Upper Savannah Area
Base Labor Market Analysis

South Carolina Department of Commerce
Labor Market Information

November 2008
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Appendix A: Occupational Projections
EXECUTIVE SUMMARY

Population
The Upper Savannah area’s population growth has been slower than the state’s. Future population growth is expected to continue to be slower than the state rate. The Upper Savannah area attracts workers predominantly from within its borders. Over half live in Greenwood, Laurens and Newberry counties.

Income
Per capita income growth has been below the state and national rates. The Upper Savannah area’s per capita income remains below the national and state levels. The Upper Savannah area’s average wages are lower than those of the state for all major occupational groups.

Education
The number of degrees awarded by area post-secondary institutions has increased. The greatest increase has been in the area of healthcare.

Occupations
The personal care and service occupational group is expected to have faster growth in the Upper Savannah area than in the state. Requirements for the Upper Savannah area’s workers are expected to grow in the following levels of education and experience: Work experience in a related field, postsecondary vocational award, bachelor’s degree, degree plus work experience, and master’s degree or higher.

Industry
Sectors rated as having potential in various parts of the Upper Savannah area are as follows:
Heavy and civil engineering construction; construction of buildings; food manufacturing; textile mills; chemical manufacturing; plastics and rubber product manufacturing; wood product manufacturing; furniture and related product manufacturing; nonmetallic mineral product manufacturing; fabricated metal product manufacturing; machinery manufacturing; truck transportation; support activities for transportation; telecommunications; management of companies and enterprises; professional, scientific and technical services; and ambulatory healthcare services.
**Population Growth**

The Upper Savannah area’s 2007 population was 255,212. The area population has grown by 4.9% since 1997, compared to 14.2% for South Carolina. Future population growth is expected to continue to be slower than state levels.

**Source:** U.S. Census Bureau (estimates) and SC Budget & Control Board/Office of Research and Statistics (projections).
LABORSHED

The map below shows where Upper Savannah area workers come from (in 2006, latest available data). The Upper Savannah area draws over half of its workers from Greenwood, Laurens and Newberry counties.

Characteristics of Workers

<table>
<thead>
<tr>
<th>Age of Workers</th>
<th>Percentage</th>
<th>Earnings of Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 or younger</td>
<td>24.0%</td>
<td>$1,200 per month or less</td>
</tr>
<tr>
<td>31 to 54</td>
<td>57.3%</td>
<td>$1,201 to $3,400 per month</td>
</tr>
<tr>
<td>55 or older</td>
<td>18.7%</td>
<td>More than $3,400 per month</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, Local Employment Dynamics.
**States Where Workers Live:**

- South Carolina: 97.2%
- Georgia: 1.9%
- All other locations: 0.9%

**Counties Where Workers Live:**

- Greenwood: 29.5%
- Laurens: 14.4%
- Newberry: 11.1%
- Abbeville: 7.0%
- Edgefield: 4.8%
- Greenville: 4.2%
- Saluda: 4.0%
- Aiken: 2.9%
- Anderson: 2.8%
- Lexington: 2.7%
- All Other Locations: 16.8%

**Cities Where Workers Live:**

- Greenwood, South Carolina: 9.9%
- Newberry, South Carolina: 3.4%
- Clinton, South Carolina: 2.7%
- Laurens, South Carolina: 2.5%
- Abbeville, South Carolina: 2.1%
- Edgefield, South Carolina: 1.1%
- Ninety Six, South Carolina: 0.9%
- Ware Shoals, South Carolina: 0.8%
- Columbia, South Carolina: 0.8%
- Saluda, South Carolina: 0.8%
- All Other Locations: 75.0%

*Source: U.S. Census Bureau, Local Employment Dynamics.*
INCOME

Per Capita Income

The Upper Savannah area’s per capita income fell farther behind the state and national levels from 1996 to 2006.


As reflected above, the Upper Savannah area’s per capita income growth was below both South Carolina’s and the United States’.

Wages by Industry

The Upper Savannah area’s average wages are below those of South Carolina ($590 vs. $680 in 2007). Average wages were up 14% in the Upper Savannah area over the past five years, compared to 18% for the state. All major sectors except arts, entertainment and recreation had growth over the past five years, led by construction and transportation and warehousing.

<table>
<thead>
<tr>
<th>Industry</th>
<th>NAICS Code</th>
<th>2007 Average Weekly Wage ($)</th>
<th>2002 Average Weekly Wage ($)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, Private and Government</td>
<td></td>
<td>590</td>
<td>517</td>
<td>14</td>
</tr>
<tr>
<td>Construction</td>
<td>23</td>
<td>731</td>
<td>577</td>
<td>27</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>31-33</td>
<td>727</td>
<td>627</td>
<td>16</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>44-45</td>
<td>395</td>
<td>350</td>
<td>13</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>48-49</td>
<td>680</td>
<td>535</td>
<td>27</td>
</tr>
<tr>
<td>Information</td>
<td>51</td>
<td>749</td>
<td>617</td>
<td>21</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>52</td>
<td>671</td>
<td>595</td>
<td>13</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>53</td>
<td>419</td>
<td>345</td>
<td>22</td>
</tr>
<tr>
<td>Administration &amp; Support &amp; Waste Management &amp; Remediation Services</td>
<td>56</td>
<td>345</td>
<td>308</td>
<td>12</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>71</td>
<td>272</td>
<td>304</td>
<td>-11</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>72</td>
<td>200</td>
<td>197</td>
<td>1</td>
</tr>
<tr>
<td>Other Services (Except Public Administration)</td>
<td>81</td>
<td>405</td>
<td>386</td>
<td>5</td>
</tr>
<tr>
<td>Federal Government</td>
<td></td>
<td>1,008</td>
<td>833</td>
<td>21</td>
</tr>
<tr>
<td>State Government</td>
<td></td>
<td>590</td>
<td>527</td>
<td>12</td>
</tr>
<tr>
<td>Local Government</td>
<td></td>
<td>622</td>
<td>528</td>
<td>18</td>
</tr>
</tbody>
</table>

**Wages by Occupation**

Average wages in the Upper Savannah area are lower than South Carolina’s in all major occupational groups.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2007 Upper Savannah Area Median Hourly Wage ($)</th>
<th>2007 SC Median Hourly Wage ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management occupations</td>
<td>15.35</td>
<td>28.78</td>
</tr>
<tr>
<td>Business and financial operations occupations</td>
<td>15.25</td>
<td>20.28</td>
</tr>
<tr>
<td>Computer and mathematical science occupations</td>
<td>19.09</td>
<td>26.20</td>
</tr>
<tr>
<td>Architecture and engineering occupations</td>
<td>21.61</td>
<td>30.22</td>
</tr>
<tr>
<td>Life, physical and social science occupations</td>
<td>19.37</td>
<td>22.76</td>
</tr>
<tr>
<td>Community and social services occupations</td>
<td>13.02</td>
<td>13.18</td>
</tr>
<tr>
<td>Legal occupations</td>
<td>19.64</td>
<td>30.68</td>
</tr>
<tr>
<td>Education, training and library occupations</td>
<td>22.47</td>
<td>24.42</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports and media occupations</td>
<td>9.78</td>
<td>12.66</td>
</tr>
<tr>
<td>Healthcare practitioners and technical occupations</td>
<td>24.93</td>
<td>30.64</td>
</tr>
<tr>
<td>Healthcare support occupations</td>
<td>9.36</td>
<td>10.55</td>
</tr>
<tr>
<td>Protective service occupations</td>
<td>13.78</td>
<td>13.87</td>
</tr>
<tr>
<td>Food preparation and serving related occupations</td>
<td>7.36</td>
<td>7.90</td>
</tr>
<tr>
<td>Building and grounds cleaning and maintenance occupations</td>
<td>7.48</td>
<td>8.42</td>
</tr>
<tr>
<td>Personal care and service occupations</td>
<td>7.57</td>
<td>8.39</td>
</tr>
<tr>
<td>Sales and related occupations</td>
<td>9.55</td>
<td>13.48</td>
</tr>
<tr>
<td>Office and administrative support occupations</td>
<td>10.56</td>
<td>13.22</td>
</tr>
<tr>
<td>Farming, fishing, and forestry occupations</td>
<td>10.11</td>
<td>13.07</td>
</tr>
<tr>
<td>Construction and extraction occupations</td>
<td>12.24</td>
<td>16.51</td>
</tr>
<tr>
<td>Installation, maintenance and repair occupations</td>
<td>13.31</td>
<td>16.88</td>
</tr>
<tr>
<td>Production occupations</td>
<td>12.04</td>
<td>15.21</td>
</tr>
<tr>
<td>Transportation and material moving occupations</td>
<td>10.32</td>
<td>12.94</td>
</tr>
</tbody>
</table>

*Source: Economic Modeling Specialists, Inc.*
High School Graduates

From 1995 to 2005 (latest data available), the number of Upper Savannah area students receiving high school diplomas decreased by 5—or 0.3%. In South Carolina, the number of high school diplomas increased 9% from 1995 to 2005. A total of 1,776 people received high school diplomas in the Upper Savannah area in 2005. The Upper Savannah area had 51 more 12th grade students in 2004-05 than in 1994-95. Also, the number of students not passing the exit exam who received a certificate of completion instead of a diploma increased by 114 (to 188) over the 1995-2005 period.

