Economic Analysis

The Unified or Combined State Plan must include an analysis of the economic conditions and trends in the State, including sub-State regions and any specific economic areas identified by the State. This must include—

(i) **Existing Demand Industry Sectors and Occupations.** Provide an analysis of the industries and occupations for which there is existing demand.

(ii) Emerging Demand Industry Sectors and Occupations.

(iii) Employers’ Employment Needs.
(A) Economic Analysis

(i) Existing Demand Industry Sectors and Occupations

Tennessee Industry Employment 2015-2020

Tennessee’s average annual nonfarm employment decreased 4.0 percent from 2019 to 2020, losing 124,300 jobs. Goods producing jobs declined at a rate of 4.4 percent compared to 4.5 percent for private service-providing jobs. Jobs in the government sector declined by 1.2 percent. In the goods producing sector, mining, logging, and construction declined by 1,100 jobs while manufacturing decreased by 20,300 jobs.

Among the private service-providing industries, those with the largest job decreases were leisure and hospitality which lost 54,600 jobs, and education and health services which lost 13,500 jobs. Within the leisure and hospitality sector, accommodation and food services accounted for 46,500 of the lost jobs while health care and social assistance accounted for 9,900 of the 13,500 jobs lost in the education and health services sector. Transportation, warehousing, and utilities and professional, scientific, and technical services experienced an increase from 2019 to 2020 with a gain of 3,800 and 1,900 jobs respectively.

Since 2015, Tennessee has added 101,400 jobs, a 3.5 percent increase. Trade, transportation, and utilities led the way adding 27,200 jobs. Of those jobs, 29,200 were added in transportation, warehousing, and utilities, and 200 were added in wholesale trade. Other sectors gaining over 15,000 jobs included mining, logging, and construction; financial activities; professional and business services. Leisure and hospitality experienced a decline of 15,400 jobs from 2015 to 2020.

TN 2020 Private Sector Employment

Source: TN Department of Labor and Workforce Development, Current Employment Statistics
## Tennessee Industry Employment, 2015-2020

<table>
<thead>
<tr>
<th>Industry Employment (in thousands)</th>
<th>2015</th>
<th>2019</th>
<th>2020</th>
<th>19-20 %</th>
<th>19-20 %</th>
<th>15-20 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nonfarm</td>
<td>2,897.2</td>
<td>3,122.9</td>
<td>2,998.6</td>
<td>-124.3</td>
<td>-4.0%</td>
<td>101.4</td>
</tr>
<tr>
<td>Goods Producing</td>
<td>448.1</td>
<td>489.8</td>
<td>468.4</td>
<td>-21.4</td>
<td>-4.4%</td>
<td>20.3</td>
</tr>
<tr>
<td>Mining, Logging, &amp; Construction</td>
<td>117.2</td>
<td>134.4</td>
<td>133.3</td>
<td>-1.1</td>
<td>-0.8%</td>
<td>16.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>330.9</td>
<td>355.4</td>
<td>335.1</td>
<td>-20.3</td>
<td>-5.7%</td>
<td>4.2</td>
</tr>
<tr>
<td>Durable Goods Manuf.</td>
<td>211.2</td>
<td>227.5</td>
<td>211.3</td>
<td>-16.2</td>
<td>-7.1%</td>
<td>0.1</td>
</tr>
<tr>
<td>Non Durable Goods Manufacturing</td>
<td>119.8</td>
<td>127.9</td>
<td>123.9</td>
<td>-4.0</td>
<td>-3.1%</td>
<td>4.1</td>
</tr>
<tr>
<td>Private Service-Providing</td>
<td>2,024.1</td>
<td>2,195.4</td>
<td>2,097.7</td>
<td>-97.7</td>
<td>-4.5%</td>
<td>73.6</td>
</tr>
<tr>
<td>Trade, Transportation, &amp; Utilities</td>
<td>600.1</td>
<td>637.0</td>
<td>627.3</td>
<td>-9.7</td>
<td>-1.5%</td>
<td>27.2</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>117.4</td>
<td>121.0</td>
<td>117.6</td>
<td>-3.4</td>
<td>-2.8%</td>
<td>0.2</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>325.6</td>
<td>333.6</td>
<td>323.4</td>
<td>-10.2</td>
<td>-3.1%</td>
<td>-2.2</td>
</tr>
<tr>
<td>Transportation, Warehousing, &amp; Utilities</td>
<td>157.1</td>
<td>182.5</td>
<td>186.3</td>
<td>3.8</td>
<td>2.1%</td>
<td>29.2</td>
</tr>
<tr>
<td>Information</td>
<td>44.0</td>
<td>45.2</td>
<td>45.5</td>
<td>0.3</td>
<td>0.7%</td>
<td>1.5</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>150.9</td>
<td>172.3</td>
<td>171.0</td>
<td>-1.3</td>
<td>-0.8%</td>
<td>20.1</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>114.5</td>
<td>130.4</td>
<td>131.5</td>
<td>1.1</td>
<td>0.8%</td>
<td>17.0</td>
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<tr>
<td>Real Estate, Rental &amp; Leasing</td>
<td>36.4</td>
<td>42.0</td>
<td>39.5</td>
<td>-2.5</td>
<td>-6.0%</td>
<td>3.1</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>394.5</td>
<td>426.3</td>
<td>414.7</td>
<td>-11.6</td>
<td>-2.7%</td>
<td>20.2</td>
</tr>
<tr>
<td>Professional, Scientific &amp; Technical Services</td>
<td>128.7</td>
<td>145.6</td>
<td>147.5</td>
<td>1.9</td>
<td>1.3%</td>
<td>18.8</td>
</tr>
<tr>
<td>Management of Companies &amp; Enterprises</td>
<td>42.8</td>
<td>51.8</td>
<td>50.0</td>
<td>-1.8</td>
<td>-3.5%</td>
<td>7.2</td>
</tr>
<tr>
<td>Admin, Support, Waste Mgt &amp; Remediation Services</td>
<td>223.0</td>
<td>228.8</td>
<td>217.2</td>
<td>-11.6</td>
<td>-5.1%</td>
<td>-5.8</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>418.2</td>
<td>445.4</td>
<td>431.9</td>
<td>-13.5</td>
<td>-3.0%</td>
<td>13.7</td>
</tr>
<tr>
<td>Educational Services</td>
<td>56.8</td>
<td>61.8</td>
<td>58.2</td>
<td>-3.6</td>
<td>-5.8%</td>
<td>1.4</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>361.4</td>
<td>383.6</td>
<td>373.7</td>
<td>-9.9</td>
<td>-2.6%</td>
<td>12.3</td>
</tr>
<tr>
<td>Industry</td>
<td>May 2021</td>
<td>May 2020</td>
<td>May 2019</td>
<td>Change</td>
<td>Change (%)</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>--------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>308.0</td>
<td>347.2</td>
<td>292.6</td>
<td>-45.6</td>
<td>-15.7</td>
<td></td>
</tr>
<tr>
<td>Arts, Entertainment &amp; Recreation</td>
<td>34.3</td>
<td>42.1</td>
<td>34.0</td>
<td>-8.1</td>
<td>-19.2</td>
<td></td>
</tr>
<tr>
<td>Accommodation &amp; Food Services</td>
<td>273.7</td>
<td>305.1</td>
<td>258.6</td>
<td>-36.5</td>
<td>-13.9</td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td>107.8</td>
<td>121.7</td>
<td>117.0</td>
<td>-9.2</td>
<td>-8.1</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>425.1</td>
<td>437.6</td>
<td>432.5</td>
<td>-5.1</td>
<td>-1.2</td>
<td></td>
</tr>
<tr>
<td>Federal Government</td>
<td>49.1</td>
<td>50.1</td>
<td>51.9</td>
<td>1.8</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>State Government</td>
<td>96.5</td>
<td>96.8</td>
<td>95.5</td>
<td>-1.3</td>
<td>-1.3</td>
<td></td>
</tr>
<tr>
<td>Local Government</td>
<td>279.4</td>
<td>290.7</td>
<td>285.1</td>
<td>-5.6</td>
<td>-1.9</td>
<td></td>
</tr>
</tbody>
</table>

Source: TN Department of Labor & Workforce Development, Current Employment Statistics

**Short Term Trends in the Tennessee Economy 2020 to June 2021**

After Tennessee’s unemployment rate reached 15 percent in April 2020 when the COVID-19 pandemic was first raging, a slow recovery began. From May 2019 to May 2020 more than 250,000 jobs were lost in Tennessee. However, from May 2020 to May 2021, 226,900 jobs were added, restoring employment close to pre-pandemic levels.

Table 1 displays the industries which have gained the most employment since May 2020. Last year, nearly four times as many jobs were lost in the service-providing industries as in the goods-producing sector. Over the year Job gains from May 2020 to May 2021 responded likewise, with service-providing industries having job gains four times as great (181,000) as the goods-producing sector (45,600). Notably, job gains of 57,200 in leisure and hospitality were trending toward 2019 annual average employment but have not reached employment levels of 2019 as the pandemic continues.

In May 2021 manufacturing was only about 10,000 below its annual average employment for 2019 of 355.4 thousand. After having lost tens of thousands of jobs in 2020, transportation equipment manufacturing was only about 5,000 below its employment level of 75,300 in May 2019. Other industries rebounding to previous levels (May 2019) included administrative and support and waste management and health services, especially ambulatory care. Local government education in May 2021 was within 5,000 of its May 2019 employment.

The industry experiencing a smaller employment recovery is retail trade, especially with the expansion of e-commerce during the pandemic. Its May 2019 employment level was 339.7 thousand; in May 2021 at 329.5. National projections expect retail trade to continue to decline even after the pandemic is under control due to changes in consumers’ spending habits and more individuals working at home.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nonfarm</td>
<td>3,067,800</td>
<td>3,049,800</td>
<td>2,840,900</td>
<td>18,000</td>
<td>226,900</td>
</tr>
<tr>
<td>Goods Producing</td>
<td>478,200</td>
<td>476,100</td>
<td>432,600</td>
<td>2,100</td>
<td>45,600</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>345,400</td>
<td>344,100</td>
<td>299,500</td>
<td>1,300</td>
<td>45,900</td>
</tr>
<tr>
<td>Transportation Equipment Manufacturing</td>
<td>70,100</td>
<td>69,300</td>
<td>43,500</td>
<td>800</td>
<td>26,600</td>
</tr>
<tr>
<td>Plastics and Rubber Products Manufacturing</td>
<td>23,500</td>
<td>23,800</td>
<td>19,400</td>
<td>-300</td>
<td>4,100</td>
</tr>
<tr>
<td>Service-Providing</td>
<td>2,589,600</td>
<td>2,573,700</td>
<td>2,408,300</td>
<td>15,900</td>
<td>181,300</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>118,600</td>
<td>119,000</td>
<td>116,000</td>
<td>-400</td>
<td>2,600</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>329,500</td>
<td>325,600</td>
<td>308,700</td>
<td>3,900</td>
<td>20,800</td>
</tr>
<tr>
<td>Transportation, Warehousing, and Utilities</td>
<td>193,200</td>
<td>192,900</td>
<td>177,100</td>
<td>300</td>
<td>16,100</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>189,500</td>
<td>189,200</td>
<td>173,500</td>
<td>300</td>
<td>16,000</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>437,000</td>
<td>431,100</td>
<td>389,300</td>
<td>5,900</td>
<td>47,700</td>
</tr>
<tr>
<td>Administrative and Support and Waste Management</td>
<td>228,100</td>
<td>224,100</td>
<td>198,100</td>
<td>4,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Educational and Health Services</td>
<td>427,300</td>
<td>430,600</td>
<td>418,500</td>
<td>-3,300</td>
<td>8,800</td>
</tr>
<tr>
<td>Ambulatory Health Care Services</td>
<td>155,300</td>
<td>156,100</td>
<td>146,400</td>
<td>-800</td>
<td>8,900</td>
</tr>
<tr>
<td>Hospitals</td>
<td>108,500</td>
<td>108,800</td>
<td>106,100</td>
<td>-300</td>
<td>2,400</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>310,400</td>
<td>300,900</td>
<td>253,200</td>
<td>9,500</td>
<td>57,200</td>
</tr>
<tr>
<td>Accommodation</td>
<td>31,300</td>
<td>29,900</td>
<td>21,500</td>
<td>1,400</td>
<td>9,800</td>
</tr>
<tr>
<td>Food Services and Drinking Places</td>
<td>240,400</td>
<td>236,300</td>
<td>204,200</td>
<td>4,100</td>
<td>36,200</td>
</tr>
<tr>
<td>Government</td>
<td>433,800</td>
<td>438,300</td>
<td>425,600</td>
<td>-4,500</td>
<td>8,200</td>
</tr>
<tr>
<td>Local Government Educational Services</td>
<td>143,300</td>
<td>143,700</td>
<td>138,700</td>
<td>-400</td>
<td>4,600</td>
</tr>
<tr>
<td>Local Government, Excluding Education</td>
<td>146,200</td>
<td>145,100</td>
<td>143,400</td>
<td>1,100</td>
<td>2,800</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR3ED Division, Current Employment Statistics May 2021
Tennessee Long Term Outlook to 2028

From a base of 3.3 million jobs in 2018, total employment for Tennessee, including agricultural, self-employed, and private household workers, is expected to grow to 3.5 million by 2028. Expected to increase by 0.7 percent annually, Tennessee’s economy in the long run is expected to continue expansion in nine of twelve major industry sectors.

The goods-producing industries are expected to expand by 2.8 percent and create an estimated 14,000 jobs. Construction is forecast to be the most rapidly growing sector at 1.52 percent annually, faster than the overall growth in the economy. However, manufacturing employment is expected to decline slightly. Natural resources and mining, which includes agriculture, is expected to gain a little less than 1,400 jobs.

The service-providing sector is expected to grow more rapidly than the goods-producing sector, at about eight percent annually. Growth will increase in information and leisure and hospitality; professional and business services are expected to increase more than 67,000 jobs alone. Continued losses in the financial sector are forecast due to employment reductions and continued technological expansion.

The service-providing industries expected to have the largest employment growth are education and health services, professional and business services, and leisure and hospitality, forecast to add a total of 200,000 jobs by 2028. As the retail and wholesale sector respond to short term loss of business and electronic sales, these sectors are expected to remain flat. Government will experience growth over this period of 2.6 percent as services expand.

With the expansion of e-commerce and changes in work organization, the number of self-employed and unpaid family workers is expected to grow at a slightly lower rate than the average for all employment (0.6 percent annually).
The most rapidly growing occupational groups are listed in the following table. Two are in the education and health services industry—healthcare support and healthcare practitioners and technical occupations. These are two of the occupational groups which in the long term are expected to grow twice as rapidly as the average for all occupations. Other rapidly-growing groups are expected to be personal care and service; life, physical, and social science; and computer and mathematical occupations. Of the top five major groups, two (healthcare support and personal care) have median wages that are below the median for all occupations.

Table 2: TN Major Occupations Employment Statistics 2018-2028

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total All</td>
<td>3,283,030</td>
<td>3,524,030</td>
<td>241,000</td>
<td>0.71%</td>
<td>$35,909</td>
</tr>
<tr>
<td>Personal Care and Service</td>
<td>106,390</td>
<td>126,260</td>
<td>19,880</td>
<td>1.87%</td>
<td>$23,775</td>
</tr>
<tr>
<td>Health Support</td>
<td>78,050</td>
<td>92,100</td>
<td>14,060</td>
<td>1.80%</td>
<td>$27,388</td>
</tr>
<tr>
<td>Computer and Mathematical</td>
<td>60,140</td>
<td>69,340</td>
<td>9,200</td>
<td>1.53%</td>
<td>$72,471</td>
</tr>
<tr>
<td>Category</td>
<td>2018</td>
<td>2028</td>
<td>Change</td>
<td>Growth</td>
<td>2028</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical</td>
<td>205,040</td>
<td>234,700</td>
<td>29,660</td>
<td>1.45%</td>
<td>$57,956</td>
</tr>
<tr>
<td>Food Preparation and Serving Related</td>
<td>281,290</td>
<td>319,710</td>
<td>38,420</td>
<td>1.37%</td>
<td>$20,379</td>
</tr>
<tr>
<td>Community and Social Services</td>
<td>50,605</td>
<td>56,760</td>
<td>6,150</td>
<td>1.22%</td>
<td>$42,980</td>
</tr>
<tr>
<td>Architecture and Engineering</td>
<td>46,280</td>
<td>51,360</td>
<td>5,080</td>
<td>1.10%</td>
<td>$73,013</td>
</tr>
<tr>
<td>Protective Services</td>
<td>71,240</td>
<td>79,030</td>
<td>7,790</td>
<td>1.09%</td>
<td>$37,439</td>
</tr>
<tr>
<td>Management</td>
<td>233,290</td>
<td>258,350</td>
<td>25,060</td>
<td>1.07%</td>
<td>$89,000</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>292,780</td>
<td>323,830</td>
<td>31,050</td>
<td>1.06%</td>
<td>$32,152</td>
</tr>
<tr>
<td>Life, Physical, and Social Science</td>
<td>19,572</td>
<td>21,606</td>
<td>2,034</td>
<td>1.04%</td>
<td>$62,183</td>
</tr>
<tr>
<td>Construction and Extraction</td>
<td>114,290</td>
<td>126,080</td>
<td>11,790</td>
<td>1.03%</td>
<td>$40,525</td>
</tr>
<tr>
<td>Business and Financial Operations</td>
<td>142,315</td>
<td>155,947</td>
<td>13,632</td>
<td>0.96%</td>
<td>$60,052</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>135,140</td>
<td>146,630</td>
<td>11,490</td>
<td>0.85%</td>
<td>$44,636</td>
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<tr>
<td>Building and Grounds Cleaning and Maintenance</td>
<td>104,810</td>
<td>113,660</td>
<td>8,850</td>
<td>0.84%</td>
<td>$25,521</td>
</tr>
<tr>
<td>Legal</td>
<td>17,150</td>
<td>18,490</td>
<td>1,340</td>
<td>0.78%</td>
<td>$69,063</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, and Media</td>
<td>48,400</td>
<td>51,730</td>
<td>3,340</td>
<td>0.69%</td>
<td>$45,113</td>
</tr>
<tr>
<td>Education, Training, and Library</td>
<td>171,270</td>
<td>182,910</td>
<td>11,640</td>
<td>0.68%</td>
<td>$48,052</td>
</tr>
<tr>
<td>Farming, Fishing, and Forestry</td>
<td>23,820</td>
<td>24,430</td>
<td>610</td>
<td>0.26%</td>
<td>$29,500</td>
</tr>
<tr>
<td>Office and Administrative Support</td>
<td>495,330</td>
<td>497,410</td>
<td>2,090</td>
<td>0.04%</td>
<td>$35,947</td>
</tr>
<tr>
<td>Production</td>
<td>274,600</td>
<td>274,570</td>
<td>-30</td>
<td>0.00%</td>
<td>$35,706</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>311,230</td>
<td>299,100</td>
<td>-12,140</td>
<td>-0.39%</td>
<td>$28,433</td>
</tr>
</tbody>
</table>

Source: TN Department of Labor and Workforce Development, WIR\ED Division, TN Long Term Industry Projections, 2018-2028
The total number of job openings annually due to growth, transfers, and exits is forecast to be 415,450, with more than 90 percent of the jobs created by transfers and exits. The five occupational groups with the largest number of openings are forecast to be:

- Office and administrative support
- Food preparation and serving
- Transportation and material moving
- Sales and related
- Production

Jobs in these categories are some of those most affected by the current pandemic. More than 31,970 openings
are expected in production occupations. In 2019, those jobs paid close to the median wage for all occupations. The smallest number of openings are expected in legal occupations. Some of the production occupations with the most openings will be assemblers and fabricators, metal workers and plastic workers, food processing workers, production supervisors, inspectors and testers, and welders.

**West Region Targeted Industries and Occupations**

Total employment in the West Region in 2018 including self-employed and agricultural workers was 770,250, projected to increase to 813,650 by 2028, for an annual growth rate of 0.55 percent. From 2018 to 2028, a total of 949,460 jobs are forecast to be created- 43,400 new jobs and 906,060 from exits and transfers out of occupations. Current and projected employment by industry sector is displayed in the table below.

The largest sectors are trade, transportation, and utilities and education and health services. Trade, transportation, and utilities employed nearly 179,000 workers in 2018.

**Table 3: Trade, Transportation, and Utilities is the Largest Employment Sector**

<table>
<thead>
<tr>
<th>Industry Sector Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>West Location Quotient</th>
<th>Median Annual Wage(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>5,950</td>
<td>5,290</td>
<td>0.65</td>
<td>47,788</td>
</tr>
<tr>
<td>Natural Resources and Mining</td>
<td>7,920</td>
<td>6,380</td>
<td>0.89</td>
<td>36,786</td>
</tr>
<tr>
<td>Construction</td>
<td>26,210</td>
<td>28,330</td>
<td>0.90</td>
<td>42,845</td>
</tr>
<tr>
<td>Other Services (except Government)</td>
<td>30,770</td>
<td>32,040</td>
<td>1.03</td>
<td>35,555</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>31,670</td>
<td>33,620</td>
<td>0.82</td>
<td>42,056</td>
</tr>
<tr>
<td>Government</td>
<td>48,760</td>
<td>47,610</td>
<td>1.10</td>
<td>47,475</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>66,450</td>
<td>71,250</td>
<td>0.84</td>
<td>20,262</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>71,390</td>
<td>70,560</td>
<td>0.87</td>
<td>40,017</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>94,050</td>
<td>119,110</td>
<td>0.96</td>
<td>33,711</td>
</tr>
<tr>
<td>Education and Health Services</td>
<td>166,750</td>
<td>186,250</td>
<td>1.06</td>
<td>43,555</td>
</tr>
<tr>
<td>Trade, Transportation, and Utilities</td>
<td>178,660</td>
<td>169,930</td>
<td>1.19</td>
<td>34,658</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR\ED,West Region Long Term Projections 2018-2028
As e-commerce continues to grow beyond the pandemic, both wholesale and retail trade will experience declining employment. However, the same trend will cause transportation and warehousing to grow and create new jobs. The second largest sector, education and health services, is expected to create nearly 20,000 new jobs, and reach total employment of more than 186,000. The most rapidly growing sector is expected to be professional and business services.

Manufacturing is expected to decline slightly. A loss of jobs in government will be due to a decline of about 1,400 jobs in the federal government and about 100 in state government, but local government jobs (excluding education and health services) are expected to increase.

Industry Specialization: Industry location quotients compare the percent of a sector’s employment to total employment in the region to the state’s percent of total employment in that sector. Location quotients greater than one indicate sector specialization in the region. As can be seen in the above table, the sectors with the highest location quotients are trade, transportation, and utilities (1.19), government (1.10), and education and health services (1.06). The Greater Memphis area is rich in water, air freight, trucking, and related transportation resources.

**Industries with High Location Quotients**

The transportation, trade, and utilities sector is the largest employment sector in the West Region and also the sector with the highest location quotient. Detailed industries in this sector with the largest employment and expected positive growth rates are listed below.
Table 4: Couriers and Messengers has the Highest Employment and Location Quotient in TTU

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>492000</td>
<td>Couriers and Messengers</td>
<td>28,560</td>
<td>32,420</td>
<td>1.28</td>
<td>2.97</td>
</tr>
<tr>
<td>423000</td>
<td>Merchant Wholesalers, Durable Goods</td>
<td>19,160</td>
<td>19,510</td>
<td>0.18</td>
<td>1.17</td>
</tr>
<tr>
<td>484000</td>
<td>Truck Transportation</td>
<td>15,920</td>
<td>16,220</td>
<td>0.19</td>
<td>1.17</td>
</tr>
<tr>
<td>493000</td>
<td>Warehousing and Storage</td>
<td>9,470</td>
<td>11,680</td>
<td>2.13</td>
<td>1.10</td>
</tr>
<tr>
<td>444000</td>
<td>Building Material and Garden Equipment and Supplies Dealers</td>
<td>5,390</td>
<td>5,670</td>
<td>0.51</td>
<td>0.77</td>
</tr>
<tr>
<td>488000</td>
<td>Support Activities for Transportation</td>
<td>5,020</td>
<td>5,130</td>
<td>0.22</td>
<td>1.51</td>
</tr>
<tr>
<td>485000</td>
<td>Transit and Ground Passenger Transportation</td>
<td>2,520</td>
<td>3,050</td>
<td>1.91</td>
<td>1.50</td>
</tr>
<tr>
<td>425000</td>
<td>Wholesale Electronic Markets and Agents and Brokers</td>
<td>1,560</td>
<td>2,070</td>
<td>2.89</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR3ED, West Region Long Term Projections 2018-2028

Appendix A, West Region lists occupations in the transportation industry for all workers and for middle skill workers which are expected to grow the fastest and have the most jobs. Some of these jobs include:

- Heavy and tractor-trailer truck drivers
- Light truck or delivery services drivers
- Industrial truck and tractor operators
- Couriers and messengers
- Dispatchers
- Cargo and freight agents
- Sales representatives, services

The industry sector with the next highest location quotient is government. The 2018 employment and expected growth over the decade is shown below
Table 5: Local and Federal Government have High Location Quotients

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>999300</td>
<td>Local Government, Excluding Education and Hospitals</td>
<td>31,320</td>
<td>31,740</td>
<td>0.13</td>
<td>1.17</td>
</tr>
<tr>
<td>999100</td>
<td>Federal Government, Excluding Post Office</td>
<td>10,820</td>
<td>9,410</td>
<td>-1.39</td>
<td>1.27</td>
</tr>
<tr>
<td>999200</td>
<td>State Government, Excluding Education and Hospitals</td>
<td>6,620</td>
<td>6,460</td>
<td>-0.23</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR2ED, West Region Long Term Projections 2018-2028

Jobs in government are available in almost every occupation, given the wide range of services that are provided. Local government jobs are expected to grow slightly over the decade.

