

3-19-2015

A Look at Job Vacancies by Occupation

Maine Center for Workforce Research and Information

Ruth E. Pease
Maine Department of Labor

Follow this and additional works at: http://digitalmaine.com/cwri_docs

Recommended Citation

Maine Center for Workforce Research and Information and Pease, Ruth E., "A Look at Job Vacancies by Occupation" (2015). *Center for Workforce Research and Information Documents*. Paper 219.
http://digitalmaine.com/cwri_docs/219

This Text is brought to you for free and open access by the Labor at Maine State Documents. It has been accepted for inclusion in Center for Workforce Research and Information Documents by an authorized administrator of Maine State Documents. For more information, please contact statedocs@maine.gov.

A Look at Job Vacancies by Occupation

In this post, we look at results of the September 2014 Maine job vacancy survey by occupation. Occupations describe what workers do, in contrast to industries which describe what firms do. In our [last blog](#) dated March 4, we described an industry distribution of job vacancies that is highly concentrated, with 80 percent of job vacancies occurring in five sectors. The occupational distribution is less concentrated.

Job vacancies occurred in every major occupational group (excluding military occupations). Nine groups with the largest numbers of openings accounted for 80 percent of vacancies; the remaining 20 percent of unfilled openings were distributed across 13 occupational groups. Distribution by major group ranged from a high of 2,996 unfilled openings in food preparation and serving related occupations to a low of 26 unfilled openings in life, physical science and social science occupations.

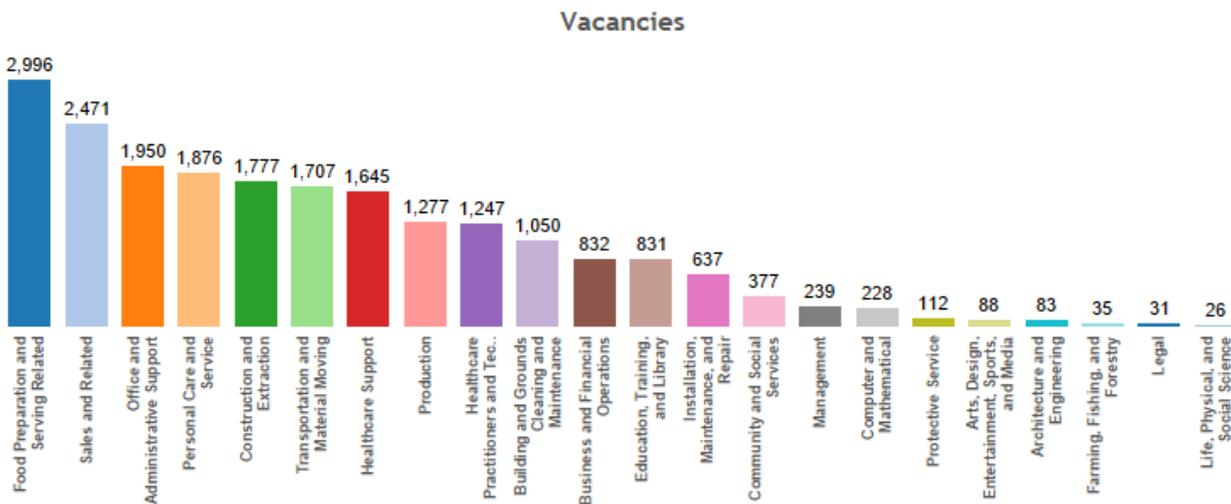
The association of occupations with industries is not always as easily recognized, say, as production occupations with manufacturing firms. Most occupational groups are found in a variety of industries, and every industry has jobs in an array of occupations. These diverse associations are reflected in job vacancies. Consider vacancies in healthcare.