Source: National Center for Education Statistics.
Higher Education Graduates

Over 6,200 more students graduated from higher educational institutions in the Upper Savannah area in 2006 than in 1996, an increase of 34%. The greatest numerical increase was in the healthcare field.

<table>
<thead>
<tr>
<th>Program</th>
<th>1996</th>
<th>2006</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, agriculture operations, and related sciences</td>
<td>27</td>
<td>68</td>
<td>41</td>
<td>152</td>
</tr>
<tr>
<td>Area, ethnic, cultural, and gender studies</td>
<td>23</td>
<td>31</td>
<td>8</td>
<td>35</td>
</tr>
<tr>
<td>Biological and biomedical sciences</td>
<td>625</td>
<td>601</td>
<td>-24</td>
<td>-4</td>
</tr>
<tr>
<td>Business, management, marketing, and related support services</td>
<td>3,136</td>
<td>3,976</td>
<td>840</td>
<td>27</td>
</tr>
<tr>
<td>Communication, journalism, and related programs</td>
<td>337</td>
<td>624</td>
<td>287</td>
<td>85</td>
</tr>
<tr>
<td>Communications technologies/technicians and support services</td>
<td>10</td>
<td>25</td>
<td>15</td>
<td>150</td>
</tr>
<tr>
<td>Computer and information sciences and support services</td>
<td>335</td>
<td>979</td>
<td>644</td>
<td>192</td>
</tr>
<tr>
<td>Construction trades</td>
<td>117</td>
<td>125</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Education</td>
<td>2,016</td>
<td>2,363</td>
<td>347</td>
<td>17</td>
</tr>
<tr>
<td>Engineering technologies/technicians</td>
<td>297</td>
<td>318</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>Engineering</td>
<td>302</td>
<td>323</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>English language and literature/letters</td>
<td>408</td>
<td>427</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Family and consumer sciences/human sciences</td>
<td>235</td>
<td>278</td>
<td>43</td>
<td>18</td>
</tr>
<tr>
<td>Foreign languages, literatures, and linguistics</td>
<td>149</td>
<td>162</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Health professions and related clinical sciences</td>
<td>3,189</td>
<td>5,194</td>
<td>2,005</td>
<td>63</td>
</tr>
<tr>
<td>Legal professions and studies</td>
<td>396</td>
<td>448</td>
<td>52</td>
<td>13</td>
</tr>
<tr>
<td>Liberal arts and sciences, general studies and humanities</td>
<td>1,205</td>
<td>1,208</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Library science</td>
<td>185</td>
<td>200</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Mathematics and statistics</td>
<td>120</td>
<td>160</td>
<td>40</td>
<td>33</td>
</tr>
<tr>
<td>Mechanic and repair technologies/technicians</td>
<td>730</td>
<td>1,058</td>
<td>328</td>
<td>45</td>
</tr>
<tr>
<td>Multi/interdisciplinary studies</td>
<td>155</td>
<td>271</td>
<td>116</td>
<td>75</td>
</tr>
<tr>
<td>Natural resources and conservation</td>
<td>--</td>
<td>10</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Parks, recreation, leisure, and fitness studies</td>
<td>155</td>
<td>360</td>
<td>205</td>
<td>132</td>
</tr>
<tr>
<td>Personal and culinary services</td>
<td>47</td>
<td>180</td>
<td>133</td>
<td>283</td>
</tr>
<tr>
<td>Philosophy and religious studies</td>
<td>66</td>
<td>179</td>
<td>113</td>
<td>171</td>
</tr>
<tr>
<td>Physical sciences</td>
<td>242</td>
<td>214</td>
<td>-28</td>
<td>-12</td>
</tr>
<tr>
<td>Precision production</td>
<td>357</td>
<td>291</td>
<td>-66</td>
<td>-18</td>
</tr>
<tr>
<td>Psychology</td>
<td>539</td>
<td>712</td>
<td>173</td>
<td>32</td>
</tr>
<tr>
<td>Public administration and social service professions</td>
<td>347</td>
<td>488</td>
<td>141</td>
<td>41</td>
</tr>
<tr>
<td>Science technologies/technicians</td>
<td>6</td>
<td>13</td>
<td>7</td>
<td>117</td>
</tr>
<tr>
<td>Security and protective services</td>
<td>514</td>
<td>550</td>
<td>36</td>
<td>7</td>
</tr>
<tr>
<td>Social sciences and history</td>
<td>1,037</td>
<td>1,343</td>
<td>306</td>
<td>30</td>
</tr>
<tr>
<td>Theology and religious vocations</td>
<td>486</td>
<td>574</td>
<td>88</td>
<td>18</td>
</tr>
<tr>
<td>Transportation and materials moving</td>
<td>90</td>
<td>129</td>
<td>39</td>
<td>43</td>
</tr>
<tr>
<td>Visual and performing arts</td>
<td>372</td>
<td>592</td>
<td>220</td>
<td>59</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18,255</td>
<td>24,474</td>
<td>6,219</td>
<td>34</td>
</tr>
</tbody>
</table>

Data for these schools: Aiken Technical College, Allen University, Anderson University, Augusta Area Dietetic Internship-University Hospital (Georgia), Augusta State University (Georgia), Augusta Technical College (Georgia), Benedict College, Beta Tech, Bob Jones University, Claflin University, Columbia College, Columbia International University, Converse College, Erskine College and Seminary, Forrest Junior College, Furman University, Georgia Military College-Augusta Campus (Georgia), Greenville Technical College, ITT Technical Institute-Greenville, Lander University, Lutheran Theological Southern Seminary, Medical College of Georgia, Midlands Technical College, Newberry College, North Greenville University, Paine College (Augusta), Piedmont Technical College, Presbyterian College, Savannah River College (Georgia), South University, Spartanburg Community College, Spartanburg Methodist College, Tri-County Technical College, University of Phoenix-Columbia Campus, University of South Carolina-Aiken, University of South Carolina-Columbia, University of South Carolina-Upstate, W L Bonner College, and Wofford College.
OCCUPATIONS

Occupational Projections

The personal care and service occupational group is projected to grow faster in the Upper Savannah area than in the state.

See Appendix A for detailed occupational information.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2007-2016 Upper Savannah Area Projected Growth (%)</th>
<th>2007-2016 SC Projected Growth %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management occupations</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Business and financial operations occupations</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Computer and mathematical science occupations</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Architecture and engineering occupations</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Life, physical and social science occupations</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Community and social services occupations</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Legal occupations</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>Education, training, and library occupations</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports and media occupations</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Healthcare practitioners and technical occupations</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>Healthcare support occupations</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Protective service occupations</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Food preparation and serving related occupations</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Building and grounds cleaning and maintenance occupations</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>Personal care and service occupations</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Sales and related occupations</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Office and administrative support occupations</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Farming, fishing, and forestry occupations</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Construction and extraction occupations</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Installation, maintenance and repair occupations</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Production occupations</td>
<td>-8%</td>
<td>10</td>
</tr>
<tr>
<td>Transportation and material moving occupations</td>
<td>3</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Economic Modeling Specialists, Inc.
Occupational Education Requirements

Occupational growth trends show that education and training requirements are generally increasing. This is reflected in the projected growth of occupations such as business professionals and healthcare practitioners in the Upper Savannah area. Based on employment projections, the Upper Savannah area is expected to see growth in requirements for the following levels of education and experience:

- Work experience in a related field
- Postsecondary vocational award
- Bachelor’s degree
- Degree plus work experience
- Master’s degree or higher

![Upper Savannah Area Employment by Typical Education Level](chart)

Source: Economic Modeling Specialists, Inc
INDUSTRY

Businesses by Sector

The Upper Savannah area had higher percentages of businesses than South Carolina or the nation in the following sectors:

- Retail trade
- Finance and insurance
- Manufacturing
- Agriculture and forestry
- Transportation and warehousing

Growth in Number of Businesses

The number of private businesses in the Upper Savannah area fell 7% from 2002 to 2007, compared to a 2% drop for the state.

Because the amount of detailed data varies by county, information for three-digit NAICS code sectors for the Upper Savannah area as a whole is unavailable. Please see county reports for information on growth by detailed industry sectors.

Employment by Sector

Compared to South Carolina and the United States, the Upper Savannah area’s employment is more concentrated in manufacturing and natural resources and mining.

![Employment by Industry Sector 2007](chart)

Industry Analysis

Screening Criteria
For each county in the Upper Savannah area, industry sectors with available data were rated on six factors:

- 2002-2007 employment growth
- 2002-2007 employment growth rate
- Location quotient

Using those factors, sectors were awarded “stars” based on meeting the following criteria:

- 2002-2007 employment growth (Did the sector add a significant number of jobs?)
- 2002-2007 employment growth rate (Did the sector add jobs at a greater rate than overall job growth?)
- Location quotient of at least 1.25 (Does the sector have a significant concentration in the county?)
- Competitive effect greater than 0 (Did the sector add jobs beyond national growth overall and in the sector?)
- Average annual wage greater than the overall county average (Does the sector pay wages greater than average for the county?)
- Average or above average projected growth (Is the sector expected to add jobs?)