**Mature Industries**

Table 6: Largest Education and Health Care Industries

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>611000</td>
<td>Educational Services</td>
<td>63,110</td>
<td>64,940</td>
<td>0.29</td>
<td>1.04</td>
</tr>
<tr>
<td>622000</td>
<td>Hospitals</td>
<td>37,920</td>
<td>42,140</td>
<td>1.06</td>
<td>1.18</td>
</tr>
<tr>
<td>621000</td>
<td>Ambulatory Health Care Services</td>
<td>35,370</td>
<td>42,640</td>
<td>1.89</td>
<td>0.98</td>
</tr>
<tr>
<td>623000</td>
<td>Nursing and Residential Care Facilities</td>
<td>17,450</td>
<td>20,560</td>
<td>1.65</td>
<td>1.12</td>
</tr>
<tr>
<td>624000</td>
<td>Social Assistance</td>
<td>12,900</td>
<td>15,980</td>
<td>2.16</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR2ED, West Region Long Term Projections 2018-2028

Education and Health Services is the second largest employment sector in the West Region and is expected to add jobs over the decade. The region shows specialization in the hospital and nursing and residential care facilities sectors. Appendix A has additional information about fast growing jobs and those with the most openings in this sector. Occupations with the most expected openings include:

- Registered nurses
- LPNs
- Clinical laboratory technologists and technicians

Middle skill jobs with the most openings also include:
• Emergency medical technicians

• Medical records and health information technicians

• Respiratory therapists

and a variety of clerical jobs including insurance claims clerks and medical secretaries. Growing educational jobs with the most openings include health specialties teachers, postsecondary and preschool teachers. Middle skill occupations include teacher assistants and substitute teachers.

**Table 7: Fastest Growing Sector - Professional and Business Services**

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>561300</td>
<td>Employment Services</td>
<td>28,780</td>
<td>41,490</td>
<td>3.73</td>
<td>1.25</td>
</tr>
<tr>
<td>541300</td>
<td>Architecture, Engineering, and Related Services</td>
<td>3,400</td>
<td>4,840</td>
<td>3.59</td>
<td>0.68</td>
</tr>
<tr>
<td>561600</td>
<td>Investigation and Security Services</td>
<td>8,300</td>
<td>11,550</td>
<td>3.36</td>
<td>1.57</td>
</tr>
<tr>
<td>541600</td>
<td>Management, Scientific, and Technical Consulting Services</td>
<td>7,040</td>
<td>8,930</td>
<td>2.41</td>
<td>0.96</td>
</tr>
<tr>
<td>541800</td>
<td>Advertising, Public Relations, and Related Services</td>
<td>1,590</td>
<td>2,000</td>
<td>2.34</td>
<td>0.95</td>
</tr>
<tr>
<td>541500</td>
<td>Computer Systems Design and Related Services</td>
<td>2,910</td>
<td>3,670</td>
<td>2.33</td>
<td>0.60</td>
</tr>
<tr>
<td>561100</td>
<td>Office Administrative Services</td>
<td>1,700</td>
<td>2,120</td>
<td>2.27</td>
<td>0.65</td>
</tr>
<tr>
<td>541200</td>
<td>Accounting, Tax Preparation, Bookkeeping, and Payroll Services</td>
<td>2,580</td>
<td>3,220</td>
<td>2.26</td>
<td>0.46</td>
</tr>
<tr>
<td>561700</td>
<td>Services to Buildings and Dwellings</td>
<td>9,810</td>
<td>11,450</td>
<td>1.56</td>
<td>0.96</td>
</tr>
<tr>
<td>561200</td>
<td>Facilities Support Services</td>
<td>1,590</td>
<td>1,790</td>
<td>1.23</td>
<td>1.17</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR\:ED,West Region Long Term Projections 2018-2028

This is the most rapidly growing sector in the West Region. The industries employing more than 1,000 workers and expected to grow through 2028 are listed above. Many of these are considered AE industries. Jobs related to those industries are listed earlier in this section.

Appendix A1to A3 in the 2020-2021 Reference Guide- Tennessee’s Economy (online) list West Region top occupations, with projected employment, growth rates, annual total openings, education levels, highlighting those with the most openings, including middle skill occupations.
Middle Region Targeted Industries and Occupations

The Middle Region is the most rapidly growing region in the state and is expected to continue that trend, with employment growing at an annual rate of 1.07 percent. Total employment in the Middle Region in 2018 was 1,349,880 in 2018 and is projected to increase to 1,502,140 employment by 2028. Job openings will result from new job growth of 152,270 plus 1,634,060 job openings created from workers exiting the labor market or transferring into other jobs.

The table below displays base year 2018 employment and projected employment by industry sector in 2028.

Table 8: Education and Health Services is the Largest Employment Sector

<table>
<thead>
<tr>
<th>Industry Sector Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Middle LQ</th>
<th>Median Annual Wages $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources and Mining</td>
<td>22,870</td>
<td>19,970</td>
<td>1.46</td>
<td>39,424</td>
</tr>
<tr>
<td>Information</td>
<td>24,400</td>
<td>28,410</td>
<td>1.53</td>
<td>56,320</td>
</tr>
<tr>
<td>Construction</td>
<td>53,360</td>
<td>61,850</td>
<td>1.04</td>
<td>42,986</td>
</tr>
<tr>
<td>Other Services (except Government)</td>
<td>53,780</td>
<td>57,860</td>
<td>1.03</td>
<td>33,322</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>69,010</td>
<td>74,860</td>
<td>1.02</td>
<td>48,789</td>
</tr>
<tr>
<td>Government</td>
<td>78,750</td>
<td>82,640</td>
<td>1.01</td>
<td>47,172</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>131,300</td>
<td>133,100</td>
<td>0.91</td>
<td>39,415</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>143,760</td>
<td>168,200</td>
<td>1.04</td>
<td>21,346</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>180,200</td>
<td>217,900</td>
<td>1.05</td>
<td>45,875</td>
</tr>
<tr>
<td>Trade, Transportation, and Utilities</td>
<td>241,310</td>
<td>256,200</td>
<td>0.92</td>
<td>33,268</td>
</tr>
<tr>
<td>Education and Health Services</td>
<td>268,400</td>
<td>312,110</td>
<td>0.98</td>
<td>44,502</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR’ED, Middle Region Long Term Projections 2018-2028, and TN Middle Region OEWS 2020.
The largest industry sectors are education and health services, expected to employ more than 310,000 people by 2028; trade, transportation, and utilities, forecast to employ 256,200; and professional and business services, with nearly 220,000 jobs projected. All three are expected to grow over the decade. The three sectors expected to grow the most rapidly include professional and business services (1.9 percent annually); leisure and hospitality (1.6 percent); and information (1.5 percent). Only natural resources and mining (which includes agriculture) is expected to decline.

Industry Specialization: Industry location quotients compare the percent of a sector’s employment to total employment in the region to the state’s percent of that sector’s employment. Location quotients greater than one show industry specialization in the region. As shown in table 37, the industry sectors with the largest location quotients in the Middle Region are information (1.53) and natural resources and mining (1.46). As a growing metropolitan area, the region has a diverse economy with a balance of employment across many industry sectors, many of which are local serving. Professional and business services, construction, and leisure and hospitality all have location quotients greater than one, with professional and business services slightly larger.

**Industries with High Location Quotients**

**Information**

The information sector has the highest location quotient in the Middle Region (1.53), indicating specialization in this sector. The top industries in the sector employing more than 1,000 employees and expected to have positive growth rates in the next decade are listed below, with the most rapidly growing industry expected to be data processing and hosting.
Table 9: AE Information Sector Growth Industries

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>Middle LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>512000</td>
<td>Motion Picture and Sound Recording Industries</td>
<td>7,620</td>
<td>8,200</td>
<td>0.73</td>
<td>1.70</td>
</tr>
<tr>
<td>511000</td>
<td>Publishing Industries (except Internet)</td>
<td>5,330</td>
<td>7,320</td>
<td>3.21</td>
<td>1.43</td>
</tr>
<tr>
<td>518000</td>
<td>Data Processing, Hosting and Related Services</td>
<td>3,980</td>
<td>5,870</td>
<td>3.96</td>
<td>1.67</td>
</tr>
<tr>
<td>515000</td>
<td>Broadcasting (except Internet)</td>
<td>2,120</td>
<td>2,520</td>
<td>1.75</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR’ED, Middle Region Industry Employment Projections 2018-2028

The number of annual average job openings in key occupations related to the information sector, along with their usual educational requirements, are listed in Appendix A. Top fast-growing information technology occupations include

- Computer user support specialists
- Software developers for applications and systems software
- Operations research analysts
- Information security analysts

Top middle skill occupations expected to grow most rapidly include computer user support specialists, computer network support specialists, and web developers.

The information sector also includes occupations in the arts, entertainment, and media. Occupations expected to have the most openings include editors, public relations specialists and producers and directors. A middle skill occupation with higher numbers of openings will be audio and video equipment technicians.

**Natural Resources and Mining**

Included in this sector are mining, other natural resources, and agricultural industries. With estimated employment of nearly 23,000 in 2018. However, all industries, including animal and crop production and mining, are expected to decline by 2028. The only industry expected to grow is support activities for agriculture and forestry, with a projection of 2,770 employment in 2028.
Mature Industry Sectors

The largest industry sectors in Middle Tennessee in terms of employment are Education and Health Services and Trade, Transportation, and Utilities.

Education and Health Services

These industries are the human capital cluster, acting to improve and maintain the learning capabilities and health status of the population. Education and Health Services is the largest employment sector in the Middle Region. The industries in Education Services include local and state public and private educational facilities at the preschool, elementary and secondary, and postsecondary levels. With just over 100,000 employment in 2018, it is expected to grow at about the same rate as employment in the Middle Region.

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>Middle LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>611000</td>
<td>Educational Services</td>
<td>104,230</td>
<td>115,510</td>
<td>1.03</td>
<td>0.98</td>
</tr>
<tr>
<td>621000</td>
<td>Ambulatory Health Care Services</td>
<td>62,400</td>
<td>79,320</td>
<td>2.43</td>
<td>0.98</td>
</tr>
<tr>
<td>622000</td>
<td>Hospitals</td>
<td>55,800</td>
<td>59,580</td>
<td>0.66</td>
<td>0.99</td>
</tr>
<tr>
<td>623000</td>
<td>Nursing and Residential Care Facilities</td>
<td>25,520</td>
<td>29,460</td>
<td>1.44</td>
<td>0.94</td>
</tr>
<tr>
<td>624000</td>
<td>Social Assistance</td>
<td>20,460</td>
<td>28,250</td>
<td>3.28</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR·ED, Middle Region Industry Employment Projections 2018-2028

In the Middle as in the East Region, the number of employees working in ambulatory care settings such as doctors’ offices and clinics outnumber those working in hospitals, and ambulatory care settings are expected to grow in employment nearly four times faster than hospitals. This should still be the case even with telemedicine expanding. As more individuals receive home and community-based care, growth will be greater in residential care facilities than nursing homes, which are seeing employment decreases.

The top fastest growing middle skill health practitioner and technical occupations include:

- Ophthalmic medical technicians
- Diagnostic medical sonographers
- Respiratory therapists
- Dental hygienists
- Veterinary technologists and technicians
The most openings for middle skill occupations are expected to be for registered nurses, LPNs, pharmacy technicians, emergency medical technicians, and dental hygienists. Fast-growing clerical occupations include medical secretaries, insurance claims clerks, and bill and account collectors. For additional detail, see Appendix A.

In educational services, the most rapidly growing occupations include preschool and self-enrichment education teachers (middle skill) as well as postsecondary business school and health specialties teachers and nursing instructors. Other needed middle skill occupations include teacher assistants and library technicians.

**Trade, Transportation, and Utilities**

This sector is the second largest in the Middle Region. As the region grows and consumer demand increases, particularly with online purchases, distribution facilities are expanding to meet the needs.

Warehousing and storage employment is expected to grow by nearly 10,000, and now has a location quotient showing specialization in the Middle Region. Both that industry and couriers and messengers are growing at four times the average growth rate for the region. Other fast-growing industries provide essential services, including food and beverage stores, health and personal care stores, and building materials for the many construction projects in the area.

**Table 11: Trade, Transportation, and Utilities Growth Industries**

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>Middle LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>423000</td>
<td>Merchant Wholesalers, Durable Goods</td>
<td>26,560</td>
<td>28,080</td>
<td>0.56</td>
<td>0.93</td>
</tr>
<tr>
<td>441000</td>
<td>Motor Vehicle and Parts Dealers</td>
<td>19,400</td>
<td>21,200</td>
<td>0.89</td>
<td>0.99</td>
</tr>
<tr>
<td>445000</td>
<td>Food and Beverage Stores</td>
<td>19,340</td>
<td>22,000</td>
<td>1.30</td>
<td>0.86</td>
</tr>
<tr>
<td>484000</td>
<td>Truck Transportation</td>
<td>19,260</td>
<td>19,490</td>
<td>0.12</td>
<td>0.81</td>
</tr>
<tr>
<td>493000</td>
<td>Warehousing and Storage</td>
<td>17,580</td>
<td>27,440</td>
<td>4.55</td>
<td>1.16</td>
</tr>
<tr>
<td>424000</td>
<td>Merchant Wholesalers, Nondurable Goods</td>
<td>14,350</td>
<td>14,500</td>
<td>0.11</td>
<td>0.82</td>
</tr>
<tr>
<td>444000</td>
<td>Building Material and Garden Equipment and Supplies Dealers</td>
<td>12,930</td>
<td>14,810</td>
<td>1.37</td>
<td>1.05</td>
</tr>
<tr>
<td>446000</td>
<td>Health and Personal Care Stores</td>
<td>9,150</td>
<td>10,980</td>
<td>1.84</td>
<td>0.94</td>
</tr>
<tr>
<td>447000</td>
<td>Gasoline Stations</td>
<td>8,740</td>
<td>9,590</td>
<td>0.93</td>
<td>0.92</td>
</tr>
<tr>
<td>492000</td>
<td>Couriers and Messengers</td>
<td>7,840</td>
<td>11,900</td>
<td>4.27</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR‘ED, Middle Region Industry Employment Projections 2018-2028
Large and fast-growing transportation occupations are primarily middle skill, including

- Heavy and tractor-trailer truck drivers
- Light truck/delivery services drivers (projected 23 percent employment increase)
- Transportation supervisors and
- School bus drivers.

There is also increased demand for water vessel pilots.

Other middle skill occupations in the transportation sector involve clerical and recordkeeping and sales abilities. These include shipping, receiving, and traffic clerks and dispatchers, excluding fire, police, and ambulance. Fast-growing middle skill occupations in the sales area include:

- Sales representatives, services
- Sales representatives, wholesale and manufacturing, non-technical

Although the occupation of retail sales supervisors is declining, it remains the sales occupation with the most openings expected in this sector. For further information on these occupations, see Appendix A.

Fastest Growing Industry Sector- Professional and Business Services

This sector is forecast to grow at the annual rate of 1.92 percent from 2018-28, surpassing all other Middle Region industry sectors. Below are the prominent industries within this sector with more than 1000 employment and positive growth rates. All are growing more rapidly than average for the Middle Region.

Jobs in professional, scientific, and technical services in Alternative Energy were listed in an earlier table.

Table 12: Professional, Scientific, and Technical Services Industry Growing the Most Rapidly

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>MiddleLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>561000</td>
<td>Administrative and Support Services</td>
<td>86,200</td>
<td>97,150</td>
<td>1.20</td>
<td>0.97</td>
</tr>
<tr>
<td>541000</td>
<td>Professional, Scientific, and Technical Services</td>
<td>68,720</td>
<td>89,830</td>
<td>2.71</td>
<td>1.19</td>
</tr>
<tr>
<td>551000</td>
<td>Management of Companies and Enterprises</td>
<td>22,940</td>
<td>28,310</td>
<td>2.13</td>
<td>1.11</td>
</tr>
<tr>
<td>562000</td>
<td>Waste Management and Remediation Service</td>
<td>2,340</td>
<td>2,610</td>
<td>1.09</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR'ED, Middle Region Industry Employment Projections 2018-2028

The professional and business services industries contain a wide variety of occupations- high level management occupations in the management of companies and enterprises industry (business headquarters), employment recruiters in the employer services industry, clerical and production workers in the temporary help industries, buildings and grounds workers in facilities management, and accountants and lawyers in professional services.
In the business and financial occupations category, some of the fastest-growing occupations include market research analysts and training and development specialists. Occupations with the most openings include accountants and auditors and human resource specialists. Middle skill occupations with significant numbers of openings include tax preparers.

For further information on Middle Region occupations, consult the Appendix A, Middle Region Section, and jobs4tn.gov, labor market information, occupation profiles. Appendix A4 to A6 in the 2020-2021 Reference Guide- Tennessee’s Economy (online) list Middle Region top occupations, with projected employment, growth rates, annual total openings, and education levels, highlighting those with the most openings, including middle skill occupations.

**East Region Targeted Industries and Occupations**

Total employment in the East Region in 2018 was 1,097,460. It was projected to increase to 1,184,240 by 2028, for an annual growth rate of .76 percent. Over the decade, a total of 1,409,740 jobs were expected to be created; 86,780 new jobs and 1,322,960 from transfers and exits from occupations.

Current and projected employment by industry sector is displayed in the table below.

<table>
<thead>
<tr>
<th>Industry Sector Title</th>
<th>Est. Employ.</th>
<th>Proj. Employ.</th>
<th>East Location Quotient</th>
<th>Median Annual Wage(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>11,964</td>
<td>11,670</td>
<td>0.92</td>
<td>43,876</td>
</tr>
<tr>
<td>Natural Resources and Mining</td>
<td>14,144</td>
<td>11,985</td>
<td>1.11</td>
<td>39,649</td>
</tr>
<tr>
<td>Other Services (except Government)</td>
<td>40,740</td>
<td>42,372</td>
<td>0.96</td>
<td>31,811</td>
</tr>
<tr>
<td>Construction</td>
<td>42,404</td>
<td>47,164</td>
<td>1.02</td>
<td>41,419</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>47,905</td>
<td>54,801</td>
<td>0.87</td>
<td>41,630</td>
</tr>
<tr>
<td>Government</td>
<td>61,678</td>
<td>65,102</td>
<td>0.98</td>
<td>42,076</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>123,489</td>
<td>144,841</td>
<td>0.89</td>
<td>37,553</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>125,194</td>
<td>139,748</td>
<td>1.11</td>
<td>20,373</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>141,674</td>
<td>144,491</td>
<td>0.89</td>
<td>37,553</td>
</tr>
<tr>
<td>Trade, Transportation, and Utilities</td>
<td>201,372</td>
<td>204,809</td>
<td>0.94</td>
<td>31,001</td>
</tr>
<tr>
<td>Education and Health Services</td>
<td>223,881</td>
<td>249,947</td>
<td>1.00</td>
<td>41,024</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR²ED, East Region Long Term Projections 2018-2028
Education, Health Services Largest Sector

![Bar chart showing employment projections and estimates for various sectors from 2018 to 2028. The largest sectors are Education and Health Services, Trade, Transportation, and Utilities.]

Source: TDLWD, WIR‘ED, East Region Long Term Projections 2018-2028
The largest sectors are education and health services, expected to employ nearly 250,000 people in 2028; trade, transportation, and utilities, expected to employ nearly 205,000, and manufacturing, with expected employment of nearly 145,000. All three sectors are expected to experience growth over the decade. The most rapidly-growing sectors are expected to be business and professional services (annual growth of 1.6 percent), financial activities (1.4 percent), and education and health services (1.1 percent).

Industry Specialization: Industry location quotients compare the percent of a sector’s employment to total employment in the region to the state percent of that sector’s employment in the state. Location quotients greater than one indicate industry sector specialization in the region. As can be seen in table 56, the industry sectors with the largest location quotients in the East Region are manufacturing (1.21), natural resources and mining (1.11), and leisure and hospitality (1.11). A location quotient of 1.2 or greater identifies the sector as an export industry sector.

**Mature Industry Sectors**

Health Care, Education, and Social Assistance, the human capital cluster, is the largest employment sector in the East Region, with total employment of 223,880 in 2018 and an expected 249,950 employment in 2028. The largest 3-digit industries are displayed below. Only the hospital sector is expected to decrease in size but will still employ nearly 42,000 persons. Notably, ambulatory care (outpatient) services are expected to grow more than three times faster than overall employment in the region and employ more than 70,000 people by 2028.

The largest employers in educational services include local education and colleges and universities. In 623000, growth is occurring in assisted living and residential care facilities, in social assistance, in childcare, and in individual and family services. The services provided by these employers will be essential in increasing the labor force participation rate in the East Region.

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>East LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>611000</td>
<td>Educational Services</td>
<td>87,010</td>
<td>90,180</td>
<td>0.36</td>
<td>1.01</td>
</tr>
<tr>
<td>62100</td>
<td>Ambulatory Health Care Services</td>
<td>54,490</td>
<td>70,330</td>
<td>2.59</td>
<td>1.06</td>
</tr>
<tr>
<td>62000</td>
<td>Hospitals</td>
<td>42,970</td>
<td>41,990</td>
<td>-0.23</td>
<td>0.94</td>
</tr>
<tr>
<td>62300</td>
<td>Nursing and Residential Care Facilities</td>
<td>23,040</td>
<td>26,110</td>
<td>1.26</td>
<td>1.04</td>
</tr>
<tr>
<td>62400</td>
<td>Social Assistance</td>
<td>16,380</td>
<td>21,327</td>
<td>2.67</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR²ED, Middle Region Industry Employment Projections 2018-2028

**Occupations in Health Services**

Four of the five occupations expected to grow the most rapidly in health care/veterinary care require master’s or doctoral degrees (See Appendix Table A). The fastest-growing middle skill occupations, requiring an associate degree or less education, include dental hygienist, psychiatric technicians, ophthalmic medical technicians, and medical records and health information technicians. The five middle skill occupations expected to have the most openings, are registered nurses, emergency medical technicians, pharmacy technicians, licensed practical nurses, and medical records.
and health information technicians. Due to the pandemic, in August 2021 there were a total of 5,266 job openings listed for registered nurses in the three LWDAs which make up the East Region.

Thousands of openings for middle skill workers exist in clerical occupations in the health services; some of the fastest-growing occupations include billing and posting clerks, insurance claims and policy processing clerks, medical secretaries, and receptionists. Secretaries and administrative assistants are expected to have more than 1,800 openings, with nearly 1,400 for bookkeeping and accounting clerks.

**Occupations in Educational Services**

Educational services include all institutions from local education agencies to four-year colleges and universities, public and private. The occupations expected to grow the most rapidly are:

- Postsecondary business teachers
- Postsecondary nursing instructors and teachers
- Criminal justice and law enforcement teachers, postsecondary
- Preschool teachers

Business administration continues to be one of the most popular majors at higher educational institutions. With the expanding need for registered nurses and related occupations, having more nursing instructors will be vital in reducing nursing shortages. In order for more women to re-enter the labor force, more preschools will need to reopen and hire teachers. Preschool teachers are also one of the top five occupations with the most openings in education services. Other occupations in the top five with the most openings in educational services include elementary, middle school, and secondary school teachers, with an expected 700, 310, and 480 annual openings, respectively. For middle school occupations, teacher assistants are expected to have 890 openings annually.

