



# Program of Study Justifications for Finance

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# Accounting

2017-18 Program of Study	Level 1	Level 2	Level 3	Level 4
<b>Accounting</b>	Introduction to Business & Marketing (5905)	Accounting I (5910)	Accounting II (5911) -or- <b>Dual Enrollment</b> Accounting (4090)	Statistics (3136) -or- AP Statistics (3129) -or- <b>Dual Enrollment</b> Accounting (4090)

## Description

The Accounting program of study is designed to prepare students for employment in a career in accounting, the basis for all banking and finance structure. Subject matter is arranged around sequenced, progressive courses that provide students with the opportunity to develop a holistic understanding of accounting systems and how they are utilized in business and industry. Course content centers on concepts in business, finance, and marketing; social responsibility and ethics; key business processes; accounting processes and operations; and analysis of financial data. Proficient students will understand how to reason quantitatively, pay attention to precision, follow the double entry accounting process, collect and record financial data, and apply accounting functions business start-up and expansion. Upon completion of this POS, students will be prepared to seek employment or advanced training as a bookkeeping or accounting clerk, budget analyst, financial manager, tax preparer, or many other careers in the accounting field. Students may gain job experience while still in high school through local Career and Technical Students Organization (CTSO) competitions and through opportunities in work-based learning.

## Job Outlook

Accounting careers incorporate talents in recording, classifying, summarizing, analyzing, and communicating the financial information and business transactions of an organization for use in management decision-making. Many careers in the finance industry are projected to grow at a faster rate than other occupations through 2024.<sup>1</sup> United States jobs related to accounting are expected to increase at a rate of 2.8% through the year 2024. The United States Department of Labor Bureau of Labor Statistics lists several careers in the area of accounting that will experience significant growth to 2024, among them Accountants, Auditors, Billing and Posting Clerks and Financial Examiners.<sup>2</sup> In addition, the Tennessee Department of Labor and Workforce Development includes Accountants; Auditors; and Bookkeeping,

<sup>1</sup> O\*Net Online on the Internet at <https://www.onetonline.org/find/industry?i=52&g=Go> (visited June 30, 2017).

<sup>2</sup> Bureau of Labor Statistics, U. S. Department of Labor, on the internet at [http://www.bls.gov/emp/ep\\_table\\_102.htm](http://www.bls.gov/emp/ep_table_102.htm) (visited June 30, 2017).



Accounting, and Auditing Clerks among the *Hot Careers to 2022*.<sup>3</sup> Jobs within the Finance cluster will enjoy a 16% increase, higher than more than half of other clusters, through 2018.<sup>4</sup> **Figure 1** outlines career opportunities related to accounting and the education level and work experience required for each.

**Figure 1.** Tennessee employment projections for accounting and related occupations with positive openings projected 2014 – 2024.<sup>5</sup>

Occupation	Average Annual Openings, 2014 – 2024	Total % Change, 2014 – 2024	Annual Median Wage, 2016	Level of Education	Minimum Work Experience Required
<b>Accountants and Auditors</b>	1,460	34.30%	\$59,130	Bachelor's Degree	2 – 5 years
<b>Billing and Account Collectors</b>	850	26.00%	\$33,940	High School Diploma	Entry level
<b>Bookkeeping, Accounting, and Auditing Clerks</b>	910	18.00%	\$36,070	High School Diploma	1 – 2 years
<b>Budget Analysts</b>	45	13.50%	\$62,340	Bachelor's Degree	2 – 5 years
<b>Financial Manager</b>	685	7.00%	\$90,290	Bachelor's Degree	5 – 6 years
<b>Payroll and Timekeeping Clerks</b>	195	23.00%	\$39,340	Bachelor's Degree	Entry level
<b>Statistical Assistants</b>	109	3.70%	\$48,280	Bachelor's Degree	1 – 2 years
<b>Tax Preparers</b>	160	48.80%	\$41,400	Bachelor's Degree	Entry level

Job opportunities for accounting related occupations are strongest in urban and surrounding areas in Tennessee. **Figure 2** reflects that more job openings in the area of accounting are located in Nashville, Memphis, and Knoxville and other counties in the mid-Cumberland region than in surrounding areas.<sup>6</sup>

<sup>3</sup> Tennessee Department of Labor and Workforce Development on the internet at <https://www.tn.gov/workforce/topic/occupations-in-demand> (visited June 30, 2017).

