Tennessee Higher Education Commission 2020-21
Commission Members

Mr. Evan Cope, **Chair**, Murfreesboro (Middle Tennessee)

Dr. Nancy Dishner, Jonesborough (East Tennessee)

Ms. Pam Koban, Nashville (Middle Tennessee)

Mr. Jay Moser, Jefferson City (East Tennessee)

Ms. Tara Scarlett, Nashville (Middle Tennessee)

Mr. Vernon Stafford, Jr., Collierville (West Tennessee)

Mr. Frank L. Watson, Jr., Memphis (West Tennessee)

Mayor A C Wharton, Jr., **Secretary**, Memphis (West Tennessee)

Ms. Dakasha Winton, Chattanooga (East Tennessee)

Mr. Tre Hargett, Secretary of State

Mr. David H. Lillard, Jr., State Treasurer

Mr. Justin P. Wilson, State Comptroller

Dr. Sara Morrison, Executive Director, State Board of Education, non-voting ex-officio

Dawson Hassler, Tennessee Tech University, voting student member
Contents

Tennessee Higher Education Commission 2020-21 Commission Members................................................................. 3
List of Tables  ................................................................................................................................................................ 5
List of Figures .............................................................................................................................................................. 5
Executive Summary ......................................................................................................................................................... 6
Introduction .................................................................................................................................................................. 7
Data and Methods ........................................................................................................................................................ 8
COVID-19 and Implications for Supply and Demand Analyses.................................................................................. 11
Degrees Produced and Expected ................................................................................................................................ 14
State Workforce Needs .................................................................................................................................................. 18
Top Growing Occupations by Region .......................................................................................................................... 20
Oversupplied Programs .................................................................................................................................................. 30
Tennessee Providers for In-Demand Occupations ......................................................................................................... 33
Limitations ..................................................................................................................................................................... 36
Conclusions .................................................................................................................................................................... 36
Appendix A: Wage Data by CIP Code and Degree Level .............................................................................................. 38
Appendix B: Institutions Included in IPEDS Degree Production Data (Table 3) ............................................................ 40
List of Tables

Table 1: Highest Number of Claims Filed by In-Demand Occupation .......................................................... 12
Table 2: Highest Percent of Claims Filed to 2020 Employment for In-Demand Occupations ....................... 12
Table 3: Degrees Produced and Expected by Tennessee Institutions, 2015-2020 ........................................ 15
Table 4: Thresholds for In Demand Occupations, by Region ......................................................................... 18
Table 5: Top 25 High-Demand Occupations by Projected Growth- Tennessee ........................................... 19
Table 6: Top 15 High-Demand Occupations by Projected Growth- Greater Memphis ............................... 21
Table 7: Top 15 High-Demand Occupations by Projected Growth- Northwest ........................................... 22
Table 8: Top 15 High-Demand Occupations by Projected Growth- Southwest ........................................... 23
Table 9: Top 15 High-Demand Occupations by Projected Growth- Northern Middle ............................... 24
Table 10: Top 15 High-Demand Occupations by Projected Growth- Southern Middle ............................... 25
Table 11: Top 15 High-Demand Occupations by Projected Growth- Upper Cumberland ........................... 26
Table 12: Top 15 High-Demand Occupations by Projected Growth- East .................................................... 27
Table 13: Top 15 High-Demand Occupations by Projected Growth- Southeast .......................................... 28
Table 14: Top 15 High-Demand Occupations by Projected Growth- Northeast .......................................... 29
Table 15: Oversupplied Programs ................................................................................................................ 30
Table 16: Employment rates for the Academic Programs for the Top 25 Occupations ................................. 32

List of Figures

Figure 1: Map of LWDA Regions ............................................................................................................. 20
Executive Summary

This year’s Academic Supply and Occupational Demand report incorporates several meaningful changes from prior years’ reports. The Tennessee Higher Education Commission (THEC) and Tennessee Department of Labor and Workforce Development (TDLWD) worked to update the way in which we identify “in-demand” occupations found in Table 4. THEC and TDLWD made these updates in order to bring greater alignment between this report and the LEAP report produced by Tennessee’s Department of Economic and Community Development (ECD).

THEC has also updated the way in which we estimate degrees produced and expected to be produced in the coming year. This new method favors simplicity and factors in an average annual growth rate to estimate degree production for the coming year. These data can be found in Section II, Degrees Produced and Expected.

Tennesseans should take away two things from this report: first, we need to continue to educate and upskill our workforce; second, there are opportunities for Tennesseans of all skill levels and education to participate in the Tennessee economy.

This report:

- **Highlights updates to the methods behind the “in-demand” identification process.**
  - These updates bring our data into 100% alignment with the ECD “in-demand occupation” definition.
- **Provides important caveats about the data created by the ongoing COVID-19 pandemic.**
  - The recession caused by this ongoing pandemic impacted many occupations, including some that appear in the in-demand section of this report.
- **Provides a five-year snapshot of degrees produced by all public, private, and proprietary institutions in Tennessee. These analyses include updates on trends in the academic fields for which credentials have been awarded.**
  - Awards granted in Tennessee have, on average, increased annually over the past five years.
  - Students are changing the types of degrees they are earning. The number of students earning STEM awards is increasing more rapidly, while several other degree offerings, such as English, Philosophy, and Education, have decreased in production.
- **Lists the top 25 occupations that are in-demand within the state, by growth rate.**
- **Lists the top 15 occupations for each region within the state, by growth rate.**
- **Identifies programs for which there are more credentials awarded than jobs calculated to be available, otherwise known as “Oversupplied programs”.**
- **Reports the employment rates for programs of study associated with in-demand occupations.**
Introduction

This report is prepared pursuant to Tennessee Code Annotated § 49-7-112(b), which directs the Tennessee Higher Education Commission (THEC) to “produce an annual report regarding state workforce need projections and credential production.”

The 2021 Academic Supply and Occupational Demand report has several notable updates. This year, THEC revamped and revised the Academic Supply and Occupational Demand report to create a product that is more intuitive, well-aligned, specific, and actionable.

This report is the result of a collaboration between THEC, the Tennessee Department of Labor and Workforce Development (TDLWD), and the Department of Economic and Community Development (ECD). The inclusion of ECD among the partners in this report represents over a year of planning and coordinating to create alignment between our respective two reports\(^1\) that measure occupational demand in the state.

THEC, TDLWD, and ECD studied discrepancies in data sources, methods, and units of analysis between the two reports with an eye towards bringing these two reports closer in alignment. In Summer 2020, all three agencies agreed to adopt the same data and methods for studying occupational demand within the state. The 2021 Academic Supply and Occupational Demand report represents the first time in the report’s history that the occupational data listed within are 100% aligned with ECD’s LEAP report. The reimagining of this report brings about greater clarity and purpose to the data within, as well as greater alignment and collaboration between agencies tasked with workforce planning at the statewide level.

We believe this change is both significant and meaningful. Seamless alignment between these reports provides a unified message and clear directions for the future of our state. It changes the way policymakers, workforce planners, and individuals think about, and prepare for, the future.

THEC continues to work with the named partners here, as well as other state agencies, to create relevant data and analysis that Tennesseans can use to plan for the future of our workforce. This work can guide the future of workforce planning at both the state and regional level.

---

This report is divided into five sections:

- **COVID-19 and Implications for Supply and Demand Analyses** highlights the limitations of supply and demand analyses during the tumultuous economic circumstances created by the ongoing COVID-19 pandemic.

- **Degrees Produced and Expected** presents historical production and a one-year projection of postsecondary credentials to be awarded by public, private, and proprietary institutions in Tennessee through 2021 using data from the Integrated Postsecondary Educational Data System (IPEDS).

- **State Workforce Needs** identifies the top 25 high-demand occupations in terms of projected annual growth in Tennessee through 2028. Additionally, this section lists the top 15 occupations by projected growth through 2026 by region. This section also lists the most oversupplied programs of study in Tennessee, for which there are substantially more postsecondary graduates than job opportunities.

- **Employment Rates for Programs of Study** displays the employment data for students graduating from programs of study that lead to in-demand jobs.

- **Limitations and Conclusions** describes the caveats in these analyses and summarizes the key takeaways of the report.

### Data and Methods

**Academic Supply Projections**

Postsecondary credentials are projected through academic year 2021, based on historical data for 2015-2020. The institutions included in these projections are public, private, and proprietary institutions in Tennessee that award postsecondary certificates, associate's degrees, or bachelor's degrees.\(^2\) THEC used historical data from Integrated Postsecondary Education Data System (IPEDS).\(^3\)

**Occupational Demand Projections**

TDLWD projected occupational demand by Standard Occupation Classification (SOC) code. The U.S. Bureau of Labor Statistics provides information about the education and training required for specific occupations across the state. These education and training requirements reflect what is typically observed for an employee in each occupation, though exceptions exist. Except where otherwise noted, any mention of “in-demand” in this report refers to the 25 highest-demand occupations by average annual growth listed in Table 5.

---

\(^2\) Only certificates, associate's degrees, and bachelor's degrees are included in the analysis to better align this report with Tennessee's Drive to 55 initiative, which set the goal of increasing Tennessee's educational attainment to 55% by 2025. Degrees awarded show only awards given for first majors.

\(^3\) IPEDS is a federal dataset containing information about higher education institutions, including student demographics, program offerings, and completion data. Data are available at [https://nces.ed.gov/ipeds/](https://nces.ed.gov/ipeds/)
One of the primary data sets used to identify workforce demand is Tennessee’s long-term occupational projections, including expected annual total openings. These data come from the Department of Labor and Workforce Development. The openings consist of those created by growth and by occupational separations. Additional criteria including real-time labor market information from Tennessee’s jobs database were used to present a more comprehensive picture of occupations in demand and their characteristics. More information on the occupational selection process can be found in Table 4.

The average annual occupational projections are then compared to the number of people being trained in Tennessee in related programs of study to determine if shortages of workers in certain occupations are expected (Table 15). Data for academic program completers come from Tennessee’s State Longitudinal Data System (SLDS).

The relationship between education requirements and occupation is most direct for highly specialized fields, such as those requiring a specific certificate or an advanced degree. Conversely, many fields requiring a bachelor’s are less clearly defined, as those who hold a bachelor’s often have diverse employment opportunities in a variety of fields.

**Wage Data by Classification of Instructional Programs (CIP) Code**

Wage data by Classification of Instructional Program (CIP) code tables are created using Tennessee’s State Longitudinal Data System (SLDS), also known as P20 Connect. Detailed educational program outcome information within programs of study can be found in the appendix. With increasing concern about degree value, the appendix lists CIP-level wage data for graduates of 100 public, private, and proprietary schools across Tennessee, including the name of each program, its CIP code, and the average wage by program for those earning wages in Tennessee and not enrolled in school. Programs differ widely in the average wages of graduates as they enter the workforce.
Section One: COVID-19 and Implications for Supply and Demand Analyses
COVID-19 and Implications for Supply and Demand Analyses

This report highlights occupations that are in demand for Tennessee and the nine local workforce development areas (LWDAs) using three metrics: projected job openings, current job postings, and current hiring patterns. These data measure demand in the average year.