**Trade, Transportation, and Utilities**

This sector is the second largest employment sector in the East Region, employing 201,370 in 2018 and expected to increase slightly to 2014, 810 in 2028, below the average rate of employment growth in the East Region.

Both wholesale and retail trade are expected to decline in employment from 2018 to 2028, whereas the transportation and warehousing industries are expected to grow at a rapid pace. Only the four wholesale and retail industries listed in the table below (with more than 1,000 employment) are expected to have positive growth rates, including durable goods wholesalers (who sell automobiles) and building material and garden equipment dealers, responding to the housing and construction expansion. The most rapid growth rate is in the warehousing and storage industry, which is forecast to add nearly 6,000 new jobs over the decade. Truck transportation is also one of the fastest growing industries with a location quotient showing specialization in the East Region.
Table 15: Trade, Transportation, and Utilities Growth Industries

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>East LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>423000</td>
<td>Merchant Wholesalers, Durable Goods</td>
<td>19,010</td>
<td>19,980</td>
<td>0.50</td>
<td>0.82</td>
</tr>
<tr>
<td>425000</td>
<td>Wholesale Electronic Markets and Agents and Brokers</td>
<td>2,600</td>
<td>2,780</td>
<td>0.66</td>
<td>1.06</td>
</tr>
<tr>
<td>444000</td>
<td>Building Material and Garden Equipment and Supplies Dealers</td>
<td>10,830</td>
<td>12,010</td>
<td>1.03</td>
<td>1.09</td>
</tr>
<tr>
<td>447000</td>
<td>Gasoline Stations</td>
<td>9,490</td>
<td>10,380</td>
<td>0.90</td>
<td>1.21</td>
</tr>
<tr>
<td>480000</td>
<td>Transportation and Warehousing</td>
<td>47,130</td>
<td>59,240</td>
<td>2.31</td>
<td>0.79</td>
</tr>
<tr>
<td>484000</td>
<td>Truck Transportation</td>
<td>22,220</td>
<td>27,810</td>
<td>2.27</td>
<td>1.14</td>
</tr>
<tr>
<td>485000</td>
<td>Transit and Ground Passenger Transportation</td>
<td>1,930</td>
<td>1,940</td>
<td>0.03</td>
<td>0.82</td>
</tr>
<tr>
<td>492000</td>
<td>Couriers and Messengers</td>
<td>4,270</td>
<td>4,910</td>
<td>1.41</td>
<td>0.31</td>
</tr>
<tr>
<td>493000</td>
<td>Warehousing and Storage</td>
<td>9,700</td>
<td>15,450</td>
<td>4.76</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIRED, East Region Long Term Projections 2018-2028

**Occupations in Trade, Transportation, and Utilities**

Occupations in this industry sector, all middle skill occupations, expected to have the most annual openings include:

- First-line supervisors of transportation and material moving workers
- Bus drivers, school or special client
- Driver/sales workers
- Heavy and tractor-trailer truck drivers (3,670 annual openings)

First-line supervisors of transportation and material moving workers and tractor-trailer truck drivers are among the top five fastest-growing occupations in this industry sector. Other fast-growing occupations with more than 50 annual openings include dispatchers, except police, fire, and ambulance: and reservation and transportation ticket agents and travel clerks.

Among retail and wholesale sales occupations, the number of supervisors of retail sales workers is expected to decline, but still will have the most annual openings (1,510). Other occupations among those with the most openings include wholesale and manufacturing sales representatives for technical and scientific products (400 annual openings) and sales representatives for non-technical products (610 openings).
**Most Rapidly Growing Sectors**

- Professional and Business Services
- Financial Activities

The professional, scientific, and technical sector is forecast to be the most rapidly growing of all the industry sectors in the East Region, increasing from 2018 employment of 123,490 to expected employment of 144,840 in 2028. The employment and growth in the professional, scientific, and technical services sector has already been discussed; most of that employment is included in the AE sector. The remaining employment in this sector is expected to top 95,000 by 2028. All industries shown below are growing faster than average; management of companies and administrative support services at twice the average rate. The largest industries in the administrative and support group include employment services, services to buildings and dwellings, and business support services.

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>East LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>551000</td>
<td>Management of Companies and Enterprises</td>
<td>16,230</td>
<td>18,670</td>
<td>1.41</td>
<td>0.97</td>
</tr>
<tr>
<td>561000</td>
<td>Administrative and Support Services</td>
<td>63,650</td>
<td>73,470</td>
<td>1.44</td>
<td>0.88</td>
</tr>
<tr>
<td>562000</td>
<td>Waste Management and Remediation Services</td>
<td>3,260</td>
<td>3,650</td>
<td>1.14</td>
<td>1.11</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR\ED, East Region Long Term Projections 2018-2028

**Occupations in the Professional and Business Services Sector**

Among the fastest-growing occupations in the professional and business services sector are

- Management analysts
- Meeting, convention, and event planners
- Market research analysts and marketing specialists
- Personal financial planners
- Tax preparers

Accountants and auditors and human resources specialists were expected to have the most annual openings. Middle skill occupations with the most openings include claims adjusters, examiners, and investigators and tax preparers.

The professional and technical sector includes a wide variety of professional services such as legal, accounting, architectural and engineering, computer design, management consulting, and research and development services; as well as management of companies, and administrative support services such as temporary help firms. Consequently, it includes significant employment in most of the occupational categories, from occupations requiring graduate degrees to those requiring less than a high school degree.
Financial Activities Sector

The second-fastest growing industry sector in the East Region is financial activities. Employment in the securities and commodities contracts industries is growing four times as fast as the average for the region. Insurance carriers and those involved in real estate also expected to grow at a pace faster than average.

Table 17: Financial Industries Growing Faster than Average

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>East LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>522000</td>
<td>Credit Intermediation and Related Activities</td>
<td>20,150</td>
<td>22,610</td>
<td>1.16</td>
<td>1.12</td>
</tr>
<tr>
<td>523000</td>
<td>Securities, Commodity Contracts, and Other Financial Investments and Related Activities</td>
<td>1,610</td>
<td>2,140</td>
<td>2.89</td>
<td>0.47</td>
</tr>
<tr>
<td>524000</td>
<td>Insurance Carriers and Related Activities</td>
<td>15,160</td>
<td>17,890</td>
<td>1.67</td>
<td>0.77</td>
</tr>
<tr>
<td>531000</td>
<td>Real Estate</td>
<td>7,200</td>
<td>8,240</td>
<td>1.35</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR‘ED, East Region Long Term Projections 2018-2028

Occupations in the Financial Activities Sector

Some of the most rapidly-growing occupations in the financial activities sector include

- Financial analysts
- Personal financial advisors
- Loan officers
- Tax preparers
- Securities, commodities, and financial services sales agents

with the most openings for accountants and auditors, financial analysts, credit counselors, loan officers, and tax preparers. Claims adjusters and tax preparers are occupations at the middle skill level. Clerical occupations growing rapidly and requiring less than a bachelor’s degree include office supervisors (1,400 annual openings expected), insurance claims and policy processing clerks, and loan interviewers and clerks.

For further information on East Region occupations, consult the Appendix A, East Region Section, and jobs4tn.gov, labor market information, occupation profiles. Appendix A7 to A12 in the 2020-2021 Reference Guide- Tennessee’s Economy (online) list East Region top occupations, with projected employment, growth rates, annual total openings, and education levels, highlighting those with the most openings, including middle skill occupations.
Economic & Workforce Analysis

Economic Analysis

The Unified or Combined State Plan must include an analysis of the economic conditions and trends in the State, including sub-State regions and any specific economic areas identified by the State. This must include—

(i) Existing Demand Industry Sectors and Occupations.

(ii) Emerging Demand Industry Sectors and Occupations. Provide an analysis of the industries and occupations for which demand is emerging.

(iii) Employers’ Employment Needs.
(A) Economic Analysis

(ii) Emerging Demand Industry Sectors and Occupations

What are some of the changes from COVID-19 that might affect the Tennessee economy in the longer run? An important question is whether self-employment will increase. One of the primary ways of collecting information on self-employment is the Current Population Survey which continuously surveys samples of households in the states. This survey has not shown evidence of increasing self-employment as the gig economy has been emerging. However, administrative records such as 1099 returns from the IRS has shown some growth in self-employment. 1 Economists have suggested ways to change the questions on the CPS to better reflect different kinds of self-employment; until those questions are changed or researchers have better access to administrative data, the answer to this question will not be available.

According to current research, several trends are likely. 2 If work at home at increases, with the potential for new jobs closer to where people live, there may be more job growth outside of metropolitan areas. This could cause negative effects on business support services such as restaurants, hotels, cleaning, and maintenance services, hurting lower-wage workers. 3 Lower-wage workers could also be displaced if more routine, lower-skilled jobs are displaced with the faster adoption of technology. But lack of funds for investment could slow this trend.

A third potential trend could be re-shoring of manufacturing, with COVID-19 disrupting off-shore supply chains. This has reinforced trends such as higher labor and transportation costs, and issues of product safety. Industries identified as more likely to re-shore are the following, many of which are prominent in Tennessee:

- Automobile bodies and trailers;
- Other transportation equipment manufacturing;
- Navigational, measurement equipment and control instruments;
- Basic chemicals;
- Semi-conductor and electronics components manufacturing;
- Medical equipment and supplies;
- Communications equipment manufacturing; and
- Aerospace products and parts.

2 Dr. Susan N. Houseman, director of research at the Upjohn Institute for Employment Research, Projections Managing Partnership Summit presentation August 20, 2020. “Measuring industry and occupations trends beyondCOVID-19”.
Better ways to communicate through technology and re-shoring of manufacturing could also mean less international business travel and cause the airlines to continue to have reduced employment.4

**Emerging Industry Trends-Advanced Energy Industries Fueling Growth**

A recent report5 by the Tennessee Advanced Energy Business Council identifies industries included in the advanced energy (AE) sector in utilities and construction; manufacturing; information; professional, scientific, and technical services; and other services. Advanced energy sectors in Tennessee were found to employ 393,756 workers in 2019, a nearly 10 percent increase since 2016, and employment growth, payroll, and the number of establishments were growing faster than the state.6

The report defines AE activities which include “...being directly involved with researching, developing, producing, manufacturing, distributing, selling, or implementing components, goods, or services related to alternative fuels and vehicles; energy efficiency; renewable, nuclear, and natural gas electricity generation; smart grid; and other related technologies.7 It also includes activities supporting AE which encompass legal services, finance, consulting, and tax services. As one example, the three major automotive manufacturers in Tennessee are producing electric vehicles, creating related electric vehicle suppliers and other related industries.

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7 Ibid, p. 8.
**West Region Emerging Industries- Advanced Energy**

Using AE industry codes identified in the report, the tables below list the largest detailed industries with positive growth in the five major industry sectors included in advanced energy and their 2018 and projected 2028 employment, location quotients, and expected annual growth rates. Some industries may be excluded due to confidentiality.

*Advanced Energy- Manufacturing*

**Table 18: Medical Equipment and Supplies Lead in AE Manufacturing Growth**

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>339100</td>
<td>Medical Equipment and Supplies</td>
<td>6,700</td>
<td>8,090</td>
<td>1.91</td>
<td>2.81</td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>336300</td>
<td>Motor Vehicle Parts Manufacturing</td>
<td>4,060</td>
<td>3,550</td>
<td>-1.33</td>
<td>0.38</td>
</tr>
<tr>
<td>335300</td>
<td>Electrical Equipment Manufacturing</td>
<td>2,430</td>
<td>2,680</td>
<td>0.97</td>
<td>2.13</td>
</tr>
<tr>
<td>324100</td>
<td>Petroleum and Coal Products Manufacturing</td>
<td>940</td>
<td>910</td>
<td>-0.32</td>
<td>4.00</td>
</tr>
<tr>
<td>339900</td>
<td>Other Miscellaneous Manufacturing</td>
<td>770</td>
<td>900</td>
<td>1.56</td>
<td>0.48</td>
</tr>
<tr>
<td>333300</td>
<td>Commercial and Service Industry Machinery Manufacturing</td>
<td>600</td>
<td>780</td>
<td>2.62</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR\ED Division, West Region Long Term Projections 2018-2028

---


Medical equipment and supplies manufacturing has a high location quotient, is an export industry, and is expected to add the most manufacturing jobs in AE. Electrical equipment manufacturing also has a higher location quotient and is expected to have job gains.

**Advanced Energy- Utility and Construction**

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>238200</td>
<td>Building Equipment Contractors</td>
<td>10,300</td>
<td>11,820</td>
<td>1.02</td>
</tr>
<tr>
<td>238100</td>
<td>Foundation, Structure, and Building Exterior Contractors</td>
<td>3,130</td>
<td>3,290</td>
<td>0.85</td>
</tr>
<tr>
<td>236200</td>
<td>Nonresidential Building Construction</td>
<td>2,510</td>
<td>2,560</td>
<td>0.75</td>
</tr>
<tr>
<td>238300</td>
<td>Building Finishing Contractors</td>
<td>2,360</td>
<td>2,250</td>
<td>0.91</td>
</tr>
<tr>
<td>236100</td>
<td>Residential Building Construction</td>
<td>2,170</td>
<td>2,350</td>
<td>0.74</td>
</tr>
<tr>
<td>237100</td>
<td>Utility System Construction</td>
<td>1,320</td>
<td>1,370</td>
<td>0.74</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR‘ED, West Region Long Term Projections 2018-2028

The construction sector in the West Region is expected to add about 2,000 new jobs over the decade, partially fueled by growth in several of the AE construction sectors, which are using new materials and construction techniques.

**Advanced Energy- Professional, Scientific, and Technical Services**

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>541600</td>
<td>Management, Scientific, and Technical Consulting Services</td>
<td>7,040</td>
<td>8,930</td>
<td>2.41</td>
<td>0.96</td>
</tr>
<tr>
<td>541300</td>
<td>Architectural, Engineering, and Related Services</td>
<td>3,400</td>
<td>4,840</td>
<td>3.59</td>
<td>0.68</td>
</tr>
<tr>
<td>541500</td>
<td>Computer Systems Design and Related Services</td>
<td>2,910</td>
<td>3,670</td>
<td>2.33</td>
<td>0.60</td>
</tr>
<tr>
<td>541900</td>
<td>Other Professional, Scientific, and Technical Services</td>
<td>2,180</td>
<td>2,480</td>
<td>1.31</td>
<td>0.72</td>
</tr>
<tr>
<td>541700</td>
<td>Scientific Research and Development Services</td>
<td>600</td>
<td>810</td>
<td>3.09</td>
<td>0.32</td>
</tr>
</tbody>
</table>
As the pace of technology and business competitiveness increases, technical and consulting services for computersystems design, business strategies, and new engineering solutions will be sought.

**Advanced Energy- Other Services**

Table 21: Medical and Technological Diagnostic Services Needed

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>621500</td>
<td>Medical and Diagnostic Laboratories</td>
<td>1,400</td>
<td>1,710</td>
<td>2.01</td>
<td>0.82</td>
</tr>
<tr>
<td>811200</td>
<td>Electronic and Precision Equipment Repair and Maintenance</td>
<td>940</td>
<td>1,010</td>
<td>0.73</td>
<td>1.33</td>
</tr>
<tr>
<td>811300</td>
<td>Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance</td>
<td>940</td>
<td>1,060</td>
<td>1.18</td>
<td>0.92</td>
</tr>
</tbody>
</table>

The increased use of automation in business will require more sophisticated maintenance services.

**Advanced Energy- Information**

Table 22: Industry Sector Growth

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>West LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>511200</td>
<td>Software Publishers</td>
<td>370</td>
<td>440</td>
<td>1.57</td>
<td>0.50</td>
</tr>
<tr>
<td>519100</td>
<td>Other Information Services</td>
<td>270</td>
<td>190</td>
<td>-3.46</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Some growth is expected in information services, but this region does not have specialization in these industries.

The table below summarizes the number of new jobs projected for the decade ending in 2028 for the most prominent occupations in the AE industries. Additional jobs will be created in these occupations due to separations in 2018-2018.
### Table 23: West Region Advanced Energy Top Occupations

<table>
<thead>
<tr>
<th>West Region - Most New Jobs in the Advanced Energy Industries</th>
<th>Estimated New Jobs 2018-28</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced Energy Manufacturing</strong></td>
<td></td>
</tr>
<tr>
<td>Industrial Engineers</td>
<td>80</td>
</tr>
<tr>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>50</td>
</tr>
<tr>
<td>Welders, Cutters, Solderers, and Brazers</td>
<td>30</td>
</tr>
<tr>
<td><strong>Advanced Energy - Professional, Scientific, and Technical Services</strong></td>
<td></td>
</tr>
<tr>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>350</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>150</td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>130</td>
</tr>
<tr>
<td>Veterinary Assistants and Laboratory Animal Caretakers</td>
<td>120</td>
</tr>
<tr>
<td>Civil Engineers</td>
<td>110</td>
</tr>
<tr>
<td>Market Research Analysts and Marketing Specialists</td>
<td>100</td>
</tr>
<tr>
<td>Architects, Except Landscape and Naval</td>
<td>90</td>
</tr>
<tr>
<td>Management Analysts</td>
<td>90</td>
</tr>
<tr>
<td>Veterinary Technologists and Technicians</td>
<td>60</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>60</td>
</tr>
<tr>
<td><strong>Advanced Energy - Utilities and Construction</strong></td>
<td></td>
</tr>
<tr>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>280</td>
</tr>
<tr>
<td>Construction Laborers</td>
<td>130</td>
</tr>
<tr>
<td>Sheet Metal Workers</td>
<td>60</td>
</tr>
<tr>
<td>Helpers--Electricians</td>
<td>50</td>
</tr>
<tr>
<td>Roofers</td>
<td>40</td>
</tr>
<tr>
<td>Construction Managers</td>
<td>30</td>
</tr>
<tr>
<td><strong>Advanced Energy - Other Services</strong></td>
<td></td>
</tr>
<tr>
<td>Clinical Laboratory Technologists and Technicians</td>
<td>110</td>
</tr>
<tr>
<td>Industrial Machinery Mechanics</td>
<td>50</td>
</tr>
</tbody>
</table>
Middle Region Emerging Industries- Advanced Energy

Emerging Industry Trends- Advanced Energy Industries Fueling Growth

The tables below list the largest detailed industries with positive growth in the five major industry sectors included in advanced energy and their 2018 and projected 2028 employment, location quotients, and expected annual growth rates. Some industries may be excluded due to confidentiality.

Advanced Energy- Information Industries

The information sector has the highest location quotient in the Middle Region. The information industries below also have high location quotients in the Middle Region and expected growth rates much higher than the average for all industries in the region. Starting at 6,510 employments in 2018, the industry sector is forecast to reach 11,790 by 2028.

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>Middle LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>511200</td>
<td>Software Publishers</td>
<td>2,020</td>
<td>5,030</td>
<td>9.54</td>
<td>1.50</td>
</tr>
<tr>
<td>518200</td>
<td>Data Processing, Hosting, and Related Services</td>
<td>3,980</td>
<td>5,870</td>
<td>3.96</td>
<td>1.67</td>
</tr>
<tr>
<td>519100</td>
<td>Other Information Services</td>
<td>480</td>
<td>870</td>
<td>6.21</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR2ED, Middle Region Industry Employment Projections 2018-2028

Advanced Energy- Manufacturing Industries

The manufacturing industries listed below are the largest in AE employment in the Middle Region with positive growth rates expected. The growth rate for motor vehicle parts is expected to slow as electric vehicle production increases as they use fewer parts than gasoline engine vehicles. Total manufacturing employment in AE in the Middle Region was 62,590 in 2018 and expected to increase to 63,450 in 2028. Some AE manufacturing industries are expected to decline through 2028.
### Table 25: Slow Growth in Motor Vehicle Parts Industry

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>Middle LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>336300</td>
<td>Motor Vehicle Parts Manufacturing</td>
<td>23,710</td>
<td>24,600</td>
<td>0.37</td>
<td>1.25</td>
</tr>
<tr>
<td>339100</td>
<td>Medical Equipment and Supplies Manufacturing</td>
<td>1,780</td>
<td>2,310</td>
<td>2.65</td>
<td>0.42</td>
</tr>
<tr>
<td>335300</td>
<td>Electrical Equipment Manufacturing</td>
<td>950</td>
<td>1,130</td>
<td>1.72</td>
<td>0.47</td>
</tr>
<tr>
<td>335900</td>
<td>Other Electrical Equipment and Component Manufacturing</td>
<td>660</td>
<td>820</td>
<td>2.26</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR’ED, Middle Region Industry Employment Projections 2018-2028

**Advanced Energy – Utilities and Construction**

Total AE employment in utilities and construction was 47,000 in 2018 and forecast to expand to 53,960 by 2028. Construction is forecast to be one of the fastest-growing industries in the Middle Region through 2028. Four of the industries have location quotients larger than 1.2, showing specialization for these industries in this region.

### Table 26: High Growth Rates in AE Construction

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>Middle LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>238200</td>
<td>Building Equipment Contractors</td>
<td>17,460</td>
<td>20,550</td>
<td>1.64</td>
<td>0.98</td>
</tr>
<tr>
<td>238100</td>
<td>Foundation, Structure, and Building Exterior Contractors</td>
<td>7,790</td>
<td>9,270</td>
<td>1.76</td>
<td>1.21</td>
</tr>
<tr>
<td>236100</td>
<td>Residential Building Construction</td>
<td>6,170</td>
<td>6,960</td>
<td>1.21</td>
<td>1.21</td>
</tr>
<tr>
<td>236200</td>
<td>Nonresidential Building Construction</td>
<td>5,080</td>
<td>5,610</td>
<td>1.00</td>
<td>0.86</td>
</tr>
<tr>
<td>238300</td>
<td>Building Finishing Contractors</td>
<td>4,890</td>
<td>5,470</td>
<td>1.14</td>
<td>1.06</td>
</tr>
<tr>
<td>237100</td>
<td>Utility System Construction</td>
<td>3,750</td>
<td>4,160</td>
<td>1.03</td>
<td>1.22</td>
</tr>
<tr>
<td>221100</td>
<td>Electric Power Generation, Transmission and Distribution</td>
<td>1,330</td>
<td>1,430</td>
<td>0.75</td>
<td>1.25</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR’ED, Middle Region Industry Employment Projections 2018-2028

**Advanced Energy- Professional Scientific and Technical Industries**

Total employment in this AE sector was 43,140 in 2018 and is expected to grow rapidly to 57,950 by 2028.
Table 27: Computer Systems Design Growing 4 Times Faster than Regional Average

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>Midle LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>541600</td>
<td>Management, Scientific, and Technical Consulting Services</td>
<td>15,430</td>
<td>18,410</td>
<td>1.78</td>
<td>1.20</td>
</tr>
<tr>
<td>541500</td>
<td>Computer Systems Design and Related Services</td>
<td>10,570</td>
<td>16,770</td>
<td>4.73</td>
<td>1.24</td>
</tr>
<tr>
<td>541300</td>
<td>Architectural, Engineering, and Related Services</td>
<td>9,670</td>
<td>12,580</td>
<td>2.67</td>
<td>1.11</td>
</tr>
<tr>
<td>541900</td>
<td>Other Professional, Scientific, and Technical Services</td>
<td>5,530</td>
<td>7,730</td>
<td>2.90</td>
<td>1.05</td>
</tr>
<tr>
<td>541700</td>
<td>Scientific Research and Development Services</td>
<td>1,100</td>
<td>2,030</td>
<td>6.31</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR'ED, Middle Region Industry Employment Projections 2018-2028

Advanced Energy - Other Services

Total employment was 7070 in 2018, increasing to 8680 by 2028. Medical and diagnostic labs are needed to providetests results for COVID-19 and other illnesses and should grow along with the healthcare industry.

