Idaho’s new tool for analyzing real-time labor market information via job listings traffic – example of analyzing recent trends in software developer occupations

**Idaho Department of Labor**

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Help Wanted On-Line

- The Conference Board Help Wanted OnLine® Data Series (HWOL) measures the number of new, first-time online ads and jobs reposted from the previous month for over 16,000 Internet job boards, corporate boards and smaller job sites that serve niche markets and smaller geographic areas. Duplicate ads are removed and then identified by type according to location and Standard Occupational Classification (SOC).
- The department can monitor around 26,000 job listings in Idaho, assuring greater access to job listings for WIA participants within the system.
- The tool also allows researchers to analyze and define the occupations and industries that are thriving by local geographies. This enhanced labor market information will be used to better educate WIA participants and other job seekers of career and job opportunities in their area. Research staff also follow these data closely to assess real time changes in Idaho’s economy and potential changes in its business cycle.
Idaho’s software developer share of total job listings is much smaller than the nation’s share. But (next slide) >>>
Idaho Software Developer Occupations (SOC 15-1132 and 15-1133)
Job Ads in the Economic Expansion (April 2009 to April 2014)

Information provided by the Idaho Department of Labor using Help Wanted On-line Listings data, June 2014.

But, you can see Idaho’s software developer job listings have grown significantly during the recent economic expansion. In Fact (next slide) >>>
In fact - while the total and computer-related job listings are fairly comparable between the U.S. and Idaho, Idaho’s growth in software developer listings has skyrocketed, doubling the pace of the nation. Also (next slide)
### Idaho’s hot jobs for 2010-2020

- **Registered Nurses**: 16,188, 4,661/40.44% Associate Degree
- **Medical and Health Services Managers**: 1,978, 455 / 29.88% Bachelor’s Degree
- **Physical Therapists**: 1,453, 424 / 41.21% Doctor or Professional Degree
- **Dental Hygienists**: 1,573, 365 / 30.22% Associate Degree
- **Pharmacists**: 1,726, 322 / 22.93% Doctor or Professional Degree
- **Software Developers, Applications**: 1,697, 391 / 29.94% Bachelor’s Degree
- **Management Analysts**: 2,708, 540 / 24.91% Bachelor’s Degree
- **Physicians and Surgeons, All Other**: 1,311, 222 / 22.45%
  - 42 not available
  - Doctor or Professional Degree
- **Network and Computer Systems Administrators**: 1,406, 312 / 28.52% Bachelor’s Degree
- **Market Research Analysts and Marketing Specialists**: 1,479, 427 / 40.59%
  - 71 Bachelor’s Degree
- **Radiologic Technologists and Technicians**: 1,399, 399 / 39.90%
  - 56 Associate Degree
- **Family and General Practitioners**: 918, 179 / 24.22%
  - 33 Doctor or Professional Degree
- **Physician Assistants**: 732, 167 / 29.56%
  - 27 Master’s Degree
- **Licensed Practical and Licensed Vocational Nurses**: 3,609, 770 / 22.12%
  - 153 not available
  - Postsecondary Non-Degree Award
- **Mechanical Engineers**: 1,370, 212 / 18.31%
  - 58 Bachelor’s Degree
- **Electrical Engineers**: 2,124, 290 / 15.81%
  - 73 Bachelor’s Degree
- **Computer Systems Analysts**: 1,174, 215 / 22.42%
  - 40 Bachelor’s Degree
- **Industrial Machinery Mechanics**: 1,630, 356 / 22.94%
  - 60 High School Diploma or Equivalent
- **Loan Officers**: 2,825, 438 / 18.35%
  - 105 Bachelor’s Degree
- **Elementary School Teachers, Excluding Special Education**: 8,160, 1,200 / 17.24%
  - 273 Bachelor’s Degree

### Also

- The software developers occupation makes Idaho’s top 20 hot jobs list coming in at number six. You will notice that network and computer systems administrators and computer system analysts come in at numbers nine and 17 respectively. This Hot Jobs ranking looks at all 800 plus occupations and ranks them by a combination of abundance, fastest growing and highest paying metrics. And lastly (next slide) >>>

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**Legend**
- **Projected Employment**
- **Growth in Number / %**
- **Annual Openings**
- **Median Hourly Wage**

**Explore careers at labor.idaho.gov/careers and see more job growth projections at lmi.idaho.gov.**
### Top 20 Occupation Vacancy Rates in Idaho