Occupation	Vacancies	Median Wage 2013*	Full-Time Positions	Seasonal or Temporary Positions	Requiring Education Beyond High School **	Requiring Previous Experience **	Difficult to Fill
Food Preparation and Serving Related	2,996	\$9.26	19%	6%	1%	23%	64%
Sales and Related	2,471	\$11.19	47%	11%	17%	41%	63%
Office and Administrative Support	1,950	\$14.77	63%	19%	16%	49%	48%
Personal Care and Service	1,876	\$10.34	51%	1%	33%	36%	85%
Construction and Extraction	1,777	\$17.62	87%	37%	5%	87%	94%
Transportation and Material Moving	1,707	\$14.06	78%	33%	16%	48%	68%
Healthcare Support	1,645	\$12.46	57%	0%	81%	56%	74%
Production	1,277	\$16.54	91%	17%	22%	62%	66%
Healthcare Practitioners and Technical	1,247	\$28.82	70%	1%	92%	87%	49%
Building and Grounds Cleaning and Maintenance	1,050	\$11.62	70%	3%	27%	14%	82%
Business and Financial Operations	832	\$26.64	99%	1%	97%	99%	86%
Education, Training, and Library	831	\$19.86	39%	0%	95%	91%	89%
Installation, Maintenance, and Repair	637	\$19.72	96%	8%	47%	88%	90%
Community and Social Services	377	\$18.12	82%	1%	92%	86%	77%
Management	239	\$36.36	100%	4%	94%	100%	42%
Computer and Mathematical	228	\$29.91	98%	3%	89%	98%	73%
Protective Service	112	\$16.09	25%	43%	20%	35%	22%
Arts, Design, Entertainment, Sports, and Media	88	\$14.88	81%	14%	51%	71%	55%
Architecture and Engineering	83	\$32.97	100%	5%	98%	100%	66%
Farming, Fishing, and Forestry	35	\$15.14	73%	58%	0%	49%	73%
Legal	31	\$26.96	100%	0%	94%	100%	100%
Life, Physical, and Social Science	26	\$24.92	100%	18%	74%	66%	81%
Total, All Occupations	21,517	\$16.06	62%	12%	34%	54%	70%

* From the Occupational Employment Survey (OES).

**Share of vacancies that specified a level of education or experience (excluding unspecified).

Display
Vacancies



Ranked from high to low by number of vacancies, healthcare occupations ranked seventh (healthcare support) and ninth (healthcare practitioners and technical). Together, these two groups account for nearly 2,900 unfilled jobs and account for about half vacancies attributed to the healthcare and social assistance sector (5,700). What occupations comprise the balance? About 1,400 of the sector’s unfilled positions are in personal care and service occupations and the rest are distributed among 14 other groups, including community and social services; office and administrative support; and education, training and library occupations.

Other distinctive features of occupational groupings of job vacancies:

- In food preparation and serving; protective services; education, training and library; and sales occupations, fewer than half of unfilled jobs were full time, well below the average of 62 percent of all occupations.
- Vacancies in protective services were also far more likely to be seasonal or temporary (43 percent), as were unfilled jobs in farming, fishing and forestry; construction and extraction; and transportation and material moving. (The timing of this survey in September, between the summer and winter recreation seasons, has bearing on the number and composition of temporary and seasonal job vacancies. It's quite likely that a different reference period would solicit different responses in this category).
- Not all unfilled openings specified an educational requirement. Among those that did, about one-third required education or training beyond high school. More occupational groups exceeded the average than not; in seven groups, more than 90 percent of unfilled jobs required post-secondary training or education. They were: architecture and engineering; business and financial operations; education, training, and library; management; legal; healthcare practitioners and technical; and community and social services. On the other end of the spectrum, vacancies in farming, food preparation and serving, and construction occupations were least likely to require education beyond high school.
- Occupational groups most likely to require post-secondary education were also more likely to require previous experience. Among vacancies that had any specification, more than half indicated that some level of previous experience was required. More than 90 percent of vacancies in architecture and engineering; management; legal; business and financial operations; and education, training, and library occupations required previous experience, while fewer than 25 percent in food preparation and serving, and building and grounds cleaning and maintenance did so.
- Difficult-to-fill status was reported for 70 percent of all vacancies. This status was not necessarily associated with any single characteristic. The highest shares of vacancies identified as difficult to fill were in legal, construction, and installation, maintenance and repair occupations. Unfilled openings in management and protective service occupations were least likely to be identified as difficult to fill. [A future blog will examine difficult-to-fill vacancies and reasons provided by employers.]