Table 28: AE Other Services Sector Growth Industries

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>Midele LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>621500</td>
<td>Medical and Diagnostic Laboratories</td>
<td>4,200</td>
<td>5,260</td>
<td>2.28</td>
<td>1.41</td>
</tr>
<tr>
<td>81130</td>
<td>Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance</td>
<td>1,460</td>
<td>1,690</td>
<td>1.45</td>
<td>0.85</td>
</tr>
<tr>
<td>811200</td>
<td>Electronic and Precision Equipment Repair and Maintenance</td>
<td>1,410</td>
<td>1,730</td>
<td>2.08</td>
<td>1.11</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR'ED, Middle Region Industry Employment Projections 2018-2028

The table below identifies top job categories projected to create new jobs in the Advanced Energy Industries by 2028. Occupations are listed if they are in the top ten in terms of new jobs to be created, or if there are not ten, jobs expected to have 30 or more openings. Some occupations are not included due to confidentiality. In addition to new jobs created in these industries, individuals transferring from these jobs and exiting the labor force altogether will create more separations openings in these occupations.
<table>
<thead>
<tr>
<th>Middle Region - Largest Occupations in the Advanced Energy Industries</th>
<th>Estimated New Jobs 2018-28</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced Energy Manufacturing</strong></td>
<td></td>
</tr>
<tr>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>250</td>
</tr>
<tr>
<td>Industrial Engineers</td>
<td>190</td>
</tr>
<tr>
<td>Industrial Machinery Mechanics</td>
<td>180</td>
</tr>
<tr>
<td>Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers</td>
<td>150</td>
</tr>
<tr>
<td>Welders, Cutters, Solderers, and Brazers</td>
<td>130</td>
</tr>
<tr>
<td>Helpers--Production Workers</td>
<td>130</td>
</tr>
<tr>
<td>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</td>
<td>120</td>
</tr>
<tr>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>110</td>
</tr>
<tr>
<td>Dental Laboratory Technicians</td>
<td>100</td>
</tr>
<tr>
<td>Machinists</td>
<td>100</td>
</tr>
<tr>
<td><strong>Advanced Energy - Professional, Scientific, and Technical Services</strong></td>
<td></td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>830</td>
</tr>
<tr>
<td>Software Developers, Systems Software</td>
<td>720</td>
</tr>
<tr>
<td>Computer User Support Specialists</td>
<td>570</td>
</tr>
<tr>
<td>Software Developers, Applications</td>
<td>570</td>
</tr>
<tr>
<td>Market Research Analysts and Marketing Specialists</td>
<td>380</td>
</tr>
<tr>
<td>Veterinary Technologists and Technicians</td>
<td>360</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>280</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>240</td>
</tr>
<tr>
<td>Computer Programmers</td>
<td>240</td>
</tr>
<tr>
<td>Training and Development Specialists</td>
<td>230</td>
</tr>
</tbody>
</table>
Table 29: Top Ten Job Categories in AE Professional and Technical Industries to Create More than 4,000 New Jobs by 2028 Continued

<table>
<thead>
<tr>
<th>Middle Region - Largest Occupations in the Advanced Energy Industries</th>
<th>Estimated New Jobs 2018-28</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced Energy - Utilities and Construction</strong></td>
<td></td>
</tr>
<tr>
<td>Construction Laborers</td>
<td>810</td>
</tr>
<tr>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>690</td>
</tr>
<tr>
<td>Electricians</td>
<td>660</td>
</tr>
<tr>
<td>Plumbers, Pipefitters, and Steamfitters</td>
<td>510</td>
</tr>
<tr>
<td>First-Line Supervisors of Construction Trades and Extraction Workers</td>
<td>390</td>
</tr>
<tr>
<td>Construction Managers</td>
<td>280</td>
</tr>
<tr>
<td>Carpenters</td>
<td>250</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>180</td>
</tr>
<tr>
<td>Brick masons and Block masons</td>
<td>150</td>
</tr>
<tr>
<td>First-Line Supervisors of Mechanics, Installers, and Repairers</td>
<td>140</td>
</tr>
<tr>
<td><strong>Advanced Energy - Other Services</strong></td>
<td></td>
</tr>
<tr>
<td>Phlebotomists</td>
<td>90</td>
</tr>
<tr>
<td>Billing and Posting Clerks</td>
<td>50</td>
</tr>
<tr>
<td>Bookkeeping, Accounting, and Auditing Clerks</td>
<td>40</td>
</tr>
<tr>
<td>Computer, Automated Teller, and Office Machine Repairers</td>
<td>30</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>30</td>
</tr>
<tr>
<td><strong>Advanced Energy - Information Technology</strong></td>
<td></td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>620</td>
</tr>
<tr>
<td>Computer User Support Specialists</td>
<td>350</td>
</tr>
<tr>
<td>Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products</td>
<td>320</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>260</td>
</tr>
<tr>
<td>Software Developers, Systems Software</td>
<td>220</td>
</tr>
<tr>
<td>Financial Managers</td>
<td>200</td>
</tr>
<tr>
<td>Software Developers, Applications</td>
<td>180</td>
</tr>
</tbody>
</table>
East Region Emerging Industries- Advanced Energy

Total employment in the East Region in AE manufacturing is projected to increase from 46,050 to 49,220 in 2028. Some of the largest industries in AE manufacturing in the East Region that are growing are:

Table 30: Motor Vehicle Parts Top Industry

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>East LQ</th>
<th>Industry Title</th>
<th>Est. 2018 Employment</th>
<th>Proj. 2028 Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>336300</td>
<td>1.19</td>
<td>Motor Vehicle Parts Manufacturing</td>
<td>18,410</td>
<td>19,160</td>
</tr>
<tr>
<td>336600</td>
<td>2.45</td>
<td>Ship and Building</td>
<td>2,970</td>
<td>3,310</td>
</tr>
<tr>
<td>336200</td>
<td>2.43</td>
<td>Motor Vehicle Body and Trailer Manufacturing</td>
<td>1,830</td>
<td>1,990</td>
</tr>
<tr>
<td>331500</td>
<td>1.60</td>
<td>Foundries</td>
<td>1,710</td>
<td>1,850</td>
</tr>
<tr>
<td>336400</td>
<td>2.00</td>
<td>Aerospace Product and Parts Manufacturing</td>
<td>1,590</td>
<td>1,610</td>
</tr>
<tr>
<td>339100</td>
<td>0.45</td>
<td>Medical Equipment and Supplies Manufacturing</td>
<td>1,550</td>
<td>1,890</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR\ED Division, East Region Long Term Projections 2018-2028

Other Advanced Energy Sectors- Utilities and Construction and Information

Total employment in the East Region in the AE utility and construction industries was 36,770 in 2018 and expected to grow to 40,550 by 2028. The industries with the highest location quotients and positive growth rates include nonresidential building and other heavy and civil engineering construction. The table below displays industries in utilities and construction in the AE cluster with more than 1,000 employment and positive growth rates. Several have expected growth rates nearly double the average for all industries in the East Region.
The advanced energy information sector is not as strong in the East Region. Software publishers, however, are expected to add employment more than twice as fast as the average for all industries.

**Advanced Energy- Professional, Scientific, and Technical Services**

This is one of the East Region’s most rapidly growing sectors, with employment of 29,890 in 2018 which is expected to increase to 37,220 in 2028. The professional, scientific, and technical services industry (NAICS 541) is especially strong in this region, with two industries having location quotients greater than 1.1.

**Table 32: AE Professional, Scientific, Technical Industries will Grow Rapidly**

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>East LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>541500</td>
<td>Computer Systems Design and Related Services</td>
<td>4,160</td>
<td>5,850</td>
<td>3.47</td>
<td>0.60</td>
</tr>
<tr>
<td>541600</td>
<td>Management, Scientific, and Technical Consulting Services</td>
<td>6,360</td>
<td>9,810</td>
<td>4.43</td>
<td>0.61</td>
</tr>
<tr>
<td>541700</td>
<td>Scientific Research and Development Services</td>
<td>6,210</td>
<td>7,400</td>
<td>1.77</td>
<td>2.28</td>
</tr>
<tr>
<td>541900</td>
<td>Other Professional, Scientific, and Technical Services</td>
<td>5,010</td>
<td>6,120</td>
<td>2.04</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR'ED, East Region Long Term Projections 2018-2028

**Advanced Energy- Other Services**

AE other services includes the important industries of medical and diagnostic laboratories and commercial and industrial machinery and repair, both with more than 1,000 employment in 2018. Total employment in AE other services was 4,490 in 2018, expected to grow to 5,100 in 2028, a growth
rate nearly twice that of the average for the East Region (note that base and projected numbers were before rounding).

Table 33: AE Other Services Sector Growth Industries

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry Title</th>
<th>Est. Employ. 2018</th>
<th>Proj. Employ. 2028</th>
<th>Annual Growth Rate</th>
<th>East LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>621500</td>
<td>Medical and Diagnostic Laboratories</td>
<td>1,580</td>
<td>1,890</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>81130</td>
<td>Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance</td>
<td>1,810</td>
<td>2,020</td>
<td>1.11</td>
<td>1.23</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR’ED, East Region Long Term Projections 2018-2028

Table 34: East Region - Largest AE Occupations

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced Energy Manufacturing - Top 10 Occupations</strong></td>
<td></td>
</tr>
<tr>
<td>Welders, Cutters, Scolders, and Brazers</td>
<td>80</td>
</tr>
<tr>
<td>Maintenance and Repair Workers, General</td>
<td>70</td>
</tr>
<tr>
<td>Industrial Engineers</td>
<td>70</td>
</tr>
<tr>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>70</td>
</tr>
<tr>
<td>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</td>
<td>60</td>
</tr>
<tr>
<td>Dental Laboratory Technicians</td>
<td>60</td>
</tr>
<tr>
<td>Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers</td>
<td>60</td>
</tr>
<tr>
<td>Mechanical Engineers</td>
<td>40</td>
</tr>
<tr>
<td>Helpers--Production Workers</td>
<td>40</td>
</tr>
<tr>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>40</td>
</tr>
<tr>
<td><strong>Advanced Energy - Professional, Scientific, and Technical Services</strong></td>
<td></td>
</tr>
<tr>
<td>Veterinary Assistant and Laboratory Animal Caretakers</td>
<td>370</td>
</tr>
<tr>
<td>Computer User Support Specialists</td>
<td>280</td>
</tr>
<tr>
<td>Software Developers, Applications</td>
<td>260</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>240</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>180</td>
</tr>
<tr>
<td>Occupation</td>
<td>Projected Jobs</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>180</td>
</tr>
<tr>
<td>Software Developers, Systems Software</td>
<td>170</td>
</tr>
<tr>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>160</td>
</tr>
<tr>
<td>First-Line Supervisors of Office and Administrative Support Workers</td>
<td>150</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>130</td>
</tr>
<tr>
<td><strong>Advanced Energy - Utilities and Construction</strong></td>
<td></td>
</tr>
<tr>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>350</td>
</tr>
<tr>
<td>Construction Laborers</td>
<td>280</td>
</tr>
<tr>
<td>Plumbers, Pipefitters, and Steamfitters</td>
<td>280</td>
</tr>
<tr>
<td>First-Line Supervisors of Construction Trades and Extraction Workers</td>
<td>210</td>
</tr>
<tr>
<td>Construction Managers</td>
<td>110</td>
</tr>
<tr>
<td>First-Line Supervisors of Mechanics, Installers, and Repairers</td>
<td>90</td>
</tr>
<tr>
<td>Carpenters</td>
<td>90</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>60</td>
</tr>
<tr>
<td>Helpers--Electricians</td>
<td>60</td>
</tr>
<tr>
<td>Electrical Power-Line Installers and Repairers</td>
<td>60</td>
</tr>
<tr>
<td><strong>Advanced Energy - Other Services</strong></td>
<td></td>
</tr>
<tr>
<td>Clinical Laboratory Technologists and Technicians</td>
<td>110</td>
</tr>
<tr>
<td>Industrial Machinery Mechanics</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIR²ED, East Region Long Term Projections 2018-2028

In addition to new jobs created in these industries, individuals transferring from these jobs and exiting the labor force altogether will create more openings in these occupations.
Economic & Workforce Analysis

Economic Analysis

The Unified or Combined State Plan must include an analysis of the economic conditions and trends in the State, including sub-State regions and any specific economic areas identified by the State. This must include—

(i) Existing Demand Industry Sectors and Occupations.

(ii) Emerging Demand Industry Sectors and Occupations. Provide an analysis of the industries and occupations for which demand is emerging.

(iii) Employers’ Employment Needs. With regard to the industry sectors and occupations identified in (A)(i) and (ii), provide an assessment of the employment needs of employers, including a description of the knowledge, skills, and abilities required, including credentials and licenses.
(A) Economic Analysis
(iii) Employers’ Employment Needs

The table below shows the latest information in jobs4tn.gov on the top certifications employers are listing in their job openings in Tennessee. The certifications listed show the extent to which employers are actively dealing with the effects of COVID-19 in the state and the shortages in the skilled workforce this is creating. More than half of the top certifications relate to healthcare occupations—nursing, respiratory care, emergency medical technicians, and pharmacy technicians. With increases in e-commerce, package delivery, and growth in transportation and warehousing, commercial driver’s licenses are an important need, as well as material-moving management. Family financial and mental health stresses during the pandemic are creating the need for more social workers.

The table below shows the top advertised certification groups found in job openings advertised online in Tennessee in December 2021.

**Tennessee Advertised Job Certifications Table**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Advertised Certification Group</th>
<th>Advertised Certification Sub-Category</th>
<th>Job Opening Match Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nursing Credentials and Certifications</td>
<td>Nursing</td>
<td>40,572</td>
</tr>
<tr>
<td>2</td>
<td>American Heart Association (AHA) CPR &amp; First Aid Certifications</td>
<td>Nursing</td>
<td>35,384</td>
</tr>
<tr>
<td>3</td>
<td>Commercial Drivers License (CDL)</td>
<td>Ground Transportation</td>
<td>13,256</td>
</tr>
<tr>
<td>4</td>
<td>American Institute of CPAs (AICPA) Certifications</td>
<td>Financial Specialists</td>
<td>2,029</td>
</tr>
<tr>
<td>5</td>
<td>Social Worker Credentials &amp; Certifications</td>
<td>Social and Human Services</td>
<td>1,181</td>
</tr>
<tr>
<td>6</td>
<td>National Registry of Emergency Medical Technicians (NREMT)</td>
<td>Fire Rescue</td>
<td>1,160</td>
</tr>
<tr>
<td>7</td>
<td>American Red Cross - First Aid Certifications</td>
<td>Nursing</td>
<td>1,080</td>
</tr>
<tr>
<td>8</td>
<td>National Board for Respiratory Care (NBRC)</td>
<td>Medical Treatment and Therapy</td>
<td>978</td>
</tr>
<tr>
<td>9</td>
<td>Pharmacy Technician Certification Board (PTCB)</td>
<td>Pharmaceutical</td>
<td>922</td>
</tr>
<tr>
<td>10</td>
<td>North American Transportation Management Institute (NATMI) Certifications</td>
<td>Transportation and Material Moving Management</td>
<td>685</td>
</tr>
</tbody>
</table>

Source: Online advertised jobs data
Downloaded: 01/19/2022 10:29 AM
The following graphs display the top certifications in each of the three regions in the state.
The top certifications for each of the regions are similar to those needed for the state. All regions are still dealing with the serious effects of the pandemic.

A regional analysis of licenses and certifications, knowledge, and skills related to the demand occupations identified resulted in the following categories being ranked at the top in terms of knowledge and abilities. The highest-ranked categories by far, tied for number one, were customer and personal service and English language knowledge. Safety knowledge was next in importance. Closely following in importance was mathematics. This points out the paramount importance of foundational knowledge in math and language. Administration and management, clerical, and medicine and dentistry knowledge were tied for next in importance.
The top-ranking category, oral comprehension, depends on attentive listening ability. Next is the ability to express oneself orally. Problem detection and solving are also high on the list, as are reasoning abilities. For numerous occupations, visual ability is critical.

Licenses and certifications required for the demand occupations included engineer intern and professional engineer, medical laboratory technician, medical laboratory technologist, emergency medical technician (EMT), EMT responder, EMT paramedic, commercial driver’s license, licensed practical nurse, registered nurse (RN), RN first assistant, licensed registered respiratory therapist, and veterinary medical technician. Extensive information on job requirements including top knowledge, skills, and abilities and licensing requirements is available in the Occupational Profile section of jobs4tn.gov by region and LWDA.
Tennessee
Economic & Workforce Analysis
PY 2022-2023

Workforce Analysis

The Unified or Combined State Plan must include an analysis of the current workforce, including individuals with barriers to employment, as defined in section 3 of WIOA4. This population must include individuals with disabilities among other groups5 in the State and across regions identified by the State. This includes—

(i) Employment and Unemployment. Provide an analysis of current employment and unemployment data, including labor force participation rates, and trends in the State.

(ii) Labor Market Trends. Provide an analysis of key labor market trends, including across existing industries and occupations.

(iii) Education and Skill Levels of the Workforce. Provide an analysis of the educational and skill levels of the workforce.

(iv) Skill Gaps. Describe apparent ‘skill gaps’
Workforce and Labor Force Issues in Tennessee's West Region and Comparison to the State

The population in the West Region in 2020 was estimated at 1,569,363, a decrease of 0.04 percent over 2019. This is a slightly slower rate of decline than the previous year’s decline of 0.12 percent. Only the Southwest LWDA increased in population. It added an estimated 469 people, while the Greater Memphis LWDA lost an estimated 431 and the Northwest LWDA an estimated 720 people. Females were 52.0 percent of the population in the West Region during 2020. The Greater Memphis LWDA had the highest percent of females in the population in 2020 at 52.4 percent, compared to the Southwest LWDA at 51.3 percent and the Northwest LWDA at 51.1 percent.

The labor force participation rate in the West Region was 60.5 percent, just 0.9 percentage points lower than the State’s rate of 61.4 percent. The Greater Memphis LWDA had the highest labor force participation rate at 63.8 percent, while the Northwest LWDA had the lowest at 53.6 percent. Average unemployment rates increased in all three LWDA’s in the West Region, for a West Region average of 8.8 percent. The Greater Memphis LWDA had the highest unemployment rate at 9.4 percent, 0.6 percentage points above the West Region and 1.9 percentage points above the State’s rate of 7.5 percent.

The lowest rate of higher educational attainment (attainment of some college or more for those 25 years of age or older) was in the Northwest LWDA, with a rate of 42.3 percent compared to the West Region’s rate of 54.0 percent and the State’s rate of 55.4 percent. In the West Region, the greatest percentage of those with a high school degree or more (88.6 percent) were those who identified as white. Those who identified as Hispanic, or Latino only had the lowest percentage (56.5 percent).

Poverty rates decreased slightly in the West Region from 19.9 percent in 2018 to 18.8 percent in 2019. The Northwest LWDA had the highest poverty rate at 19.0 percent, just slightly above the West Region and 3.8 percentage points above the State’s poverty rate of 15.2 percent. The Greater Memphis LWDA had a poverty rate of 18.8 and the Southwest LWDA had a poverty rate of 18.5 percent.

The percent of the unemployed with a disability in the West Region was 14.1 percent, 2.6 percentage points higher than the State’s percent of the unemployed with a disability of 11.5 percent. The Greater
Memphis LWDA had the highest percentage of those unemployed with a disability at 15.0 percent; the Northwest LWDA had the lowest percentage at 11.9 percent. The percent of those not in the labor force with a disability was 33.2 percent in the West Region, lower than the State's 33.7 percent. The Northwest LWDA had the highest percent of those not in the labor force with a disability at 42.6 percent, while the Greater Memphis LWDA had the lowest at 30.0 percent.

Table 1: West Region Labor Force Data

<table>
<thead>
<tr>
<th></th>
<th>Southwest LWDA</th>
<th>Northwest LWDA</th>
<th>Greater Memphis LWDA</th>
<th>West Region</th>
<th>State Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Population 2019</strong></td>
<td>257,437</td>
<td>247,171</td>
<td>1,065,437</td>
<td>1,570,045</td>
<td>6,830,325</td>
</tr>
<tr>
<td><strong>Total Population 2020</strong></td>
<td>257,906</td>
<td>246,451</td>
<td>1,065,006</td>
<td>1,569,363</td>
<td>6,886,834</td>
</tr>
<tr>
<td><strong>Male Population 2020</strong></td>
<td>125,568</td>
<td>120,533</td>
<td>507,210</td>
<td>753,311</td>
<td>3,358,020</td>
</tr>
<tr>
<td><strong>Female Population 2020</strong></td>
<td>132,338</td>
<td>125,918</td>
<td>557,796</td>
<td>816,052</td>
<td>3,528,614</td>
</tr>
<tr>
<td><strong>Labor Force Participation Rate 2018 (5-Year Estimate)</strong></td>
<td>54.4%</td>
<td>53.4%</td>
<td>63.8%</td>
<td>60.6%</td>
<td>61.2%</td>
</tr>
<tr>
<td><strong>Labor Force Participation Rate 2019 (5-Year Estimate)</strong></td>
<td>54.0%</td>
<td>53.6%</td>
<td>63.8%</td>
<td>60.5%</td>
<td>61.4%</td>
</tr>
<tr>
<td><strong>Annual Average Unemployment Rate 2019 Percent</strong></td>
<td>4.1%</td>
<td>4.5%</td>
<td>4.0%</td>
<td>4.1%</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Annual Average Unemployment Rate 2020 Percent</strong></td>
<td>7.7%</td>
<td>7.1%</td>
<td>9.4%</td>
<td>8.8%</td>
<td>7.5%</td>
</tr>
<tr>
<td><strong>Educational Attainment 25 Years and Over (2019) Some College Or Higher - Percent</strong></td>
<td>44.3%</td>
<td>42.3%</td>
<td>59.2%</td>
<td>54.0%</td>
<td>55.4%</td>
</tr>
<tr>
<td><strong>Poverty Estimate, All Ages, Percent (2019)</strong></td>
<td>18.5%</td>
<td>19.0%</td>
<td>18.8%</td>
<td>18.8%</td>
<td>15.2%</td>
</tr>
<tr>
<td><strong>Percentage of Unemployed with a Disability (2019)</strong></td>
<td>13.0%</td>
<td>11.9%</td>
<td>15.0%</td>
<td>14.1%</td>
<td>11.5%</td>
</tr>
<tr>
<td><strong>Percent of Those Not in the Labor Force with a Disability (2019)</strong></td>
<td>35.1%</td>
<td>42.6%</td>
<td>30.0%</td>
<td>33.2%</td>
<td>33.7%</td>
</tr>
</tbody>
</table>

Source: U.S. Census, American Community Survey, 2019
Table 2: West Region Educational Attainment by Race, 2018

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>West Region White Only</th>
<th>West Region Black Only</th>
<th>West Region Hispanic or Latino Only</th>
<th>Statewide White Only</th>
<th>Statewide Black Only</th>
<th>Statewide Hispanic or Latino Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 25 years and over</td>
<td>617,935</td>
<td>373,166</td>
<td>37,660</td>
<td>3,641,698</td>
<td>697,227</td>
<td>173,116</td>
</tr>
<tr>
<td>High school graduate only</td>
<td>367,716</td>
<td>250,067</td>
<td>16,377</td>
<td>2,191,041</td>
<td>457,713</td>
<td>81,607</td>
</tr>
<tr>
<td>Percent high school graduate only</td>
<td>59.51%</td>
<td>67.01%</td>
<td>43.49%</td>
<td>60.17%</td>
<td>65.65%</td>
<td>47.14%</td>
</tr>
<tr>
<td>High school graduate or higher</td>
<td>547,632</td>
<td>314,758</td>
<td>21,284</td>
<td>3,194,533</td>
<td>595,489</td>
<td>107,877</td>
</tr>
<tr>
<td>Percent high school graduate or higher</td>
<td>88.62%</td>
<td>84.35%</td>
<td>56.52%</td>
<td>87.72%</td>
<td>85.41%</td>
<td>62.31%</td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>179,916</td>
<td>64,691</td>
<td>4,907</td>
<td>1,003,492</td>
<td>137,776</td>
<td>26,270</td>
</tr>
<tr>
<td>Percent bachelor degree or higher</td>
<td>29.12%</td>
<td>17.34%</td>
<td>13.03%</td>
<td>27.56%</td>
<td>19.76%</td>
<td>15.17%</td>
</tr>
</tbody>
</table>


Youth unemployment for those ages 16 to 24 topped 12 percent in all three LWDA’s in the West Region. The Southwest LWDA had the highest youth unemployment rate at 18.5 percent. Greater Memphis LWDA had a youth unemployment rate of 14.4 percent, compared to 12.7 percent in the Northwest; both had a rate lower than the West Region, which was 14.8 percent.