Industries of Note
Based on the analyses for each county in the Upper Savannah area, the following sectors of note were identified (and the counties for which they were significant):

- Heavy and civil engineering construction (Greenwood, Newberry)
- Construction of buildings (McCormick)
- Food manufacturing (Saluda)
- Textile mills (Edgefield)
- Chemical manufacturing (Greenwood)
- Plastics and rubber product manufacturing (Laurens)
- Wood product manufacturing (Greenwood, Laurens, Newberry)
- Furniture and related product manufacturing (Abbeville)
- Nonmetallic mineral product manufacturing (Greenwood, Laurens)

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1 Competitive Effect: based on shift-share analysis; represents the change in employment in the sector in the county after accounting for overall US employment growth and growth/decline in the sector in the US.

2 Location Quotient: percentage of employment in the sector in the county divided by the percentage of employment in that sector in the US; gives an indication of how concentrated employment in the sector is in the county compared to the US; based on 2007 data.
• Fabricated metal product manufacturing (Abbeville, Greenwood, Laurens)
• Machinery manufacturing (Newberry)
• Truck transportation (Laurens, Newberry)
• Support activities for transportation (Laurens)
• Telecommunications (Laurens)
• Management of companies and enterprises (Greenwood)
• Professional, scientific and technical services (Saluda)
• Ambulatory healthcare services (Greenwood)

See the reports for each county for information about the respective industries of note as well as other sectors in the county.
**MOVING FORWARD**

The South Carolina Department of Commerce appreciates the opportunity to provide this base analysis of the Upper Savannah area’s labor market. We hope that it will help in advancing the progress of the Upper Savannah area’s economic development.

**What’s been done so far?**

This analysis identifies the region’s assets—both current and future—at a macro level. Labor Market Information (LMI) at the S.C. Department of Commerce developed a Base Labor Analysis report providing an overview of the region’s population, industries, occupations, and educational assets. Additionally, these findings were benchmarked against the state and the nation.

**What’s next?**

Because local knowledge is required to interpret and apply the findings appropriately, the Upper Savannah Base Labor Analysis should be used with local stakeholders to identify and define key, targeted industry clusters. Some items to consider when defining these clusters may include the following.

1. **What is the Upper Savannah area’s economic base?**
   
   In order for an economy to grow, it must have a base (export) sector that generates wealth from beyond its borders. Industries in the economic base (manufacturing, scientific and technology services, warehouse and distribution, financial services, regional healthcare, etc.) typically provide occupations with higher pay and benefits as well as better human capital development and promotion opportunities. A successful economic base stimulates the development of the non-base sector (housing, schools, retail, restaurants, personal services, etc.). Is also propels the local tax base which, in turn, provides support to community services.

2. **What are strategies to assist low-wage citizens in non-base economy jobs?**
   
   Although the economic base is the driver for long-term growth in a region, implementable strategies for developing job opportunities for low-skilled individuals is a priority for community economic well-being. This need must also be kept in mind when defining target industry clusters.

3. **What other factors are vital to the Upper Savannah area and its communities?**
   
   Over and above pure economic considerations, what is important to the citizens of the Upper Savannah area? How does Upper Savannah want to be perceived? What quality of life issues affect Upper Savannah? These questions may impact the types of industries desired for the area.
How Labor Market Information at the S.C. Department of Commerce can help.

Once local stakeholders have identified key industry clusters vital to the future economic development of the region, LMI can provide more in-depth analysis of each of these industries, their occupations, business establishments, and educational requirements.

1. Detailed Industry Analysis
   For each identified industry, LMI can develop a detailed analysis of each sector, including employment, projected growth, staffing patterns, location quotients, and employers. Additionally, the analysis will examine the largest, fastest growing, and declining sectors within the industry cluster.

2. Detailed Occupational Analysis
   At this point, the occupations—classified by SOC codes—that make up each of the identified industry clusters can be analyzed in detail. This analysis will include employment, average earnings, educational requirements, projected growth, and completers from available local training programs. It will culminate in identifying gaps between the number of occupations required to sustain and advance industry growth and the number of skilled workers (as identified by educational requirements and program completers) available to fulfill these positions.

3. Identification of Implementable Recommendations
   LMI will utilize the findings of the analyses to develop a set of implementable recommendations. These may include recommendations to align community college programs with economic development goals along with others. Finally, local knowledge will once again be called upon to review the findings and develop an action plan for the implementation of feasible solutions.
# Appendix A: Occupational Projections for Upper Savannah Area