Median wage and relative demand for new hires by occupations

Number and characteristics of job vacancies describe the stock of unfilled jobs; however, to assess relative demand for new hires by occupational group, we compare the share of job vacancies to the share of jobs in the group. The resulting ratio is assessed relative to the all-industries benchmark value of one (1). A value less than one indicates lower demand for new hires; a value greater than one indicates higher demand for new hires compared to all industries. [A longer description of this method appeared in our [March 4 blog](#).]

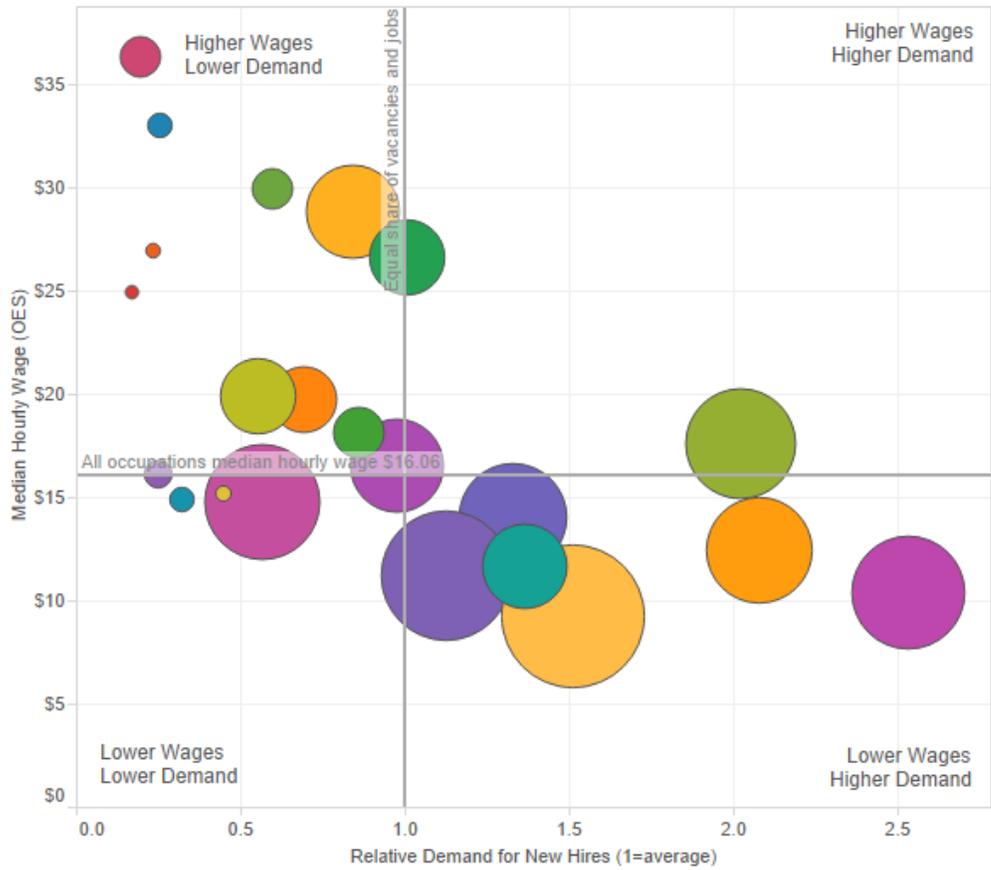
The following chart shows occupations plotted by relative demand, median hourly wage and estimated number of vacant positions. The chart is divided into quadrants: vertically bisected at the value 1, signifying lower or higher demand for new hires compared to the average (left and right, respectively), and horizontally bisected at the value \$16.06 – the median hourly wage for all occupations in 2013 – signifying below- or above-average wages.