Table 3: West Region Disability Status of Those in the Labor Force, 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Civilian Non-institutional Population</th>
<th>Total Labor Force</th>
<th>Total Employed</th>
<th>Employed W Disability</th>
<th>Employed W/O Disability</th>
<th>Total Unemployed</th>
<th>Unemployed W Disability</th>
<th>Unemployed W/O Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwest LWDA</td>
<td>143,781</td>
<td>99,930</td>
<td>93,122</td>
<td>5,039</td>
<td>88,083</td>
<td>6,808</td>
<td>756</td>
<td>6,052</td>
</tr>
<tr>
<td>Northwest LWDA</td>
<td>142,176</td>
<td>98,613</td>
<td>92,996</td>
<td>7,578</td>
<td>85,418</td>
<td>5,617</td>
<td>1,028</td>
<td>4,589</td>
</tr>
<tr>
<td>Greater Memphis LWDA</td>
<td>643,218</td>
<td>492,152</td>
<td>457,271</td>
<td>22,919</td>
<td>434,352</td>
<td>34,881</td>
<td>4,052</td>
<td>30,829</td>
</tr>
<tr>
<td>West Region</td>
<td>929,175</td>
<td>690,695</td>
<td>643,389</td>
<td>35,536</td>
<td>607,853</td>
<td>47,306</td>
<td>5,836</td>
<td>41,470</td>
</tr>
<tr>
<td>Tennessee</td>
<td>4,053,247</td>
<td>3,052,526</td>
<td>2,893,064</td>
<td>179,393</td>
<td>2,713,671</td>
<td>159,462</td>
<td>23,420</td>
<td>136,042</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates
Table 4: West Region Disability Status of Those Not in the Labor Force, 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Civilian Non-institutional Population</th>
<th>Total Not In Labor Force</th>
<th>Not in Labor Force W Disability</th>
<th>Not In Labor Force W/O Disability</th>
<th>% W Disability</th>
<th>% W/O Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwest LWDA</td>
<td>143,781</td>
<td>43,851</td>
<td>15,411</td>
<td>28,440</td>
<td>35.1%</td>
<td>64.9%</td>
</tr>
<tr>
<td>Northwest LWDA</td>
<td>142,176</td>
<td>43,563</td>
<td>18,571</td>
<td>24,992</td>
<td>42.6%</td>
<td>57.4%</td>
</tr>
<tr>
<td>Greater Memphis LWDA</td>
<td>643,218</td>
<td>151,066</td>
<td>45,260</td>
<td>105,806</td>
<td>30.0%</td>
<td>70.0%</td>
</tr>
<tr>
<td>West Region</td>
<td>929,175</td>
<td>238,480</td>
<td>79,242</td>
<td>159,238</td>
<td>33.2%</td>
<td>66.8%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>4,053,247</td>
<td>1,000,721</td>
<td>337,665</td>
<td>663,056</td>
<td>33.7%</td>
<td>66.3%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

Table 5: West Region Youth Unemployment, Ages 16-24 in 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Labor Force</th>
<th>Unemployment</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwest LWDA</td>
<td>15,468</td>
<td>2,864</td>
<td>18.5%</td>
</tr>
<tr>
<td>Northwest LWDA</td>
<td>15,936</td>
<td>2,017</td>
<td>12.7%</td>
</tr>
<tr>
<td>Greater Memphis LWDA</td>
<td>72,151</td>
<td>10,410</td>
<td>14.4%</td>
</tr>
<tr>
<td>West Region</td>
<td>103,555</td>
<td>15,291</td>
<td>14.8%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2015-2019 American Community Survey, 2019, 5-year estimates

Barriers to Employment

Listed below are numbers of individuals with significant barriers to employment by LWDAs, with region and state totals. * indicates counties of commitment, not residence, in the table below. The sources listed below provided the data for barriers to employment.


Probationers and Parolees, Community Corrections: Dr. Mary Karpos, TN Department of Correction, Community Supervision.

Mental Health Court and Recovery Court Statistics: Rebekah Provost-Emmons, Recovery Court Administrator, Office of Criminal Justice Services, Division of Substance Abuse Services.


Foster Care Services: Dave Aguzzi, Office of Independent Living, TN Department of Children’s Services.
**Table 6: West Region - Significant Barriers to Employment**

<table>
<thead>
<tr>
<th></th>
<th>Southwest LWDA</th>
<th>Northwest LWDA</th>
<th>Greater Memphis LWDA</th>
<th>West Region</th>
<th>State Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of American Indians or Alaskan Natives alone</td>
<td>379</td>
<td>911</td>
<td>2,324</td>
<td>3,614</td>
<td>18,189</td>
</tr>
<tr>
<td>Population Ages 15-19</td>
<td>17,257</td>
<td>18,983</td>
<td>73,172</td>
<td>109,412</td>
<td>422,111</td>
</tr>
<tr>
<td>Population Ages 20-24</td>
<td>17,132</td>
<td>18,933</td>
<td>76,676</td>
<td>112,741</td>
<td>458,394</td>
</tr>
<tr>
<td>Population Ages 55+</td>
<td>75,141</td>
<td>92,114</td>
<td>241,620</td>
<td>408,875</td>
<td>1,784,288</td>
</tr>
<tr>
<td>Number of Veterans 2020</td>
<td>15,603</td>
<td>19,901</td>
<td>60,552</td>
<td>96,056</td>
<td>456,197</td>
</tr>
<tr>
<td>Number Below Poverty</td>
<td>44,076</td>
<td>50,598</td>
<td>190,066</td>
<td>284,740</td>
<td>996,930</td>
</tr>
<tr>
<td>Number With Disability</td>
<td>18,108</td>
<td>8,488</td>
<td>114,980</td>
<td>136,576</td>
<td>737,731</td>
</tr>
<tr>
<td>Number of Single Parent Families</td>
<td>7,331</td>
<td>7,606</td>
<td>41,513</td>
<td>56,450</td>
<td>184,062</td>
</tr>
<tr>
<td>Probationers and Parolees</td>
<td>3,139</td>
<td>2,914</td>
<td>10,023</td>
<td>16,076</td>
<td>68,391</td>
</tr>
<tr>
<td>Community Correction</td>
<td>1,382</td>
<td>318</td>
<td>439</td>
<td>2,139</td>
<td>7,454</td>
</tr>
<tr>
<td>Mental Health Court Statistics (FY 2020)</td>
<td>0</td>
<td>0</td>
<td>85</td>
<td>85</td>
<td>218</td>
</tr>
<tr>
<td>Limited English Speaking</td>
<td>558</td>
<td>723</td>
<td>7,359</td>
<td>8,640</td>
<td>38,144</td>
</tr>
<tr>
<td>*Foster Care Services - Youth Aged Out</td>
<td>17</td>
<td>23</td>
<td>127</td>
<td>167</td>
<td>717</td>
</tr>
<tr>
<td>Clients In Recovery Courts (2020)</td>
<td>184</td>
<td>129</td>
<td>530</td>
<td>843</td>
<td>3,159</td>
</tr>
<tr>
<td>Veterans Recovery Courts</td>
<td>0</td>
<td>0</td>
<td>55</td>
<td>55</td>
<td>208</td>
</tr>
<tr>
<td>In School Youth Experiencing Homelessness in 2019</td>
<td>621</td>
<td>195</td>
<td>1,735</td>
<td>2,551</td>
<td>17,228</td>
</tr>
<tr>
<td>TANF 24 Months From Ending Total 2020</td>
<td>144</td>
<td>89</td>
<td>460</td>
<td>693</td>
<td>1,773</td>
</tr>
<tr>
<td>Prison and Jail Population Tot.</td>
<td>3,570</td>
<td>2,323</td>
<td>3,479</td>
<td>9,372</td>
<td>26,908</td>
</tr>
</tbody>
</table>
Workforce and Labor Force Issues in Tennessee’s Middle Region and Comparison to the State

Population in the Middle Region in 2020 was estimated at 2,832,779, an increase of 1.3 percent over 2019. This is a slower rate of growth than the 2019 rate of 4.7 percent. All three LWDA’s in the Middle Region increased in population: Northern Middle by 29,029, Upper Cumberland by 3,954, and Southern Middle by 2,716 people. Northern Middle LWDA had the highest percent of females in the population (51.1 percent).

The labor force participation rate in the Middle Region was 64.9 percent, which is 3.5 percentage points higher than the State’s rate of 61.4 percent. Northern Middle LWDA had the highest labor force participation rate at 68.6 percent, while Upper Cumberland had the lowest at 53.6 percent. Average unemployment rates increased in all of the three LWDA’s in the Middle Region, for a Middle Region average of 7.1 percent. The Southern Middle LWDA had the highest unemployment rate at 7.9 percent, 0.8 percentage points above the Middle Region and 0.4 percentage points above the State’s rate of 7.5 percent.

The lowest rate of higher educational attainment (attainment of some college or more for those 25 years of age or older) is in the Upper Cumberland LWDA, with a rate of 41.4 percent compared to the Middle Region’s rate of 58.1 percent and the State’s rate of 55.4 percent. In the Middle Region, the greatest percentage of those with a high school degree or more (88.67) were those who identified as white. Those who identified as Hispanic or Latino only had the lowest percent at 66.1.

Poverty rates decreased in the Middle Region from 14.0 percent in 2018 to 13.1 percent in 2019. The Upper Cumberland LWDA had the highest poverty rate at 18.0 percent, which is above the Middle Region and 2.8 percentage points above the State’s poverty rate of 15.2 percent. Northern Middle had the lowest poverty rate at 11.8 percent.

The percent of the unemployed with a disability in the Middle Region was 9.3 percent, 1.8 percentage points lower than the State’s percent of the unemployed with a disability of 11.5 percent. The Southern Middle LWDA had the highest percentage at 11.7 percent; the Northern Middle LWDA had the lowest percentage at 8.6 percent. The percent of those not in the labor force with a disability was at 31.5 percent in the Middle Region, lower than the State’s 33.7 percent. The Southern Middle LWDA had the highest percent of those not in the labor with a disability at 37.9 percent, while the Northern Middle LWDA had the lowest at 28.1 percent.

<table>
<thead>
<tr>
<th>Middle Tennessee Local Workforce Development Areas and Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Cumberland Tennessee (LWDA 3)</td>
</tr>
<tr>
<td>Cannon</td>
</tr>
<tr>
<td>Clay</td>
</tr>
<tr>
<td>Cumberland</td>
</tr>
<tr>
<td>Dekalb</td>
</tr>
<tr>
<td>Fentress</td>
</tr>
<tr>
<td>Jackson</td>
</tr>
<tr>
<td>Macon</td>
</tr>
<tr>
<td>Southern Middle Tennessee (LWDA 5)</td>
</tr>
<tr>
<td>Bedford</td>
</tr>
<tr>
<td>Coffee</td>
</tr>
<tr>
<td>Franklin</td>
</tr>
<tr>
<td>Giles</td>
</tr>
<tr>
<td>Hickman</td>
</tr>
<tr>
<td>Lawrence</td>
</tr>
<tr>
<td>Lewis</td>
</tr>
<tr>
<td>Northern Middle Tennessee (LWDA 6)</td>
</tr>
<tr>
<td>Cheatham</td>
</tr>
<tr>
<td>Davidson</td>
</tr>
<tr>
<td>Dickson</td>
</tr>
<tr>
<td>Houston</td>
</tr>
<tr>
<td>Humphreys</td>
</tr>
<tr>
<td>Montgomery</td>
</tr>
<tr>
<td>Robertson</td>
</tr>
</tbody>
</table>
Youth unemployment for those ages 16 to 24 topped 9 percent in all three LWDA’s in the Middle Region. The Upper Cumberland LWDA had the highest youth unemployment rate at 12.6 percent compared to Southern Middle LWDA at 10.1 percent and the Northern Middle LWDA at 9.0 percent. The total youth unemployment rate for the Middle Region was 9.5 percent.

Table 7: Middle Region Labor Force Data

<table>
<thead>
<tr>
<th></th>
<th>Upper Cumberland LWDA</th>
<th>Southern Middle LWDA</th>
<th>Northern Middle LWDA</th>
<th>Middle Region</th>
<th>State Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population 2019</td>
<td>364,637</td>
<td>404,797</td>
<td>2,027,646</td>
<td>2,797,080</td>
<td>6,830,325</td>
</tr>
<tr>
<td>Total Population 2020</td>
<td>368,591</td>
<td>407,513</td>
<td>2,056,675</td>
<td>2,832,779</td>
<td>6,886,834</td>
</tr>
<tr>
<td>Male Population 2020</td>
<td>182,202</td>
<td>201,530</td>
<td>1,005,290</td>
<td>1,389,022</td>
<td>3,358,020</td>
</tr>
<tr>
<td>Female Population 2020</td>
<td>186,389</td>
<td>205,983</td>
<td>1,015,385</td>
<td>1,443,757</td>
<td>3,528,814</td>
</tr>
<tr>
<td>Labor Force Participation Rate 2018 (5-Year Estimate)</td>
<td>53.4%</td>
<td>57.4%</td>
<td>68.4%</td>
<td>64.6%</td>
<td>61.2%</td>
</tr>
<tr>
<td>Labor Force Participation Rate 2019 (5-Year Estimate)</td>
<td>53.6%</td>
<td>57.9%</td>
<td>68.6%</td>
<td>64.9%</td>
<td>61.4%</td>
</tr>
<tr>
<td>Annual Average Unemployment Rate 2019 Percent</td>
<td>3.9%</td>
<td>3.5%</td>
<td>2.7%</td>
<td>2.9%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Annual Average Unemployment Rate 2020 Percent</td>
<td>7.2%</td>
<td>7.9%</td>
<td>7.0%</td>
<td>7.1%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Educational Attainment 25 Years and Over (2019) Some College Or Higher - Percent</td>
<td>41.4%</td>
<td>44.7%</td>
<td>64.4%</td>
<td>58.1%</td>
<td>55.4%</td>
</tr>
<tr>
<td>Poverty Estimate, All Ages, Percent (2019)</td>
<td>18.0%</td>
<td>14.3%</td>
<td>11.8%</td>
<td>13.1%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Percentage of Unemployed with a Disability (2019)</td>
<td>10.3%</td>
<td>11.7%</td>
<td>8.6%</td>
<td>9.3%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Percent of Those Not in the Labor Force with a Disability (2019)</td>
<td>37.6%</td>
<td>37.9%</td>
<td>28.1%</td>
<td>31.5%</td>
<td>33.7%</td>
</tr>
</tbody>
</table>

Source: U.S. Census, American Community Survey, 2019
### Table 8: Middle Region Educational Attainment by Race, 2018

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Middle Region White Only</th>
<th>Middle Region Black Only</th>
<th>Middle Region Hispanic or Latino Only</th>
<th>Statewide White Only</th>
<th>Statewide Black Only</th>
<th>Statewide Hispanic or Latino Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 25 years and over</td>
<td>1,527,939</td>
<td>230,328</td>
<td>89,410</td>
<td>3,641,698</td>
<td>697,227</td>
<td>173,116</td>
</tr>
<tr>
<td>High school graduate only</td>
<td>893,398</td>
<td>143,689</td>
<td>44,726</td>
<td>2,191,041</td>
<td>457,713</td>
<td>81,607</td>
</tr>
<tr>
<td>Percent high school graduate only</td>
<td>58.47%</td>
<td>62.38%</td>
<td>50.02%</td>
<td>60.17%</td>
<td>65.65%</td>
<td>47.14%</td>
</tr>
<tr>
<td>High school graduate or higher</td>
<td>1,354,842</td>
<td>201,485</td>
<td>59,114</td>
<td>3,194,533</td>
<td>595,489</td>
<td>107,877</td>
</tr>
<tr>
<td>Percent high school graduate or higher</td>
<td>88.67%</td>
<td>87.48%</td>
<td>66.12%</td>
<td>87.72%</td>
<td>85.41%</td>
<td>62.31%</td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>461,444</td>
<td>57,796</td>
<td>14,388</td>
<td>1,003,492</td>
<td>137,776</td>
<td>26,270</td>
</tr>
<tr>
<td>Percent bachelor degree or higher</td>
<td>30.20%</td>
<td>25.09%</td>
<td>16.09%</td>
<td>27.56%</td>
<td>19.76%</td>
<td>15.17%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates

### Table 9: Middle Region Disability Status of Those in the Labor Force, 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Civilian Non-institutional Population</th>
<th>Total Labor Force</th>
<th>Total Employed</th>
<th>Employed W Disability</th>
<th>Employed W/O Disability</th>
<th>Total Unemployed</th>
<th>Unemployed W Disability</th>
<th>Unemployed W/O Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Cumberland LWDA</td>
<td>203,910</td>
<td>142,052</td>
<td>134,782</td>
<td>9,133</td>
<td>125,649</td>
<td>7,270</td>
<td>1,049</td>
<td>6,221</td>
</tr>
<tr>
<td>Southern Middle LWDA</td>
<td>259,971</td>
<td>190,524</td>
<td>181,392</td>
<td>11,982</td>
<td>169,410</td>
<td>9,132</td>
<td>1,589</td>
<td>7,543</td>
</tr>
<tr>
<td>Northern Middle LWDA</td>
<td>1,229,801</td>
<td>982,998</td>
<td>943,044</td>
<td>55,867</td>
<td>887,177</td>
<td>39,954</td>
<td>5,250</td>
<td>34,704</td>
</tr>
<tr>
<td>Middle Region</td>
<td>1,693,682</td>
<td>1,315,574</td>
<td>1,259,218</td>
<td>76,982</td>
<td>1,182,236</td>
<td>56,356</td>
<td>7,888</td>
<td>48,468</td>
</tr>
<tr>
<td>Tennessee</td>
<td>4,053,247</td>
<td>3,052,526</td>
<td>2,893,064</td>
<td>179,393</td>
<td>2,713,671</td>
<td>159,462</td>
<td>23,420</td>
<td>136,042</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates
Table 10: Middle Region Disability Status of Those Not in the Labor Force, 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Civilian Non-institutional Population</th>
<th>Total Not In Labor Force</th>
<th>Not in Labor Force W Disability</th>
<th>Not In Labor Force W/O Disability</th>
<th>% W Disability</th>
<th>% W/O Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Cumberland LWDA</td>
<td>203,910</td>
<td>61,858</td>
<td>23,266</td>
<td>38,592</td>
<td>37.6%</td>
<td>62.4%</td>
</tr>
<tr>
<td>Southern Middle LWDA</td>
<td>259,971</td>
<td>69,447</td>
<td>26,302</td>
<td>43,145</td>
<td>37.9%</td>
<td>62.1%</td>
</tr>
<tr>
<td>Northern Middle LWDA</td>
<td>1,229,801</td>
<td>246,803</td>
<td>69,470</td>
<td>177,333</td>
<td>28.1%</td>
<td>71.9%</td>
</tr>
<tr>
<td>Middle Region</td>
<td>1,693,682</td>
<td>378,108</td>
<td>119,038</td>
<td>259,070</td>
<td>31.5%</td>
<td>68.5%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>4,053,247</td>
<td>1,000,721</td>
<td>337,665</td>
<td>663,056</td>
<td>33.7%</td>
<td>66.3%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

Table 11: Middle Region Youth Unemployment, Ages 16-24 in 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Labor Force</th>
<th>Unemployment</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Cumberland LWDA</td>
<td>23,002</td>
<td>2,899</td>
<td>12.6%</td>
</tr>
<tr>
<td>Southern Middle LWDA</td>
<td>28,172</td>
<td>2,842</td>
<td>10.1%</td>
</tr>
<tr>
<td>Northern Middle LWDA</td>
<td>158,113</td>
<td>14,169</td>
<td>9.0%</td>
</tr>
<tr>
<td>Middle Region</td>
<td>209,287</td>
<td>19,910</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Table 12: Middle Region - Significant Barriers to Employment

<table>
<thead>
<tr>
<th>Number of American Indians or Alaskan Natives alone</th>
<th>Upper Cumberland LWDA</th>
<th>Southern Middle LWDA</th>
<th>Northern Middle LWDA</th>
<th>Middle Region</th>
<th>State Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,205</td>
<td>967</td>
<td>5,515</td>
<td>7,687</td>
<td>18,189</td>
</tr>
<tr>
<td>Population Ages 15-19</td>
<td>21,835</td>
<td>26,695</td>
<td>118,606</td>
<td>167,136</td>
<td>422,111</td>
</tr>
<tr>
<td>Population Ages 20-24</td>
<td>22,934</td>
<td>26,367</td>
<td>134,910</td>
<td>184,211</td>
<td>458,394</td>
</tr>
<tr>
<td>Population Ages 55+</td>
<td>112,202</td>
<td>128,059</td>
<td>416,687</td>
<td>656,948</td>
<td>1,784,288</td>
</tr>
<tr>
<td>Number of Veterans 2020</td>
<td>25,183</td>
<td>29,912</td>
<td>132,494</td>
<td>187,589</td>
<td>456,197</td>
</tr>
<tr>
<td>Number Below Poverty</td>
<td>61,869</td>
<td>61,980</td>
<td>222,186</td>
<td>346,035</td>
<td>996,930</td>
</tr>
<tr>
<td>Number With Disability</td>
<td>30,843</td>
<td>42,428</td>
<td>204,665</td>
<td>277,936</td>
<td>737,731</td>
</tr>
<tr>
<td>Number of Single Parent Families</td>
<td>8,758</td>
<td>11,846</td>
<td>50,369</td>
<td>70,973</td>
<td>184,062</td>
</tr>
<tr>
<td>Probationers and Parolees</td>
<td>3,323</td>
<td>3,609</td>
<td>24,128</td>
<td>31,060</td>
<td>68,391</td>
</tr>
<tr>
<td>Community Correction</td>
<td>365</td>
<td>481</td>
<td>2,059</td>
<td>2,905</td>
<td>7,454</td>
</tr>
<tr>
<td>Mental Health Court Statistics (FY 2020)</td>
<td>0</td>
<td>0</td>
<td>39</td>
<td>39</td>
<td>218</td>
</tr>
<tr>
<td>Limited English Speaking</td>
<td>1,342</td>
<td>2,125</td>
<td>16,607</td>
<td>20,074</td>
<td>38,144</td>
</tr>
<tr>
<td>*Foster Care Services - Youth Aged Out</td>
<td>62</td>
<td>58</td>
<td>164</td>
<td>284</td>
<td>717</td>
</tr>
<tr>
<td>Clients In Recovery Courts (2020)</td>
<td>249</td>
<td>272</td>
<td>900</td>
<td>1,421</td>
<td>3,159</td>
</tr>
<tr>
<td>Veterans Recovery Courts</td>
<td>6</td>
<td>0</td>
<td>125</td>
<td>131</td>
<td>208</td>
</tr>
<tr>
<td>In School Youth Experiencing Homelessness in 2019</td>
<td>1,129</td>
<td>70</td>
<td>8,016</td>
<td>9,215</td>
<td>17,228</td>
</tr>
<tr>
<td>TANF 24 Months From Ending Total 2020</td>
<td>45</td>
<td>104</td>
<td>393</td>
<td>542</td>
<td>1,773</td>
</tr>
<tr>
<td>Prison and Jail Population Total 2020</td>
<td>477</td>
<td>3,330</td>
<td>5,896</td>
<td>9,703</td>
<td>26,908</td>
</tr>
</tbody>
</table>

* Counties of commitment, not residence.


Probationers and Parolees, Community Corrections: Dr. Mary Karpos, TN Department of Correction, Community Supervision.

Mental Health Court and Recovery Court Statistics: Rebekah Provost-Emmons, Recovery Court Administrator, Office of Criminal Justice Services, Division of Substance Abuse Services.


Foster Care Services: Dave Aguzzi, Office of Independent Living, TN Department of Children’s Services.

In School Youth Experiencing Homelessness: Josh Carlson, Data Management Division, TN Department of Education.


Listed above are numbers of individuals with significant barriers to employment by LWDAs, with region and state totals.
Population in the East Region in 2020 was estimated at 2,484,692, an increase of 0.87 percent over 2019. This is a slower rate of growth than the previous year’s growth of 2.20 percent. All three LWDA’s in the East Region increased in population. East LWDA added 11,795 people, Southeast LWDA added 8,523 people, and Northeast LWDA added 1,174 people. Females made up 51.1 percent of the population in the East Region during 2020. Southeast LWDA had the highest percent of the female population at the rate of 51.3 percent.

Labor force participation rate in the East Region was 57.8 percent, which is 3.4 percentage points lower than the State’s labor force participation rate of 61.2 percent. Southeast LWDA had the highest labor force participation rate at 59.3 percent, while the Northeast LWDA had the lowest labor force participation rate at 53.9 percent. Average unemployment rates increased in all three LWDAs in the East Region, for an East Region average of 7.0 percent. The Southeast LWDA had the highest unemployment rate at 7.3 percent, 0.3 percentage points above the East Region and 0.2 percentage points below the State’s rate of 7.5 percent.

The lowest rate of higher educational attainment (attainment of some college or more for those 25 years of age or higher) is in the Northeast LWDA, with a rate of 49.9 percent compared to the East Region’s rate of 53.2 percent and the State’s rate of 55.4 percent. In the East Region, the highest percentage of those with a high school degree or higher were those who identified as white. Those who identify as Hispanic or Latino only had the lowest percent of high school degrees or higher at 59.68 percent.