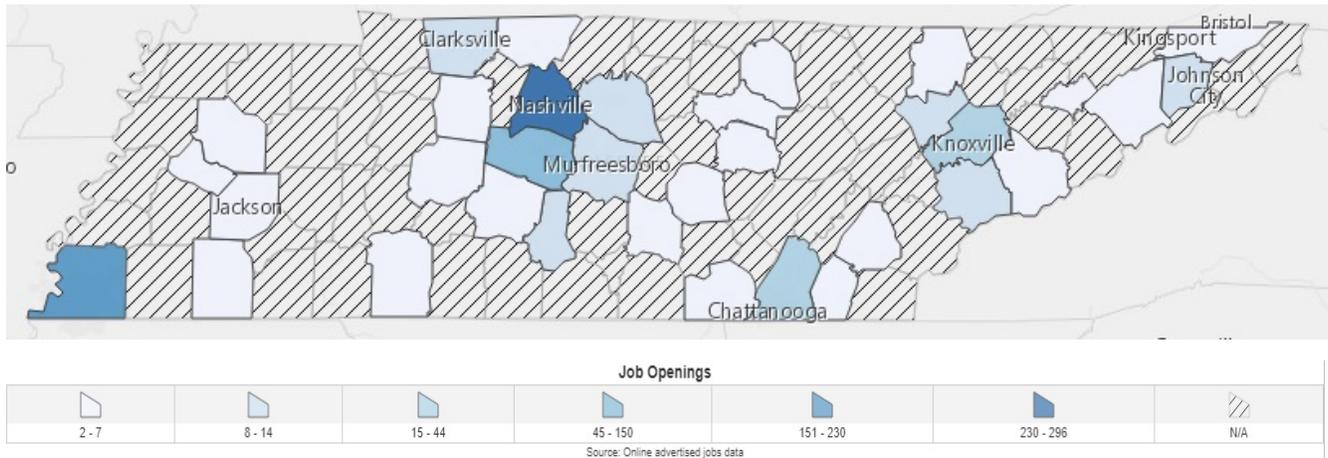
<sup>4</sup> Georgetown University Center on Education and the Workforce. (2013). *Career clusters: Forecasting demand for high school through college jobs, 2008-2018: State-Level Analysis*. Washington DC: Carnevale, A. P., et al.

<sup>5</sup> Tennessee Department of Labor and Workforce Development, Jobs4TN Online. (2017). Occupational Projections on the internet at <https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=occproj> (visited July 13, 2017).

<sup>6</sup> Tennessee Department of Labor and Workforce Development, Jobs4TN Online. (2017). Occupational Projections on the internet at <https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=occproj> (visited July 13, 2017).