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<td>Self-enrichment education teachers</td>
<td>138</td>
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<td>25</td>
<td>18</td>
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<td>Librarians</td>
<td>128</td>
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<td>28</td>
<td>6</td>
<td>27</td>
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<td>157</td>
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<td>7.22</td>
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<td>25</td>
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<td>40</td>
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<td>29</td>
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<td>19</td>
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<td>0.25</td>
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<td>Athletes and sports competitors</td>
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<td>15</td>
<td>3</td>
<td>25</td>
<td>0.45</td>
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<td>148</td>
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<td>12</td>
<td>1.06</td>
<td>15.72</td>
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<td>12</td>
<td>18</td>
<td>0.61</td>
<td>6.65</td>
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<td>0.78</td>
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<td>-11</td>
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<td>23</td>
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<td>11.47</td>
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<td>29-2012</td>
<td>Medical and clinical laboratory technicians</td>
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<td>36</td>
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<td>535</td>
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<td>80</td>
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<td>Nursing aides, orderlies, and attendants</td>
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<td>1,270</td>
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<td>22</td>
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<td>29</td>
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<td>116</td>
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<td>31-9096</td>
<td>Veterinary assistants and laboratory animal caretakers</td>
<td>26</td>
<td>28</td>
<td>2</td>
<td>8</td>
<td>0.50</td>
<td>7.77</td>
<td>Short-term on-the-job training</td>
</tr>
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<td>31-9099</td>
<td>Healthcare support workers, all other</td>
<td>136</td>
<td>186</td>
<td>50</td>
<td>37</td>
<td>1.10</td>
<td>11.66</td>
<td>Short-term on-the-job training</td>
</tr>
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<tr>
<td>33-1011</td>
<td>First-line supervisors/managers of correctional officers</td>
<td>25</td>
<td>27</td>
<td>2</td>
<td>8</td>
<td>0.83</td>
<td>19.46</td>
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<td>71</td>
<td>76</td>
<td>5</td>
<td>7</td>
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<td>20.11</td>
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<td>First-line supervisors/managers of fire fighting and prevention workers</td>
<td>45</td>
<td>48</td>
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<td>7</td>
<td>1.24</td>
<td>19.41</td>
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<td>First-line supervisors/managers, protective service workers, all other</td>
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<td>27</td>
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<td>4</td>
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<td>18.01</td>
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<td>169</td>
<td>182</td>
<td>13</td>
<td>8</td>
<td>0.96</td>
<td>12.19</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>33-3011</td>
<td>Bailiffs</td>
<td>13</td>
<td>14</td>
<td>1</td>
<td>8</td>
<td>1.00</td>
<td>10.13</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>33-3012</td>
<td>Correctional officers and jailers</td>
<td>497</td>
<td>568</td>
<td>71</td>
<td>14</td>
<td>1.96</td>
<td>11.65</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>33-3021</td>
<td>Detectives and criminal investigators</td>
<td>51</td>
<td>58</td>
<td>7</td>
<td>14</td>
<td>0.79</td>
<td>17.71</td>
<td>Work experience in a related field</td>
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<tr>
<td>33-3051</td>
<td>Police and sheriff's patrol officers</td>
<td>509</td>
<td>545</td>
<td>36</td>
<td>7</td>
<td>1.39</td>
<td>14.54</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>33-9011</td>
<td>Animal control workers</td>
<td>11</td>
<td>12</td>
<td>1</td>
<td>9</td>
<td>1.06</td>
<td>14.82</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>33-9021</td>
<td>Private detectives and investigators</td>
<td>23</td>
<td>27</td>
<td>4</td>
<td>17</td>
<td>0.52</td>
<td>13.51</td>
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<td>Security guards</td>
<td>332</td>
<td>329</td>
<td>-3</td>
<td>-1</td>
<td>0.51</td>
<td>11.33</td>
<td>Short-term on-the-job training</td>
</tr>
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<td>33-9091</td>
<td>Crossing guards</td>
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<td>0.47</td>
<td>9.73</td>
<td>Short-term on-the-job training</td>
</tr>
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<td>33-9092</td>
<td>Lifeguards, ski patrol, and other recreational protective service workers</td>
<td>56</td>
<td>63</td>
<td>7</td>
<td>13</td>
<td>0.78</td>
<td>9.55</td>
<td>Short-term on-the-job training</td>
</tr>
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<td>33-9099</td>
<td>Protective service workers, all other</td>
<td>52</td>
<td>56</td>
<td>4</td>
<td>8</td>
<td>1.01</td>
<td>10.97</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>35-1011</td>
<td>Chefs and head cooks</td>
<td>68</td>
<td>75</td>
<td>7</td>
<td>10</td>
<td>0.87</td>
<td>10.81</td>
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<td>561</td>
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<td>6</td>
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<tr>
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<td>Cooks, fast food</td>
<td>478</td>
<td>486</td>
<td>8</td>
<td>2</td>
<td>1.32</td>
<td>6.76</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>35-2012</td>
<td>Cooks, institution and cafeteria</td>
<td>447</td>
<td>459</td>
<td>12</td>
<td>3</td>
<td>1.78</td>
<td>7.24</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>35-2013</td>
<td>Cooks, private household</td>
<td>14</td>
<td>17</td>
<td>3</td>
<td>21</td>
<td>1.12</td>
<td>6.84</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>35-2014</td>
<td>Cooks, restaurant</td>
<td>429</td>
<td>466</td>
<td>37</td>
<td>9</td>
<td>0.78</td>
<td>7.92</td>
<td>Long-term on-the-job training</td>
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<td>Cooks, short order</td>
<td>138</td>
<td>141</td>
<td>3</td>
<td>2</td>
<td>1.19</td>
<td>6.76</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>35-2019</td>
<td>Cooks, all other</td>
<td>22</td>
<td>25</td>
<td>3</td>
<td>14</td>
<td>1.23</td>
<td>8.35</td>
<td>Moderate-term on-the-job training</td>
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<tr>
<td>35-2021</td>
<td>Food preparation workers</td>
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<td>496</td>
<td>30</td>
<td>6</td>
<td>0.84</td>
<td>7.25</td>
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<td>35-3011</td>
<td>Bartenders</td>
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<td>21</td>
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<td>7.71</td>
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<td>35-3021</td>
<td>Combined food preparation and serving workers, including fast food</td>
<td>1,439</td>
<td>1,587</td>
<td>148</td>
<td>10</td>
<td>0.89</td>
<td>6.67</td>
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<td>35-3022</td>
<td>Counter attendants, cafeteria, food concession, and coffee shop</td>
<td>233</td>
<td>238</td>
<td>5</td>
<td>2</td>
<td>0.69</td>
<td>6.72</td>
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<tr>
<td>35-3031</td>
<td>Waiters and waitresses</td>
<td>954</td>
<td>1,030</td>
<td>76</td>
<td>8</td>
<td>0.65</td>
<td>6.69</td>
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</tr>
<tr>
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<td>Food servers, nonrestaurant</td>
<td>95</td>
<td>108</td>
<td>13</td>
<td>14</td>
<td>0.82</td>
<td>7.60</td>
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<td>35-9011</td>
<td>Dining room and cafeteria attendants and bartender helpers</td>
<td>108</td>
<td>116</td>
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<td>7</td>
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<td>Hosts and hostesses, restaurant, lounge, and coffee shop</td>
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<td>140</td>
<td>10</td>
<td>8</td>
<td>0.60</td>
<td>7.03</td>
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<td>35-9099</td>
<td>Food preparation and serving related workers, all other</td>
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<td>18</td>
<td>1</td>
<td>6</td>
<td>0.51</td>
<td>7.08</td>
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<td>37-1011</td>
<td>First-line supervisors/managers of housekeeping and janitorial workers</td>
<td>234</td>
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<td>146</td>
<td>18</td>
<td>14</td>
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<td>7.78</td>
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<td>37-2012</td>
<td>Maids and housekeeping cleaners</td>
<td>1,630</td>
<td>2,047</td>
<td>417</td>
<td>26</td>
<td>1.24</td>
<td>6.65</td>
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<td>37-2019</td>
<td>Building cleaning workers, all other</td>
<td>307</td>
<td>377</td>
<td>70</td>
<td>23</td>
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<td>6.56</td>
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<tr>
<td>37-2021</td>
<td>Pest control workers</td>
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<td>66</td>
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<tr>
<td>37-3011</td>
<td>Landscaping and groundskeeping workers</td>
<td>629</td>
<td>637</td>
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<td>7.96</td>
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<tr>
<td>37-3012</td>
<td>Pesticide handlers, sprayers, and applicators, vegetation</td>
<td>133</td>
<td>177</td>
<td>44</td>
<td>33</td>
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<td>6.75</td>
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</tr>
<tr>
<td>37-3013</td>
<td>Tree trimmers and pruners</td>
<td>136</td>
<td>181</td>
<td>45</td>
<td>33</td>
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<td>6.90</td>
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<td>37-3019</td>
<td>Grounds maintenance workers, all other</td>
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<td>183</td>
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<td>Slot key persons</td>
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<td>145</td>
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<td>Animal trainers</td>
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<td>91</td>
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<td>39-2021</td>
<td>Nonfarm animal caretakers</td>
<td>181</td>
<td>149</td>
<td>-32</td>
<td>-18</td>
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<td>7.08</td>
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<td>Gaming and sports book writers and runners</td>
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<td>31</td>
<td>5</td>
<td>19</td>
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<td>7.84</td>
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<td>39-3031</td>
<td>Ushers, lobby attendants, and ticket takers</td>
<td>28</td>
<td>30</td>
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<td>7</td>
<td>0.44</td>
<td>6.97</td>
<td>Short-term on-the-job training</td>
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<td>Amusement and recreation attendants</td>