Poverty rates decreased in the East Region from 16.4 percent in 2018 to 15.7 percent in 2019. The Northeast LWDA had the highest poverty rate at 17.5 percent, above the East Region and 2.3 percentage points above the State’s poverty rate of 15.2 percent. The East LWDA had a poverty rate of 15.4 percent and the Southeast LWDA had a poverty rate of 15.0 percent.

The percent of the unemployed with a disability in the East Region was 12.7 percent, 1.2 percentage points higher than the State’s percent of the unemployed with a disability of 11.5 percent. The East LWDA had the highest percentage of those unemployed with a disability at 13.0 percent. The Southeast LWDA had the lowest percentage of those unemployed with a disability at 12.1 percent.

The percent of those not in the labor force with a disability was at 36.2 percent in the East Region, higher than the State’s 33.7 percent of those not in the labor force with a disability. The Northeast LWDA had the highest percent of those not in the labor force with a disability at 40.5 percent, while the East LWDA had the lowest at 34.4 percent.
Youth unemployment for those ages 16 to 24 topped 10 percent in all three LWDA’s in the East Region. The North-east LWDA had the highest youth unemployment rate at 11.3 percent. Southeast LWDA had a youth unemployment rate of 11.1 and the East had a youth unemployment rate of 10.1. Only the East LWDA had a rate lower than the total youth unemployment rate for the East Region, which was 10.6 percent.

Table 13: East Region Labor Force Data

<table>
<thead>
<tr>
<th></th>
<th>Northeast LWDA</th>
<th>East LWDA</th>
<th>Southeast LWDA</th>
<th>East Region</th>
<th>State Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population 2019</td>
<td>512,809</td>
<td>1,247,070</td>
<td>703,321</td>
<td>2,463,200</td>
<td>6,830,325</td>
</tr>
<tr>
<td>Total Population 2020</td>
<td>513,983</td>
<td>1,258,865</td>
<td>711,844</td>
<td>2,484,692</td>
<td>6,886,834</td>
</tr>
<tr>
<td>Female Population 2020</td>
<td>261,760</td>
<td>642,206</td>
<td>365,039</td>
<td>1,269,005</td>
<td>3,528,814</td>
</tr>
<tr>
<td>Labor Force Participation Rate 2018 (5-Year Estimate)</td>
<td>53.9%</td>
<td>58.8%</td>
<td>59.3%</td>
<td>57.8%</td>
<td>61.2%</td>
</tr>
<tr>
<td>Labor Force Participation Rate 2019 (5-Year Estimate)</td>
<td>54.1%</td>
<td>58.9%</td>
<td>59.4%</td>
<td>58.0%</td>
<td>61.4%</td>
</tr>
<tr>
<td>Annual Average Unemployment Rate 2019 Percent</td>
<td>3.9%</td>
<td>3.3%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Annual Average Unemployment Rate 2020 Percent</td>
<td>7.2%</td>
<td>6.8%</td>
<td>7.3%</td>
<td>7.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Educational Attainment 25 Years and Over (2019) SomeCollege Or Higher - Percent</td>
<td>49.9%</td>
<td>53.6%</td>
<td>55.1%</td>
<td>53.2%</td>
<td>55.4%</td>
</tr>
<tr>
<td>Poverty Estimate, All Ages, Percent (2019)</td>
<td>17.5%</td>
<td>15.4%</td>
<td>15.0%</td>
<td>15.7%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Percentage of Unemployed with a Disability (2019)</td>
<td>12.6%</td>
<td>13.0%</td>
<td>12.1%</td>
<td>12.7%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Percent of Those Not in the Labor Force with a Disability (2019)</td>
<td>40.5%</td>
<td>34.4%</td>
<td>35.8%</td>
<td>36.2%</td>
<td>33.7%</td>
</tr>
</tbody>
</table>

Source: U.S. Census, American Community Survey, 2019
### Table 14: East Region Educational Attainment by Race, 2018

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>East Region White Only</th>
<th>East Region Black Only</th>
<th>East Region Hispanic or Latino Only</th>
<th>Statewide White Only</th>
<th>Statewide Black Only</th>
<th>Statewide Hispanic or Latino Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 25 years and over</td>
<td>1,495,824</td>
<td>93,733</td>
<td>46,046</td>
<td>3,641,698</td>
<td>697,227</td>
<td>173,116</td>
</tr>
<tr>
<td>High school graduate only</td>
<td>929,927</td>
<td>63,957</td>
<td>20,504</td>
<td>2,191,041</td>
<td>457,713</td>
<td>81,607</td>
</tr>
<tr>
<td>Percent high school graduate only</td>
<td>62.17%</td>
<td>68.23%</td>
<td>44.53%</td>
<td>60.17%</td>
<td>65.65%</td>
<td>47.14%</td>
</tr>
<tr>
<td>High school graduate or higher</td>
<td>1,292,059</td>
<td>79,246</td>
<td>27,479</td>
<td>3,194,533</td>
<td>595,489</td>
<td>107,877</td>
</tr>
<tr>
<td>Percent high school graduate or higher</td>
<td>86.38%</td>
<td>84.54%</td>
<td>59.68%</td>
<td>87.72%</td>
<td>85.41%</td>
<td>62.31%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>362,132</td>
<td>15,289</td>
<td>6,975</td>
<td>1,003,492</td>
<td>137,776</td>
<td>26,270</td>
</tr>
<tr>
<td>Percent bachelor’s degree or higher</td>
<td>24.21%</td>
<td>16.31%</td>
<td>15.15%</td>
<td>27.56%</td>
<td>19.76%</td>
<td>15.17%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates

### Table 15: East Region Disability Status of Those in the Labor Force, 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Civilian Non-institutional Population</th>
<th>Total Labor Force</th>
<th>Total Employed</th>
<th>Employed W Disability</th>
<th>Employed W/O Disability</th>
<th>Total Unemployed</th>
<th>Unemployed W disability</th>
<th>Unemployed W/O Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast LWDA</td>
<td>301,980</td>
<td>211,457</td>
<td>199,847</td>
<td>16,134</td>
<td>183,713</td>
<td>11,610</td>
<td>2,333</td>
<td>9,277</td>
</tr>
<tr>
<td>East LWDA</td>
<td>736,030</td>
<td>542,938</td>
<td>514,196</td>
<td>32,146</td>
<td>482,050</td>
<td>28,742</td>
<td>4,822</td>
<td>23,920</td>
</tr>
<tr>
<td>Southeast LWDA</td>
<td>393,483</td>
<td>292,064</td>
<td>276,447</td>
<td>18,637</td>
<td>257,810</td>
<td>15,617</td>
<td>2,569</td>
<td>13,048</td>
</tr>
<tr>
<td>East Region</td>
<td>1,431,493</td>
<td>1,046,459</td>
<td>990,490</td>
<td>66,917</td>
<td>923,573</td>
<td>55,969</td>
<td>9,724</td>
<td>46,245</td>
</tr>
<tr>
<td>Tennessee</td>
<td>4,053,247</td>
<td>3,052,526</td>
<td>2,893,064</td>
<td>179,393</td>
<td>2,713,671</td>
<td>159,462</td>
<td>23,420</td>
<td>136,042</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates
### Table 16: East Region Disability Status of Those Not in the Labor Force, 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Civilian Non-institutional Population</th>
<th>Total Not In Labor Force</th>
<th>Not in Labor Force W Disability</th>
<th>Not In Labor Force W/O Disability</th>
<th>% W Disability</th>
<th>% W/O Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast LWDA</td>
<td>301,980</td>
<td>90,523</td>
<td>36,620</td>
<td>53,903</td>
<td>40.5%</td>
<td>59.5%</td>
</tr>
<tr>
<td>East LWDA</td>
<td>736,030</td>
<td>193,092</td>
<td>66,352</td>
<td>126,740</td>
<td>34.4%</td>
<td>65.6%</td>
</tr>
<tr>
<td>Southeast LWDA</td>
<td>393,483</td>
<td>101,419</td>
<td>36,316</td>
<td>65,103</td>
<td>35.8%</td>
<td>64.2%</td>
</tr>
<tr>
<td>East Region</td>
<td>1,431,493</td>
<td>385,034</td>
<td>139,288</td>
<td>245,746</td>
<td>36.2%</td>
<td>63.8%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>4,053,247</td>
<td>1,000,721</td>
<td>337,665</td>
<td>663,056</td>
<td>33.7%</td>
<td>66.3%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

### Table 17: East Region Youth Unemployment, Ages 16-24 in 2019

<table>
<thead>
<tr>
<th>Area</th>
<th>Labor Force</th>
<th>Unemployment</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast LWDA</td>
<td>34,368</td>
<td>3,875</td>
<td>11.3%</td>
</tr>
<tr>
<td>East LWDA</td>
<td>91,602</td>
<td>9,258</td>
<td>10.1%</td>
</tr>
<tr>
<td>Southeast LWDA</td>
<td>44,334</td>
<td>4,943</td>
<td>11.1%</td>
</tr>
<tr>
<td>East Region</td>
<td>170,304</td>
<td>18,076</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2015-2019 American Community Survey, 2019, 5-year estimates
<table>
<thead>
<tr>
<th>Table 18: East Region - Significant Barriers to Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Number of American Indians or Alaskan Natives alone         | 1,263     | 4,005         | 1,703       | 6,971       | 18,189
| Population Ages 15-19                                      | 30,416    | 75,339        | 39,808      | 145,563     | 422,111
| Population Ages 20-24                                      | 33,185    | 84,813        | 43,444      | 161,442     | 458,394
| Population Ages 55+                                        | 166,700   | 362,782       | 188,983     | 718,465     | 1,784,288
| Number of Veterans 2020                                    | 39,483    | 89,342        | 43,727      | 172,552     | 456,197
| Number Below Poverty                                       | 86,237    | 184,750       | 95,168      | 366,155     | 996,930
| Number With Disability                                     | 89,936    | 156,150       | 77,133      | 323,219     | 737,731
| Number of Single Parent Families                           | 12,631    | 28,163        | 15,845      | 56,639      | 184,062
| Probationers and Parolees                                  | 5,623     | 10,935        | 4,697       | 21,255      | 68,394
| Community Correction                                       | 425       | 1,460         | 525         | 2,410       | 7,454
| Mental Health Court Statistics (FY 2020)                   | 4         | 0             | 90          | 94          | 218
| Limited English Speaking                                   | 829       | 5,532         | 3,069       | 9,430       | 38,144
| *Foster Care Services - Youth Aged Out                      | 44        | 153           | 69          | 266         | 717
| Clients In Recovery Courts (2020)                          | 152       | 555           | 188         | 895         | 3,159
| Veterans Recovery Courts                                   | 0         | 16            | 6           | 32          | 208
| In School Youth Experiencing Homelessness in 2019           | 1,214     | 2,261         | 1,987       | 5,462       | 17,228
| TANF 24 Months From Ending Total 2020                      | 106       | 261           | 171         | 538         | 1,773
| Prison and Jail Population Total 2020                      | 2,120     | 3,208         | 2,505       | 7,833       | 26,908

* Counties of commitment, not residence.


Probationers and Parolees, Community Corrections: Dr. Mary Karpos, TN Department of Correction, Community Supervision.

Mental Health Court and Recovery Court Statistics: Rebekah Provost-Emmons, Recovery Court Administrator, Office of Criminal Justice Services, Division of Substance Abuse Services.


Foster Care Services: Dave Aguzzi, Office of Independent Living, TN Department of Children’s Services.

In School Youth Experiencing Homelessness: Josh Carlson, Data Management Division, TN Department of Education.


Listed above are numbers of individuals with significant barriers to employment by LWDA, with region and state totals.
Tennessee’s June 2021 seasonally adjusted unemployment rate was 4.9 percent, a slight decrease from the revised May 2021 rate of 5.0 percent. Over the past year, Tennessee’s seasonally adjusted unemployment rate decreased from 9.3 percent in June 2020 to 4.9 percent in June 2021 while the national rate decreased from 11.1 percent to 5.9 percent. The annual average unemployment rate for the U.S. in 2011 was 8.9 percent and dropped to 8.1 percent in 2020, a decrease of 0.8 of a percentage point. Tennessee’s annual average in 2011 was 9.1 percent and declined to 7.5 percent in 2020, a decrease of 1.6 percentage points, which is more significant than the United States.

Source: TDLWD, Local Area Unemployment Statistics, July 2021

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>8.9%</td>
<td>8.1%</td>
<td>7.4%</td>
<td>6.2%</td>
<td>5.3%</td>
<td>4.9%</td>
<td>4.4%</td>
<td>3.9%</td>
<td>3.7%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>9.1%</td>
<td>8.0%</td>
<td>7.8%</td>
<td>6.6%</td>
<td>5.6%</td>
<td>4.7%</td>
<td>3.7%</td>
<td>3.5%</td>
<td>3.4%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>


West Region Employment and Unemployment

In 2020, the average unemployment rate in the West Region was 8.8 percent, which was above the state average of 7.5 percent. Of the two Metropolitan Statistical Areas in the West Region, the Memphis TN-MS-AR MSA had the highest unemployment rate at 8.8 percent in 220. This was higher than the revised 2019 rate of 4.2 percent. The Jackson, TN MSA had an unemployment rate of 7.1 percent in 2020, up from the revised 2019 rate of 3.5 percent.

Four Micropolitan Statistical Areas are in the West Region. Dyersburg, TN (Dyer County) micropolitan statistical area had the highest unemployment rate at 8.0 percent in 2020, higher than the revised 2019 rate of 4.8 percent. Martin, TN (Weakley County) micropolitan statistical area had the lowest unemployment rate in 2020 at 5.8 percent, higher than the revised 2019 rate of 4.0 percent.

The State of Tennessee creates a monthly report of all unemployment rates by State, Region, County, LWDA, Metropolitan Statistical Area, and Micropolitan Statistical Area called the Labor Force Estimates. This report can be found on the State’s website at: https://www.tn.gov/workforce/general-resources/major-publications0/major-publications-redirect/public-reports-redirect/labor-force-estimates.html

The State of Tennessee also creates a monthly report that provides the nonfarm employment, long-term graphs of the unemployment, and a brief explanation for each major MSA in the Tennessee Labor Market Report. That report can be found on the State’s website at: https://www.tn.gov/workforce/general-resources/major-publications0/major-publications-redirect/public-reports-redirect/labor-market-reports.html
Table 20: West Region Annual Average Unemployment Rates, 2019 to 2020

<table>
<thead>
<tr>
<th>Area</th>
<th>2020 Annual Averages</th>
<th>2019 Annual Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor Force</td>
<td>Employment</td>
</tr>
<tr>
<td>UNITED STATES</td>
<td>160,742,000</td>
<td>147,795,000</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>3,289,426</td>
<td>3,043,894</td>
</tr>
<tr>
<td>WEST REGION</td>
<td>719,663</td>
<td>656,438</td>
</tr>
</tbody>
</table>

Metropolitan Statistical Areas (MSAs)

<table>
<thead>
<tr>
<th></th>
<th>2020 Annual Averages</th>
<th>2019 Annual Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor Force</td>
<td>Employment</td>
</tr>
<tr>
<td>Jackson, TN MSA</td>
<td>64,254</td>
<td>59,691</td>
</tr>
<tr>
<td>Chester County</td>
<td>8,390</td>
<td>7,912</td>
</tr>
<tr>
<td>Crockett County</td>
<td>6,836</td>
<td>6,436</td>
</tr>
<tr>
<td>Madison</td>
<td>49,028</td>
<td>45,343</td>
</tr>
</tbody>
</table>
### County

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Memphis, TN-MS-AR MSA</td>
<td>639,654</td>
<td>583,157</td>
<td>56,497</td>
<td>8.8%</td>
<td>643,951</td>
<td>617,177</td>
<td>26,774</td>
<td>4.2%</td>
<td>643,951</td>
<td>617,177</td>
<td>26,774</td>
<td>4.2%</td>
</tr>
<tr>
<td>Fayette County</td>
<td>18,987</td>
<td>17,774</td>
<td>1,213</td>
<td>6.4%</td>
<td>19,533</td>
<td>18,828</td>
<td>705</td>
<td>3.6%</td>
<td>19,533</td>
<td>18,828</td>
<td>705</td>
<td>3.6%</td>
</tr>
<tr>
<td>Shelby County</td>
<td>447,769</td>
<td>404,507</td>
<td>43,262</td>
<td>9.7%</td>
<td>447,655</td>
<td>429,816</td>
<td>17,839</td>
<td>4.0%</td>
<td>447,655</td>
<td>429,816</td>
<td>17,839</td>
<td>4.0%</td>
</tr>
<tr>
<td>Tipton County</td>
<td>27,498</td>
<td>25,612</td>
<td>1,886</td>
<td>6.9%</td>
<td>28,281</td>
<td>27,191</td>
<td>1,090</td>
<td>3.9%</td>
<td>28,281</td>
<td>27,191</td>
<td>1,090</td>
<td>3.9%</td>
</tr>
<tr>
<td>Arkansas Portion</td>
<td>21,209</td>
<td>19,459</td>
<td>1,750</td>
<td>8.3%</td>
<td>21,242</td>
<td>20,341</td>
<td>901</td>
<td>4.2%</td>
<td>21,242</td>
<td>20,341</td>
<td>901</td>
<td>4.2%</td>
</tr>
<tr>
<td>Mississippi Portion</td>
<td>124,192</td>
<td>115,805</td>
<td>8,387</td>
<td>6.8%</td>
<td>127,239</td>
<td>121,000</td>
<td>6,239</td>
<td>4.9%</td>
<td>127,239</td>
<td>121,000</td>
<td>6,239</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyersburg (Dyer Co.)</td>
<td>15,879</td>
<td>14,603</td>
<td>1,276</td>
<td>8.0%</td>
<td>16,413</td>
<td>15,619</td>
<td>794</td>
<td>4.8%</td>
<td>16,413</td>
<td>15,619</td>
<td>794</td>
<td>4.8%</td>
</tr>
<tr>
<td>Martin (Weakley Co.)</td>
<td>15,456</td>
<td>14,554</td>
<td>902</td>
<td>5.8%</td>
<td>16,087</td>
<td>15,443</td>
<td>644</td>
<td>4.0%</td>
<td>16,087</td>
<td>15,443</td>
<td>644</td>
<td>4.0%</td>
</tr>
<tr>
<td>Paris (Henry Co.)</td>
<td>13,668</td>
<td>12,642</td>
<td>1,026</td>
<td>7.5%</td>
<td>14,170</td>
<td>13,584</td>
<td>586</td>
<td>4.1%</td>
<td>14,170</td>
<td>13,584</td>
<td>586</td>
<td>4.1%</td>
</tr>
<tr>
<td>Union City, TN-KY</td>
<td>14,163</td>
<td>13,176</td>
<td>987</td>
<td>7.0%</td>
<td>14,510</td>
<td>13,792</td>
<td>718</td>
<td>4.9%</td>
<td>14,510</td>
<td>13,792</td>
<td>718</td>
<td>4.9%</td>
</tr>
<tr>
<td>Obion Co.</td>
<td>12,180</td>
<td>11,322</td>
<td>858</td>
<td>7.0%</td>
<td>12,476</td>
<td>11,870</td>
<td>606</td>
<td>4.9%</td>
<td>12,476</td>
<td>11,870</td>
<td>606</td>
<td>4.9%</td>
</tr>
<tr>
<td>Kentucky Portion (Fulton Co.)</td>
<td>1,983</td>
<td>1,854</td>
<td>129</td>
<td>6.5%</td>
<td>2,035</td>
<td>1,923</td>
<td>112</td>
<td>5.5%</td>
<td>2,035</td>
<td>1,923</td>
<td>112</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

Source: TN Department of Labor and Workforce Development, WIRED Division, Local Area Unemployment Statistics

### Middle Region Employment and Unemployment

In 2020, the average unemployment rate in the Middle Region was 7.1 percent, which was below the state average of 7.5 percent. Of the two Metropolitan Statistical Areas in the Middle Region, the Clarksville TN-KY MSA had the higher unemployment rate at 7.6 percent in 2020. This was higher than the revised 2019 rate of 4.2 percent. The Nashville, TN MSA had an unemployment rate of 6.9 percent in 2020, up from the revised 2019 rate of 2.6 percent.

Six Micropolitan Statistical Areas are in the Middle Region. Lewisburg, TN (Lawrence County) micropolitan statistical area had the highest unemployment rate at 9.1 percent in 2020, higher than the revised 2019 rate of 3.5 percent. Cookeville, TN (Jackson County, Overton County, and Putnam County) micropolitan statistical area had the lowest unemployment rate in 2020 at 6.7 percent, higher than the revised 2019 rate of 3.6 percent.

The State of Tennessee creates a monthly report of all unemployment rates by State, Region, County, LWDA, Metropolitan Statistical Area, and Micropolitan Statistical Area called the Labor Force Estimates. This report can be found on the State’s website at: [https://www.tn.gov/workforce/general-resources-major-publications0-major-publications-redirect/public-reports-redirect/labor-force-estimates.html](https://www.tn.gov/workforce/general-resources-major-publications0-major-publications-redirect/public-reports-redirect/labor-force-estimates.html)

The State of Tennessee also creates a monthly report that provides the nonfarm employment, long-term graphs of the unemployment, and a brief explanation for each major MSA in the Tennessee Labor Market Report. That report can be found on the State’s website at: [https://www.tn.gov/workforce/general-resources-major-publications0-major-publications-redirect/public-reports-redirect/labor-market-reports.html](https://www.tn.gov/workforce/general-resources-major-publications0-major-publications-redirect/public-reports-redirect/labor-market-reports.html)
Table 21: Middle Region Annual Average Unemployment Rates, 2019 to 2020

<table>
<thead>
<tr>
<th>Area</th>
<th>2020 Annual Averages</th>
<th>2019 Annual Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor Force</td>
<td>Employment</td>
</tr>
<tr>
<td>UNITED STATES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TENNESSEE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan Statistical Areas (MSAs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarksville, TN-KY MSA</td>
<td>116,852</td>
<td>107,940</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>86,234</td>
<td>79,666</td>
</tr>
<tr>
<td>Kentucky Portion</td>
<td>30,617</td>
<td>28,273</td>
</tr>
<tr>
<td>Nashville-Murfreesboro, TN MSA</td>
<td>1,070,473</td>
<td>996,206</td>
</tr>
<tr>
<td>Cannon County</td>
<td>6,506</td>
<td>6,083</td>
</tr>
<tr>
<td>Cheatham County</td>
<td>21,313</td>
<td>20,113</td>
</tr>
<tr>
<td>Davidson County</td>
<td>402,058</td>
<td>369,787</td>
</tr>
<tr>
<td>Dickson County</td>
<td>26,354</td>
<td>24,799</td>
</tr>
<tr>
<td>Hickman County</td>
<td>11,103</td>
<td>10,458</td>
</tr>
<tr>
<td>Macon County</td>
<td>11,156</td>
<td>10,428</td>
</tr>
</tbody>
</table>

Source: TN Department of Labor and Workforce Development, WIR’ED Division, Local Area Unemployment Statistics
<table>
<thead>
<tr>
<th>County</th>
<th>Residents 2019</th>
<th>Residents 2020</th>
<th>Change</th>
<th>Percent Change</th>
<th>Residents 2018</th>
<th>Residents 2019</th>
<th>Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maury County</td>
<td>49,915</td>
<td>45,854</td>
<td>4,061</td>
<td>8.1%</td>
<td>50,244</td>
<td>48,658</td>
<td>1,586</td>
<td>3.2%</td>
</tr>
<tr>
<td>Robertson County</td>
<td>37,300</td>
<td>35,018</td>
<td>2,282</td>
<td>6.1%</td>
<td>38,227</td>
<td>37,125</td>
<td>1,102</td>
<td>2.9%</td>
</tr>
<tr>
<td>Rutherford County</td>
<td>184,368</td>
<td>171,731</td>
<td>12,637</td>
<td>6.9%</td>
<td>187,178</td>
<td>182,384</td>
<td>4,794</td>
<td>2.6%</td>
</tr>
<tr>
<td>Smith County</td>
<td>9,259</td>
<td>8,701</td>
<td>558</td>
<td>6.0%</td>
<td>9,503</td>
<td>9,218</td>
<td>285</td>
<td>3.0%</td>
</tr>
<tr>
<td>Sumner County</td>
<td>102,069</td>
<td>95,424</td>
<td>6,645</td>
<td>6.5%</td>
<td>104,025</td>
<td>101,247</td>
<td>2,778</td>
<td>2.7%</td>
</tr>
<tr>
<td>Trousdale County</td>
<td>5,383</td>
<td>5,055</td>
<td>328</td>
<td>6.1%</td>
<td>5,527</td>
<td>5,360</td>
<td>167</td>
<td>3.0%</td>
</tr>
<tr>
<td>Williamson County</td>
<td>126,997</td>
<td>120,874</td>
<td>6,123</td>
<td>4.8%</td>
<td>131,365</td>
<td>128,178</td>
<td>3,187</td>
<td>2.4%</td>
</tr>
<tr>
<td>Wilson County</td>
<td>76,694</td>
<td>71,882</td>
<td>4,812</td>
<td>6.3%</td>
<td>78,383</td>
<td>76,285</td>
<td>2,098</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cookeville (Cumber-land Co.)</td>
<td>22,733</td>
<td>20,988</td>
<td>1,745</td>
<td>7.7%</td>
<td>23,320</td>
<td>22,300</td>
<td>1,030</td>
<td>4.4%</td>
</tr>
<tr>
<td>Jackson Co.</td>
<td>19,092</td>
<td>17,603</td>
<td>1,489</td>
<td>7.8%</td>
<td>19,195</td>
<td>18,410</td>
<td>785</td>
<td>4.1%</td>
</tr>
<tr>
<td>Overton Co.</td>
<td>15,374</td>
<td>13,978</td>
<td>1,396</td>
<td>9.1%</td>
<td>15,211</td>
<td>15,211</td>
<td>555</td>
<td>3.5%</td>
</tr>
<tr>
<td>Putnam Co.</td>
<td>20,956</td>
<td>19,293</td>
<td>1,663</td>
<td>7.9%</td>
<td>20,297</td>
<td>20,297</td>
<td>785</td>
<td>3.7%</td>
</tr>
<tr>
<td>Lawrenceburg (Lawrence Co.)</td>
<td>49,004</td>
<td>45,249</td>
<td>3,755</td>
<td>7.7%</td>
<td>49,506</td>
<td>47,873</td>
<td>1,633</td>
<td>3.3%</td>
</tr>
<tr>
<td>Lawrenceburg (MarshallCo.)</td>
<td>25,612</td>
<td>23,620</td>
<td>1,992</td>
<td>7.8%</td>
<td>25,665</td>
<td>24,813</td>
<td>852</td>
<td>3.3%</td>
</tr>
<tr>
<td>Shelbyville (BedfordCo.)</td>
<td>19,782</td>
<td>18,213</td>
<td>1,569</td>
<td>7.9%</td>
<td>20,218</td>
<td>19,542</td>
<td>676</td>
<td>3.3%</td>
</tr>
<tr>
<td>Moore Co.</td>
<td>3,610</td>
<td>3,416</td>
<td>194</td>
<td>5.4%</td>
<td>3,623</td>
<td>3,518</td>
<td>105</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Source: TN Department of Labor and Workforce Development, WIR’ED Division, Local Area Unemployment Statistics

**East Region Employment and Unemployment**

In 2020, the average unemployment rate in the East Region was 7.0 percent, which was below the state average of 7.5 percent. Of the six Metropolitan Statistical Areas in the East Region, the Morristown TN MSA had the highest unemployment rate at 7.3 percent in 2020. This was higher than the revised 2019 rate of 3.8 percent. The Knoxville, TN MSA had the lowest unemployment rate of 6.2 percent in 2020, up from the revised 2019 rate of 3.2 percent.