The COVID-19 pandemic has had a tremendous impact on the economy and continues to do so. This section is special to our report this year and highlights areas where the in-demand occupations listed in this report intersect with high levels of unemployment insurance claims in 2020. These claims were made in large part due to business closures arising from the COVID-19 pandemic, as reported by TDLWD.

In March 2020, the Tennessee economy experienced significant changes due to the COVID-19 pandemic. Business closures, related to stay-at-home orders and declines in customers, forced many Tennesseans out of work. Unemployment in Tennessee grew to 15.5 percent in April 2020, up from 3.2 percent in March 2020. Many of these layoffs, though, were temporary, as cities attempted to keep people home and enforce social distancing through short-term, stay-at-home orders.

Data from the Federal Reserve Bank of St. Louis shows that real personal consumption expenditures (PCE), a measure of consumer spending for items such as a car or groceries, fell 18.1 percent between February and April of 2020. Even as places have begun to re-open, many consumers have been slow to spend money, and PCE has yet to return to pre-recession levels from February 2020.

The effect of stay-at-home orders and reduced consumer spending was experienced disproportionately across industries. While the unemployment rate improved to 5.3% as of November 2020, it remains notably higher than pre-COVID-19 unemployment rates at 3.2 percent. Job losses particularly impacted the leisure and hospitality industry.

In-Demand Occupations Affected by COVID-19

Below we highlight occupations that have been disproportionately affected by the COVID-19 pandemic, as seen in TDLWD’s unemployment insurance claims data.

Table 1 highlights the occupations that are in-demand at the statewide level, as defined in this report, that also had a high number of unemployment insurance claims for the week ending June 27, 2020.

---

7 Ibid.
In-demand occupations that have experienced high numbers of claims include laborers, customer service representatives, heavy- and tractor-trailer drivers, and inspectors.

**Table 1**: Highest Number of Claims Filed by In-Demand Occupation

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Occupation Title</th>
<th>2020 Employment</th>
<th>Total Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>53-7062</td>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>99,080</td>
<td>8,331</td>
</tr>
<tr>
<td>43-4051</td>
<td>Customer Service Representatives</td>
<td>65,420</td>
<td>6,056</td>
</tr>
<tr>
<td>53-3032</td>
<td>Heavy and Tractor-Trailer Truck Drivers</td>
<td>72,800</td>
<td>2,929</td>
</tr>
<tr>
<td>51-9061</td>
<td>Inspectors, Testers, Sorters, Samplers, and Weighers</td>
<td>14,650</td>
<td>2,659</td>
</tr>
</tbody>
</table>

Note: Estimated 2020 employment must be >100. Occupations that were not highlighted as in-demand in this report have been removed from the table. Limited to demand occupations as identified at statewide level.

**Table 2** displays the in-demand occupations with the highest percent of claims as a percent of estimated 2020 employment. This table highlights occupations that may have lower overall employment than those highlighted in Table 1 but had high claims numbers relative to the occupational size. This applied to only one occupation in our statewide in-demand analysis - Chefs and Head Cooks.

**Table 2**: Highest Percent of Claims Filed to 2020 Employment for In-Demand Occupations

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Occupation Title</th>
<th>Estimated 2020 Employment</th>
<th>Claims Filed as % of 2020 Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-1011</td>
<td>Chefs and Head Cooks</td>
<td>2,250</td>
<td>82.50%</td>
</tr>
</tbody>
</table>

Notes: Estimated 2020 employment must be >100. This table is limited to occupations highlighted as in-demand at the statewide level in this report. Limited to demand occupations as identified at statewide level.

Future supply and demand reports will encompass data reflecting the COVID-19 period and will address the influence of the pandemic on in-demand analyses. This is important because while the occupations that THEC/TDLWD highlights as in-demand in this report clearly offer viable income options for Tennesseans, some of them are also volatile. The occupations listed in this section clearly met the thresholds to be an in-demand occupation. The data suggested these occupations were growing at above average rates and paying decent wages.

In reality, newer data tells us that people in these occupations experienced high levels of unemployment and disruptions to their livelihoods. We include this section in order to be as transparent as possible with the data we have and to acknowledge areas where our historical data does not quite match reality.

For a more detailed report on the subject, or to see the full tables listed here, please see [Tennessee Department of Labor and Workforce Development’s 2019-2020 Reference Guide: Tennessee’s Economy](#).

---

8 Standard Occupation Classification  
9 Standard Occupation Classification
Section Two:
Degrees Produced and Expected
This section explores the degrees produced and expected to be produced by institutions in Tennessee over the 2015-2020 period.

The awards, degrees, and credentials that will help us realize the vision of the Drive to 55\textsuperscript{10} are multifaceted and come from many sources. THEC analyzed graduation data from IPEDS to better understand the number of awards produced and types of academic programs Tennesseans are graduating from.

\textsuperscript{10} The Drive to 55 is an attainment goal set by Governor Haslam. By 2025, Tennessee hopes to have at least 55% of its adult population (25-64) with a postsecondary credential or workforce-relevant equivalent.
Table 3 below highlights the five-year raw count of undergraduate degrees produced by institutions in the state of Tennessee. These data included all Tennessee institutions reporting to IPEDS.\textsuperscript{11} Degrees produced are bucketed at the two-digit classification of instructional programs (CIP) level. In addition to the five-year count, the table shows the average annual growth rate over this period and the projected awards for the 2020 school year.\textsuperscript{12}

These data show an upward trend in degree production. Overall award production at the sub-baccalaureate level within the state has increased 0.8\% annually over the past five years, on average.\textsuperscript{13} This growth is an important factor in Tennessee’s pursuit of the Drive to 55.

Just as pivotal as the number of awards are the skills and proficiencies that academic programs are training Tennesseans in. While overall award production continues to trend upward, there are differences within programs. Some programs, like construction, production, and communications, are all growing at rapid rates. Academic programs related to STEM, like architecture, engineering, and computer information sciences, have also grown over the past five years.

Yet not all programs have experienced growth in award production over this five-year time period. Programs experiencing declines in award production include English, philosophy, family and consumer sciences, and education. Many of the programs experiencing declines during this time period are non-STEM related.

The distinction in growth trends between these two general categories may be related to concerted efforts to push for more STEM-related awards.

\textsuperscript{11} The list of IPEDS reporting institutions included in these data is available in Appendix B. 
\textsuperscript{12} Estimates shown are calculated by applying the average annual growth rate to the most recent data available. 
\textsuperscript{13} Some academic programs, like law, generally require graduate degrees. Given the exclusion of degrees above the baccalaureate level, such programs have low counts in the table below.
### Table 3: Degrees Produced and Expected by Tennessee Institutions, 2015-2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Trades</td>
<td>231</td>
<td>270</td>
<td>337</td>
<td>361</td>
<td>413</td>
<td>15.6%</td>
<td>478</td>
</tr>
<tr>
<td>Transportation and Materials Moving</td>
<td>299</td>
<td>403</td>
<td>391</td>
<td>593</td>
<td>441</td>
<td>10.2%</td>
<td>486</td>
</tr>
<tr>
<td>Precision Production</td>
<td>908</td>
<td>993</td>
<td>1,080</td>
<td>1,296</td>
<td>1,300</td>
<td>9.4%</td>
<td>1,422</td>
</tr>
<tr>
<td>Communications Technologies/Technicians and Support Services</td>
<td>303</td>
<td>342</td>
<td>337</td>
<td>394</td>
<td>415</td>
<td>8.2%</td>
<td>449</td>
</tr>
<tr>
<td>Architecture and Related Services</td>
<td>60</td>
<td>55</td>
<td>60</td>
<td>66</td>
<td>78</td>
<td>6.8%</td>
<td>83</td>
</tr>
<tr>
<td>Engineering*</td>
<td>1,414</td>
<td>1,573</td>
<td>1,714</td>
<td>1,839</td>
<td>1,769</td>
<td>5.8%</td>
<td>1,871</td>
</tr>
<tr>
<td>Computer and Information Sciences and Support Services*</td>
<td>1,262</td>
<td>1,209</td>
<td>1,232</td>
<td>1,471</td>
<td>1,551</td>
<td>5.3%</td>
<td>1,633</td>
</tr>
<tr>
<td>Parks Recreation Leisure and Fitness Studies</td>
<td>1,663</td>
<td>1,887</td>
<td>2,001</td>
<td>2,052</td>
<td>2,032</td>
<td>5.1%</td>
<td>2,136</td>
</tr>
<tr>
<td>Area Ethnic Cultural Gender and Group Studies</td>
<td>59</td>
<td>70</td>
<td>65</td>
<td>82</td>
<td>72</td>
<td>5.1%</td>
<td>76</td>
</tr>
<tr>
<td>Engineering Technologies and Engineering-related Fields*</td>
<td>1,345</td>
<td>1,501</td>
<td>1,575</td>
<td>1,576</td>
<td>1,591</td>
<td>4.3%</td>
<td>1,659</td>
</tr>
<tr>
<td>Natural Resources and Conservation*</td>
<td>202</td>
<td>231</td>
<td>250</td>
<td>226</td>
<td>234</td>
<td>3.7%</td>
<td>243</td>
</tr>
<tr>
<td>Liberal Arts and Sciences General Studies and Humanities</td>
<td>8,600</td>
<td>9,448</td>
<td>9,802</td>
<td>10,380</td>
<td>9,728</td>
<td>3.1%</td>
<td>10,032</td>
</tr>
<tr>
<td>Agriculture Operations and Related Sciences *</td>
<td>631</td>
<td>732</td>
<td>715</td>
<td>713</td>
<td>711</td>
<td>3.0%</td>
<td>733</td>
</tr>
<tr>
<td>Communication Journalism and Related Programs</td>
<td>1,431</td>
<td>1,466</td>
<td>1,578</td>
<td>1,553</td>
<td>1,609</td>
<td>3.0%</td>
<td>1,657</td>
</tr>
<tr>
<td>Visual and Performing Arts</td>
<td>2,307</td>
<td>2,296</td>
<td>2,379</td>
<td>2,457</td>
<td>2,575</td>
<td>2.8%</td>
<td>2,647</td>
</tr>
<tr>
<td>Public Administration and Social Service Professions</td>
<td>675</td>
<td>709</td>
<td>662</td>
<td>751</td>
<td>742</td>
<td>2.4%</td>
<td>760</td>
</tr>
<tr>
<td>Legal Professions and Studies</td>
<td>132</td>
<td>151</td>
<td>124</td>
<td>129</td>
<td>140</td>
<td>1.5%</td>
<td>142</td>
</tr>
<tr>
<td>Biological and Biomedical Sciences*</td>
<td>1,575</td>
<td>1,535</td>
<td>1,696</td>
<td>1,626</td>
<td>1,652</td>
<td>1.2%</td>
<td>1,672</td>
</tr>
<tr>
<td>Personal and Culinary Services</td>
<td>2,009</td>
<td>2,070</td>
<td>2,174</td>
<td>2,000</td>
<td>2,074</td>
<td>0.8%</td>
<td>2,091</td>
</tr>
</tbody>
</table>