The size of each bubble reflects the number of job vacancies in that occupational group.

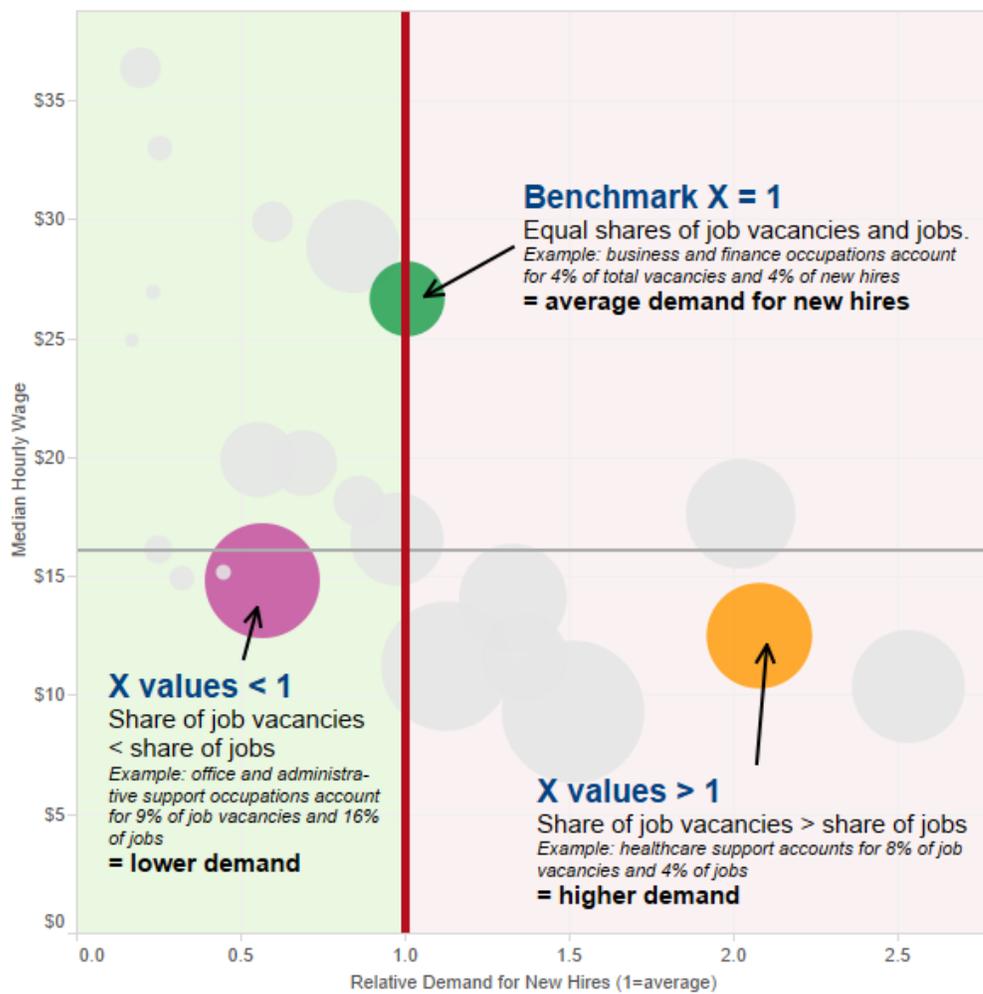
Demand by Wages	How to read this chart: X-axis	How to read this chart: Y-axis	How to read this chart: Quadrants
-----------------	-----------------------------------	-----------------------------------	--------------------------------------