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<td>156</td>
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<td>3</td>
<td>0.98</td>
<td>6.81</td>
<td>Short-term on-the-job training</td>
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<td>Entertainment attendants and related workers, all other</td>
<td>48</td>
<td>56</td>
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<td>17</td>
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<td>7.71</td>
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<td>Funeral attendants</td>
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<td>81</td>
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<td>3.83</td>
<td>9.19</td>
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<td>Hairdressers, hairstylists, and cosmetologists</td>
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<td>124</td>
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<td>-43</td>
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<td>-29</td>
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<td>Description</td>
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<td>2016 Jobs</td>
<td>Change</td>
<td>% Change</td>
<td>2007 Median Hourly Earnings ($)</td>
<td>Typical Education &amp; Training Level</td>
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<td>39-6021</td>
<td>Tour guides and escorts</td>
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<td>16</td>
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<td>14</td>
<td>0.52</td>
<td>7.05</td>
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<td>1,647</td>
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<td>Personal and home care aides</td>
<td>504</td>
<td>615</td>
<td>111</td>
<td>22</td>
<td>0.86</td>
<td>7.59</td>
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<td>Fitness trainers and aerobics instructors</td>
<td>145</td>
<td>171</td>
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<td>18</td>
<td>0.86</td>
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<td>Residential advisors</td>
<td>60</td>
<td>64</td>
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<td>8.79</td>
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<td>48</td>
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<td>-29</td>
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<td>First-line supervisors/managers of retail sales workers</td>
<td>1,623</td>
<td>1,758</td>
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<td>383</td>
<td>470</td>
<td>87</td>
<td>23</td>
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<td>15.92</td>
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<td>Cashiers, except gaming</td>
<td>2,383</td>
<td>2,233</td>
<td>-150</td>
<td>-6</td>
<td>1.07</td>
<td>6.73</td>
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<td>41-2012</td>
<td>Gaming change persons and booth cashiers</td>
<td>29</td>
<td>35</td>
<td>6</td>
<td>21</td>
<td>0.73</td>
<td>10.01</td>
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<tr>
<td>41-2021</td>
<td>Counter and rental clerks</td>
<td>170</td>
<td>184</td>
<td>14</td>
<td>8</td>
<td>0.58</td>
<td>7.39</td>
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<td>41-2022</td>
<td>Parts salespersons</td>
<td>94</td>
<td>99</td>
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<td>5</td>
<td>0.65</td>
<td>12.36</td>
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<tr>
<td>41-2031</td>
<td>Retail salespersons</td>
<td>2,400</td>
<td>2,603</td>
<td>203</td>
<td>8</td>
<td>0.77</td>
<td>8.63</td>
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<tr>
<td>41-3011</td>
<td>Advertising sales agents</td>
<td>41</td>
<td>45</td>
<td>4</td>
<td>10</td>
<td>0.30</td>
<td>12.94</td>
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<td>Insurance sales agents</td>
<td>292</td>
<td>336</td>
<td>44</td>
<td>15</td>
<td>0.63</td>
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<td>Securities, commodities, and financial services sales agents</td>
<td>154</td>
<td>206</td>
<td>52</td>
<td>34</td>
<td>0.36</td>
<td>10.75</td>
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<tr>
<td>41-3041</td>
<td>Travel agents</td>
<td>13</td>
<td>19</td>
<td>6</td>
<td>46</td>
<td>0.18</td>
<td>8.75</td>
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<tr>
<td>41-3099</td>
<td>Sales representatives, services, all other</td>
<td>150</td>
<td>198</td>
<td>48</td>
<td>32</td>
<td>0.32</td>
<td>11.12</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>41-4011</td>
<td>Sales representatives, wholesale and manufacturing, technical and scientific products</td>
<td>168</td>
<td>203</td>
<td>35</td>
<td>21</td>
<td>0.51</td>
<td>19.53</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>41-4012</td>
<td>Sales representatives, wholesale and manufacturing, except technical and scientific products</td>
<td>648</td>
<td>717</td>
<td>69</td>
<td>11</td>
<td>0.64</td>
<td>19.96</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>41-9011</td>
<td>Demonstrators and product promoters</td>
<td>46</td>
<td>52</td>
<td>6</td>
<td>13</td>
<td>0.59</td>
<td>8.92</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>41-9012</td>
<td>Models</td>
<td>14</td>
<td>14</td>
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<td>0.51</td>
<td>6.74</td>
<td>Moderate-term on-the-job training</td>
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<tr>
<td>41-9021</td>
<td>Real estate brokers</td>
<td>552</td>
<td>753</td>
<td>201</td>
<td>36</td>
<td>0.52</td>
<td>7.39</td>
<td>Work experience in a related field</td>
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<tr>
<td>41-9022</td>
<td>Real estate sales agents</td>
<td>595</td>
<td>798</td>
<td>203</td>
<td>34</td>
<td>0.52</td>
<td>7.09</td>
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<tr>
<td>41-9031</td>
<td>Sales engineers</td>
<td>16</td>
<td>18</td>
<td>2</td>
<td>13</td>
<td>0.32</td>
<td>29.43</td>
<td>Bachelor's degree</td>
</tr>
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<tr>
<td>41-9041</td>
<td>Telemarketers</td>
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<tr>
<td>41-9091</td>
<td>Door-to-door sales workers, news and street vendors, and related workers</td>
<td>457</td>
<td>399</td>
<td>-58</td>
<td>-13</td>
<td>0.65</td>
<td>6.57</td>
<td>Moderate training</td>
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<tr>
<td>41-9099</td>
<td>Sales and related workers, all other</td>
<td>102</td>
<td>113</td>
<td>11</td>
<td>11</td>
<td>0.47</td>
<td>6.87</td>
<td>Moderate term on-the-job training</td>
</tr>
<tr>
<td>43-1011</td>
<td>First-line supervisors/managers of office and administrative support workers</td>
<td>822</td>
<td>835</td>
<td>13</td>
<td>2</td>
<td>0.86</td>
<td><strong>14.42</strong></td>
<td>Work experience in a related field</td>
</tr>
<tr>
<td>43-2011</td>
<td>Switchboard operators, including answering service</td>
<td>83</td>
<td>69</td>
<td>-14</td>
<td>-17</td>
<td>0.81</td>
<td>9.21</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>43-3011</td>
<td>Bill and account collectors</td>
<td>155</td>
<td>169</td>
<td>14</td>
<td>9</td>
<td>0.60</td>
<td>9.25</td>
<td>Short-term on-the-job training</td>
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<td>43-3021</td>
<td>Billing and posting clerks and machine operators</td>
<td>268</td>
<td>266</td>
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<td>-1</td>
<td>0.81</td>
<td>10.42</td>
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<td>43-3031</td>
<td>Bookkeeping, accounting, and auditing clerks</td>
<td>1,095</td>
<td>1,184</td>
<td>89</td>
<td>8</td>
<td>0.79</td>
<td>10.30</td>
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<tr>
<td>43-3051</td>
<td>Payroll and timekeeping clerks</td>
<td>132</td>
<td>126</td>
<td>-6</td>
<td>-5</td>
<td>1.03</td>
<td>11.63</td>
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<td>Procurement clerks</td>
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<td>-4</td>
<td>1.02</td>
<td>11.88</td>
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<td>Tellers</td>
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<td>26</td>
<td>3</td>
<td>13</td>
<td>0.50</td>
<td><strong>21.03</strong></td>
<td>Short-term on-the-job training</td>
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<tr>
<td>43-4031</td>
<td>Court, municipal, and license clerks</td>
<td>59</td>
<td>62</td>
<td>3</td>
<td>5</td>
<td>0.86</td>
<td>11.35</td>
<td>Short-term on-the-job training</td>
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<td>43-4041</td>
<td>Credit authorizers, checkers, and clerks</td>
<td>27</td>
<td>24</td>
<td>-3</td>
<td>-11</td>
<td>0.61</td>
<td>8.43</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>43-4051</td>
<td>Customer service representatives</td>
<td>932</td>
<td>1,090</td>
<td>158</td>
<td>17</td>
<td>0.66</td>
<td>9.56</td>
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<td>43-4061</td>
<td>Eligibility interviewers, government programs</td>
<td>11</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0.17</td>
<td>16.18</td>
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<td>-36</td>
<td>0.73</td>
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<td>0.60</td>
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<td>Interviewers, except eligibility and loan</td>
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<td>99</td>
<td>7</td>
<td>8</td>
<td>0.59</td>
<td>10.23</td>
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<td>58</td>
<td>3</td>
<td>5</td>
<td>0.76</td>
<td>8.70</td>
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<td>43-4131</td>
<td>Loan interviewers and clerks</td>
<td>59</td>
<td>57</td>
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<td>-3</td>
<td>0.38</td>
<td>9.32</td>
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<td>-24</td>
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<td>9.42</td>
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<tr>
<td>43-4161</td>
<td>Human resources assistants, except payroll and timekeeping</td>
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<td>8</td>
<td>5</td>
<td>1.49</td>
<td>13.09</td>
<td>Short-term on-the-job training</td>
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<td>43-4171</td>
<td>Receptionists and information clerks</td>
<td>509</td>
<td>548</td>
<td>39</td>
<td>8</td>
<td>0.71</td>
<td>9.32</td>
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<td>Information and record clerks, all other</td>
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<td>67</td>
<td>-12</td>
<td>-15</td>
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<td>Short-term on-the-job training</td>
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<tr>
<td>43-5021</td>
<td>Couriers and messengers</td>
<td>88</td>
<td>103</td>
<td>15</td>
<td>17</td>
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<td>7.67</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>43-5031</td>
<td>Police, fire, and ambulance dispatchers</td>
<td>84</td>
<td>99</td>
<td>15</td>
<td>18</td>
<td>1.39</td>
<td>10.66</td>
<td>Moderate-term on-the-job training</td>
</tr>
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<tr>
<td>43-5032</td>
<td>Dispatchers, except police, fire, and ambulance</td>
<td>95</td>
<td>120</td>
<td>25</td>
<td>26</td>
<td>0.79</td>
<td>12.43</td>
<td>Moderate-term on-the-job training</td>
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<td>43-5041</td>
<td>Meter readers, utilities</td>
<td>32</td>
<td>30</td>
<td>-2</td>
<td>-6</td>
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<td>10.38</td>
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<td>43-5051</td>
<td>Postal service clerks</td>
<td>43</td>
<td>42</td>
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<td>-2</td>
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<td>20.28</td>
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<td>43-5052</td>
<td>Postal service mail carriers</td>
<td>235</td>
<td>227</td>
<td>-8</td>
<td>-3</td>
<td>1.11</td>
<td>19.44</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>43-5053</td>
<td>Postal service mail sorters, processors, and processing machine operators</td>