¹⁴ While all 2020 degrees have been awarded by the release of this report, data are not yet available for the year in IPEDS, requiring an estimate for 2020 degrees using previous years' growth.
### Table 3 Cont’d

<table>
<thead>
<tr>
<th>Program</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Compound Annual Growth Rate</th>
<th>2020 Estimated Awards&lt;sup&gt;15&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences</td>
<td>1,911</td>
<td>1,894</td>
<td>1,881</td>
<td>1,870</td>
<td>1,950</td>
<td>0.5%</td>
<td>1,960</td>
</tr>
<tr>
<td>Health Professions and Related Programs</td>
<td>12,882</td>
<td>13,307</td>
<td>13,617</td>
<td>13,096</td>
<td>12,680</td>
<td>-0.4%</td>
<td>12,630</td>
</tr>
<tr>
<td>Homeland Security Law Enforcement Firefighting and Related Protective Service</td>
<td>1,644</td>
<td>1,696</td>
<td>1,780</td>
<td>1,650</td>
<td>1,617</td>
<td>-0.4%</td>
<td>1,610</td>
</tr>
<tr>
<td>Business Management Marketing and Related Support Services</td>
<td>8,294</td>
<td>8,394</td>
<td>8,548</td>
<td>8,266</td>
<td>8,128</td>
<td>-0.5%</td>
<td>8,087</td>
</tr>
<tr>
<td>Psychology</td>
<td>1,837</td>
<td>1,884</td>
<td>1,861</td>
<td>1,817</td>
<td>1,789</td>
<td>-0.7%</td>
<td>1,777</td>
</tr>
<tr>
<td>Multi/Interdisciplinary Studies</td>
<td>1,440</td>
<td>1,624</td>
<td>1,689</td>
<td>1,437</td>
<td>1,350</td>
<td>-1.6%</td>
<td>1,328</td>
</tr>
<tr>
<td>Mechanic and Repair Technologies/Technicians</td>
<td>3,188</td>
<td>3,138</td>
<td>3,348</td>
<td>3,013</td>
<td>2,954</td>
<td>-1.9%</td>
<td>2,898</td>
</tr>
<tr>
<td>Foreign Languages Literatures and Linguistics</td>
<td>333</td>
<td>350</td>
<td>336</td>
<td>306</td>
<td>308</td>
<td>-1.9%</td>
<td>302</td>
</tr>
<tr>
<td>Theology and Religious Vocations</td>
<td>464</td>
<td>529</td>
<td>469</td>
<td>476</td>
<td>418</td>
<td>-2.6%</td>
<td>407</td>
</tr>
<tr>
<td>History</td>
<td>561</td>
<td>531</td>
<td>471</td>
<td>477</td>
<td>484</td>
<td>-3.6%</td>
<td>466</td>
</tr>
<tr>
<td>Physical Sciences*</td>
<td>590</td>
<td>536</td>
<td>590</td>
<td>578</td>
<td>508</td>
<td>-3.7%</td>
<td>489</td>
</tr>
<tr>
<td>Mathematics and Statistics*</td>
<td>315</td>
<td>307</td>
<td>307</td>
<td>294</td>
<td>266</td>
<td>-4.1%</td>
<td>255</td>
</tr>
<tr>
<td>Education</td>
<td>2,326</td>
<td>2,153</td>
<td>2,075</td>
<td>1,937</td>
<td>1,928</td>
<td>-4.6%</td>
<td>1,840</td>
</tr>
<tr>
<td>Family and Consumer Sciences/Human Sciences</td>
<td>825</td>
<td>736</td>
<td>728</td>
<td>727</td>
<td>662</td>
<td>-5.4%</td>
<td>627</td>
</tr>
<tr>
<td>Philosophy and Religious Studies</td>
<td>199</td>
<td>191</td>
<td>204</td>
<td>188</td>
<td>159</td>
<td>-5.5%</td>
<td>150</td>
</tr>
<tr>
<td>English Language and Literature/Letters</td>
<td>900</td>
<td>779</td>
<td>747</td>
<td>743</td>
<td>712</td>
<td>-5.7%</td>
<td>671</td>
</tr>
<tr>
<td>Science Technologies/Technicians</td>
<td>88</td>
<td>94</td>
<td>38</td>
<td>29</td>
<td>24</td>
<td>-27.7%</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>62,903</td>
<td>65,084</td>
<td>66,861</td>
<td>66,469</td>
<td>65,064</td>
<td>0.8%</td>
<td>65,616</td>
</tr>
</tbody>
</table>

*Indicates a STEM related field using THEC’s definition.

<sup>15</sup> While all 2020 degrees have been awarded by the release of this report, data are not yet available for the year in IPEDS, requiring an estimate for 2020 degrees using previous years’ growth.
Section Three:
State Workforce Needs
ECD, in partnership with TDLWD and THEC, created the list of in-demand occupations for the 2021 Supply and Demand report. The agencies applied the following criteria to occupational data to identify occupations that are in demand within the state and each of the Local Workforce Development Areas (LWDAs):

The occupation must meet the following minimum thresholds:

- **Occupational size:** Occupations must employ at least .04% of a region’s total jobs.
- **Occupational wage:** Occupations must have a median annual wage that is at least 80% of the overall median regional wage.

The occupation must be above average in at least TWO out of the following THREE metrics:

- Region’s Median Ratio of Job Postings to Employment
- Region’s Median Ratio of Hires to Employment
- Region’s Median Ratio of Job Openings to Employment

Table 4 below lists the thresholds necessary for inclusion as an in-demand occupation, by region.

<table>
<thead>
<tr>
<th>Region</th>
<th>0.04% of Region's Jobs</th>
<th>80% of Region's Median Wage</th>
<th>Region's Median Ratio of Job Postings to Employment</th>
<th>Region's Median Ratio of Hires to Employment</th>
<th>Region's Median Ratio of Job Openings to Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennessee</td>
<td>1,203</td>
<td>$28,727</td>
<td>10.7%</td>
<td>12.1%</td>
<td>62.2%</td>
</tr>
<tr>
<td>Greater Memphis</td>
<td>214</td>
<td>$29,500</td>
<td>14.2%</td>
<td>10.9%</td>
<td>64.5%</td>
</tr>
<tr>
<td>Northwest</td>
<td>32</td>
<td>$25,543</td>
<td>10.0%</td>
<td>11.5%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Southwest</td>
<td>40</td>
<td>$26,605</td>
<td>10.0%</td>
<td>12.5%</td>
<td>54.5%</td>
</tr>
<tr>
<td>Northern Middle</td>
<td>401</td>
<td>$31,010</td>
<td>16.3%</td>
<td>12.4%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Southern Middle</td>
<td>62</td>
<td>$26,658</td>
<td>11.8%</td>
<td>11.2%</td>
<td>53.4%</td>
</tr>
<tr>
<td>Upper Cumberland</td>
<td>43</td>
<td>$25,125</td>
<td>9.4%</td>
<td>12.5%</td>
<td>51.4%</td>
</tr>
<tr>
<td>East</td>
<td>206</td>
<td>$26,843</td>
<td>11.1%</td>
<td>12.5%</td>
<td>52.7%</td>
</tr>
<tr>
<td>Southeast</td>
<td>120</td>
<td>$27,982</td>
<td>12.5%</td>
<td>12.5%</td>
<td>57.0%</td>
</tr>
<tr>
<td>Northeast</td>
<td>77</td>
<td>$26,838</td>
<td>8.1%</td>
<td>11.1%</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

Table 5 below highlights the top 25 occupations by projected growth over the next decade. Occupations in the list range from the medical professions to software developers and research analysts. The full list of in-demand occupations can be found on the THEC and ECD websites.

The list of educational requirements in the table are also diverse, with typical entry-level educational requirements ranging from high school diplomas to doctoral degrees. Tennesseans of all education and skill levels can find potential career options in the table below.

Table 5: Top 25 High-Demand Occupations by Projected Growth: Tennessee

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Growth</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-9097</td>
<td>Phlebotomists</td>
<td>2,290</td>
<td>4.04%</td>
<td>415</td>
<td>$30,779</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>19-1042</td>
<td>Medical Scientists, Except Epidemiologists</td>
<td>1,310</td>
<td>3.42%</td>
<td>212</td>
<td>$66,405</td>
<td>Doctoral</td>
</tr>
<tr>
<td>21-1018</td>
<td>Substance Abuse, Behavioral Disorder, and Mental Health Counselors</td>
<td>3,270</td>
<td>3.01%</td>
<td>585</td>
<td>$36,284</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>15-2031</td>
<td>Operations Research Analysts</td>
<td>1,270</td>
<td>3.01%</td>
<td>159</td>
<td>$63,619</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>3,290</td>
<td>2.66%</td>
<td>593</td>
<td>$57,733</td>
<td>Associate's</td>
</tr>
<tr>
<td>31-9092</td>
<td>Medical Assistants</td>
<td>15,280</td>
<td>2.48%</td>
<td>2,249</td>
<td>$32,292</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>25-3021</td>
<td>Self-Enrichment Teachers</td>
<td>2,450</td>
<td>2.48%</td>
<td>715</td>
<td>$34,431</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>21-1023</td>
<td>Mental Health and Substance Abuse Social Workers</td>
<td>1,600</td>
<td>2.43%</td>
<td>253</td>
<td>$36,849</td>
<td>Master's</td>
</tr>
<tr>
<td>13-1161</td>
<td>Market Research Analysts and Marketing Specialists</td>
<td>8,970</td>
<td>2.21%</td>
<td>1,328</td>
<td>$55,406</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>27-2022</td>
<td>Coaches and Scouts</td>
<td>4,570</td>
<td>2.18%</td>
<td>1,087</td>
<td>$32,693</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>19-4021</td>
<td>Biological Technicians</td>
<td>1,340</td>
<td>2.17%</td>
<td>182</td>
<td>$37,168</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>15-1256</td>
<td>Software Developers and Software Quality Assurance Analysts and Testers</td>
<td>12,030</td>
<td>2.15%</td>
<td>1,156</td>
<td>$90,910</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>51-9198</td>
<td>Helpers--Production Workers</td>
<td>8,040</td>
<td>2.12%</td>
<td>2,554</td>
<td>$30,714</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>31-9011</td>
<td>Massage Therapists</td>
<td>2,200</td>
<td>2.12%</td>
<td>364</td>
<td>$41,108</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>31-9091</td>
<td>Dental Assistants</td>
<td>5,680</td>
<td>2.11%</td>
<td>913</td>
<td>$38,122</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>27-4011</td>
<td>Audio and Video Technicians</td>
<td>1,320</td>
<td>2.07%</td>
<td>262</td>
<td>$47,798</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>49-2098</td>
<td>Security and Fire Alarm Systems Installers</td>
<td>1,540</td>
<td>2.00%</td>
<td>257</td>
<td>$47,918</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>43-5021</td>
<td>Couriers and Messengers</td>
<td>1,720</td>
<td>1.96%</td>
<td>284</td>
<td>$30,231</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>11-9111</td>
<td>Medical and Health Services Managers</td>
<td>9,820</td>
<td>1.87%</td>
<td>1,207</td>
<td>$90,693</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>33-9091</td>
<td>Crossing Guards and Flaggers</td>
<td>2,320</td>
<td>1.76%</td>
<td>419</td>
<td>$32,079</td>
<td>N/A</td>
</tr>
<tr>
<td>43-4011</td>
<td>Brokerage Clerks</td>
<td>1,270</td>
<td>1.67%</td>
<td>162</td>
<td>$42,785</td>
<td>HS Diploma</td>
</tr>
</tbody>
</table>

17 Standard Occupation Classification
### Table 5 Cont’d

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Growth</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-1011</td>
<td>Chefs and Head Cooks</td>
<td>1,590</td>
<td>1.54%</td>
<td>337</td>
<td>$46,643</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>13-1121</td>
<td>Meeting, Convention, and Event Planners</td>
<td>1,670</td>
<td>1.51%</td>
<td>298</td>
<td>$48,191</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>11-9051</td>
<td>Food Service Managers</td>
<td>10,520</td>
<td>1.47%</td>
<td>2,253</td>
<td>$46,213</td>
<td>HS Diploma</td>
</tr>
</tbody>
</table>

---

### Top Growing Occupations by Region

Tennessee is divided into nine economic regions by ECD. These regions represent distinct geographic and economic areas within the state. Figure 1 displays the counties in each region.