Wages/Demand:
All

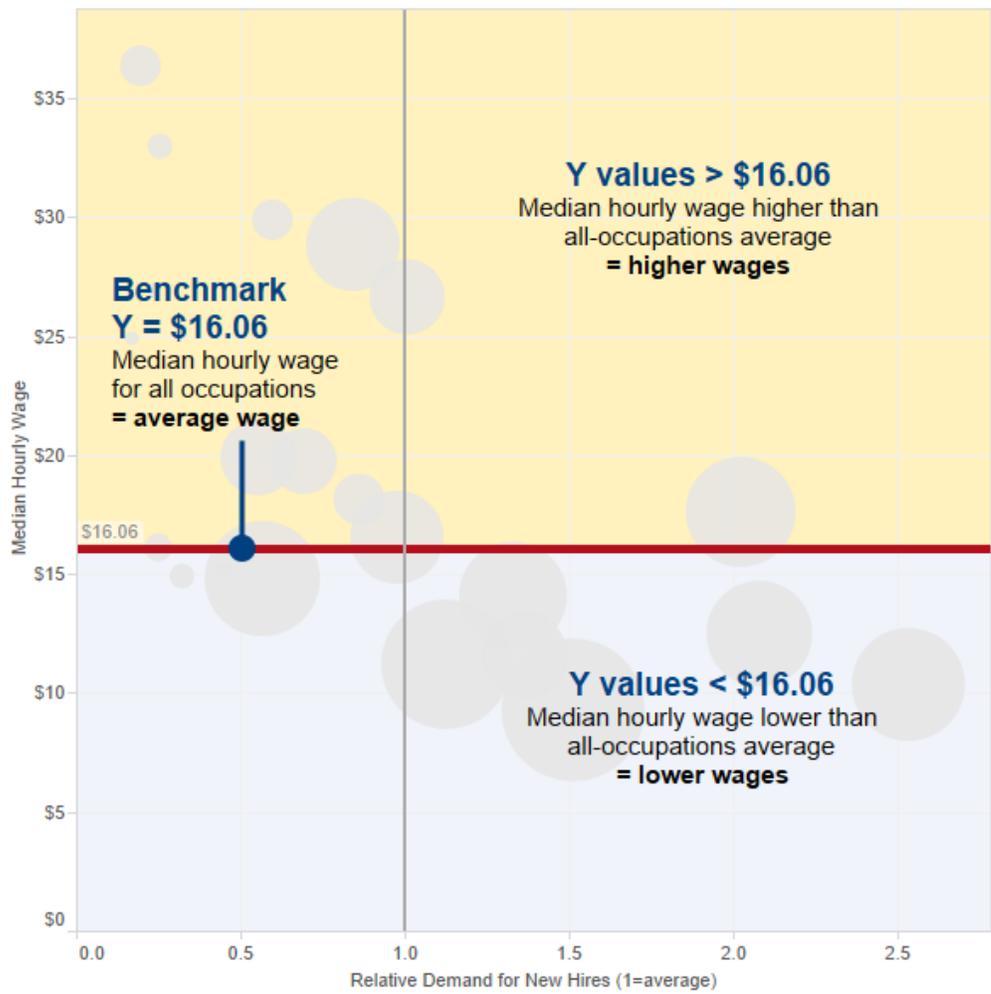
Hover over bubbles for detailed information



