.55</td>
<td>45</td>
<td>High school diploma or equivalent</td>
</tr>
</tbody>
</table>

Note: Wages, replacements openings, and competitive education level based on jobs in all Oregon industries (not just maritime).
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenters</td>
<td>51</td>
<td>$22.43</td>
<td>35</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Shipping, Receiving, and Traffic Clerks</td>
<td>50</td>
<td>$16.51</td>
<td>39</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Industrial Production Managers</td>
<td>49</td>
<td>$42.00</td>
<td>23</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Riggers</td>
<td>47</td>
<td>$31.56</td>
<td>29</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Stock Clerks and Order Fillers</td>
<td>46</td>
<td>$14.18</td>
<td>50</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Secretaries and Administrative Assistants, Except Legal, Medical, and Executive</td>
<td>45</td>
<td>$18.42</td>
<td>48</td>
<td>Associate's degree</td>
</tr>
<tr>
<td>Buyers and Purchasing Agents</td>
<td>44</td>
<td>$28.14</td>
<td>47</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Motorboat Mechanics</td>
<td>44</td>
<td>$18.14</td>
<td>36</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders</td>
<td>44</td>
<td>$20.47</td>
<td>23</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Waiters and Waitresses</td>
<td>41</td>
<td>$11.81</td>
<td>61</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Production Worker's Helpers</td>
<td>41</td>
<td>$15.52</td>
<td>44</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Supervisors and Managers of Retail Sales Workers</td>
<td>41</td>
<td>$18.58</td>
<td>30</td>
<td>Postsecondary training (non-degree)</td>
</tr>
<tr>
<td>Packers and Packagers, Hand</td>
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<tr>
<td>Cooks, All Other</td>
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<td>$13.16</td>
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</tr>
<tr>
<td>Weighers, Measurers, Checkers, and Samplers, Recordkeeping</td>
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<td>$15.77</td>
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</tr>
<tr>
<td>Cleaners of Vehicles and Equipment</td>
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</tr>
<tr>
<td>Transportation Inspectors</td>
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<td>$32.04</td>
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<td>Inspectors, Testers, Sorters, Samplers, and Weighers</td>
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<td>$19.48</td>
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<tr>
<td>Business Operations Specialists, All Other</td>
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<td>$31.68</td>
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<tr>
<td>Service Station Attendants</td>
<td>31</td>
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<tr>
<td>Managers, All Other</td>
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<td>Payroll and Timekeeping Clerks</td>
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<td>Installation, Maintenance, and Repair Workers, All Other</td>
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<td>Janitors and Cleaners, Except Maids and Housekeeping Cleaners</td>
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<td>Transportation, Storage, and Distribution Managers</td>
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</tr>
<tr>
<td>Material Moving Workers, All Other</td>
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<td>Production Workers, All Other</td>
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<tr>
<td>Financial Managers</td>
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<td>Counter and Rental Clerks</td>
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<td>Boilermakers</td>
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<td>Sales Managers</td>
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<td>Motorboat Operators</td>
<td>20</td>
<td>$20.23</td>
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<td>High school diploma or equivalent</td>
</tr>
</tbody>
</table>

Note: Wages, replacements openings, and competitive education level based on jobs in all Oregon industries (not just maritime).
## Top 100 Occupations in Oregon’s Maritime Industries (continued)

<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Accountants and Auditors</td>
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<td>Dining Room and Cafeteria Attendants and Bartender Helpers</td>
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<td>Cooks, Restaurant</td>
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<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Billing and Posting Clerks</td>
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</tr>
<tr>
<td>Cashiers</td>
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<td>Cooling and Freezing Equipment Operators and Tenders</td>
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<td>$15.02</td>
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<tr>
<td>Supervisors and Managers of Mechanics, Installers, and Repairers</td>
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<td>$31.53</td>
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</tr>
<tr>
<td>Industrial Machinery Mechanics</td>
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<tr>
<td>Marine Engineers and Naval Architects</td>
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<td>$52.83</td>
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<tr>
<td>Bill and Account Collectors</td>
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<tr>
<td>Network and Computer Systems Administrators</td>
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<tr>
<td>Parts Salespersons</td>
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<tr>
<td>Human Resources Specialists</td>
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</tr>
<tr>
<td>Office and Administrative Support Workers, All Other</td>
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<tr>
<td>Truck Drivers, Light or Delivery Services</td>
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<td>$16.63</td>
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<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Layout Workers, Metal and Plastic</td>
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<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Sales Representatives, Services, All Other</td>
<td>13</td>
<td>$24.29</td>
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<td>Fiberglass Laminators and Fabricators</td>
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<td>Plumbers, Pipefitters, and Steamfitters</td>
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<td>Machinists</td>
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<td>Cost Estimators</td>
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<td>Occupational Health and Safety Specialists</td>
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<tr>
<td>Computer User Support Specialists</td>
<td>11</td>
<td>$24.13</td>
<td>4</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Executive Secretaries and Executive Administrative Assistants</td>
<td>10</td>
<td>$26.56</td>
<td>11</td>
<td>Associate's degree</td>
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<tr>
<td>Upholsterers</td>
<td>10</td>
<td>$14.86</td>
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<tr>
<td>Farmworkers, Farm, Ranch, and Aquacultural Animals</td>
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<tr>
<td>Automotive Body and Related Repairers</td>
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<td>$18.37</td>
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<td>Postsecondary training (non-degree)</td>
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<tr>
<td>Tour and travel guides</td>
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<tr>
<td>Dispatchers, Except Police, Fire, and Ambulance</td>
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<td>$11.77</td>
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<td>Postsecondary training (non-degree)</td>
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<tr>
<td>Administrative Services Managers</td>
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<td>$19.43</td>
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<tr>
<td>Production, Planning, and Expediting Clerks</td>
<td>8</td>
<td>$22.08</td>
<td>5</td>
<td>Bachelor's degree</td>
</tr>
</tbody>
</table>

Note: Wages, replacements openings, and competitive education level based on jobs in all Oregon industries (not just maritime).
### Top 100 Occupations in Oregon’s Maritime Industries (continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors and Managers of Construction Trades and Extraction Workers</td>
<td>8</td>
<td>$33.93</td>
<td>5</td>
<td>Postsecondary training (non-degree)</td>
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<tr>
<td>Customer Service Representatives</td>
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<td>$16.86</td>
<td>7</td>
<td>High school diploma or equivalent</td>
</tr>
<tr>
<td>Crane and Tower Operators</td>
<td>7</td>
<td>$30.24</td>
<td>5</td>
<td>High school diploma or equivalent</td>
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<tr>
<td>Drafters, All Other</td>
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<td>$25.17</td>
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<tr>
<td>Training and Development Specialists</td>
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<td>$29.53</td>
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</tr>
<tr>
<td>Chefs and Head Cooks</td>
<td>6</td>
<td>$21.32</td>
<td>4</td>
<td>Postsecondary training (non-degree)</td>
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<tr>
<td>Commercial Pilots, Except Airline Pilots</td>
<td>6</td>
<td>$57,500*</td>
<td>3</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>All Other Occupations Combined</td>
<td>147</td>
<td>N/A</td>
<td>98</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: Wages, replacements openings, and competitive education level based on jobs in all Oregon industries (not just maritime).

* Median Annual Salary

Source: Oregon Employment Department