**Figure 1:** Map of LWDA Regions

Source: ECD, LEAP Report Dashboard

Occupations that are in-demand vary greatly by region. This section lists the top 15 occupations by average annual percent growth, or how quickly an occupation is growing year over year, in each region. Organizing these lists by growth rate allows us to better keep a pulse on changes within a region.¹⁹

Occupations can, and often are, growing at different rates within a region than they are within the state overall. For instance, in

Table 6 below, Software Developers are growing about four percent annually in the Greater Memphis region. This is two percentage points greater than the overall statewide growth rate. The changes in growth rates and growth occupations makes it important to dissect in-demand occupations at the regional level.

---

¹⁸ Standard Occupation Classification  
¹⁹ For the full set of data, please THEC’s Academic Supply and Occupational Demand website.
### Table 6: Top 15 High-Demand Occupations by Projected Growth: Greater Memphis

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Percent Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-1256</td>
<td>Software Developers and Software Quality Assurance Analysts and Testers</td>
<td>1,660</td>
<td>4.05%</td>
<td>150</td>
<td>$84,077</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>31-9097</td>
<td>Phlebotomists</td>
<td>560</td>
<td>3.28%</td>
<td>90</td>
<td>$31,110</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>21-1018</td>
<td>Substance Abuse, Behavioral Disorder, and Mental Health Counselors</td>
<td>530</td>
<td>3.17%</td>
<td>205</td>
<td>$41,559</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>25-2011</td>
<td>Preschool Teachers, Except Special Education</td>
<td>840</td>
<td>3.07%</td>
<td>220</td>
<td>$36,556</td>
<td>Associate's</td>
</tr>
<tr>
<td>13-1161</td>
<td>Market Research Analysts and Marketing Specialists</td>
<td>1,230</td>
<td>2.85%</td>
<td>240</td>
<td>$56,065</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>53-7051</td>
<td>Industrial Truck and Tractor Operators</td>
<td>4,040</td>
<td>2.81%</td>
<td>770</td>
<td>$32,261</td>
<td>N/A</td>
</tr>
<tr>
<td>11-3031</td>
<td>Financial Managers</td>
<td>2,470</td>
<td>2.22%</td>
<td>280</td>
<td>$104,804</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>29-2032</td>
<td>Diagnostic Medical Sonographers</td>
<td>230</td>
<td>2.19%</td>
<td>30</td>
<td>$71,611</td>
<td>Associate's</td>
</tr>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>430</td>
<td>2.15%</td>
<td>45</td>
<td>$54,373</td>
<td>Associate's</td>
</tr>
<tr>
<td>11-9111</td>
<td>Medical and Health Services Managers</td>
<td>1,570</td>
<td>2.10%</td>
<td>190</td>
<td>$99,747</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>15-1232</td>
<td>Computer User Support Specialists</td>
<td>1,490</td>
<td>2.07%</td>
<td>220</td>
<td>$45,575</td>
<td>Some college, no degree</td>
</tr>
<tr>
<td>43-4131</td>
<td>Loan Interviewers and Clerks</td>
<td>710</td>
<td>2.02%</td>
<td>90</td>
<td>$44,441</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>41-3011</td>
<td>Advertising Sales Agents</td>
<td>290</td>
<td>1.98%</td>
<td>75</td>
<td>$49,443</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>43-3021</td>
<td>Billing and Posting Clerks</td>
<td>1,650</td>
<td>1.94%</td>
<td>290</td>
<td>$36,756</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>51-9111</td>
<td>Packaging and Filling Machine Operators and Tenders</td>
<td>1,630</td>
<td>1.90%</td>
<td>245</td>
<td>$29,876</td>
<td>HS Diploma</td>
</tr>
</tbody>
</table>
Table 7 below shows the top 15 occupations by projected growth for the Northwest region. The top five occupations in the region are dominated by health occupations. The top two growing occupations are physical therapists and physical therapists’ assistants.

### Table 7: Top 15 High-Demand Occupations by Projected Growth: Northwest

<table>
<thead>
<tr>
<th>SOC Code21</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>2019 Jobs</th>
<th>Avg. Annual Percent Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>130</td>
<td>130</td>
<td>5.56%</td>
<td>25</td>
<td>$59,457</td>
<td>Associate's</td>
</tr>
<tr>
<td>29-1123</td>
<td>Physical Therapists</td>
<td>170</td>
<td>170</td>
<td>5.18%</td>
<td>20</td>
<td>$80,636</td>
<td>Doctoral</td>
</tr>
<tr>
<td>11-9111</td>
<td>Medical and Health Services Managers</td>
<td>220</td>
<td>220</td>
<td>3.78%</td>
<td>40</td>
<td>$74,299</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>17-2141</td>
<td>Mechanical Engineers</td>
<td>70</td>
<td>70</td>
<td>2.72%</td>
<td>10</td>
<td>$59,750</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>21-1022</td>
<td>Healthcare Social Workers</td>
<td>90</td>
<td>90</td>
<td>2.69%</td>
<td>10</td>
<td>$45,218</td>
<td>Master's</td>
</tr>
<tr>
<td>47-2211</td>
<td>Sheet Metal Workers</td>
<td>70</td>
<td>70</td>
<td>2.06%</td>
<td>5</td>
<td>$39,620</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>51-9198</td>
<td>Helpers--Production Workers</td>
<td>290</td>
<td>290</td>
<td>2.03%</td>
<td>130</td>
<td>$29,139</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>39-1098</td>
<td>First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services</td>
<td>50</td>
<td>50</td>
<td>2.02%</td>
<td>20</td>
<td>$34,096</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>41-4011</td>
<td>Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products</td>
<td>90</td>
<td>90</td>
<td>1.84%</td>
<td>20</td>
<td>$47,211</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>53-3032</td>
<td>Heavy and Tractor-Trailer Truck Drivers</td>
<td>1,810</td>
<td>1,810</td>
<td>1.59%</td>
<td>210</td>
<td>$40,767</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>53-1047</td>
<td>First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors</td>
<td>220</td>
<td>220</td>
<td>1.57%</td>
<td>30</td>
<td>$49,658</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>49-9021</td>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>190</td>
<td>190</td>
<td>1.55%</td>
<td>45</td>
<td>$40,114</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>37-3011</td>
<td>Landscaping and Groundskeeping Workers</td>
<td>390</td>
<td>390</td>
<td>1.54%</td>
<td>60</td>
<td>$26,148</td>
<td>N/A</td>
</tr>
<tr>
<td>11-9151</td>
<td>Social and Community Service Managers</td>
<td>40</td>
<td>40</td>
<td>1.32%</td>
<td>10</td>
<td>$52,800</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>49-3031</td>
<td>Bus and Truck Mechanics and Diesel Engine Specialists</td>
<td>150</td>
<td>150</td>
<td>1.29%</td>
<td>35</td>
<td>$39,631</td>
<td>HS Diploma</td>
</tr>
</tbody>
</table>

21 Standard Occupation Classification
Table 8 shows the top growth occupations in the Southwest region. The Southwest region includes large farming areas. Agriculture equipment operator is the fastest growing occupation in the region by a large margin. Other top growing occupations include health information technologists, bus and truck mechanics, and landscapers/groundskeepers.

Table 8: Top 15 High-Demand Occupations by Projected Growth: Southwest

<table>
<thead>
<tr>
<th>SOC Code²²</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Percent Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>45-2091</td>
<td>Agricultural Equipment Operators</td>
<td>50</td>
<td>5.20%</td>
<td>70</td>
<td>$36,073</td>
<td>N/A</td>
</tr>
<tr>
<td>29-9098</td>
<td>Health Information Technologists, Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers, All Other</td>
<td>50</td>
<td>3.10%</td>
<td>15</td>
<td>$43,125</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>49-3031</td>
<td>Bus and Truck Mechanics and Diesel Engine Specialists</td>
<td>260</td>
<td>2.80%</td>
<td>35</td>
<td>$43,227</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>37-3011</td>
<td>Landscaping and Groundskeeping Workers</td>
<td>450</td>
<td>2.75%</td>
<td>120</td>
<td>$27,084</td>
<td>N/A</td>
</tr>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>200</td>
<td>2.69%</td>
<td>40</td>
<td>$58,409</td>
<td>Associate's</td>
</tr>
<tr>
<td>37-1012</td>
<td>First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers</td>
<td>70</td>
<td>2.53%</td>
<td>10</td>
<td>$58,232</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>21-1023</td>
<td>Mental Health and Substance Abuse Social Workers</td>
<td>50</td>
<td>2.27%</td>
<td>20</td>
<td>$38,481</td>
<td>Master's</td>
</tr>
<tr>
<td>29-1122</td>
<td>Occupational Therapists</td>
<td>70</td>
<td>2.27%</td>
<td>10</td>
<td>$88,165</td>
<td>Master's</td>
</tr>
<tr>
<td>43-6013</td>
<td>Medical Secretaries and Administrative Assistants</td>
<td>270</td>
<td>2.26%</td>
<td>35</td>
<td>$28,759</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>31-9092</td>
<td>Medical Assistants</td>
<td>450</td>
<td>2.15%</td>
<td>80</td>
<td>$30,356</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>47-2051</td>
<td>Cement Masons and Concrete Finishers</td>
<td>240</td>
<td>2.09%</td>
<td>40</td>
<td>$33,946</td>
<td>N/A</td>
</tr>
<tr>
<td>41-2022</td>
<td>Parts Salespersons</td>
<td>120</td>
<td>1.97%</td>
<td>15</td>
<td>$33,300</td>
<td>N/A</td>
</tr>
<tr>
<td>49-9021</td>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>190</td>
<td>1.86%</td>
<td>40</td>
<td>$32,947</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>29-1127</td>
<td>Speech-Language Pathologists</td>
<td>70</td>
<td>1.81%</td>
<td>10</td>
<td>$64,688</td>
<td>Master's</td>
</tr>
<tr>
<td>47-2141</td>
<td>Painters, Construction and Maintenance</td>
<td>90</td>
<td>1.81%</td>
<td>20</td>
<td>$32,664</td>
<td>N/A</td>
</tr>
</tbody>
</table>

²² Standard Occupation Classification
Table 9 shows the top growth occupations for the Northern Middle region. This region includes Davidson County and Nashville. The occupations on the list largely reflect the growth of the region as a tourist destination and include travel clerks, brokerage clerks, customer service representatives, and marketing specialists.

