Kentucky County Workforce Profiles
Boyd County - Employment & Earnings

Economic development planning relies upon a good understanding of your county’s workforce. The information below describes Boyd County’s current workforce.

Occational Data for Major Kentucky Occupations (by 2 Digit SOC codes)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Kentucky (2012)</th>
<th>FIVCO Development District (2012)</th>
<th>Boyd County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office &amp; Admin. Support</td>
<td>280,743</td>
<td>7,165</td>
<td>Total (2012)</td>
</tr>
<tr>
<td>Sales &amp; Related</td>
<td>172,198</td>
<td>4,471</td>
<td>2,653</td>
</tr>
<tr>
<td>Food Preparation &amp; Serving Related</td>
<td>164,270</td>
<td>4,581</td>
<td>2,869</td>
</tr>
<tr>
<td>Production</td>
<td>163,167</td>
<td>2,366</td>
<td>1,442</td>
</tr>
<tr>
<td>Transportation &amp; Material Moving</td>
<td>154,479</td>
<td>3,265</td>
<td>1,916</td>
</tr>
<tr>
<td>Healthcare Practitioners &amp; Technical Occupations</td>
<td>113,924</td>
<td>5,045</td>
<td>3,356</td>
</tr>
<tr>
<td>Education, Training, &amp; Library</td>
<td>104,956</td>
<td>3,350</td>
<td>1,624</td>
</tr>
<tr>
<td>Management</td>
<td>79,378</td>
<td>1,569</td>
<td>907</td>
</tr>
<tr>
<td>Installation, Maintenance, &amp; Repair</td>
<td>78,644</td>
<td>1,893</td>
<td>1,164</td>
</tr>
<tr>
<td>Construction &amp; Extraction</td>
<td>68,356</td>
<td>2,314</td>
<td>1,584</td>
</tr>
</tbody>
</table>

Source: EMSI 2012

Knowledge Distribution of Workforce Skills (2012)

Community and Social Service was the fastest growing occupation in Boyd County with 16% growth from 2007-2012.

Distribution of Workforce by Education & Gender (2011)

Source: EMSI 2012

Employment & Average Annual Earnings by Age (2011)

Source: CENSUS/QWI 2011

Average Earnings by Education Level (2011)

Source: CENSUS/QWI 2011
Of those employed in Boyd County, 64% are in-commuters. Of employed Boyd County residents, 39% are out-commuters.

**In-Commuters**: Individuals living outside Boyd County who are employed inside Boyd County.  
**Out-Commuters**: Individuals living in Boyd County who are employed outside Boyd County.

**In-Commuters (2010):** 18,818

<table>
<thead>
<tr>
<th>Top 5 counties people commute from for work (2010)</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenup County, KY</td>
<td>4,623</td>
</tr>
<tr>
<td>Lawrence County, OH</td>
<td>2,874</td>
</tr>
<tr>
<td>Carter County, KY</td>
<td>1,737</td>
</tr>
<tr>
<td>Wayne County, WV</td>
<td>902</td>
</tr>
<tr>
<td>Cabell County, WV</td>
<td>881</td>
</tr>
</tbody>
</table>

**Out-Commuters (2010):** 6,834

<table>
<thead>
<tr>
<th>Top 5 counties people commute to for work (2010)</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabell County, WV</td>
<td>1,160</td>
</tr>
<tr>
<td>Greenup County, KY</td>
<td>914</td>
</tr>
<tr>
<td>Carter County, KY</td>
<td>485</td>
</tr>
<tr>
<td>Lawrence County, OH</td>
<td>441</td>
</tr>
<tr>
<td>Wayne County, WV</td>
<td>400</td>
</tr>
</tbody>
</table>

In 2010, Boyd County had more in-commuters than out-commuters. Since 2005, in-commuters had increased by 21% and out-commuters increased by 1%.

### People living and working in the County (2010): 10,632

<table>
<thead>
<tr>
<th>Average Annual Earnings</th>
<th>Number of Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $15,000</td>
<td>2,720</td>
</tr>
<tr>
<td>$15,000-$40,000</td>
<td>4,148</td>
</tr>
<tr>
<td>&gt; $40,000</td>
<td>3,764</td>
</tr>
</tbody>
</table>

*All data on this page are from CENSUS/OnTheMap*
1. Occupational Data
The table in this section provides 2012 employment numbers for the top ten occupations in the state of Kentucky, ranked from the highest to smallest. For example, Office and Administrative Support occupations are the most common, providing over 280,000 jobs in the state. Employment within these occupations is also reported at the regional Area Development District and county level. In addition to 2012 employment numbers, a percent change in employment is also provided at the county level for both a 10-year time period (2002-2012) and a 5-year period (2007-2012). If the percent change is positive, then county employment has increased for this occupation within the given time period. Conversely, if the percent change is negative, then county employment has declined. Both the minor and major recessions that started in 2002 and 2007, respectively, may also have impacted employment in these areas. Data for this table were acquired from Economic Modeling Specialists Inc. (EMSI). The occupations are classified based on the Standard Occupational Classification (SOC) system and are reported at the two-digit level.