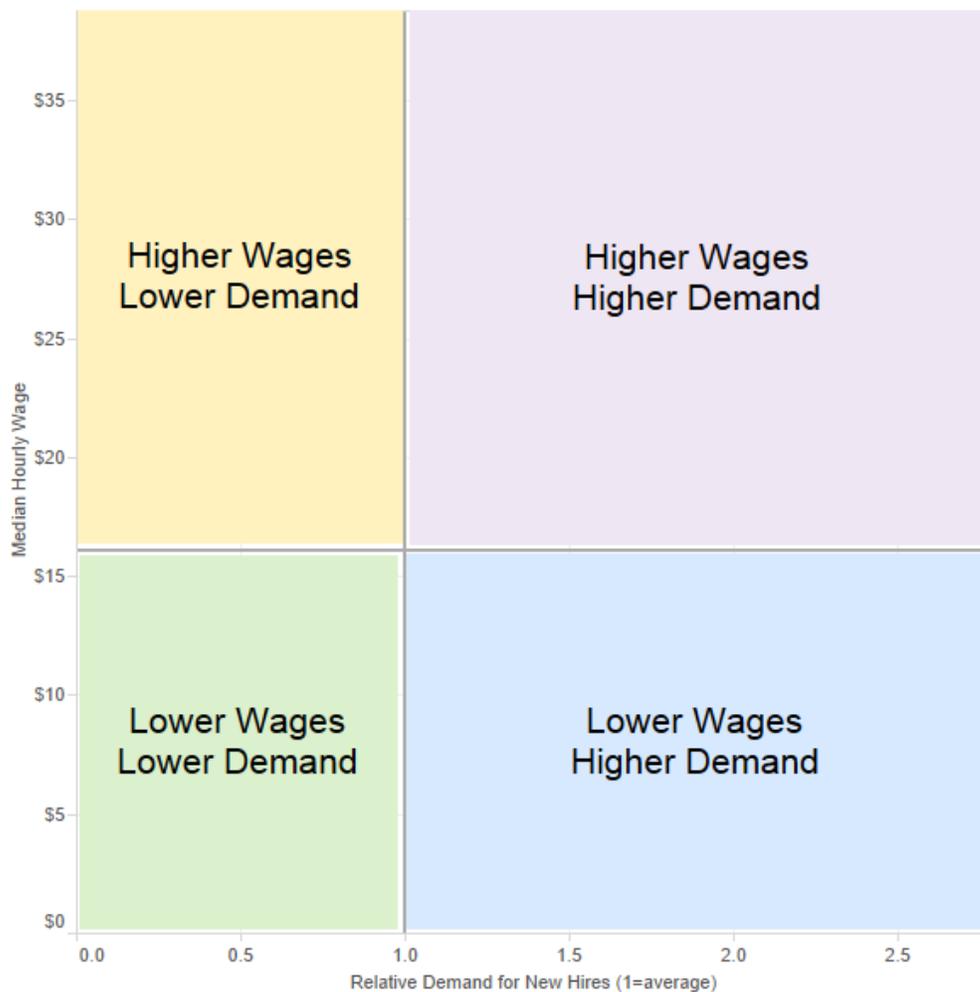
Demand by Wages	How to read this chart: X-axis	How to read this chart: Y-axis	How to read this chart: Quadrants
-----------------	-----------------------------------	-----------------------------------	--------------------------------------



Demand by Wages	How to read this chart: X-axis	How to read this chart: Y-axis	How to read this chart: Quadrants
-----------------	-----------------------------------	-----------------------------------	--------------------------------------



Demand by Wages	How to read this chart: X-axis	How to read this chart: Y-axis	How to read this chart: Quadrants
-----------------	-----------------------------------	-----------------------------------	--------------------------------------



In the upper-left quadrant are occupational groups with higher wages and lower demand for new hires, each with a median wage greater than the benchmark of \$16.06 (the median for all occupations) and a share of total vacancies less than the share of total jobs in that occupation. They are: community and social services; installation, maintenance, and repair; education, training, and library; life, physical, and social science; legal; healthcare practitioners and technical; computer and mathematical; architecture and engineering; and management occupations. Job vacancies in these occupations totaled 3,700, or 17 percent of total job vacancies.

Also in the higher wages-lower demand quadrant are two groups located on or near the wage and demand axes. One is production occupations, in which the median wage (\$16.54) is just above the benchmark; shares of vacancies and jobs were roughly equal, indicating average demand. Job vacancies at firms in this group numbered 1,277, or 6 percent of the total. The second is protective service occupations. With a median wage of \$16.09, this group is near-equal to the benchmark; because the share of vacancies (1%) was less than the share of jobs (2%), demand for new hires was below average. There were an estimated 112 job vacancies in protective service occupations.