Table 9: Top 15 High-Demand Occupations by Projected Growth: Northern Middle

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Percent Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>43-4181</td>
<td>Reservation and Transportation Ticket Agents and Travel Clerks</td>
<td>800</td>
<td>6.47%</td>
<td>135</td>
<td>$32,643</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>41-3011</td>
<td>Advertising Sales Agents</td>
<td>920</td>
<td>5.01%</td>
<td>225</td>
<td>$40,258</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>43-4011</td>
<td>Brokerage Clerks</td>
<td>520</td>
<td>4.43%</td>
<td>90</td>
<td>$49,999</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>15-2031</td>
<td>Operations Research Analysts</td>
<td>690</td>
<td>4.35%</td>
<td>110</td>
<td>$62,301</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>49-9043</td>
<td>Maintenance Workers, Machinery</td>
<td>930</td>
<td>3.87%</td>
<td>245</td>
<td>$45,526</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>810</td>
<td>3.64%</td>
<td>130</td>
<td>$61,147</td>
<td>Associate's</td>
</tr>
<tr>
<td>13-1161</td>
<td>Market Research Analysts and Marketing Specialists</td>
<td>4,220</td>
<td>3.61%</td>
<td>505</td>
<td>$57,907</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>13-2052</td>
<td>Personal Financial Advisors</td>
<td>1,260</td>
<td>3.57%</td>
<td>160</td>
<td>$64,854</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>43-4051</td>
<td>Customer Service Representatives</td>
<td>23,570</td>
<td>3.47%</td>
<td>4,385</td>
<td>$34,525</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>13-1151</td>
<td>Training and Development Specialists</td>
<td>2,170</td>
<td>3.32%</td>
<td>305</td>
<td>$56,288</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>31-9011</td>
<td>Massage Therapists</td>
<td>950</td>
<td>3.28%</td>
<td>145</td>
<td>$43,433</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>15-1256</td>
<td>Software Developers and Software Quality Assurance Analysts and Testers</td>
<td>6,010</td>
<td>3.25%</td>
<td>550</td>
<td>$95,511</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>49-3011</td>
<td>Aircraft Mechanics and Service Technicians</td>
<td>540</td>
<td>3.23%</td>
<td>70</td>
<td>$56,036</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>27-4011</td>
<td>Audio and Video Technicians</td>
<td>740</td>
<td>3.11%</td>
<td>185</td>
<td>$50,698</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>11-3131</td>
<td>Training and Development Managers</td>
<td>460</td>
<td>3.06%</td>
<td>80</td>
<td>$92,047</td>
<td>Bachelor's</td>
</tr>
</tbody>
</table>

23 Standard Occupation Classification
Table 10 shows the top growth occupations for the Southern Middle region. Top growing occupations in the region are varied, ranging from health occupations like physical therapists and substance abuse counselors, to engineering focused occupations like mechanical engineers and mechanical engineer technicians.

Table 10: Top 15 High-Demand Occupations by Projected Growth: Southern Middle

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Percent Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-2141</td>
<td>Mechanical Engineers</td>
<td>270</td>
<td>4.21%</td>
<td>70</td>
<td>$79,456</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>100</td>
<td>3.80%</td>
<td>20</td>
<td>$61,498</td>
<td>Associate's</td>
</tr>
<tr>
<td>43-5061</td>
<td>Production, Planning, and Expediting Clerks</td>
<td>350</td>
<td>3.13%</td>
<td>90</td>
<td>$43,353</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>21-1018</td>
<td>Substance Abuse, Behavioral Disorder, and Mental Health Counselors</td>
<td>170</td>
<td>2.92%</td>
<td>35</td>
<td>$33,277</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>31-9092</td>
<td>Medical Assistants</td>
<td>490</td>
<td>2.86%</td>
<td>100</td>
<td>$31,903</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>17-3027</td>
<td>Mechanical Engineering Technologists and Technicians</td>
<td>70</td>
<td>2.64%</td>
<td>20</td>
<td>$51,169</td>
<td>Associate's</td>
</tr>
<tr>
<td>43-6013</td>
<td>Medical Secretaries and Administrative Assistants</td>
<td>410</td>
<td>2.47%</td>
<td>70</td>
<td>$30,174</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>37-3011</td>
<td>Landscaping and Groundskeeping Workers</td>
<td>590</td>
<td>2.42%</td>
<td>120</td>
<td>$29,060</td>
<td>N/A</td>
</tr>
<tr>
<td>49-3031</td>
<td>Bus and Truck Mechanics and Diesel Engine Specialists</td>
<td>250</td>
<td>2.39%</td>
<td>30</td>
<td>$43,660</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>13-1111</td>
<td>Management Analysts</td>
<td>170</td>
<td>2.32%</td>
<td>25</td>
<td>$78,895</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>11-9111</td>
<td>Medical and Health Services Managers</td>
<td>390</td>
<td>2.21%</td>
<td>45</td>
<td>$78,049</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>13-2011</td>
<td>Accountants and Auditors</td>
<td>430</td>
<td>2.09%</td>
<td>60</td>
<td>$59,818</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>31-9091</td>
<td>Dental Assistants</td>
<td>160</td>
<td>2.07%</td>
<td>50</td>
<td>$34,906</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>21-1022</td>
<td>Healthcare Social Workers</td>
<td>160</td>
<td>2.06%</td>
<td>20</td>
<td>$43,681</td>
<td>Master's</td>
</tr>
<tr>
<td>11-9051</td>
<td>Food Service Managers</td>
<td>450</td>
<td>2.04%</td>
<td>80</td>
<td>$41,604</td>
<td>HS Diploma</td>
</tr>
</tbody>
</table>

24 Standard Occupation Classification
Table 11 displays the top growth occupations for the Upper Cumberland region. Top growing occupations include physical therapist assistants, medical assistants, and software developers.

Table 11: Top 15 High-Demand Occupations by Projected Growth: Upper Cumberland

<table>
<thead>
<tr>
<th>SOC Code25</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Percent Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>250</td>
<td>4.04%</td>
<td>30</td>
<td>$58,577</td>
<td>Associate's</td>
</tr>
<tr>
<td>31-9092</td>
<td>Medical Assistants</td>
<td>450</td>
<td>3.35%</td>
<td>70</td>
<td>$29,181</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>15-1256</td>
<td>Software Developers and Software Quality Assurance Analysts and Testers</td>
<td>110</td>
<td>3.31%</td>
<td>10</td>
<td>$100,021</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>49-9021</td>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>280</td>
<td>3.05%</td>
<td>40</td>
<td>$36,849</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>47-2152</td>
<td>Plumbers, Pipefitters, and Steamfitters</td>
<td>240</td>
<td>2.94%</td>
<td>25</td>
<td>$44,198</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>25-3021</td>
<td>Self-Enrichment Teachers</td>
<td>60</td>
<td>2.57%</td>
<td>15</td>
<td>$37,660</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>43-9041</td>
<td>Insurance Claims and Policy Processing Clerks</td>
<td>60</td>
<td>2.56%</td>
<td>10</td>
<td>$29,077</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>31-9091</td>
<td>Dental Assistants</td>
<td>130</td>
<td>2.50%</td>
<td>30</td>
<td>$38,286</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>47-2111</td>
<td>Electricians</td>
<td>320</td>
<td>2.40%</td>
<td>40</td>
<td>$55,506</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>11-9141</td>
<td>Property, Real Estate, and Community Association Managers</td>
<td>70</td>
<td>2.38%</td>
<td>15</td>
<td>$40,053</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>21-1018</td>
<td>Substance Abuse, Behavioral Disorder, and Mental Health Counselors</td>
<td>90</td>
<td>2.26%</td>
<td>20</td>
<td>$32,531</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>43-3021</td>
<td>Billing and Posting Clerks</td>
<td>180</td>
<td>2.14%</td>
<td>35</td>
<td>$34,186</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>13-1051</td>
<td>Cost Estimators</td>
<td>60</td>
<td>2.05%</td>
<td>10</td>
<td>$69,195</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>47-5022</td>
<td>Excavating and Loading Machine and Dragline Operators, Surface Mining</td>
<td>80</td>
<td>2.04%</td>
<td>25</td>
<td>$30,691</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>41-2022</td>
<td>Parts Salespersons</td>
<td>90</td>
<td>1.88%</td>
<td>25</td>
<td>$32,018</td>
<td>N/A</td>
</tr>
</tbody>
</table>

25 Standard Occupation Classification
Table 12 presents the top growth occupations for the East region. This region has large growth in substance abuse counselors, cutting and slicing machine setters, maintenance workers, and hairdressers.

**Table 12**: Top 15 High-Demand Occupations by Projected Growth: East

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual % Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-1018</td>
<td>Substance Abuse, Behavioral Disorder, and Mental Health Counselors</td>
<td>610</td>
<td>4.23%</td>
<td>140</td>
<td>$32,542</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>51-9032</td>
<td>Cutting and Slicing Machine Setters, Operators, and Tenders</td>
<td>300</td>
<td>3.39%</td>
<td>50</td>
<td>$35,162</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>49-9043</td>
<td>Maintenance Workers, Machinery</td>
<td>530</td>
<td>2.92%</td>
<td>140</td>
<td>$43,984</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>39-5012</td>
<td>Hairdressers, Hairstylists, and Cosmetologists</td>
<td>1,350</td>
<td>2.81%</td>
<td>310</td>
<td>$27,514</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>510</td>
<td>2.73%</td>
<td>95</td>
<td>$55,897</td>
<td>Associate's</td>
</tr>
<tr>
<td>31-9011</td>
<td>Massage Therapists</td>
<td>400</td>
<td>2.53%</td>
<td>40</td>
<td>$38,145</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>41-9022</td>
<td>Real Estate Sales Agents</td>
<td>250</td>
<td>2.53%</td>
<td>65</td>
<td>$45,084</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>21-1013</td>
<td>Marriage and Family Therapists</td>
<td>250</td>
<td>2.47%</td>
<td>25</td>
<td>$35,150</td>
<td>Master's</td>
</tr>
<tr>
<td>39-1098</td>
<td>First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services</td>
<td>490</td>
<td>2.40%</td>
<td>120</td>
<td>$33,218</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>11-9051</td>
<td>Food Service Managers</td>
<td>2,570</td>
<td>2.21%</td>
<td>425</td>
<td>$47,911</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>35-1011</td>
<td>Chefs and Head Cooks</td>
<td>360</td>
<td>2.17%</td>
<td>160</td>
<td>$49,927</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>27-1024</td>
<td>Graphic Designers</td>
<td>490</td>
<td>2.12%</td>
<td>70</td>
<td>$40,028</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>49-9021</td>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>1,230</td>
<td>2.12%</td>
<td>215</td>
<td>$38,313</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>53-3052</td>
<td>Bus Drivers, Transit and Intercity</td>
<td>390</td>
<td>2.12%</td>
<td>80</td>
<td>$31,067</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>35-1012</td>
<td>First-Line Supervisors of Food Preparation and Serving Workers</td>
<td>4,240</td>
<td>2.10%</td>
<td>625</td>
<td>$31,865</td>
<td>HS Diploma</td>
</tr>
</tbody>
</table>

---

26 Standard Occupation Classification
Table 13 shows the top growth occupations for the Southeast region. Top growth occupations include massage therapists, phlebotomists, software developers, and cargo and freight agents.