Five Micropolitan Statistical Areas are in the East Region. Newport, TN (Cocke County) micropolitan statistical area had the highest unemployment rate at 10.2 percent in 2020, up from the revised 2019 rate of 4.5 percent. Athens, TN (MCMinn County) micropolitan statistical area had the lowest unemployment rate in 2020 at 7.8 percent, higher than the revised 2019 rate of 3.8 percent.
The State of Tennessee creates a monthly report of all unemployment rates by State, Region, County, LWDA, Metropolitan Statistical Area, and Micropolitan Statistical Area called the Labor Force Estimates. This report can be found on the State’s website at: https://www.tn.gov/workforce/general-resources/major-publications0/major-publications-redirect/public-reports-redirect/labor-force-estimates.html

The State of Tennessee also creates a monthly report that provides the nonfarm employment, historical graphs of the unemployment, and a brief explanation for each major MSA in the Tennessee Labor Market Report. That report can be found on the State’s website at: https://www.tn.gov/workforce/general-resources/major-publications0/major-publications-redirect/public-reports-redirect/labor-market-reports.html

Table 22: East Region Annual Average Unemployment Rates, 2019 to 2020

<table>
<thead>
<tr>
<th>Area</th>
<th>2020 Annual Averages</th>
<th>2019 Annual Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor Force</td>
<td>Employment</td>
</tr>
<tr>
<td>UNITED STATES</td>
<td>160,742,000</td>
<td>147,795,000</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>3,289,426</td>
<td>3,043,894</td>
</tr>
<tr>
<td>EAST REGION</td>
<td>1,122,581</td>
<td>1,043,464</td>
</tr>
<tr>
<td>Metropolitan Statistical Areas (MSAs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chattanooga, TN-GAMSA</td>
<td>271,915</td>
<td>254,248</td>
</tr>
<tr>
<td>Hamilton County</td>
<td>182,352</td>
<td>169,337</td>
</tr>
<tr>
<td>Marion County</td>
<td>12,344</td>
<td>11,409</td>
</tr>
<tr>
<td>Sequatchie</td>
<td>6,146</td>
<td>5,664</td>
</tr>
</tbody>
</table>

Source: TN Department of Labor and Workforce Development, WIR/ED Division, Local Area Unemployment Statistics
<table>
<thead>
<tr>
<th>County</th>
<th>2022 Population</th>
<th>2020 Population</th>
<th>Change</th>
<th>Change %</th>
<th>Nonfarm Population</th>
<th>Nonfarm Population Change</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia Portion</td>
<td>71,073</td>
<td>67,838</td>
<td>3,235</td>
<td>4.6%</td>
<td>73,070</td>
<td>70,606</td>
<td>2,464</td>
</tr>
<tr>
<td>Cleveland, TN MSA</td>
<td>60,107</td>
<td>56,095</td>
<td>4,012</td>
<td>6.7%</td>
<td>59,872</td>
<td>57,777</td>
<td>2,095</td>
</tr>
<tr>
<td>Bradley County</td>
<td>52,651</td>
<td>49,151</td>
<td>3,500</td>
<td>6.6%</td>
<td>52,426</td>
<td>50,628</td>
<td>1,798</td>
</tr>
<tr>
<td>Polk County</td>
<td>7,455</td>
<td>6,943</td>
<td>512</td>
<td>6.9%</td>
<td>7,446</td>
<td>7,149</td>
<td>297</td>
</tr>
<tr>
<td>Johnson City, TN MSA</td>
<td>90,522</td>
<td>84,426</td>
<td>6,096</td>
<td>6.7%</td>
<td>92,168</td>
<td>88,764</td>
<td>3,404</td>
</tr>
<tr>
<td>Carter County</td>
<td>23,655</td>
<td>22,001</td>
<td>1,654</td>
<td>7.0%</td>
<td>24,090</td>
<td>23,119</td>
<td>971</td>
</tr>
<tr>
<td>Unicoi County</td>
<td>7,083</td>
<td>6,497</td>
<td>586</td>
<td>8.3%</td>
<td>7,040</td>
<td>6,690</td>
<td>350</td>
</tr>
<tr>
<td>Washington County</td>
<td>59,783</td>
<td>55,928</td>
<td>3,855</td>
<td>6.4%</td>
<td>60,905</td>
<td>58,827</td>
<td>2,078</td>
</tr>
<tr>
<td>Kingsport-Bristol, TN-VA MSA</td>
<td>135,045</td>
<td>125,723</td>
<td>9,322</td>
<td>6.9%</td>
<td>137,592</td>
<td>132,626</td>
<td>4,966</td>
</tr>
<tr>
<td>Hawkins County</td>
<td>23,468</td>
<td>21,663</td>
<td>1,805</td>
<td>7.7%</td>
<td>23,903</td>
<td>22,924</td>
<td>979</td>
</tr>
<tr>
<td>Sullivan County</td>
<td>69,352</td>
<td>64,370</td>
<td>4,982</td>
<td>7.2%</td>
<td>70,708</td>
<td>68,109</td>
<td>2,609</td>
</tr>
<tr>
<td>Virginia Portion</td>
<td>42,226</td>
<td>39,690</td>
<td>2,536</td>
<td>6.0%</td>
<td>42,981</td>
<td>41,593</td>
<td>1,388</td>
</tr>
<tr>
<td>Knoxville, TN MSA</td>
<td>426,561</td>
<td>399,982</td>
<td>26,579</td>
<td>6.2%</td>
<td>431,375</td>
<td>417,595</td>
<td>13,780</td>
</tr>
<tr>
<td>Anderson County</td>
<td>34,360</td>
<td>32,049</td>
<td>2,311</td>
<td>6.7%</td>
<td>34,695</td>
<td>33,468</td>
<td>1,227</td>
</tr>
<tr>
<td>Blount County</td>
<td>63,505</td>
<td>59,440</td>
<td>4,065</td>
<td>6.4%</td>
<td>64,072</td>
<td>62,043</td>
<td>2,029</td>
</tr>
<tr>
<td>Campbell County</td>
<td>14,717</td>
<td>13,597</td>
<td>1,120</td>
<td>7.6%</td>
<td>14,869</td>
<td>14,190</td>
<td>679</td>
</tr>
<tr>
<td>Grainger County</td>
<td>9,480</td>
<td>8,793</td>
<td>687</td>
<td>7.2%</td>
<td>9,550</td>
<td>9,165</td>
<td>385</td>
</tr>
<tr>
<td>Knox County</td>
<td>242,643</td>
<td>228,282</td>
<td>14,361</td>
<td>5.9%</td>
<td>245,480</td>
<td>238,396</td>
<td>7,084</td>
</tr>
<tr>
<td>Loudon County</td>
<td>23,572</td>
<td>22,072</td>
<td>1,500</td>
<td>6.4%</td>
<td>23,819</td>
<td>23,017</td>
<td>802</td>
</tr>
<tr>
<td>Morgan County</td>
<td>7,654</td>
<td>7,153</td>
<td>501</td>
<td>6.5%</td>
<td>7,786</td>
<td>7,467</td>
<td>319</td>
</tr>
<tr>
<td>Roane County</td>
<td>23,021</td>
<td>21,508</td>
<td>1,513</td>
<td>6.6%</td>
<td>23,402</td>
<td>22,457</td>
<td>945</td>
</tr>
<tr>
<td>Union County</td>
<td>7,610</td>
<td>7,088</td>
<td>522</td>
<td>6.9%</td>
<td>7,703</td>
<td>7,392</td>
<td>311</td>
</tr>
<tr>
<td>Morristown, TN MSA</td>
<td>52,717</td>
<td>48,880</td>
<td>3,837</td>
<td>7.3%</td>
<td>52,865</td>
<td>50,875</td>
<td>1,990</td>
</tr>
<tr>
<td>Hamblen County</td>
<td>28,020</td>
<td>26,027</td>
<td>1,993</td>
<td>7.1%</td>
<td>28,171</td>
<td>27,090</td>
<td>1,081</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>24,697</td>
<td>22,853</td>
<td>1,844</td>
<td>7.5%</td>
<td>24,694</td>
<td>23,785</td>
<td>909</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Micropolitan Statistical Areas (MCSAs)</th>
<th>2022 Population</th>
<th>2020 Population</th>
<th>Change</th>
<th>Change %</th>
<th>Nonfarm Population</th>
<th>Nonfarm Population Change</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athens (McMinn Co.)</td>
<td>23,393</td>
<td>21,579</td>
<td>1,814</td>
<td>7.8%</td>
<td>23,572</td>
<td>22,683</td>
<td>889</td>
</tr>
<tr>
<td>Dayton (Rhea Co.)</td>
<td>13,011</td>
<td>11,732</td>
<td>1,279</td>
<td>9.8%</td>
<td>13,354</td>
<td>12,599</td>
<td>755</td>
</tr>
<tr>
<td>Greeneville (Greene Co.)</td>
<td>28,769</td>
<td>26,372</td>
<td>2,397</td>
<td>8.3%</td>
<td>29,828</td>
<td>28,451</td>
<td>1,377</td>
</tr>
<tr>
<td>Newport (Cocke Co.)</td>
<td>14,713</td>
<td>13,205</td>
<td>1,508</td>
<td>10.2%</td>
<td>15,024</td>
<td>14,343</td>
<td>681</td>
</tr>
<tr>
<td>Sevierville (Sevier Co.)</td>
<td>53,721</td>
<td>48,540</td>
<td>5,181</td>
<td>9.6%</td>
<td>54,962</td>
<td>53,169</td>
<td>1,793</td>
</tr>
</tbody>
</table>

Source: TN Department of Labor and Workforce Development, WIR'ED Division, Local Area Unemployment Statistics
Workforce Analysis

The Unified or Combined State Plan must include an analysis of the current workforce, including individuals with barriers to employment, as defined in section 3 of WIOA4. This population must include individuals with disabilities among other groups in the State and across regions identified by the State. This includes—

(i) Employment and Unemployment. Provide an analysis of current employment and unemployment data, including labor force participation rates, and trends in the State.

(ii) Labor Market Trends. Provide an analysis of key labor market trends, including across existing industries and occupations.

(iii) Education and Skill Levels of the Workforce. Provide an analysis of the educational and skill levels of the workforce.

(iv) Skill Gaps. Describe apparent ‘skill gaps’
The transportation and material moving occupational group was the largest in the West Region in May 2020, according to the annual Occupational Employment Survey, which provides data on all industries except agriculture, the self-employed, and a few not covered by Tennessee’s unemployment insurance system. Employment was 14.8 percent of total employment in the region and exceeded 100,000 workers, with average entry level wages about at the level of all occupations in the Region ($22,937). Salaries of experienced workers in the group averaged $45,157.

Other major occupational groups employees with greater than five percent of employment in the Region included:

- Office and Administrative Support workers- 94,260 (13.7%)
- Sales and Related workers- 58,860 (8.6%)
- Food Preparation and Serving workers- 53,610 (7.8%)
- Production workers -56,270 (8.2%)
- Healthcare Practitioners and Technical workers -49,870 (7.3%)
- Management workers-40,480 (5.9%)
- Education, Training, and Library workers– 36,100 (5.2%)

Compared to state occupational employment, the West Region has a greater percentage of transportation and material moving employees (14.8 percent vs. 11.4 percent) and smaller percentages of food preparation and serving and sales and related employees and a slightly smaller proportion of production employees (8.6 v. 8.7 percent).

How different are the salaries for the employees in these occupational groups in the West Region compared to the state? For most occupational groups listed above, the West Region median salaries are lower with a few exceptions such as the computer and mathematical occupations. Business and financial occupations and healthcare support paying more in the West compared to the State median wages.
# Table 23: Occupational Employment and Wage Rates (OEWS) for All Major Groups in the West Region in 2020

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Occupation Code</th>
<th>Employment</th>
<th>Entry Level</th>
<th>Median Salary</th>
<th>Experienced Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total All Occupations</td>
<td>000000</td>
<td>688,640</td>
<td>$22,462</td>
<td>$37,128</td>
<td>$58,600</td>
</tr>
<tr>
<td>Architecture and Engineering</td>
<td>170000</td>
<td>7,830</td>
<td>$43,652</td>
<td>$70,814</td>
<td>$89,275</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, and Media</td>
<td>270000</td>
<td>5,070</td>
<td>$24,133</td>
<td>$41,381</td>
<td>$59,294</td>
</tr>
<tr>
<td>Building and Grounds Cleaning and Maintenance</td>
<td>370000</td>
<td>19,490</td>
<td>$19,222</td>
<td>$25,213</td>
<td>$32,479</td>
</tr>
<tr>
<td>Business and Financial Operations</td>
<td>130000</td>
<td>26,630</td>
<td>$37,401</td>
<td>$60,072</td>
<td>$79,444</td>
</tr>
<tr>
<td>Community and Social Services</td>
<td>210000</td>
<td>9,170</td>
<td>$30,031</td>
<td>$44,881</td>
<td>$57,097</td>
</tr>
<tr>
<td>Computer and Mathematical</td>
<td>150000</td>
<td>11,050</td>
<td>$43,192</td>
<td>$69,663</td>
<td>$89,174</td>
</tr>
<tr>
<td>Construction and Extraction</td>
<td>470000</td>
<td>20,620</td>
<td>$28,823</td>
<td>$40,113</td>
<td>$50,916</td>
</tr>
<tr>
<td>Education, Training, and Library</td>
<td>250000</td>
<td>36,100</td>
<td>$26,571</td>
<td>$48,165</td>
<td>$63,765</td>
</tr>
<tr>
<td>Farming, Fishing, and Forestry</td>
<td>450000</td>
<td>1,410</td>
<td>$21,784</td>
<td>$30,077</td>
<td>$39,934</td>
</tr>
<tr>
<td>Food Preparation and Serving Related</td>
<td>350000</td>
<td>53,610</td>
<td>$17,827</td>
<td>$20,310</td>
<td>$25,596</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical</td>
<td>290000</td>
<td>49,870</td>
<td>$37,056</td>
<td>$58,497</td>
<td>$85,745</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>490000</td>
<td>28,000</td>
<td>$30,444</td>
<td>$45,344</td>
<td>$57,422</td>
</tr>
<tr>
<td>Legal</td>
<td>230000</td>
<td>3,550</td>
<td>$33,226</td>
<td>$57,204</td>
<td>$99,349</td>
</tr>
<tr>
<td>Life, Physical, and Social Science</td>
<td>190000</td>
<td>4,560</td>
<td>$38,080</td>
<td>$62,232</td>
<td>$99,126</td>
</tr>
<tr>
<td>Management</td>
<td>110000</td>
<td>40,480</td>
<td>$48,734</td>
<td>$88,444</td>
<td>$130,792</td>
</tr>
<tr>
<td>Office and Administrative Support</td>
<td>430000</td>
<td>94,260</td>
<td>$25,307</td>
<td>$36,329</td>
<td>$45,988</td>
</tr>
<tr>
<td>Personal Care and Service</td>
<td>390000</td>
<td>12,040</td>
<td>$18,006</td>
<td>$23,184</td>
<td>$31,149</td>
</tr>
<tr>
<td>Production</td>
<td>510000</td>
<td>56,270</td>
<td>$24,361</td>
<td>$35,872</td>
<td>$45,619</td>
</tr>
<tr>
<td>Protective Service</td>
<td>330000</td>
<td>22,770</td>
<td>$22,312</td>
<td>$36,266</td>
<td>$50,494</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>410000</td>
<td>58,860</td>
<td>$19,738</td>
<td>$27,492</td>
<td>$50,929</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>530000</td>
<td>101,620</td>
<td>$22,937</td>
<td>$33,335</td>
<td>$45,157</td>
</tr>
</tbody>
</table>

Source: TDLWD, Div Emp Sec, LMI

The median wage is estimated 50th percentile: 50 percent of workers in occupations earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.
Middle Region

The office and administrative support occupational group was the largest in the Middle Region in May 2020, according to the annual Occupational Employment Survey, which provides data on all industries except agriculture, the self-employed, and a few not covered by Tennessee’s unemployment insurance system. Employment was 14 percent of total employment in the region and exceeded 171,640 workers, with average entry level wages about $2,340 more than the average for all occupations in the Region ($23,455). Salaries of experienced workers in the group averaged $47,219.

Other employees with greater than five percent of occupational employment in the Region included:

- Transportation and Material Moving workers – 128,190 (10.5%)
- Food Preparation and Serving workers – 105,110 (8.6%)
- Sales and Related workers – 111,920 (9.2%)
- Production workers – 95,670 (7.9%)
- Management workers – 85,250 (7.0%)
- Healthcare Practitioners and Technical workers – 79,770 (6.5%)
- Business and Financial Operations workers – 70,690 (5.8%)
- Education, Training, and Library workers – 61,200 (5.0%)

Compared to state occupational employment, the Middle Region has a smaller percentage of transportation and material moving employees (10.5 vs. 11.2 percent) and larger proportions of management (7.0 vs. 6.3 percent) and business and financial operations employees (5.8 vs. 4.8 percent).

How different are the salaries for the employees in these occupational groups in the Middle Region compared to the state? The median annual salary for the Middle Region was 104 percent of the state median pay; that is, about four percent or $1,500 higher per year. Several occupational groups in the Middle Region had higher median salaries than the state, notably Architecture and Engineering occupations ($3,015 greater), and Life, Physical, and Social occupations ($2,600 greater).
Table 24: Occupational Employment and Wage Rates (OEWS) for All Major Groups in the Middle Region in 2020

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Occupation Code</th>
<th>Employment</th>
<th>Entry Level Salary</th>
<th>Median Salary</th>
<th>Experienced Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total All Occupations</td>
<td>000000</td>
<td>1,218,170</td>
<td>$23,455</td>
<td>$38,964</td>
<td>$62,859</td>
</tr>
<tr>
<td>Architecture and Engineering</td>
<td>170000</td>
<td>15,180</td>
<td>$43,891</td>
<td>$69,998</td>
<td>$89,250</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, and Media</td>
<td>270000</td>
<td>16,380</td>
<td>$28,225</td>
<td>$49,016</td>
<td>$73,892</td>
</tr>
<tr>
<td>Building and Grounds Cleaning and Maintenance</td>
<td>370000</td>
<td>29,870</td>
<td>$20,247</td>
<td>$27,256</td>
<td>$34,901</td>
</tr>
<tr>
<td>Business and Financial Operations</td>
<td>130000</td>
<td>70,690</td>
<td>$39,743</td>
<td>$60,616</td>
<td>$79,477</td>
</tr>
<tr>
<td>Community and Social Services</td>
<td>210000</td>
<td>15,270</td>
<td>$29,793</td>
<td>$43,326</td>
<td>$53,656</td>
</tr>
<tr>
<td>Computer and Mathematical</td>
<td>150000</td>
<td>33,740</td>
<td>$44,434</td>
<td>$74,049</td>
<td>$95,242</td>
</tr>
<tr>
<td>Construction and Extraction</td>
<td>470000</td>
<td>43,810</td>
<td>$30,364</td>
<td>$41,135</td>
<td>$52,397</td>
</tr>
<tr>
<td>Education, Training, and Library</td>
<td>250000</td>
<td>61,200</td>
<td>$28,123</td>
<td>$48,118</td>
<td>$63,755</td>
</tr>
<tr>
<td>Farming, Fishing, and Forestry</td>
<td>450000</td>
<td>1,980</td>
<td>$22,132</td>
<td>$28,263</td>
<td>$35,692</td>
</tr>
<tr>
<td>Food Preparation and Serving Related</td>
<td>350000</td>
<td>105,110</td>
<td>$17,854</td>
<td>$20,693</td>
<td>$26,459</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical</td>
<td>290000</td>
<td>79,770</td>
<td>$37,112</td>
<td>$60,388</td>
<td>$94,585</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>490000</td>
<td>48,120</td>
<td>$30,321</td>
<td>$45,176</td>
<td>$57,081</td>
</tr>
<tr>
<td>Legal</td>
<td>230000</td>
<td>8,310</td>
<td>$40,931</td>
<td>$71,837</td>
<td>$118,766</td>
</tr>
<tr>
<td>Life, Physical, and Social Science</td>
<td>190000</td>
<td>8,920</td>
<td>$38,260</td>
<td>$59,526</td>
<td>$82,188</td>
</tr>
<tr>
<td>Management</td>
<td>110000</td>
<td>85,250</td>
<td>$52,303</td>
<td>$92,831</td>
<td>$137,004</td>
</tr>
<tr>
<td>Office and Administrative Support</td>
<td>430000</td>
<td>171,640</td>
<td>$25,794</td>
<td>$37,311</td>
<td>$47,219</td>
</tr>
<tr>
<td>Personal Care and Service</td>
<td>390000</td>
<td>21,700</td>
<td>$19,093</td>
<td>$24,504</td>
<td>$33,823</td>
</tr>
<tr>
<td>Production</td>
<td>510000</td>
<td>95,670</td>
<td>$25,757</td>
<td>$36,219</td>
<td>$46,209</td>
</tr>
<tr>
<td>Protective Service</td>
<td>330000</td>
<td>27,710</td>
<td>$23,062</td>
<td>$37,489</td>
<td>$51,445</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>410000</td>
<td>111,920</td>
<td>$20,973</td>
<td>$30,349</td>
<td>$52,658</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>530000</td>
<td>128,190</td>
<td>$23,529</td>
<td>$32,210</td>
<td>$42,054</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor & Workforce Dev, Div Emp Sec, LMI

The median wage is estimated 50th percentile: 50 percent of workers in occupations earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.
East Region

The office and administrative support occupational group was the largest in the East Region in May 2020, according to the annual Occupational Employment Survey, which provides data on all industries except agriculture, the self-employed, and a few not covered by Tennessee’s unemployment insurance system. Employment was 14.5 per- cent of total employment in the region and exceeded 141,500 workers, with average entry level wages about $2,000 more than the average for all occupations in the Region ($23,990). Salaries of experienced workers in the group averaged $43,344.