<td>52</td>
<td>47</td>
<td>-5</td>
<td>-10</td>
<td>0.42</td>
<td>16.05</td>
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<tr>
<td>43-5061</td>
<td>Production, planning, and expediting clerks</td>
<td>252</td>
<td>248</td>
<td>-4</td>
<td>-2</td>
<td>1.42</td>
<td>13.99</td>
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<td>43-5071</td>
<td>Shipping, receiving, and traffic clerks</td>
<td>452</td>
<td>453</td>
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<td>0</td>
<td>0.96</td>
<td>11.18</td>
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<td>43-5081</td>
<td>Stock clerks and order fillers</td>
<td>926</td>
<td>820</td>
<td>-106</td>
<td>-11</td>
<td>0.82</td>
<td>8.85</td>
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<td>43-5111</td>
<td>Weighers, measurers, checkers, and samplers, recordkeeping</td>
<td>74</td>
<td>60</td>
<td>-14</td>
<td>-19</td>
<td>1.53</td>
<td>9.52</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>43-6011</td>
<td>Executive secretaries and administrative assistants</td>
<td>802</td>
<td>881</td>
<td>79</td>
<td>10</td>
<td>0.76</td>
<td>11.65</td>
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<td>43-6012</td>
<td>Legal secretaries</td>
<td>153</td>
<td>170</td>
<td>17</td>
<td>11</td>
<td>0.69</td>
<td>9.34</td>
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<td>Medical secretaries</td>
<td>278</td>
<td>300</td>
<td>22</td>
<td>8</td>
<td>0.87</td>
<td>11.54</td>
<td>Postsecondary vocational award</td>
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<td>Secretaries, except legal, medical, and executive</td>
<td>1,289</td>
<td>1,260</td>
<td>-29</td>
<td>-2</td>
<td>0.99</td>
<td>10.11</td>
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<td>43-9011</td>
<td>Computer operators</td>
<td>62</td>
<td>47</td>
<td>-15</td>
<td>-24</td>
<td>0.79</td>
<td>11.32</td>
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<td>43-9021</td>
<td>Data entry keyers</td>
<td>95</td>
<td>90</td>
<td>-5</td>
<td>-5</td>
<td>0.45</td>
<td>7.59</td>
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<td>43-9022</td>
<td>Word processors and typists</td>
<td>45</td>
<td>47</td>
<td>2</td>
<td>4</td>
<td>0.40</td>
<td>8.75</td>
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<td>43-9031</td>
<td>Desktop publishers</td>
<td>15</td>
<td>17</td>
<td>2</td>
<td>13</td>
<td>0.49</td>
<td>11.25</td>
<td>Postsecondary vocational award</td>
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<tr>
<td>43-9041</td>
<td>Insurance claims and policy processing clerks</td>
<td>52</td>
<td>50</td>
<td>-2</td>
<td>-4</td>
<td>0.33</td>
<td>10.16</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>43-9051</td>
<td>Mail clerks and mail machine operators, except postal service</td>
<td>44</td>
<td>36</td>
<td>-8</td>
<td>-18</td>
<td>0.47</td>
<td>8.41</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>43-9061</td>
<td>Office clerks, general</td>
<td>1,684</td>
<td>1,787</td>
<td>103</td>
<td>6</td>
<td>0.86</td>
<td>8.68</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>43-9199</td>
<td>Office and administrative support workers, all other</td>
<td>67</td>
<td>65</td>
<td>-2</td>
<td>-3</td>
<td>0.37</td>
<td>9.02</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>45-1099</td>
<td>Supervisors, farming, fishing, and forestry workers</td>
<td>110</td>
<td>108</td>
<td>-2</td>
<td>-2</td>
<td>2.86</td>
<td>16.19</td>
<td>Work experience in a related field</td>
</tr>
<tr>
<td>45-2011</td>
<td>Agricultural inspectors</td>
<td>14</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>1.40</td>
<td>19.25</td>
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</tr>
<tr>
<td>45-2021</td>
<td>Animal breeders</td>
<td>11</td>
<td>12</td>
<td>1</td>
<td>9</td>
<td>1.99</td>
<td>19.25</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>45-2041</td>
<td>Graders and sorters, agricultural products</td>
<td>77</td>
<td>81</td>
<td>4</td>
<td>5</td>
<td>2.22</td>
<td>8.55</td>
<td>Work experience in a related field</td>
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<tr>
<td>45-2091</td>
<td>Agricultural equipment operators</td>
<td>74</td>
<td>87</td>
<td>13</td>
<td>18</td>
<td>1.71</td>
<td>7.95</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>45-2092</td>
<td>Farmworkers and laborers, crop, nursery, and greenhouse</td>
<td>703</td>
<td>844</td>
<td>141</td>
<td>20</td>
<td>1.64</td>
<td>7.88</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>45-2093</td>
<td>Farmworkers, farm and ranch animals</td>
<td>119</td>
<td>143</td>
<td>24</td>
<td>20</td>
<td>1.97</td>
<td>9.93</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>45-2099</td>
<td>Agricultural workers, all other</td>
<td>28</td>
<td>31</td>
<td>3</td>
<td>11</td>
<td>2.03</td>
<td>8.18</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>45-3011</td>
<td>Fishers and related fishing workers</td>
<td>34</td>
<td>41</td>
<td>7</td>
<td>21</td>
<td>0.55</td>
<td>6.55</td>
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</tr>
<tr>
<td>45-4011</td>
<td>Forest and conservation workers</td>
<td>37</td>
<td>40</td>
<td>3</td>
<td>8</td>
<td>4.07</td>
<td>10.90</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>45-4021</td>
<td>Fallers</td>
<td>172</td>
<td>120</td>
<td>-52</td>
<td>-30</td>
<td>12.78</td>
<td>11.32</td>
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<tr>
<td>45-4022</td>
<td>Logging equipment operators</td>
<td>226</td>
<td>179</td>
<td>-47</td>
<td>-21</td>
<td>8.66</td>
<td>13.17</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>45-4023</td>
<td>Log graders and scalers</td>
<td>43</td>
<td>44</td>
<td>1</td>
<td>2</td>
<td>3.61</td>
<td>15.54</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>45-4029</td>
<td>Logging workers, all other</td>
<td>46</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>1.61</td>
<td>12.70</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>47-1011</td>
<td>First-line supervisors/managers of construction trades and extraction workers</td>
<td>733</td>
<td>806</td>
<td>73</td>
<td>10</td>
<td>1.09</td>
<td>15.68</td>
<td>Work experience in a related field</td>
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<tr>
<td>47-2021</td>
<td>Brickmasons and blockmasons</td>
<td>83</td>
<td>80</td>
<td>-3</td>
<td>-4</td>
<td>0.86</td>
<td>13.57</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>47-2022</td>
<td>Stonemasons</td>
<td>29</td>
<td>34</td>
<td>5</td>
<td>17</td>
<td>0.82</td>
<td>10.18</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>47-2031</td>
<td>Carpenters</td>
<td>1,026</td>
<td>1,140</td>
<td>114</td>
<td>11</td>
<td>0.96</td>
<td>11.77</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>47-2041</td>
<td>Carpet installers</td>
<td>22</td>
<td>26</td>
<td>4</td>
<td>18</td>
<td>0.57</td>
<td>10.36</td>
<td>Moderate-term on-the-job training</td>
</tr>
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<tr>
<td>47-2042</td>
<td>Floor layers, except carpet, wood, and hard tiles</td>
<td>22</td>
<td>25</td>
<td>3</td>
<td>14</td>
<td>0.81</td>
<td>10.16</td>
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</tr>
<tr>
<td>47-2043</td>
<td>Floor sanders and finishers</td>
<td>22</td>
<td>26</td>
<td>4</td>
<td>18</td>
<td>0.95</td>
<td>9.97</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>47-2044</td>
<td>Tile and marble setters</td>
<td>37</td>
<td>42</td>
<td>5</td>
<td>14</td>
<td>0.71</td>
<td>10.77</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>47-2051</td>
<td>Cement masons and concrete finishers</td>
<td>92</td>
<td>95</td>
<td>3</td>
<td>3</td>
<td>0.66</td>
<td>11.31</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>47-2053</td>
<td>Terrazzo workers and finishers</td>
<td>12</td>
<td>13</td>
<td>1</td>
<td>8</td>
<td>1.16</td>
<td>10.90</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>47-2061</td>
<td>Construction laborers</td>
<td>828</td>
<td>904</td>
<td>76</td>
<td>9</td>
<td>0.91</td>
<td>9.95</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>47-2071</td>
<td>Paving, surfacing, and tamping equipment operators</td>
<td>30</td>
<td>33</td>
<td>3</td>
<td>10</td>
<td>0.74</td>
<td>11.26</td>
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</tr>
<tr>
<td>47-2072</td>
<td>Pile-driver operators</td>
<td>20</td>
<td>24</td>
<td>4</td>
<td>20</td>
<td>1.00</td>
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<td>47-2073</td>
<td>Operating engineers and other construction equipment operators</td>
<td>326</td>
<td>342</td>
<td>16</td>
<td>5</td>
<td>1.19</td>
<td>12.31</td>
<td>Moderate-term on-the-job training</td>
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<tr>
<td>47-2081</td>
<td>Drywall and ceiling tile installers</td>
<td>35</td>
<td>40</td>
<td>5</td>
<td>14</td>
<td>0.32</td>
<td>11.24</td>
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<td>47-2082</td>
<td>Tapers</td>
<td>27</td>
<td>31</td>
<td>4</td>
<td>15</td>
<td>0.59</td>
<td>10.67</td>
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<tr>
<td>47-2111</td>
<td>Electricians</td>
<td>401</td>
<td>369</td>
<td>-32</td>
<td>-8</td>
<td>0.86</td>
<td>13.08</td>
<td>Long-term on-the-job training</td>
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<td>47-2121</td>
<td>Glaziers</td>
<td>15</td>
<td>17</td>
<td>2</td>
<td>13</td>
<td>0.42</td>
<td>12.14</td>
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<tr>
<td>47-2132</td>
<td>Insulation workers, mechanical</td>
<td>16</td>
<td>17</td>
<td>1</td>
<td>6</td>
<td>0.83</td>
<td>15.48</td>
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<td>47-2141</td>
<td>Painters, construction and maintenance</td>
<td>299</td>
<td>345</td>
<td>46</td>
<td>15</td>
<td>0.85</td>
<td>10.20</td>
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<td>47-2151</td>
<td>Pipelayers</td>
<td>87</td>
<td>90</td>
<td>3</td>
<td>3</td>
<td>1.23</td>
<td>11.01</td>
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<td>47-2152</td>
<td>Plumbers, pipefitters, and steamfitters</td>
<td>286</td>
<td>302</td>
<td>16</td>
<td>6</td>
<td>0.93</td>
<td>13.61</td>
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<tr>
<td>47-2161</td>
<td>Plasterers and stucco masons</td>
<td>13</td>
<td>14</td>
<td>1</td>
<td>8</td>
<td>0.33</td>
<td>12.86</td>
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<td>47-2181</td>
<td>Roofers</td>
<td>175</td>
<td>171</td>
<td>-4</td>
<td>-2</td>
<td>1.55</td>
<td>10.47</td>
<td>Long-term on-the-job training</td>
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<tr>
<td>47-2211</td>
<td>Sheet metal workers</td>
<td>121</td>
<td>122</td>
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<td>1</td>
<td>1.10</td>
<td>14.60</td>
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<tr>
<td>47-2221</td>
<td>Structural iron and steel workers</td>
<td>55</td>
<td>56</td>
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<td>2</td>
<td>1.24</td>
<td>16.44</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>47-3011</td>
<td>Helpers, brickmasons, blockmasons, stonemasons, and tile and marble setters</td>
<td>44</td>
<td>36</td>
<td>-8</td>
<td>-18</td>
<td>1.17</td>
<td>9.53</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>47-3012</td>
<td>Helpers, carpenters</td>
<td>106</td>
<td>110</td>
<td>4</td>
<td>4</td>
<td>1.75</td>
<td>10.11</td>
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<td>47-3013</td>
<td>Helpers, electricians</td>
<td>84</td>
<td>66</td>
<td>-18</td>
<td>-21</td>
<td>1.30</td>
<td>9.12</td>
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<td>47-3015</td>
<td>Helpers, pipelayers, plumbers, pipefitters, and steamfitters</td>
<td>80</td>
<td>82</td>
<td>2</td>
<td>3</td>
<td>1.50</td>
<td>12.03</td>
<td>Short-term on-the-job training</td>
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<td>47-3016</td>
<td>Helpers, roofers</td>
<td>13</td>
<td>11</td>
<td>-2</td>
<td>-15</td>
<td>0.86</td>
<td>11.70</td>
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<tr>
<td>47-3019</td>
<td>Helpers, construction trades, all other</td>
<td>13</td>
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<td>47-4011</td>