Table 13: Top 15 High-Demand Occupations by Projected Growth: Southeast

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Percent Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-9011</td>
<td>Massage Therapists</td>
<td>260</td>
<td>3.94%</td>
<td>40</td>
<td>$40,643</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>31-9097</td>
<td>Phlebotomists</td>
<td>240</td>
<td>3.94%</td>
<td>35</td>
<td>$29,789</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>15-1256</td>
<td>Software Developers and Software Quality Assurance Analysts and Testers</td>
<td>980</td>
<td>3.86%</td>
<td>125</td>
<td>$92,458</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>43-5011</td>
<td>Cargo and Freight Agents</td>
<td>140</td>
<td>3.84%</td>
<td>10</td>
<td>$40,173</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>15-1257</td>
<td>Web Developers and Digital Interface Designers</td>
<td>160</td>
<td>3.82%</td>
<td>30</td>
<td>$71,947</td>
<td>Associate's</td>
</tr>
<tr>
<td>29-2056</td>
<td>Veterinary Technologists and Technicians</td>
<td>140</td>
<td>3.54%</td>
<td>20</td>
<td>$29,293</td>
<td>Associate's</td>
</tr>
<tr>
<td>15-1212</td>
<td>Information Security Analysts</td>
<td>150</td>
<td>3.50%</td>
<td>30</td>
<td>$90,685</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>500</td>
<td>3.48%</td>
<td>60</td>
<td>$56,993</td>
<td>Associate's</td>
</tr>
<tr>
<td>31-2011</td>
<td>Occupational Therapy Assistants</td>
<td>140</td>
<td>3.19%</td>
<td>20</td>
<td>$63,900</td>
<td>Associate's</td>
</tr>
<tr>
<td>53-3032</td>
<td>Heavy and Tractor-Trailer Truck Drivers</td>
<td>8,070</td>
<td>3.18%</td>
<td>1,385</td>
<td>$43,597</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>51-4071</td>
<td>Foundry Mold and Coremakers</td>
<td>160</td>
<td>3.16%</td>
<td>25</td>
<td>$29,552</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>31-9092</td>
<td>Medical Assistants</td>
<td>1,930</td>
<td>2.90%</td>
<td>265</td>
<td>$30,913</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>29-2010</td>
<td>Clinical Laboratory Technologists and Technicians</td>
<td>590</td>
<td>2.77%</td>
<td>110</td>
<td>$50,080</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>21-1018</td>
<td>Substance Abuse, Behavioral Disorder, and Mental Health Counselors</td>
<td>210</td>
<td>2.66%</td>
<td>30</td>
<td>$34,960</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>49-3031</td>
<td>Bus and Truck Mechanics and Diesel Engine Specialists</td>
<td>700</td>
<td>2.48%</td>
<td>100</td>
<td>$42,911</td>
<td>HS Diploma</td>
</tr>
</tbody>
</table>

27 Standard Occupation Classification
Table 14 displays the top growth occupations for the Northeast region. In-demand growth occupations within the region include software developers, substance abuse counselors, and roofers.

**Table 14: Top 15 High-Demand Occupations by Projected Growth: Northeast**

<table>
<thead>
<tr>
<th>SOC Code28</th>
<th>Description</th>
<th>2019 Jobs</th>
<th>Avg. Annual Percent Change</th>
<th>Annual Openings</th>
<th>Median Earnings</th>
<th>Typical Entry Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-1256</td>
<td>Software Developers and Software Quality Assurance Analysts and Testers</td>
<td>380</td>
<td>3.96%</td>
<td>50</td>
<td>$83,412</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>21-1018</td>
<td>Substance Abuse, Behavioral Disorder, and Mental Health Counselors</td>
<td>150</td>
<td>3.42%</td>
<td>35</td>
<td>$35,050</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>47-2181</td>
<td>Roofers</td>
<td>90</td>
<td>2.83%</td>
<td>20</td>
<td>$29,302</td>
<td>N/A</td>
</tr>
<tr>
<td>13-2052</td>
<td>Personal Financial Advisors</td>
<td>90</td>
<td>2.76%</td>
<td>20</td>
<td>$72,024</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>21-1023</td>
<td>Mental Health and Substance Abuse Social Workers</td>
<td>100</td>
<td>2.54%</td>
<td>20</td>
<td>$30,860</td>
<td>Master's</td>
</tr>
<tr>
<td>31-9091</td>
<td>Dental Assistants</td>
<td>380</td>
<td>2.40%</td>
<td>70</td>
<td>$36,244</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>13-1161</td>
<td>Market Research Analysts and Marketing Specialists</td>
<td>680</td>
<td>2.20%</td>
<td>40</td>
<td>$47,527</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>49-9021</td>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>280</td>
<td>2.09%</td>
<td>50</td>
<td>$38,599</td>
<td>Certificate/Diploma</td>
</tr>
<tr>
<td>47-2152</td>
<td>Plumbers, Pipefitters, and Steamfitters</td>
<td>380</td>
<td>1.99%</td>
<td>90</td>
<td>$40,232</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>13-2082</td>
<td>Tax Preparers</td>
<td>80</td>
<td>1.86%</td>
<td>15</td>
<td>$33,675</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>47-3013</td>
<td>Helpers—Electricians</td>
<td>130</td>
<td>1.73%</td>
<td>35</td>
<td>$29,151</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>25-3021</td>
<td>Self-Enrichment Teachers</td>
<td>100</td>
<td>1.73%</td>
<td>30</td>
<td>$28,396</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>11-9141</td>
<td>Property, Real Estate, and Community Association Managers</td>
<td>130</td>
<td>1.71%</td>
<td>30</td>
<td>$52,022</td>
<td>HS Diploma</td>
</tr>
<tr>
<td>47-2061</td>
<td>Construction Laborers</td>
<td>1,110</td>
<td>1.70%</td>
<td>195</td>
<td>$29,544</td>
<td>N/A</td>
</tr>
<tr>
<td>49-3042</td>
<td>Mobile Heavy Equipment Mechanics, Except Engines</td>
<td>190</td>
<td>1.68%</td>
<td>25</td>
<td>$47,822</td>
<td>HS Diploma</td>
</tr>
</tbody>
</table>

As evidenced by these tables, Tennessee's nine LWDA regions each have distinct economies that comprise different occupations. Analyzing these regions individually allows us the opportunity to better understand that our statewide workforce planning initiatives must be built with robust consideration of regional strengths and weaknesses.

28 Standard Occupation Classification

Academic Supply and Occupational Demand in Tennessee | 2021
Tennessee Higher Education Commission
Oversupplied Programs

TDLWD calculates the programs of study that are most oversupplied in the state by analyzing the number of credentials awarded in a program compared to the number of openings the state has for related occupations. **Table 15** below highlights the programs that are most over-supplied.

**Table 15: Oversupplied Programs**

<table>
<thead>
<tr>
<th>Program of Study Code</th>
<th>Program of Study Title</th>
<th>Annual Average Openings</th>
<th>Ratio of Concentrators and Awards to Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.4000000</td>
<td>Power Structural and Technical Systems Pathway</td>
<td>68</td>
<td>12.46</td>
</tr>
<tr>
<td>03.1000000</td>
<td>Audio and Video Technologies Pathway</td>
<td>340</td>
<td>3.12</td>
</tr>
<tr>
<td>05.1130000</td>
<td>Support Services- Interpreters/Translators</td>
<td>122</td>
<td>3.69</td>
</tr>
<tr>
<td>05.1230000</td>
<td>Postsecondary Teachers- Teacher Education</td>
<td>101</td>
<td>7.94</td>
</tr>
<tr>
<td>08.1280000</td>
<td>Optometry</td>
<td>36</td>
<td>3.67</td>
</tr>
<tr>
<td>08.1360000</td>
<td>Radiation Therapy</td>
<td>28</td>
<td>5.93</td>
</tr>
<tr>
<td>08.1410000</td>
<td>Exercise Physiology</td>
<td>16</td>
<td>6.50</td>
</tr>
<tr>
<td>08.4140000</td>
<td>Dietitian Assistance</td>
<td>76</td>
<td>8.51</td>
</tr>
<tr>
<td>11.3100000</td>
<td>Interactive Media</td>
<td>27</td>
<td>9.96</td>
</tr>
<tr>
<td>15.1120000</td>
<td>Chemical Engineering</td>
<td>56</td>
<td>4.61</td>
</tr>
<tr>
<td>15.1220000</td>
<td>Biomedical Engineering</td>
<td>47</td>
<td>3.45</td>
</tr>
</tbody>
</table>

Source: TN Department of Labor and Workforce Development, WIR²ED Division, TN Employment Projections to 2028; TN Department of Education, CTE Division, 2018-2019; IPEDS, 2018-2019

---

29 Programs of study listed in the table consist of multiple CIP codes.

30 Concentrators refers to a student who completes three or more courses within a career and technical education program of study.
Section Four: Employment Rates for Programs of Study
Table 16 provides employment rates for graduates in programs of study corresponding to the occupations in demand in Table 5.

This table includes the number of graduates or concentrators in each program of study at the typical education entry level of education. Included are the number of graduates from programs related to the occupation listed as well as employment rates for those graduates.\(^{31}\)

These results exclude individuals who were enrolled at another educational institution in Tennessee within two quarters of graduation. For outcomes by specific educational programs within the programs of study, see the related table in the appendix.