2. Knowledge Distribution
Data representing the county’s knowledge distribution are presented as a pie-chart on the first page of the profile. At its most basic level, the knowledge distribution is reported into six categories: Manufacturing, Healthcare, Science, Technical, Liberal Arts, and Business knowledge. Each slice of the pie chart reflects the corresponding percentage for those 6 categories based on the occupations that are currently present in your county. The premise for the knowledge distribution is that every occupation requires a certain mix of skills that are determined by worker experience, job requirements, and work attributes. To calculate the knowledge distribution, each occupation is “assigned” to a certain skill set. Because the knowledge distribution only considers 2012 employed occupations, the pie chart reflects the knowledge distribution of the 2012 workforce and not the training or experience of its potential workforce. Therefore, if a large manufacturing plant closed in your county last year, this will be reflected in a smaller manufacturing knowledge distribution, though a large manufacturing knowledge base may still remain in your county.

CEDIK also retrieved these data from EMSI, though it originates from O*Net, the Occupational Information Network developed with the sponsorship of the U.S. Department of Labor/Employment and Training Administration. O*Net is a free online occupational database that is updated on an annual basis. For more information on the collecting methodology and types of data please visit O*Net at http://www.onetcenter.org/dataCollection.html.

3. Workforce Demographics
Two tables and a graph provide demographic information about the people employed in your county. These workforce demographic data are collected from the U.S. Census Bureau’s Quarterly Workforce Indicators (QWI). QWI is an application of the Census’s Longitudinal Employer-Household dynamics and is reported in several ways. For this profile, county-level data are organized by education level, gender, and age groups. Employment numbers are defined based on the receipt of wages. Because the wages are not reported as full-time, part-time, long-term or temporary, people working for more than one employer in a quarter can be counted twice. Further, because employment is recounted quarterly, someone employed all year with one employer will be counted four times. For this reason, CEDIK reports in the tables the average total employment for the four quarters of 2011.

The first table is the percent distribution of workforce by education and gender, and it contains exactly 100 human figures among its 8 categories. Each human figure represents one percent of the workforce. Thus, for example, if there are 6 human figures in the first category, then 6% of your workforce is made up of males who have not attained a high school degree. Alternatively, the information in the table can be read as “Out of 100 people in the county workforce, 6 are male with less than a high school degree.”

The second table in the lower left corner contains employment and average annual earnings (all in U.S. dollars) for the workforce, divided by age groups. As previously stated, it is not clear whether these annual earnings represent part- or full-time employment, though this may explain the significantly lower wages among age groups 14-21 years and >65 years, both of which are more likely to work part-time. Additionally, while this second table is divided by six age groups, QWI data are divided into eight groupings. For those age groups where the data were aggregated (specifically, age groups 14-21 and 22-34), the average annual earnings were weighted based on percent employment distribution in that aggregated group. For example, average annual earnings for the 14-21 age group is in fact an average of average annual earnings for two groups (i.e., 14-18 years old and for 19-21 years old), but properly adjusted since the latter group makes up a larger percentage of the workforce.

Finally, the bar graph in the lower right corner presents the average annual earnings by education level and gender. The eight bars in the figure represent county-level annual earnings. Blue bars represent male earnings and orange bars represent female earnings, each subdivided among four different education levels. Additionally, the two lines represent the overall average annual
earnings for the state of Kentucky, but split by gender (not 
education); male and female are shown as a green and yellow line, 
respectively. While the figure differs for each county, each bar 
chart reveals a clear income gap between men and women within 
each education level and also at the state level. The figure also 
allows for comparison between county earnings and the state 
average. For example, if the blue bar for the education level of 
“Bachelor’s or more” exceeds the green horizontal line for state 
average earnings for male, then the county’s male workers a four-
year college degree earn more on average than the typical male 
employee in Kentucky. Conversely, if the blue bar for “Less than 
High School” is less than the green horizontal line, this indicates 
that men without a high school degree earn less on average than 
the typical Kentucky male. The same logic applies to the orange 
bars and yellow line representing female earnings.

4. Commuting patterns
The second page of the workforce profile describes commuting 
patterns of workers in and out of county. Visually, the page is 
divided into three spaces. The top table and graph pertain to 
information about people living outside of your county but who 
are employed inside, who we refer to as in-commuters. Inside the 
“bucket” in the middle of the page, information is presented for 
those who both reside and work in your county. Finally, the 
bottom of the page mirrors the information provided on the top 
of the page, but for out-commuters—those people that reside in 
your county but work outside of it. The image of the “leaky 
bucket” easily illustrates the “flow” of commuters in and out of 
your county. If your county has more in-commuters than out-
commuters, then it fills the bucket more than it leaks, which is 
called a positive net job flow. Conversely, if your county has fewer 
in-commuters than out-commuters, then it leaks more than it is 
being filled: a negative net job flow.

For any county, how many people in-commute and out-commute 
affects the county’s economy. In both cases, it is likely that 
commuters will spend part of their earnings in their county of 
work and some in their county of residence. In-commuters may 
shop and dine in your county (especially on lunch break), but they 
would likely spend more locally if they resided in your county too. 
Similarly, out-commuters may pay property tax in your county, but 
ideally, you’d like them to work in your county where they would 
spend less money on transportation and more on local businesses. 
Since ideal commuting patterns are unique for each county and 
region, we also provide the top five counties of origin for in-
commuters and top five counties of destination for out-commuters 
by 2010 employment. With this information, you can explore how 
your county can best capture the business of your commuters.

Another important aspect of commuting patterns relates to the 
question: who are your in-commuters and out-commuters? Does 
your county import or export highly paid workers, who are often 
highly educated and/or experienced? To answer this, study the two 
graphs on the second page that provide information about in-

If you have further questions regarding the data in this profile, please 
contact CEDIK Research Director James Allen at (859) 257-7272 x253. 
Kentucky County Workforce Profiles online: 
www.cedik.ca.uky.edu/data_profiles/workforce