<td>Construction and building inspectors</td>
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<td>Fence erectors</td>
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<td>17</td>
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<td>47-4041</td>
<td>Hazardous materials removal workers</td>
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<td>Highway maintenance workers</td>
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<td>47-4061</td>
<td>Rail-track laying and maintenance equipment operators</td>
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<td>47-4071</td>
<td>Septic tank servicers and sewer pipe cleaners</td>
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<td>9</td>
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<td>28</td>
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<td>87</td>
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<td>Automotive glass installers and repairers</td>
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<td>Automotive service technicians and mechanics</td>
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<td>659</td>
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<td>Bus and truck mechanics and diesel engine specialists</td>
<td>171</td>
<td>192</td>
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<td>Rail car repairers</td>
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<td>Motorcycle mechanics</td>
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<td>21</td>
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<td>49-3053</td>
<td>Outdoor power equipment and other small engine mechanics</td>
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<td>Tire repairers and changers</td>
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<td>89</td>
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<td>Control and valve installers and repairers, except mechanical door</td>
<td>41</td>
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<td>636</td>
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<td>13.23</td>
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<td>Maintenance and repair workers, general</td>
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<td>Electrical power-line installers and repairers</td>
<td>97</td>
<td>124</td>
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<td>Associate’s degree</td>
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<td>Coin, vending, and amusement machine servicers and repairers</td>
<td>32</td>
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<td>0</td>
<td>0.76</td>
<td>11.10</td>
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<td>18</td>
<td>3</td>
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<td>0.84</td>
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<td>Fabric menders, except garment</td>
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<td>42</td>
<td>6</td>
<td>17</td>
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<td>15.58</td>
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<td>Locksmiths and safe repairers</td>
<td>13</td>
<td>16</td>
<td>3</td>
<td>23</td>
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<td>Signal and track switch repairers</td>
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<td>Helpers--Installation, maintenance, and repair workers</td>
<td>129</td>
<td>131</td>
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<td>First-line supervisors/managers of production and operating workers</td>
<td>1,007</td>
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<td>Coil winders, tapers, and finishers</td>
<td>36</td>
<td>32</td>
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<td>51-2022</td>
<td>Electrical and electronic equipment assemblers</td>
<td>105</td>
<td>90</td>
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<td>Electromechanical equipment assemblers</td>
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<td>16</td>
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<td>55</td>
<td>5</td>
<td>10</td>
<td>1.97</td>
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<td>51-2041</td>
<td>Structural metal fabricators and fitters</td>
<td>106</td>
<td>99</td>
<td>-7</td>
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<td>1.54</td>
<td>17.52</td>
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<td>51-2091</td>
<td>Fiberglass laminators and fabricators</td>
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<td>60</td>
<td>-10</td>
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<td>Timing device assemblers, adjusters, and calibrators</td>
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<td>13</td>
<td>-4</td>
<td>-24</td>
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<td>51-3011</td>
<td>Bakers</td>
<td>72</td>
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<td>51-3021</td>
<td>Butchers and meat cutters</td>
<td>112</td>
<td>110</td>
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<td>-2</td>
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<td>Meat, poultry, and fish cutters and trimmers</td>
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<td>459</td>
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<td>10.55</td>
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<td>51-3023</td>
<td>Slaughterers and meat packers</td>
<td>655</td>
<td>708</td>
<td>53</td>
<td>8</td>
<td>9.07</td>
<td>9.04</td>
<td>Moderate-term on-the-job training</td>
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<td>51-3091</td>
<td>Food and tobacco roasting, baking, and drying machine operators and tenders</td>
<td>11</td>
<td>13</td>
<td>2</td>
<td>18</td>
<td>0.86</td>
<td>8.81</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>51-3092</td>
<td>Food batchmakers</td>
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<td>124</td>
<td>21</td>
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<td>1.67</td>
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<td>51-3093</td>
<td>Food cooking machine operators and tenders</td>
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<td>66</td>
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<td>Computer-controlled machine tool operators, metal and plastic</td>
<td>159</td>
<td>168</td>
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<td>51-4012</td>
<td>Numerical tool and process control programmers</td>
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<td>19</td>
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<td>13.72</td>
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<tr>
<td>51-4021</td>
<td>Extruding and drawing machine setters, operators, and tenders, metal and plastic</td>
<td>150</td>
<td>137</td>
<td>-13</td>
<td>-9</td>
<td>2.58</td>
<td>13.16</td>
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<td>Forging machine setters, operators, and tenders, metal and plastic</td>
<td>30</td>
<td>21</td>
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<td>13.54</td>
<td>Moderate-term on-the-job training</td>
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<td>Rolling machine setters, operators, and tenders, metal and plastic</td>
<td>52</td>
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<td>51-4031</td>
<td>Cutting, punching, and press machine setters, operators, and tenders, metal and plastic</td>
<td>334</td>
<td>295</td>
<td>-39</td>
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<td>51-4032</td>
<td>Drilling and boring machine tool setters, operators, and tenders, metal and plastic</td>
<td>46</td>
<td>42</td>
<td>-4</td>
<td>-9</td>
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<td>51-4033</td>
<td>Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic</td>
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<td>352</td>
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<td>Lathe and turning machine tool setters, operators, and tenders, metal and plastic</td>
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<td>Machinists</td>
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<td>358</td>
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<td>Metal-refining furnace operators and tenders</td>
<td>14</td>
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<td>51-4052</td>
<td>Pourers and casters, metal</td>
<td>40</td>
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<td>25</td>
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<td>51-4062</td>
<td>Patternmakers, metal and plastic</td>
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<td>Foundry mold and coremakers</td>
<td>21</td>
<td>25</td>
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<td>19</td>
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<td>15.34</td>
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<td>51-4072</td>
<td>Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic</td>
<td>224</td>
<td>195</td>
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<td>Multiple machine tool setters, operators, and tenders, metal and plastic</td>
<td>76</td>
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<td>Tool and die makers</td>
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<td>51-4121</td>
<td>Welders, cutters, solderers, and brazers</td>
<td>295</td>
<td>299</td>
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<td>51-4122</td>
<td>Welding, soldering, and brazing machine setters, operators, and tenders</td>
<td>74</td>
<td>80</td>
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<td>Heat treating equipment setters, operators, and tenders, metal and plastic</td>
<td>49</td>
<td>47</td>
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<td>51-4193</td>
<td>Plating and coating machine setters, operators, and tenders, metal and plastic</td>
<td>90</td>
<td>100</td>
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<td>Tool grinders, filers, and sharpeners</td>
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<td>18</td>
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<td>Metal workers and plastic workers, all other</td>
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<td>Bindery workers</td>
<td>58</td>
<td>47</td>
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<td>Job printers</td>
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<td>134</td>
<td>139</td>
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<td>Pressers, textile, garment, and related materials</td>
<td>131</td>
<td>102</td>
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<td>Shoe and leather workers and repairers</td>
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<td>10</td>
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<td>Sewers, hand</td>
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<td>8.79</td>
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<td>51-6052</td>
<td>Tailors, dressmakers, and custom sewers</td>
<td>43</td>
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<td>51-6061</td>
<td>Textile bleaching and dyeing machine operators and tenders</td>
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<td>Textile cutting machine setters, operators, and tenders</td>
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<td>Textile knitting and weaving machine setters, operators, and tenders</td>
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<td>51-6064</td>
<td>Textile winding, twisting, and drawing out machine setters, operators, and tenders</td>
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<td>51-6091</td>
<td>Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers</td>
<td>146</td>
<td>90</td>
<td>-56</td>
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<td>Fabric and apparel patternmakers</td>
<td>22</td>
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<td>23</td>
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<td>14.83</td>
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<td>Upholsterers</td>
<td>44</td>
<td>48</td>
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<td>51-6099</td>
<td>Textile, apparel, and furnishings workers, all other</td>
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<td>-25</td>
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<td>10.85</td>