**Table 16: Employment Rates for the Academic Programs for the Top 25 Occupations**

<table>
<thead>
<tr>
<th>SOC Code(^{32})</th>
<th>Description</th>
<th>Number of Awards</th>
<th>% Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-9097</td>
<td>Phlebotomists</td>
<td>48</td>
<td>83.3%</td>
</tr>
<tr>
<td>19-1042</td>
<td>Medical Scientists, Except Epidemiologists</td>
<td>70</td>
<td>28.6%</td>
</tr>
<tr>
<td>21-1018</td>
<td>Substance Abuse, Behavioral Disorder, and Mental Health Counselors</td>
<td>30</td>
<td>63.3%</td>
</tr>
<tr>
<td>15-2031</td>
<td>Operations Research Analysts</td>
<td>100</td>
<td>46.0%</td>
</tr>
<tr>
<td>31-2021</td>
<td>Physical Therapist Assistants</td>
<td>136</td>
<td>79.4%</td>
</tr>
<tr>
<td>31-9092</td>
<td>Medical Assistants</td>
<td>160</td>
<td>71.9%</td>
</tr>
<tr>
<td>25-3021</td>
<td>Self-Enrichment Teachers</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>21-1023</td>
<td>Mental Health and Substance Abuse Social Workers</td>
<td>478</td>
<td>68.6%</td>
</tr>
<tr>
<td>13-1161</td>
<td>Market Research Analysts and Marketing Specialists</td>
<td>633</td>
<td>66.7%</td>
</tr>
<tr>
<td>27-2022</td>
<td>Coaches and Scouts</td>
<td>1564</td>
<td>63.3%</td>
</tr>
<tr>
<td>19-4021</td>
<td>Biological Technicians</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>15-1256</td>
<td>Software Developers and Software Quality Assurance Analysts and Testers</td>
<td>794</td>
<td>55.2%</td>
</tr>
<tr>
<td>51-9198</td>
<td>Helpers--Production Workers</td>
<td>105</td>
<td>51.4%</td>
</tr>
<tr>
<td>31-9011</td>
<td>Massage Therapists</td>
<td>32</td>
<td>65.6%</td>
</tr>
<tr>
<td>31-9091</td>
<td>Dental Assistants</td>
<td>101</td>
<td>87.1%</td>
</tr>
<tr>
<td>27-4011</td>
<td>Audio and Video Technicians</td>
<td>18</td>
<td>50.0%</td>
</tr>
<tr>
<td>49-2098</td>
<td>Security and Fire Alarm Systems Installers</td>
<td>183</td>
<td>80.3%</td>
</tr>
<tr>
<td>43-5021</td>
<td>Couriers and Messengers</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

\(^{31}\) Data are only available for those who work for employers reporting wages in Tennessee.

\(^{32}\) Standard Occupation Classification

Academic Supply and Occupational Demand in Tennessee | 2021
Tennessee Higher Education Commission

33
Tennessee Providers for In-Demand Occupations

THEC and TDLWD worked diligently to update the Academic Supply and Occupational Demand report to make it more usable. In this spirit, the agencies are no longer publishing the list of institutions offering academic programs corresponding to in-demand occupations in the body of this report. Instead, this information now lives in an interactive dashboard here: Tennessee Providers for In-Demand Occupations Dashboard. This change will allow readers of the report to interact with the data in ways that best suit their needs.

Tennessee Providers for Demand Occupations will be useful for workforce professionals including counselors in government and nonprofit social service agencies, educational and workforce program planners and board members, and individuals seeking employment and training programs. This tool may also be useful to current and prospective Tennessee businesses looking to evaluate workforce pipelines, reskill or upskill their employees, or plan recruiting strategies.

Table 16 Cont’d

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>Number of Awards</th>
<th>% Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-9111</td>
<td>Medical and Health Services Managers</td>
<td>105</td>
<td>51.4%</td>
</tr>
<tr>
<td>33-9091</td>
<td>Crossing Guards and Flaggers</td>
<td>35</td>
<td>57.1%</td>
</tr>
<tr>
<td>43-4011</td>
<td>Brokerage Clerks</td>
<td>37</td>
<td>54.0%</td>
</tr>
<tr>
<td>21-1093</td>
<td>Social and Human Service Assistants</td>
<td>264</td>
<td>62.1%</td>
</tr>
<tr>
<td>35-1011</td>
<td>Chefs and Head Cooks</td>
<td>358</td>
<td>55.3%</td>
</tr>
<tr>
<td>13-1121</td>
<td>Meeting, Convention, and Event Planners</td>
<td>35</td>
<td>57.1%</td>
</tr>
<tr>
<td>11-9051</td>
<td>Food Service Managers</td>
<td>358</td>
<td>55.3%</td>
</tr>
</tbody>
</table>

Sources: TN OES 2019; TN Employment Projections 2018-28; IPEDS; TN CTE; TN P-20 Follow-up Data

---

33 Standard Occupation Classification
34 Readable link for those accessing the report in paper form: https://public.tableau.com/views/TennesseeProvidersforDemandOccupations/TennesseeProvidersforDemandOccupations?:language=en&:display_count=y&publish=yes&:origin=viz_share_link
35 Sources: Occupational Demand - OES 2019 and TN and LWDA Projections - TN Dept of Labor and Workforce Development (TDLWD) and TN Dept of Economic and Community Development (TNECD); Training providers - jobs4tn.gov (TDLWD), including data from IPEDS, TN Department of Education (TDOE) CTE concentrators, and apprenticeship completers for 2019.
The link allows individuals to select Tennessee or one of the nine Local Workforce Development Areas (LWDAs). From here, individuals can select from among the demand occupations listed, by occupation code (SOC) or occupational title.

The display includes educational program or apprenticeship providers offering programs related to the demand occupation. It also includes the program provider, region, county, classification of instructional program title (CIP), type of academic award, and number of program completers in 2019. Data file downloads are available in a variety of formats and include the URLs for the program providers.

Selecting the region “Tennessee” and demand level “TN Top 25” will display only the providers of academic programs corresponding to the top 25 demand occupations in the state as identified in the 2021 Academic Supply and Occupational Demand report.

To make a new selection, choose Reset Filters. Information on demand occupations and program providers will be updated annually. More detailed information on occupations and training programs can be found on jobs4tn.gov in the labor market information, occupation and education profile sections, and in the education and training provider data.
Section Five: Limitations and Conclusions
Limitations

Supply and demand analyses are useful for educators, employers, and policymakers, but there are two underlying limitations.

First, supply and demand analyses rely on historical data and assumptions about future economic conditions, as well as industry expansion or contraction. For this reason, projections are sometimes inaccurate for certain occupations, particularly emerging fields with limited historical data and those fields with high supply-to-demand ratios (i.e., oversupplied fields). This year's economic jolt created by the COVID-19 pandemic uniquely highlights one of the ways in which historical data can sometimes be ill-equipped to speak to current and future circumstances.

Second, the relationship between supply and demand is most direct at the sub-baccalaureate level and with specialized programs at the doctoral and professional level. For example, a person with a certificate in automotive repair or a medical specialization in cardiology is more likely to hold a job specific to their field of study than a person with a bachelor’s in English. As such, it is more straightforward to link individuals with specialized degrees to specific occupations. This is not as true for those with versatile bachelor's and master’s, as graduates with these degrees can be employable in many fields.

Conclusions

Credential production has, on average, continued to grow over the past five years. Moreover, the nature of the credentials produced by public, private, and proprietary institutions within the state has trended towards STEM credentials and away from non-STEM credentials. The continued growth in degrees and the transition to greater production of STEM degrees both align with Tennessee's goals as a state.

This year's report represents years of work to bring methods and definitions of “in-demand” into alignment. For the first time in the report's history, the occupational demand lists shown within the report align 100% with the lists released by ECD earlier this year. THEC will consult with TDLWD, ECD, and other state agencies moving forward to solicit feedback and support necessary to maintain the reports effectiveness and impact in subsequent years.

Tennessee's top growing occupations represent a wide range of industries and careers. They also require a large variety of academic credentials in order to be career ready. This report highlights that the employment opportunities available to Tennesseans vary largely by region. Regional demand tables in this report help us better understand what these differences are and prepare us to participate in workforce planning conversations in a more nuanced manner.

Tennesseans should take away two things from this report: first, we need to continue to educate and upskill our workforce; second, there are opportunities for Tennesseans of all skill levels and education to participate in the Tennessee economy.
Appendices
Appendix A: Wage Data by CIP Code and Degree Level

The tables below are limited to CIP codes with at least 5 graduates employed from that CIP and at that degree level. Wage data displays wages earned 2 quarters after certificate or degree receipt.

**Table A 1:** Top 10 Income Earners by CIP Code, Certificates

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>CIP Title</th>
<th>Number of Awards</th>
<th>Employed %</th>
<th>Estimated Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>320111</td>
<td>Workforce Development and Training.</td>
<td>128</td>
<td>96.88%</td>
<td>$64,970</td>
</tr>
<tr>
<td>151001</td>
<td>Construction Engineering Technology/Technician.</td>
<td>21</td>
<td>100.00%</td>
<td>$58,973</td>
</tr>
<tr>
<td>510907</td>
<td>Medical Radiologic Technology/Science - Radiation Therapist.</td>
<td>19</td>
<td>57.89%</td>
<td>$56,794</td>
</tr>
<tr>
<td>150612</td>
<td>Industrial Technology/Technician.</td>
<td>16</td>
<td>81.25%</td>
<td>$55,041</td>
</tr>
<tr>
<td>150000</td>
<td>Engineering Technology, General.</td>
<td>58</td>
<td>82.76%</td>
<td>$54,348</td>
</tr>
<tr>
<td>430203</td>
<td>Fire Science/Firefighting.</td>
<td>16</td>
<td>81.25%</td>
<td>$53,760</td>
</tr>
<tr>
<td>150403</td>
<td>Electromechanical Technology/Electromechanical Engineering Technology.</td>
<td>55</td>
<td>56.36%</td>
<td>$52,808</td>
</tr>
<tr>
<td>510920</td>
<td>Magnetic Resonance Imaging (MRI) Technology/Technician.</td>
<td>21</td>
<td>66.67%</td>
<td>$52,566</td>
</tr>
<tr>
<td>510910</td>
<td>Diagnostic Medical Sonography/Sonographer and Ultrasound Technician.</td>
<td>29</td>
<td>96.55%</td>
<td>$52,454</td>
</tr>
<tr>
<td>480503</td>
<td>Machine Shop Technology/Assistant.</td>
<td>6</td>
<td>100.00%</td>
<td>$50,898</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR2ED Div.; P-20 Longitudinal Database, 2018-19
### Table A 2: Top 10 Income Earners by CIP Code, Associate’s