Between the upper-right and -left quadrants is the business and financial group. With equal shares of vacancies and jobs, demand for new hires in this group is neither higher nor lower than average; median wage (\$26.64) is well above the benchmark. Job vacancies in this group numbered 831.

In the upper-right quadrant are occupations with higher wages and higher demand for new workers. One group populates this quadrant: construction and extraction occupations. This group had a higher median wage (\$17.62) and a higher share of vacancies than jobs. An estimated 1,777 vacancies were in these occupations, or 8 percent of total vacancies.

In the lower-right quadrant are occupational groups with lower wages and higher demand for new hires. The six groups that populate this sector account for more than half of total vacancies. They are: food preparation and serving, sales and related, personal care and service, transportation and material moving, healthcare support, and building and grounds cleaning and maintenance. Medians wage in these groups range from a low of \$9.26 to a high of \$11.62 per hour. In each group, the share of vacancies was higher than the share of jobs. These occupations accounted for 11,745 job vacancies (55% of the total number).

In the lower left quadrant are occupational groups with lower wages and lower demand for new hires. These are: office and administrative support; arts, design, entertainment, sports and media; and farming, fishing and forestry. These occupations accounted for 2,073 vacancies (10% of the total).

By industry, more than half of vacancies were located at firms in industries paying above-average weekly wages – a general indicator affected by hours worked (mix of full- and part-time jobs) and wages other than base pay (bonuses and overtime). By occupation, nearly two-thirds of vacancies were in lower-paying occupational groups – those with median wages less than \$16.06, the median for all occupations.

Top 25 occupations with the highest number of vacancies in September 2014

While there were nearly 400 individual occupations with at least one identified job opening, five occupations account for one quarter of total vacancies. The top-25 occupations account for more than half of the total. Here’s the list of detailed occupations in descending order, by number of estimated vacancies:

TOP 25 OCCUPATIONS by number of vacancies, September 2014				
Occupation Title	Vacancies	Median Hourly Wage (2013 OES)	Full Time Positions	Seasonal/Temporary Positions
Combined Food Preparation and Serving Workers, Including Fast Food	1,532	\$8.82	16%	0%
Personal Care Aides	1,354	\$10.22	52%	0%
Cashiers	901	\$9.02	20%	16%

TOP 25 OCCUPATIONS
by number of vacancies, September 2014

Occupation Title	Vacancies	Median Hourly Wage (2013 OES)	Full Time Positions	Seasonal/Temporary Positions
Retail Salespersons	821	\$10.16	37%	11%
Nursing Assistants	820	\$11.45	59%	1%
Heavy and Tractor-Trailer Truck Drivers	700	\$16.59	93%	19%
Registered Nurses	658	\$29.66	72%	0%
Laborers and Freight, Stock, and Material Movers, Hand	626	\$12.45	73%	63%
Stock Clerks and Order Fillers	555	\$10.46	27%	15%
Customer Service Representatives	471	\$15.02	82%	20%
Construction Laborers	427	\$13.76	97%	28%
Accountants and Auditors	413	\$26.95	100%	1%
Food Preparation Workers	393	\$10.14	49%	16%
Waiters and Waitresses	357	\$8.93	9%	26%
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	302	\$8.72	0%	0%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	274	\$12.00	60%	0%
Teacher Assistants	261	na	61%	0%
Medical Assistants	253	\$14.69	80%	1%
Maids and Housekeeping Cleaners	251	\$9.60	21%	11%
Telemarketers	246	\$11.15	100%	13%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	225	\$24.09	100%	0%
Helpers--Production Workers	171	\$12.54	87%	68%
Social and Human Service Assistants	154	\$14.45	65%	0%

TOP 25 OCCUPATIONS
by number of vacancies, September 2014

Occupation Title	Vacancies	Median Hourly Wage (2013 OES)	Full Time Positions	Seasonal/Temporary Positions
Carpenters	136	\$17.86	100%	8%
Millwrights	125	\$23.13	100%	0%