**Hard-To-Fill (HTF) and Hard-To-Keep (HTK) Occupations using Job Listings Data**

#### Job Listings Open 180+ Days

Sorted By Vacancy Rate - March 2014

<table>
<thead>
<tr>
<th>Job Listings Open 180+ Days</th>
<th>SOC Code</th>
<th>Openings March 2014</th>
<th>% Vacancy Rate March 2014</th>
<th>Openings March 2013</th>
<th>% Vacancy Rate March 2013</th>
<th>Total Emp (OES)</th>
<th>Median Wage (OES)</th>
<th>State Median Wage Rank (OES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Occupational Therapists</td>
<td>29112200</td>
<td>18</td>
<td>4.9%</td>
<td>81</td>
<td>21.9%</td>
<td>370</td>
<td>$69,030</td>
</tr>
<tr>
<td>2</td>
<td>Industrial Engineers</td>
<td>17211200</td>
<td>24</td>
<td>2.9%</td>
<td>5</td>
<td>0.6%</td>
<td>840</td>
<td>$83,440</td>
</tr>
<tr>
<td>3</td>
<td>Family and General Practitioners</td>
<td>29106200</td>
<td>13</td>
<td>2.8%</td>
<td>19</td>
<td>4.1%</td>
<td>460</td>
<td>$160,820</td>
</tr>
<tr>
<td>4</td>
<td>First-Line Supervisors of Food Preparation and Serving Workers</td>
<td>35101200</td>
<td>95</td>
<td>2.6%</td>
<td>34</td>
<td>0.9%</td>
<td>3,680</td>
<td>$24,150</td>
</tr>
<tr>
<td>5</td>
<td>Vocational Education Teachers, Postsecondary</td>
<td>25119400</td>
<td>11</td>
<td>2.0%</td>
<td>4</td>
<td>0.7%</td>
<td>550</td>
<td>$41,530</td>
</tr>
<tr>
<td>6</td>
<td>Physical Therapists</td>
<td>29112300</td>
<td>15</td>
<td>1.6%</td>
<td>79</td>
<td>8.4%</td>
<td>940</td>
<td>$72,840</td>
</tr>
<tr>
<td>7</td>
<td>Driver/Sales Workers</td>
<td>53303100</td>
<td>45</td>
<td>1.5%</td>
<td>5</td>
<td>0.2%</td>
<td>2,960</td>
<td>$24,380</td>
</tr>
<tr>
<td>8</td>
<td>Medical and Health Services Managers</td>
<td>11911100</td>
<td>12</td>
<td>0.8%</td>
<td>17</td>
<td>1.1%</td>
<td>1,560</td>
<td>$71,390</td>
</tr>
<tr>
<td>9</td>
<td>Software Developers, Applications</td>
<td>15113200</td>
<td>9</td>
<td>0.7%</td>
<td>5</td>
<td>0.4%</td>
<td>1,370</td>
<td>$69,570</td>
</tr>
<tr>
<td>10</td>
<td>Registered Nurses + Critical Care Nurses (ONET Combo)</td>
<td>29114100</td>
<td>73</td>
<td>0.6%</td>
<td>158</td>
<td>1.4%</td>
<td>11,420</td>
<td>$58,260</td>
</tr>
<tr>
<td>11</td>
<td>First-Line Supervisors of Retail Sales Workers</td>
<td>41101100</td>
<td>35</td>
<td>0.6%</td>
<td>42</td>
<td>0.7%</td>
<td>5,870</td>
<td>$33,230</td>
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<tr>
<td>12</td>
<td>Combined Food Preparation and Serving Workers, Including Fast Food</td>
<td>35302100</td>
<td>54</td>
<td>0.5%</td>
<td>10</td>
<td>0.1%</td>
<td>10,290</td>
<td>$17,950</td>
</tr>
<tr>
<td>13</td>
<td>Heavy and Tractor-Trailer Truck Drivers</td>
<td>53303200</td>
<td>51</td>
<td>0.5%</td>
<td>56</td>
<td>0.5%</td>
<td>3,680</td>
<td>$35,780</td>
</tr>
<tr>
<td>14</td>
<td>Security Guards</td>
<td>33903200</td>
<td>9</td>
<td>0.4%</td>
<td>10</td>
<td>0.4%</td>
<td>2,320</td>
<td>$25,240</td>
</tr>
<tr>
<td>15</td>
<td>Social and Human Service Assistants</td>
<td>21109300</td>
<td>8</td>
<td>0.3%</td>
<td>10</td>
<td>0.4%</td>
<td>2,490</td>
<td>$31,160</td>
</tr>
<tr>
<td>16</td>
<td>Sales Representatives, Wholesale and MFG., Except Tech. and Sci. Prod.</td>
<td>41401200</td>
<td>17</td>
<td>0.3%</td>
<td>15</td>
<td>0.3%</td>
<td>5,760</td>
<td>$45,550</td>
</tr>
<tr>
<td>17</td>
<td>Nursing Assistants</td>
<td>31101400</td>
<td>16</td>
<td>0.2%</td>
<td>21</td>
<td>0.3%</td>
<td>7,720</td>
<td>$22,320</td>
</tr>
<tr>
<td>18</td>
<td>Retail Salespersons</td>
<td>41203100</td>
<td>31</td>
<td>0.2%</td>
<td>74</td>
<td>0.4%</td>
<td>20,650</td>
<td>$20,780</td>
</tr>
<tr>
<td>19</td>
<td>Teacher Assistants</td>
<td>25904100</td>
<td>10</td>
<td>0.1%</td>
<td>19</td>
<td>0.3%</td>
<td>6,710</td>
<td>$20,850</td>
</tr>
<tr>
<td>20</td>
<td>Customer Service Representatives</td>
<td>43405100</td>
<td>17</td>
<td>0.1%</td>
<td>37</td>
<td>0.3%</td>
<td>14,790</td>
<td>$25,550</td>
</tr>
</tbody>
</table>

First Sort Volume - Second Sort Vacancy Rates
Date range: from 2/14/2014 to 3/13/2014
When ONET codes could be combined, they were combined
OES Employment of 250 or greater only (2013 file)

And lastly, software developers–applications makes Idaho’s top 20 list of Hard-To-Keep / Hard-To-Fill (listing open for 180 days or more) jobs, which uses listings to total jobs in that occupation as the determining factor. These slides suggest that the software developer occupations have and continue to suffer from skill and talent gaps in the existing workforce.