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>CIP Title</th>
<th>Number of Awards</th>
<th>Employed %</th>
<th>Estimated Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>510904</td>
<td>Emergency Medical Technology/Technician (EMT Paramedic).</td>
<td>33</td>
<td>96.97%</td>
<td>$60,942</td>
</tr>
<tr>
<td>470303</td>
<td>Industrial Mechanics and Maintenance Technology.</td>
<td>10</td>
<td>100.00%</td>
<td>$54,738</td>
</tr>
<tr>
<td>150613</td>
<td>Manufacturing Engineering Technology/Technician.</td>
<td>14</td>
<td>100.00%</td>
<td>$54,546</td>
</tr>
<tr>
<td>320111</td>
<td>Workforce Development and Training.</td>
<td>6</td>
<td>83.33%</td>
<td>$52,940</td>
</tr>
<tr>
<td>150614</td>
<td>Welding Engineering Technology/Technician.</td>
<td>16</td>
<td>75.00%</td>
<td>$52,785</td>
</tr>
<tr>
<td>513801</td>
<td>Registered Nursing/Registered Nurse.</td>
<td>776</td>
<td>88.02%</td>
<td>$50,809</td>
</tr>
<tr>
<td>430203</td>
<td>Fire Science/Firefighting.</td>
<td>28</td>
<td>89.29%</td>
<td>$48,926</td>
</tr>
<tr>
<td>150000</td>
<td>Engineering Technology, General.</td>
<td>187</td>
<td>78.61%</td>
<td>$48,852</td>
</tr>
<tr>
<td>520299</td>
<td>Business Administration, Management and Operations, Other.</td>
<td>12</td>
<td>83.33%</td>
<td>$46,902</td>
</tr>
<tr>
<td>510908</td>
<td>Respiratory Care Therapy/Therapist.</td>
<td>63</td>
<td>96.83%</td>
<td>$45,562</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR²ED Div.; P-20 Longitudinal Database, 2018-19

### Table A 3: Top 10 Income Earners by CIP Code, Bachelor’s

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>CIP Title</th>
<th>Number of Awards</th>
<th>Employed %</th>
<th>Estimated Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>513818</td>
<td>Nursing Practice.</td>
<td>13</td>
<td>69.2%</td>
<td>$92,641</td>
</tr>
<tr>
<td>430302</td>
<td>Crisis/Emergency/Disaster Management.</td>
<td>20</td>
<td>65.0%</td>
<td>$82,933</td>
</tr>
<tr>
<td>440401</td>
<td>Public Administration.</td>
<td>56</td>
<td>91.1%</td>
<td>$81,302</td>
</tr>
<tr>
<td>513805</td>
<td>Family Practice Nurse/Nursing.</td>
<td>15</td>
<td>60.0%</td>
<td>$74,646</td>
</tr>
<tr>
<td>130499</td>
<td>Educational Administration and Supervision, Other.</td>
<td>14</td>
<td>92.9%</td>
<td>$72,249</td>
</tr>
<tr>
<td>521301</td>
<td>Management Science.</td>
<td>19</td>
<td>84.2%</td>
<td>$64,724</td>
</tr>
<tr>
<td>522001</td>
<td>Construction Management.</td>
<td>42</td>
<td>64.3%</td>
<td>$64,275</td>
</tr>
<tr>
<td>131299</td>
<td>Teacher Education and Professional Development, Specific Levels and Methods, Other.</td>
<td>37</td>
<td>83.8%</td>
<td>$62,777</td>
</tr>
<tr>
<td>111005</td>
<td>Information Technology Project Management.</td>
<td>8</td>
<td>62.5%</td>
<td>$62,047</td>
</tr>
<tr>
<td>141001</td>
<td>Electrical and Electronics Engineering</td>
<td>183</td>
<td>47.5%</td>
<td>$62,045</td>
</tr>
</tbody>
</table>

Source: TN Dept of Labor and Workforce Development, WIR²ED Div.; P-20 Longitudinal Database, 2018-19
Appendix B: Institutions Included in IPEDS Degree Production Data (}
<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Health Careers Institute</td>
</tr>
<tr>
<td>American Baptist College</td>
</tr>
<tr>
<td>Arnolds Beauty School</td>
</tr>
<tr>
<td>Austin Peay State University</td>
</tr>
<tr>
<td>Austin’s Beauty College Inc</td>
</tr>
<tr>
<td>Baptist Memorial College of Health Sciences</td>
</tr>
<tr>
<td>Belmont University</td>
</tr>
<tr>
<td>Bethel University</td>
</tr>
<tr>
<td>Bryan College-Dayton</td>
</tr>
<tr>
<td>Career Beauty College</td>
</tr>
<tr>
<td>Carson-Newman University</td>
</tr>
<tr>
<td>Chattanooga College Medical Dental and Technical Careers</td>
</tr>
<tr>
<td>Chattanooga State Community College</td>
</tr>
<tr>
<td>Christian Brothers University</td>
</tr>
<tr>
<td>Cleveland State Community College</td>
</tr>
<tr>
<td>Columbia State Community College</td>
</tr>
<tr>
<td>Concorde Career College-Memphis</td>
</tr>
<tr>
<td>Cumberland University</td>
</tr>
<tr>
<td>DeVry University-Tennessee</td>
</tr>
<tr>
<td>Dyersburg State Community College</td>
</tr>
<tr>
<td>East Tennessee State University</td>
</tr>
<tr>
<td>EduMed Partners</td>
</tr>
<tr>
<td>Elite College of Cosmetology</td>
</tr>
<tr>
<td>Empire Beauty School-E Memphis</td>
</tr>
<tr>
<td>Empire Beauty School-Jackson</td>
</tr>
<tr>
<td>Empire Beauty School-Nashville</td>
</tr>
<tr>
<td>Empire Beauty School-S Memphis</td>
</tr>
<tr>
<td>Fisk University</td>
</tr>
<tr>
<td>Fortis Institute-Cookeville</td>
</tr>
<tr>
<td>Fortis Institute-Cookeville</td>
</tr>
<tr>
<td>Fortis Institute-Nashville</td>
</tr>
<tr>
<td>Franklin Academy</td>
</tr>
<tr>
<td>Franklin Hair Academy School of Cosmetology</td>
</tr>
<tr>
<td>Freed-Hardeman University</td>
</tr>
<tr>
<td>Genesis Career College-Cookeville</td>
</tr>
<tr>
<td>Genesis Career College-Lebanon</td>
</tr>
<tr>
<td>Gould’s Academy</td>
</tr>
<tr>
<td>Gould’s Academy</td>
</tr>
<tr>
<td>Health-Tech Institute of Memphis</td>
</tr>
<tr>
<td>Hiwassee College</td>
</tr>
<tr>
<td>Huntington University of Health Sciences</td>
</tr>
<tr>
<td>Hussian College-Daymar College Clarksville</td>
</tr>
<tr>
<td>Hussian College-Daymar College Murfreesboro</td>
</tr>
<tr>
<td>Hussian College-Daymar College Nashville</td>
</tr>
<tr>
<td>Image Maker Beauty Institute</td>
</tr>
<tr>
<td>Jackson State Community College</td>
</tr>
<tr>
<td>Jenny Lea Academy of Cosmetology</td>
</tr>
<tr>
<td>John A Gupton College</td>
</tr>
<tr>
<td>Johnson University</td>
</tr>
<tr>
<td>King University</td>
</tr>
<tr>
<td>Lane College</td>
</tr>
<tr>
<td>Le Moyne-Owen College</td>
</tr>
<tr>
<td>Lee University</td>
</tr>
<tr>
<td>Lincoln College of Technology-Nashville</td>
</tr>
<tr>
<td>Lincoln Memorial University</td>
</tr>
<tr>
<td>Lipscomb University</td>
</tr>
<tr>
<td>Love Beauty School Inc</td>
</tr>
<tr>
<td>Martin Methodist College</td>
</tr>
<tr>
<td>Maryville College</td>
</tr>
<tr>
<td>Massage Institute of Memphis</td>
</tr>
<tr>
<td>Master’s Barber &amp; Styling College</td>
</tr>
<tr>
<td>Meharry Medical College</td>
</tr>
<tr>
<td>Memphis College of Art</td>
</tr>
<tr>
<td>Memphis Institute of Barbering</td>
</tr>
<tr>
<td>Memphis Theological Seminary</td>
</tr>
<tr>
<td>Meridian Institute of Surgical Assisting</td>
</tr>
<tr>
<td>Mid-South Christian College</td>
</tr>
<tr>
<td>Middle Tennessee School of Anesthesia Inc</td>
</tr>
<tr>
<td>Middle Tennessee State University</td>
</tr>
<tr>
<td>Milligan College</td>
</tr>
<tr>
<td>Mind Body Institute</td>
</tr>
<tr>
<td>Motlow State Community College</td>
</tr>
<tr>
<td>Mr Wayne's School of Unisex Hair Design</td>
</tr>
<tr>
<td>Nashville College of Medical Careers</td>
</tr>
<tr>
<td>Nashville Film Institute</td>
</tr>
<tr>
<td>Nashville State Community College</td>
</tr>
<tr>
<td>National College-Nashville</td>
</tr>
<tr>
<td>North Central Institute</td>
</tr>
<tr>
<td>Northeast State Community College</td>
</tr>
<tr>
<td>Nossi College of Art</td>
</tr>
<tr>
<td>Omega Graduate School</td>
</tr>
</tbody>
</table>
Paul Mitchell the School-Knoxville
Paul Mitchell the School-Memphis
Paul Mitchell the School-Murfreesboro
Pellissippi State Community College
Pentecostal Theological Seminary
Platt College-Miller-Motte Technical-Chattanooga
Queen City College
Remington College-Memphis Campus
Remington College-Nashville Campus
Rhodes College
Richmont Graduate University
Roane State Community College
Ross Medical Education Center-Johnson City
Ross Medical Education Center-Knoxville
SAE Institute of Technology-Nashville
Sandra Academy of Salon Services Inc
Shear Perfection Academy of Cosmetology
South College
Southern Adventist University
Southern College of Optometry
Southwest Tennessee Community College
Strayer University-Tennessee
Tennessee Board of Regents
Tennessee Career Institute
TCAT Nashville
TCAT-Athens
TCAT-Covington
TCAT-Crossville
TCAT-Crump
TCAT-Dickson
TCAT-Elizabethton
TCAT-Harriman
TCAT-Hartville
TCAT-Hohenwald
TCAT-Jacksboro
TCAT-Jackson
TCAT-Knoxville
TCAT-Livingston
TCAT-McKenzie
TCAT-McMinnville
TCAT-Memphis
TCAT-Morristown
TCAT-Murfreesboro
TCAT-Newbern

TCAT-Oneida-Huntsville
TCAT-Paris
TCAT-Pulaski
TCAT-Ripley
TCAT-Shelbyville
TCAT-Whiteville
Tennessee School of Beauty of Knoxville Inc
Tennessee State University
Tennessee Technological University
Tennessee Wesleyan University
The Hair Academy LLC
The Salon Professional Academy-Nashville
The University of Tennessee Health Science Center
The University of Tennessee System Office
The University of Tennessee-Chattanooga
The University of Tennessee-Knoxville
The University of Tennessee-Martin
The University of the South
Trevecca Nazarene University
Tusculum University
Union University
University of Memphis
University of Phoenix-Tennessee
Vanderbilt University
Vibe Barber College
Visible Music College
Volunteer State Community College
Walters State Community College
Watkins College of Art Design & Film
Welch College
William Moore College of Technology
Williamson Christian College