Other employees with greater than five percent of occupational employment in the Region included:

- Food Preparation and Serving workers– 92,750 (9.5%)
- Production workers -96,390 (9.9%)
- Sales and Related workers- 89,860 (9.2%)
- Transportation and Material Moving - 95,210 (9.4%)
- Healthcare Practitioners and Technical workers -66,460 (6.8%)
- Management workers-56,690 (5.8%)
- Education, Training, and Library workers– 49,750 (5.1%)

Compared to state occupational employment, the East Region has a lower percentage of transportation and mate- rial moving employees (9.8 percent vs. 11.4 percent) and smaller percentages of food preparation and serving and sales and related employees and a slightly higher proportion of production employees (9.9 v. 8.6 percent).

How different are the salaries for the employees in these occupational groups in the East Region compared to the state? The median annual salary for the East Region is 94 percent of the state median pay. Several occupational groups in the East have higher median salaries than the state, notably management ($6,000 higher than the state median), office and administrative occupations ($2,300 greater), sales and related ($2,137 greater), and arts, design, entertainment and sports occupations ($4,000 greater). This last category may be lower due to the lack of professional sports teams in the East Region.
Table 25: Occupational Employment and Wage Rates (OEWS) for All Major Groups in the East Region in 2020

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Occupation Code</th>
<th>Employment</th>
<th>Entry Level Salary</th>
<th>Median Salary</th>
<th>Experienced Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total All Occupations</td>
<td>000000</td>
<td>973,270</td>
<td>$21,915</td>
<td>$35,525</td>
<td>$57,101</td>
</tr>
<tr>
<td>Architecture and Engineering</td>
<td>170000</td>
<td>16,510</td>
<td>$45,789</td>
<td>$77,160</td>
<td>$104,217</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, and Media</td>
<td>270000</td>
<td>8,870</td>
<td>$24,129</td>
<td>$41,044</td>
<td>$63,131</td>
</tr>
<tr>
<td>Building and Grounds Cleaning and Maintenance</td>
<td>370000</td>
<td>29,050</td>
<td>$19,026</td>
<td>$24,408</td>
<td>$30,688</td>
</tr>
<tr>
<td>Business and Financial Operations</td>
<td>130000</td>
<td>39,210</td>
<td>$36,788</td>
<td>$58,426</td>
<td>$81,007</td>
</tr>
<tr>
<td>Community and Social Services</td>
<td>210000</td>
<td>12,330</td>
<td>$28,319</td>
<td>$41,239</td>
<td>$50,623</td>
</tr>
<tr>
<td>Computer and Mathematical</td>
<td>150000</td>
<td>17,990</td>
<td>$42,526</td>
<td>$71,348</td>
<td>$91,826</td>
</tr>
<tr>
<td>Construction and Extraction</td>
<td>470000</td>
<td>34,010</td>
<td>$29,021</td>
<td>$39,850</td>
<td>$51,000</td>
</tr>
<tr>
<td>Education, Training, and Library</td>
<td>250000</td>
<td>49,750</td>
<td>$24,751</td>
<td>$47,886</td>
<td>$62,518</td>
</tr>
<tr>
<td>Farming, Fishing, and Forestry</td>
<td>450000</td>
<td>1,160</td>
<td>$21,333</td>
<td>$33,118</td>
<td>$41,725</td>
</tr>
<tr>
<td>Food Preparation and Serving Related</td>
<td>350000</td>
<td>92,750</td>
<td>$17,789</td>
<td>$20,120</td>
<td>$24,872</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical</td>
<td>290000</td>
<td>66,460</td>
<td>$35,135</td>
<td>$54,679</td>
<td>$86,075</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>490000</td>
<td>41,270</td>
<td>$29,205</td>
<td>$43,486</td>
<td>$55,475</td>
</tr>
<tr>
<td>Legal</td>
<td>230000</td>
<td>4,880</td>
<td>$38,109</td>
<td>$69,597</td>
<td>$106,646</td>
</tr>
<tr>
<td>Life, Physical, and Social Science</td>
<td>190000</td>
<td>8,470</td>
<td>$40,691</td>
<td>$64,956</td>
<td>$97,576</td>
</tr>
<tr>
<td>Management</td>
<td>110000</td>
<td>56,690</td>
<td>$44,039</td>
<td>$82,945</td>
<td>$126,061</td>
</tr>
<tr>
<td>Office and Administrative Support</td>
<td>430000</td>
<td>141,540</td>
<td>$23,990</td>
<td>$33,630</td>
<td>$43,344</td>
</tr>
<tr>
<td>Personal Care and Service</td>
<td>390000</td>
<td>16,850</td>
<td>$18,140</td>
<td>$23,115</td>
<td>$30,723</td>
</tr>
<tr>
<td>Production</td>
<td>510000</td>
<td>96,390</td>
<td>$25,278</td>
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</tr>
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<td>Protective Service</td>
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<td>18,660</td>
<td>$25,178</td>
<td>$38,101</td>
<td>$50,571</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>410000</td>
<td>89,860</td>
<td>$19,680</td>
<td>$26,296</td>
<td>$44,579</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>530000</td>
<td>95,210</td>
<td>$21,750</td>
<td>$30,791</td>
<td>$41,095</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor & Workforce Dev, Div Emp Sec, LMI

The median wage is estimated 50th percentile: 50 percent of workers in occupations earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.
Table 26: State Employment Significantly Increased from Nov 2020 to Nov 2021

<table>
<thead>
<tr>
<th>Industry Title</th>
<th>TN Nov.2021 Employment</th>
<th>TN Nov. 2020 Employment</th>
<th>Over the Year Employment Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nonfarm</td>
<td>3,151,400</td>
<td>3,061,000</td>
<td>90,400</td>
</tr>
<tr>
<td>Total Private</td>
<td>2,704,100</td>
<td>2,618,000</td>
<td>86,100</td>
</tr>
<tr>
<td>Goods Producing</td>
<td>488,000</td>
<td>477,000</td>
<td>11,000</td>
</tr>
<tr>
<td>Service-Providing</td>
<td>2,663,400</td>
<td>2,584,000</td>
<td>79,400</td>
</tr>
<tr>
<td>Private Service Providing</td>
<td>2,216,100</td>
<td>2,141,000</td>
<td>75,100</td>
</tr>
<tr>
<td>Natural Resources and Mining</td>
<td>4,400</td>
<td>4,100</td>
<td>300</td>
</tr>
<tr>
<td>Natural Resources and Mining and Construction</td>
<td>136,000</td>
<td>134,300</td>
<td>1,700</td>
</tr>
<tr>
<td>Construction</td>
<td>131,600</td>
<td>130,200</td>
<td>1,400</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>352,000</td>
<td>342,700</td>
<td>9,300</td>
</tr>
<tr>
<td>Durable Goods</td>
<td>227,500</td>
<td>217,600</td>
<td>9,900</td>
</tr>
<tr>
<td>Non-Durable Goods</td>
<td>124,500</td>
<td>125,100</td>
<td>-600</td>
</tr>
<tr>
<td>Trade, Transportation, and Utilities</td>
<td>667,900</td>
<td>648,900</td>
<td>19,000</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>121,800</td>
<td>115,300</td>
<td>6,500</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>342,100</td>
<td>335,900</td>
<td>6,200</td>
</tr>
<tr>
<td>Transportation Warehousing and Utilities</td>
<td>204,000</td>
<td>197,700</td>
<td>6,300</td>
</tr>
<tr>
<td>Information</td>
<td>46,000</td>
<td>44,100</td>
<td>1,900</td>
</tr>
<tr>
<td>Finance</td>
<td>176,000</td>
<td>170,800</td>
<td>5,200</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>452,800</td>
<td>432,300</td>
<td>20,500</td>
</tr>
<tr>
<td>Educational and Health Services</td>
<td>428,500</td>
<td>434,600</td>
<td>-6,100</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>319,300</td>
<td>291,600</td>
<td>27,700</td>
</tr>
<tr>
<td>Other Services</td>
<td>125,600</td>
<td>118,700</td>
<td>6,900</td>
</tr>
<tr>
<td>Government</td>
<td>447,300</td>
<td>443,000</td>
<td>4,300</td>
</tr>
</tbody>
</table>

Source: CES Data, TDLWD, WIRED Division

(CES: Seasonally non-adjusted)

Current industry employment in the state has increased more than 90,000 employment from November of 2020 to November of 2021, nearly all of that in the private sector. The current employment level surpasses that of February 2020 (3,134,500).(check if seasonally non-adjusted) The industries gaining the most jobs included leisure and hospitality (which had lost significant employment since April of 2020); professional and business services; trade, transportation, and utilities; and manufacturing (especially durable goods). The only industries losing employment over the year were education and health services (likely due to staffing shortages) and durable goods manufacturing. The growth in employment across most industries is providing significant opportunity for workers to re-enter the labor force; if the pandemic resides and the labor force participation rate increases, the economic recovery should continue to grow.
Other State Labor Force Trends

Despite the pandemic downturn, there were positive trends in the economy in 2019-2020. The total number of establishments increased by 3.8 percent and total wages increased by 2.5 percent. Industry annual average wages increased by 6.7 percent; the state median wage increased by 4.3 percent; and the average hourly pay for production workers increased from $19.76 to $20.33. The number of projected job openings in the 2018-2028 decade was expected to be greater than in the previous decade. At the same time, the labor force from 2019 to 2020 decreased by 1.2%.

West Region Labor Force Trends
Like the state, the West Region experienced some positive trends in 2019-2020. The average number of establishments increased by 2.3 percent; total wages increased by 2.4 percent; annual average industry wages increased by 2 percent; median wages increased by 4.2 percent; 18 counties increased their annual industry wages; and projected job openings were expected to be greater through 2028 than in the last decade. During this time, however, the labor force declined by .7 percent, as in June 2020 there were 2.83 people for every advertised job opening.

Currently, in January 2022, there are 1.03 candidates for every job opening on jobs4tn.gov (32,055 candidates and 31,215 openings), indicating a potential labor shortage.

Middle Region Labor Force Trends
Although employment was reduced, the Middle Region did experience positive trends in 2019-2020. The average number of establishments increased by 4.6 percent, total wages increased by 1.5 percent, and the median occupational wage increased by 4.2 percent. Average annual industry wages increased by 4.2 percent. The number of annual average job openings projected for the next ten years is greater than for the previous decade.

Currently, in January 2022, there are 0.52 candidates for every job opening on jobs4tn.gov (34,754 candidates for 67,400 job openings), indicating a labor shortage.

East Region Labor Force Trends
Regional employment decreased five percent from 2019 to 2020, but there were some positive trends. The average number of establishments increased by more than 3 percent; total wages increased by 2.8 percent; and average annual industry wages increased by 4.6 percent. Median occupational wages also increased by 4.6 percent.

Currently, in January 2022, there are 0.71 candidates for every job opening on jobs4tn.gov (32,496 candidates for 45,615 job openings), indicating a labor shortage.
Workforce Analysis

The Unified or Combined State Plan must include an analysis of the current workforce, including individuals with barriers to employment, as defined in section 3 of WIOA4. This population must include individuals with disabilities among other groups5 in the State and across regions identified by the State. This includes—

(i) Employment and Unemployment. Provide an analysis of current employment and unemployment data, including labor force participation rates, and trends in the State.

(ii) Labor Market Trends. Provide an analysis of key labor market trends, including across existing industries and occupations.

(iii) Education and Skill Levels of the Workforce. Provide an analysis of the educational and skill levels of the workforce.

(iv) Skill Gaps. Describe apparent ‘skill gaps’
Education and Skill Levels of the Workforce

Comparison of the Educational Level of Job Postings Vs Candidates

Using job postings from November 2021 in jobs4tn.gov, regional graphs were created showing the educational distribution of candidates with active resumes in the system vs. the educational requirements in the job postings. The difficulty with this analysis is that many job postings do not indicate the level of education required for the job. This analysis compared the education levels in jobs that included them with the education levels of the candidates.

West Region: More candidates had master’s, associate’s, and vocational school certificates than were found in job postings. However, about 25 percent of job postings required a bachelor’s degree, compared to about 14 percent of candidates who had one. About 46 percent of candidates had a high school degree only; jobs requiring high school only were slightly fewer, but many jobs did not list minimum educational requirements. About five percent of candidates had less than a high school diploma.

Middle Region: More candidates than job listings had master’s and associate degrees and vocational certificates. About 27 percent of jobs required a bachelor’s degree, which compared to about 13 percent of the candidates. About 46 percent of candidates had only a high school degree, compared to about 43 percent of jobs requesting them, but many jobs did not specify their educational requirements. Five percent of candidates had no high school degree.
**East Region**: This region had a higher percent of jobs requiring a doctoral degree, likely due to the federal requirement that Oak Ridge National Laboratory post their job openings. Like the other regions, candidates had more master’s and associate’s degrees than requested in job postings. About 23 percent of jobs required a bachelor’s degree; only about 13 percent of jobseekers had one. About 40 percent of job postings requested a high school degree; about 46 percent of candidates had one. Again, about 6 percent of candidates had no high school degree.

In summary, for the jobs posted online which listed educational requirements, fewer candidates had bachelor’s degrees than requested. About half of candidates had a high school degree only, and about 5 percent had no high school degree.
Educational Attainment by Race (age 25 and up): Tables presenting this information are shown earlier in the B section. The latest data available is for 2018. The most recent census data is not available, and the 2019 data was withdrawn from the census site. The Middle Region saw the highest educational attainment for all races, with 30.2 percent of Whites, 25.1 percent of Blacks, and 16.1 percent of Hispanics achieving a bachelor’s degree or above. Concerning those who highest degree was high school or the equivalent, Blacks led with 62.4 percent, followed by Whites with 58.5 percent and Hispanics with 50 percent.

The West Region had the lowest achievement for Hispanics, with 43.5 having a high school degree only and only 13 percent a bachelor’s degree or above. In contrast, Whites with a high school degree only were 59.5 percent, and Blacks 67 percent. 29.1 percent of Whites and 17.3 percent of Blacks had a bachelor’s degree or higher. In the East Region, Blacks again had the highest percent only achieving a high school degree (68.2 percent) with Whites at 62.2 percent; 44.5 percent of Hispanics had a high school degree only. The East Region had the lowest percent of Whites achieving a four-year degree or more (24.2 percent); similarly for Blacks, with 16.3 achieving at this level. However, 15.2 percent of the Hispanic population in the East Region earned a bachelor’s degree or higher, a greater percentage than in the West Region. The White-Black gap in college attainment was lowest in the Middle Region, always at least 5 percent.
Workforce Analysis

The Unified or Combined State Plan must include an analysis of the current workforce, including individuals with barriers to employment, as defined in section 3 of WIOA4. This population must include individuals with disabilities among other groups5 in the State and across regions identified by the State. This includes—

(i) Employment and Unemployment. Provide an analysis of current employment and unemployment data, including labor force participation rates, and trends in the State.

(ii) Labor Market Trends. Provide an analysis of key labor market trends, including across existing industries and occupations.

(iii) Education and Skill Levels of the Workforce. Provide an analysis of the educational and skill levels of the workforce.

(iv) Skill Gaps. Describe apparent ‘skill gaps’
Skill Gaps

The table below from jobs4tn.gov shows, for January 19, the candidates with active resumes in Tennessee compared to the job openings listed on the system, by occupation group. Compared to the jobs being posted, there are groups with significantly fewer candidates than openings. The groups with the biggest gaps (greater than 1,500 and pay above minimum wage) are healthcare practitioners and technical (21,992), management (4,754), computer and mathematical (3,113), and architecture and engineering (1,951). Sales, healthcare support, and business and financial had gaps of more than 1,200. Individual occupations with many more job openings than candidates include RNs, LPNs, and heavy and tractor-trailer truck drivers.

Area Profile for Tennessee

The table below shows the distribution number of job openings advertised online, as well as potential candidates in the workforce system in Tennessee by occupation group on January 19, 2022 (Jobs De-duplication Level 2) Opens in a new browser window.

Table 27: Jobs and Candidates by Occupation Group Table

<table>
<thead>
<tr>
<th>Rank</th>
<th>Occupation Group</th>
<th>Job Openings</th>
<th>Candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Healthcare Practitioners and Technical Occupations</td>
<td>23,608</td>
<td>1,616</td>
</tr>
<tr>
<td>2</td>
<td>Management Occupations</td>
<td>11,652</td>
<td>6,898</td>
</tr>
<tr>
<td>3</td>
<td>Office and Administrative Support Occupations</td>
<td>7,898</td>
<td>13,873</td>
</tr>
<tr>
<td>4</td>
<td>Sales and Related Occupations</td>
<td>7,697</td>
<td>6,224</td>
</tr>
<tr>
<td>5</td>
<td>Transportation and Material Moving Occupations</td>
<td>6,891</td>
<td>6,742</td>
</tr>
<tr>
<td>6</td>
<td>Food Preparation and Serving Related Occupations</td>
<td>6,252</td>
<td>4,463</td>
</tr>
<tr>
<td>7</td>
<td>Production Occupations</td>
<td>5,183</td>
<td>7,479</td>
</tr>
<tr>
<td>8</td>
<td>Computer and Mathematical Occupations</td>
<td>4,785</td>
<td>1,672</td>
</tr>
<tr>
<td>9</td>
<td>Healthcare Support Occupations</td>
<td>3,843</td>
<td>2,567</td>
</tr>
<tr>
<td>10</td>
<td>Business and Financial Operations Occupinations</td>
<td>3,720</td>
<td>2,453</td>
</tr>
<tr>
<td>11</td>
<td>Installation, Maintenance, and Repair Occupations</td>
<td>3,427</td>
<td>2,459</td>
</tr>
<tr>
<td>12</td>
<td>Architecture and Engineering Occupations</td>
<td>3,253</td>
<td>1,312</td>
</tr>
<tr>
<td>13</td>
<td>Personal Care and Service Occupations</td>
<td>2,063</td>
<td>1,997</td>
</tr>
</tbody>
</table>
### West Region Skill Gaps

**Table 28: Top Occupational Groups in West Region**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Occupation Group</th>
<th>Job Openings</th>
<th>Candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Healthcare Practitioners and Technical Occupations</td>
<td>5,086</td>
<td>756</td>
</tr>
<tr>
<td>2</td>
<td>Computer and Mathematical</td>
<td>1,104</td>
<td>773</td>
</tr>
</tbody>
</table>

Of all the occupational groups, the West Region only had two with more job openings than candidates on January 19. There was a gap of 4,330 between the number of job openings and candidates for healthcare practitioners and technical occupations, and a gap of 331 between the number of computer and mathematical job openings and candidates. There were especially large numbers of openings for registered nurses and LPNs, as well as heavy and tractor-trailed truck drivers. However, there were three occupational groups with significant surpluses of candidates over job postings: office and
administrative support (4,426); production workers (1,919), and healthcare support (520). These may need opportunities for retraining.

**Middle Region Skill Gaps**

**Table 29: Top Occupational Groups in Middle Region**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Occupation Group</th>
<th>Job Openings</th>
<th>Candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Healthcare Practitioners and Technical Occupations</td>
<td>10,291</td>
<td>793</td>
</tr>
<tr>
<td>2</td>
<td>Management Occupations</td>
<td>6,035</td>
<td>4,169</td>
</tr>
<tr>
<td>3</td>
<td>Computer and Mathematical</td>
<td>2,723</td>
<td>1,037</td>
</tr>
<tr>
<td>4</td>
<td>Business and Finance</td>
<td>2,222</td>
<td>1,422</td>
</tr>
<tr>
<td>5</td>
<td>Architecture and Engineering</td>
<td>1,497</td>
<td>735</td>
</tr>
<tr>
<td>6</td>
<td>Healthcare Support</td>
<td>1,610</td>
<td>1,185</td>
</tr>
<tr>
<td>7</td>
<td>Education, Training, and Library</td>
<td>867</td>
<td>598</td>
</tr>
</tbody>
</table>

Seven occupational groups in the Middle Region are experiencing shortages of skilled personnel. The gap between healthcare practitioners’ jobs and candidates is 9,498; computer and mathematical jobs are short by 1,686 candidates; and business and finance by 800. There were no occupational groups with significant surplus candidates in the Middle Region.

**East Region Skill Gaps**

**Table 30: Top Occupational Groups in East Region**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Occupation Group</th>
<th>Job Openings</th>
<th>Candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Healthcare Practitioners and Technical Occupations</td>
<td>8,237</td>
<td>802</td>
</tr>
<tr>
<td>2</td>
<td>Architecture and Engineering</td>
<td>766</td>
<td>474</td>
</tr>
<tr>
<td>3</td>
<td>Computer and Mathematical</td>
<td>958</td>
<td>828</td>
</tr>
<tr>
<td>4</td>
<td>Education, Training, and Library</td>
<td>656</td>
<td>507</td>
</tr>
<tr>
<td>5</td>
<td>Life, Physical, and Social Science</td>
<td>363</td>
<td>301</td>
</tr>
</tbody>
</table>

This table displays the five occupational groups with candidates than job openings on January 19. The region was facing a shortage of healthcare practitioners of 7,435 candidates; 474 shortage in the architecture and engineering; 130 in computer and mathematical applicant; and 62 in the life, physical and social science group. Occupations with the greatest differences in the number of candidates vs. the number of job openings can be found in the Area Profile section of jobs4tn.
Several occupational groups in the East Region have a significant surplus of job candidates over job openings. These include Office and Administrative Support candidates (surplus of 3,670); Transportation and material moving occupations (surplus of 946); production occupations (1,713); and construction and extraction (1,151). Some of these workers may need to gain skills to move into occupations in greater demand in their region.

**Effects of the Pandemic on the Tennessee Labor Force**

An analysis of the continued unemployment claims received by Tennesseans by race, ethnicity, gender and veteran status sheds light on the effects of the pandemic and the need for workforce services to focus on those groups who continue to be most affected.

<table>
<thead>
<tr>
<th><strong>Table 31: Continued Claims Received in Tennessee, Selected Time Periods 2020-2021</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Total Continued Claims, All Types</td>
</tr>
<tr>
<td><strong>By Race</strong></td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
</tr>
<tr>
<td>Race Unknown</td>
</tr>
<tr>
<td>(Two or more races)</td>
</tr>
<tr>
<td><strong>By Gender</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>NA</td>
</tr>
<tr>
<td><strong>By Ethnicity</strong></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
</tr>
<tr>
<td><strong>By Veteran Status</strong></td>
</tr>
<tr>
<td>Veteran</td>
</tr>
<tr>
<td>Non-Veteran</td>
</tr>
<tr>
<td>Information not available</td>
</tr>
</tbody>
</table>

Source: TDLWD, WIRED, TN PROMIS Database

The number of continued claims was reviewed for April 2020 (the period in the pandemic with the highest unemployment rate), December 2020, and December 2021. The final column in the table displays the percentage of individuals in the
population of Tennessee in 2020. White Tennesseans had a high rate of receipt of claims in April 2020, which declined as the economy improved through December 2021 as more returned to work. Black workers received continued claims at a higher rate than their share of the population, and their share of the total number of claims increased through December of 2021. Hispanic/Latino individuals received a smaller percentage of claims than their share of the population. More females than males were paid continued claims during all time periods. Information was not available by race and gender. Veterans made up more than eight percent of the population, but only about four percent were receiving claims.

Michele Holder, Janelle Jones, and Thomas Masterson researched the effects on Black women’s employment of the early part of the pandemic. Their research suggests that their greatest employment losses were cashier jobs in the hotel and restaurant industry and childcare worker jobs in the healthcare and social services industry. These industries had significant losses in employment in the early pandemic. In Tennessee, cashiers and childcare workers were among the top 20 occupations with the highest number of claims filed in mid-2021. In the East, Middle, and West Regions, many of the claims filed were by low-wage workers in the leisure and hospitality industries who now may need to upgrade their skills to re-enter the workforce.

More granular information on outcomes by population groups are not currently available for workforce programs except for adult education. See the table below.

Adult Education HISET Participants, PY 21

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Students</strong></td>
<td>1663</td>
<td>1531</td>
</tr>
<tr>
<td><strong>Hispanic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>161</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td><strong>American Indian</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td><strong>Asian</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>291</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>224</td>
<td></td>
</tr>
<tr>
<td><strong>Pacific</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>White</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>865</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>874</td>
<td></td>
</tr>
<tr>
<td><strong>Multi-race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

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