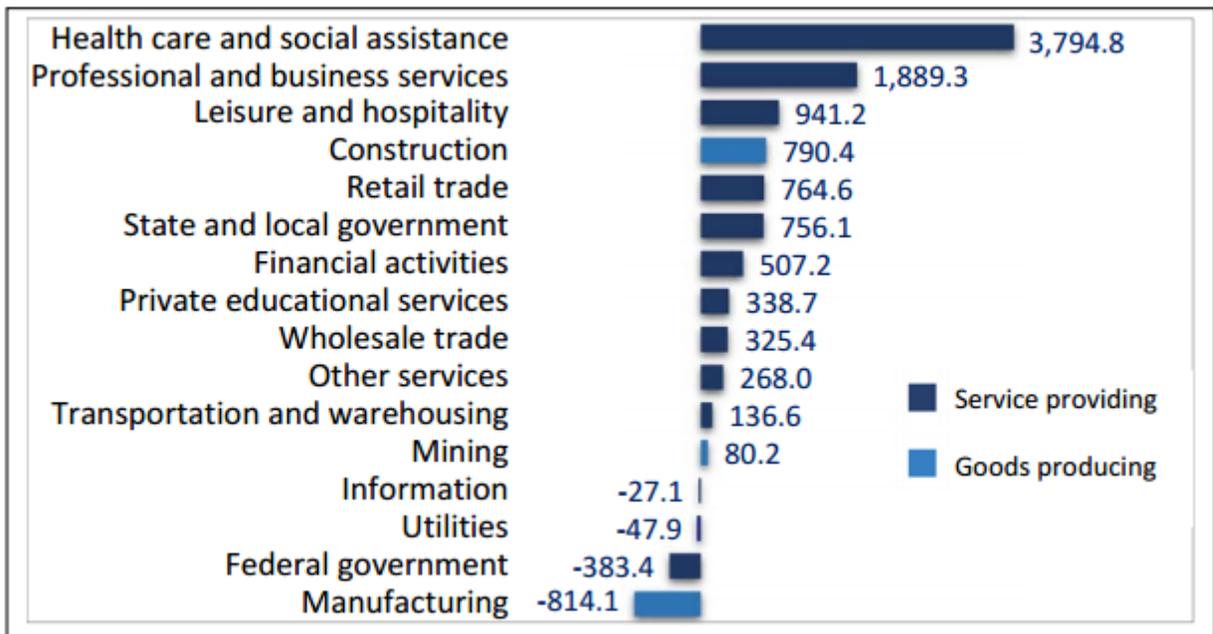


**Figure 2.** Accounting Job Openings for June 2017



On a national level, the industry sector of Financial Activities, in which the Accounting POS would be included, is projected to show the seventh largest amount of growth in industry by 2024. This placement is well above the midrange for growth as compared to other industry sectors, as reflected in **Figure 3.**<sup>7</sup>

**Figure 3.** Employment change by industry sector



<sup>7</sup> Bureau of Labor Statistics. [http://www.bls.gov/emp/ep\\_handout.pdf](http://www.bls.gov/emp/ep_handout.pdf)



### Current Secondary Landscape

In the 2014-2015 school year, 7,217 students were enrolled in a course within the Accounting POS. This number raised to 11,716 students, a 62% increase, in the 2015-2016 school year as indicated in **Figure 4**.<sup>8</sup> This growth can be attributed to the development of the new course, Introduction to Business & Marketing, which now serves as the first year course for seven programs of study, whereas the number of students enrolled in accounting-related courses from 2014-2015 to 2015-2016 decreased by 43. Despite this drop in student enrollment, **Figure 5** shows an increase in the number of schools that chose the Accounting POS each year as reflected by an analysis of open enrollment from all three years.<sup>9</sup>

**Figure 4.** Student Enrollment 2015-2016

Introduction to Business & Marketing	Accounting I	Accounting II	Statistics - or - AP Statistics Dual Enrollment
8239	2957	482	38

**Figure 5.** Open Enrollment Figures

Accounting	2014-2015 Open Enrollment Selections	2015-2016 Open Enrollment Selections	2016-2017 Open Enrollment Selections
	59	67	72