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<td>51-7011</td>
<td>Cabinetmakers and bench carpenters</td>
<td>239</td>
<td>201</td>
<td>-38</td>
<td>-16</td>
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<td>11.21</td>
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<tr>
<td>51-7021</td>
<td>Furniture finishers</td>
<td>34</td>
<td>32</td>
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<td>-6</td>
<td>1.20</td>
<td>13.71</td>
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</tr>
<tr>
<td>51-7031</td>
<td>Model makers, wood</td>
<td>16</td>
<td>10</td>
<td>-6</td>
<td>-38</td>
<td>2.93</td>
<td>9.74</td>
<td>Long-term on-the-job training</td>
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<td>51-7041</td>
<td>Sawing machine setters, operators, and tenders, wood</td>
<td>174</td>
<td>153</td>
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<td>51-7042</td>
<td>Woodworking machine setters, operators, and tenders, except sawing</td>
<td>235</td>
<td>226</td>
<td>-9</td>
<td>-4</td>
<td>3.92</td>
<td>13.90</td>
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<td>51-7099</td>
<td>Woodworkers, all other</td>
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<td>11</td>
<td>-2</td>
<td>-15</td>
<td>1.15</td>
<td>11.46</td>
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<td>51-8011</td>
<td>Nuclear power reactor operators</td>
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<td>18</td>
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<td>39.11</td>
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<td>Power plant operators</td>
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<td>59</td>
<td>11</td>
<td>23</td>
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<td>13.78</td>
<td>Long-term on-the-job training</td>
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<td>51-8021</td>
<td>Stationary engineers and boiler operators</td>
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<td>11.74</td>
<td>Long-term on-the-job training</td>
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<tr>
<td>51-8031</td>
<td>Water and liquid waste treatment plant and system operators</td>
<td>110</td>
<td>120</td>
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<td>9</td>
<td>1.64</td>
<td>13.66</td>
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<td>51-8091</td>
<td>Chemical plant and system operators</td>
<td>171</td>
<td>134</td>
<td>-37</td>
<td>-22</td>
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<td>16.28</td>
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<td>Chemical equipment operators and tenders</td>
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<td>19.18</td>
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<td>Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders</td>
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<td>15.48</td>
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<td>Crushing, grinding, and polishing machine setters, operators, and tenders</td>
<td>42</td>
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<td>11.22</td>
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<td>Grinding and polishing workers, hand</td>
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<td>11.07</td>
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<td>Mixing and blending machine setters, operators, and tenders</td>
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<td>14.74</td>
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<td>51-9031</td>
<td>Cutters and trimmers, hand</td>
<td>44</td>
<td>42</td>
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<td>Cutting and slicing machine setters, operators, and tenders</td>
<td>135</td>
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<td>51-9041</td>
<td>Extruding, forming, pressing, and compacting machine setters, operators, and tenders</td>
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<td>Furnace, kiln, oven, drier, and kettle operators and tenders</td>
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<td>51-9061</td>
<td>Inspectors, testers, sorters, samplers, and weighers</td>
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<td>-14</td>
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<td>Jewelers and precious stone and metal workers</td>
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<td>Ophthalmic laboratory technicians</td>
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<td>Packaging and filling machine operators and tenders</td>
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<td>Coating, painting, and spraying machine setters, operators, and tenders</td>
<td>139</td>
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<td>14.34</td>
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<td>Painters, transportation equipment</td>
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<td>51-9132</td>
<td>Photographic processing machine operators</td>
<td>48</td>
<td>32</td>
<td>-16</td>
<td>-33</td>
<td>1.36</td>
<td>7.76</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>51-9191</td>
<td>Cementing and gluing machine operators and tenders</td>
<td>52</td>
<td>47</td>
<td>-5</td>
<td>-10</td>
<td>2.62</td>
<td>9.38</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>51-9192</td>
<td>Cleaning, washing, and metal pickling equipment operators and tenders</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>2.89</td>
<td>11.38</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>51-9193</td>
<td>Cooling and freezing equipment operators and tenders</td>
<td>26</td>
<td>27</td>
<td>1</td>
<td>4</td>
<td>2.69</td>
<td>11.54</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>51-9195</td>
<td>Molders, shapers, and casters, except metal and plastic</td>
<td>33</td>
<td>30</td>
<td>-3</td>
<td>-9</td>
<td>1.13</td>
<td>10.64</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>51-9196</td>
<td>Paper goods machine setters, operators, and tenders</td>
<td>234</td>
<td>212</td>
<td>-22</td>
<td>-9</td>
<td>3.50</td>
<td>14.46</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>SOC Code</td>
<td>Description</td>
<td>2007 Jobs</td>
<td>2016 Jobs</td>
<td>Change</td>
<td>% Change</td>
<td>2007 Median Hourly Earnings ($)</td>
<td>Typical Education &amp; Training Level</td>
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<tr>
<td>51-9197</td>
<td>Tire builders</td>
<td>282</td>
<td>414</td>
<td>132</td>
<td>47</td>
<td>21.10</td>
<td>9.68</td>
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<tr>
<td>51-9198</td>
<td>Helpers--Production workers</td>
<td>984</td>
<td>938</td>
<td>-46</td>
<td>-5</td>
<td>3.08</td>
<td>8.11</td>
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</tr>
<tr>
<td>51-9199</td>
<td>Production workers, all other</td>
<td>197</td>
<td>210</td>
<td>13</td>
<td>7</td>
<td>1.12</td>
<td>9.14</td>
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<tr>
<td>53-1021</td>
<td>First-line supervisors/managers of helpers, laborers, and material movers, hand</td>
<td>135</td>
<td>150</td>
<td>15</td>
<td>11</td>
<td>1.15</td>
<td>16.54</td>
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<tr>
<td>53-1031</td>
<td>First-line supervisors/managers of transportation and material-moving machine and vehicle operators</td>
<td>135</td>
<td>156</td>
<td>21</td>
<td>16</td>
<td>0.96</td>
<td>19.64</td>
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<tr>
<td>53-2012</td>
<td>Commercial pilots</td>
<td>12</td>
<td>16</td>
<td>4</td>
<td>33</td>
<td>0.48</td>
<td>17.02</td>
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<tr>
<td>53-3011</td>
<td>Ambulance drivers and attendants, except emergency medical technicians</td>
<td>32</td>
<td>50</td>
<td>18</td>
<td>56</td>
<td>2.33</td>
<td>10.43</td>
<td></td>
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<tr>
<td>53-3021</td>
<td>Bus drivers, transit and intercity</td>
<td>29</td>
<td>33</td>
<td>4</td>
<td>14</td>
<td>0.22</td>
<td>7.22</td>
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<tr>
<td>53-3022</td>
<td>Bus drivers, school</td>
<td>341</td>
<td>346</td>
<td>5</td>
<td>1</td>
<td>1.15</td>
<td>6.92</td>
<td></td>
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<tr>
<td>53-3031</td>
<td>Driver/sales workers</td>
<td>291</td>
<td>316</td>
<td>25</td>
<td>9</td>
<td>0.76</td>
<td>7.86</td>
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<tr>
<td>53-3032</td>
<td>Truck drivers, heavy and tractor-trailer</td>
<td>1,424</td>
<td>1,683</td>
<td>259</td>
<td>18</td>
<td>1.19</td>
<td>13.88</td>
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<tr>
<td>53-3033</td>
<td>Truck drivers, light or delivery services</td>
<td>698</td>
<td>811</td>
<td>113</td>
<td>16</td>
<td>0.96</td>
<td>9.25</td>
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<tr>
<td>53-3041</td>
<td>Taxi drivers and chauffeurs</td>
<td>87</td>
<td>99</td>
<td>12</td>
<td>14</td>
<td>0.42</td>
<td>6.62</td>
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<tr>
<td>53-3099</td>
<td>Motor vehicle operators, all other</td>
<td>11</td>
<td>14</td>
<td>3</td>
<td>27</td>
<td>0.22</td>
<td>$15.81</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>53-4019</td>
<td>Locomotive engineers and operators</td>
<td>19</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0.63</td>
<td>$30.68</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>53-4031</td>
<td>Railroad conductors and yardmasters</td>
<td>16</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>0.85</td>
<td>$26.30</td>
<td>Moderate-term on-the-job training</td>
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<tr>
<td>53-6021</td>
<td>Parking lot attendants</td>
<td>16</td>
<td>17</td>
<td>1</td>
<td>6</td>
<td>0.19</td>
<td>$7.72</td>
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<tr>
<td>53-6031</td>
<td>Service station attendants</td>
<td>15</td>
<td>17</td>
<td>2</td>
<td>13</td>
<td>0.26</td>
<td>$13.11</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>53-7011</td>
<td>Conveyor operators and tenders</td>
<td>22</td>
<td>21</td>
<td>-1</td>
<td>-5</td>
<td>0.81</td>
<td>$10.95</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>53-7021</td>
<td>Crane and tower operators</td>
<td>26</td>
<td>28</td>
<td>2</td>
<td>8</td>
<td>0.87</td>
<td>$15.42</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>53-7032</td>
<td>Excavating and loading machine and dragline operators</td>
<td>48</td>
<td>52</td>
<td>4</td>
<td>8</td>
<td>1.04</td>
<td>$12.84</td>
<td>Moderate-term on-the-job training</td>
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<tr>
<td>53-7051</td>
<td>Industrial truck and tractor operators</td>
<td>820</td>
<td>788</td>
<td>-32</td>
<td>-4</td>
<td>2.00</td>
<td>$10.96</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>53-7061</td>
<td>Cleaners of vehicles and equipment</td>
<td>209</td>
<td>220</td>
<td>11</td>
<td>5</td>
<td>0.95</td>
<td>$7.60</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>53-7062</td>
<td>Laborers and freight, stock, and material movers, hand</td>
<td>1,821</td>
<td>1,835</td>
<td>14</td>
<td>1</td>
<td>1.22</td>
<td>$8.43</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>53-7063</td>
<td>Machine feeders and offbearers</td>
<td>483</td>
<td>381</td>
<td>-102</td>
<td>-21</td>
<td>5.80</td>
<td>$10.48</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>53-7064</td>
<td>Packers and packagers, hand</td>
<td>740</td>
<td>594</td>
<td>-146</td>
<td>-20</td>
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<td>$7.92</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>53-7081</td>
<td>Refuse and recyclable material collectors</td>
<td>182</td>
<td>193</td>
<td>11</td>
<td>6</td>
<td>2.00</td>
<td>$7.81</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>53-7199</td>
<td>Material moving workers, all other</td>
<td>32</td>
<td>31</td>
<td>-1</td>
<td>-3</td>
<td>1.15</td>
<td>$8.98</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
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</tr>
<tr>
<td>109,177</td>
<td>115,494</td>
<td>6,316</td>
<td>6</td>
<td>12.70</td>
<td>1.25</td>
<td>greater than $12.70</td>
<td>Source: EMSI</td>
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</table>