### Postsecondary Opportunities

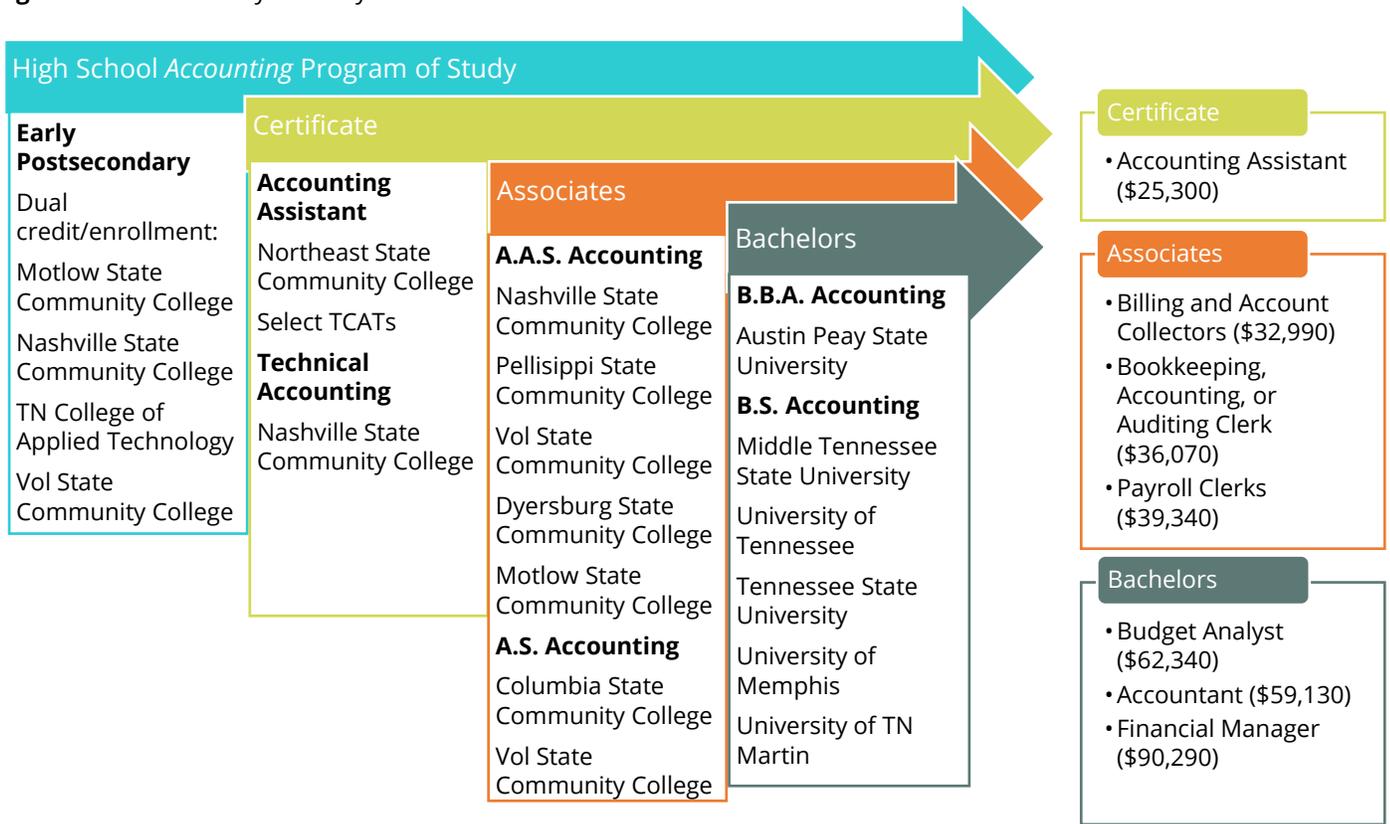
Upon completion of this POS, students will be prepared to further their training at technical schools and universities in the area of accounting. **Figure 6** outlines the related career opportunities and the training necessary for each. Very few occupations require only a high school diploma as most occupations in the area of accounting require a minimum of a bachelor’s degree. **Figure 7** reflects that more than 57% of occupations in the career cluster of Finance will require at least a Bachelor’s degree by 2018. Occupations in the Finance cluster, of which Accounting is a component, offer significantly higher salaries to employees with a minimum of a Bachelor’s degree.<sup>10</sup> Postsecondary institutions in Tennessee offer accounting degree programs exclusively toward the end of earning a minimum of an Associate’s degree in accounting; however, the Tennessee Transfer Pathway is in place at many community and technical schools to prepare students to move on to institutions of higher learning that offer Bachelor’s or Master’s degrees in this area.

<sup>8</sup> Tennessee Department of Education. (2017). *Student Enrollment Data*. Based on author’s calculation of student enrollment data.

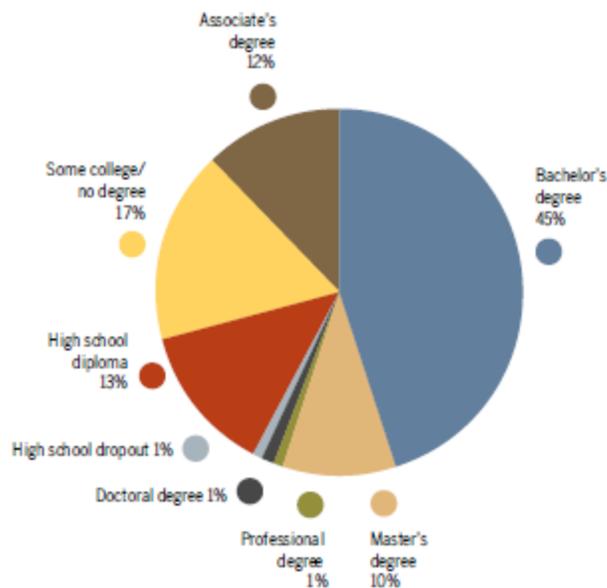
<sup>9</sup> Tennessee Department of Education. (2017). *Open Enrollment Figures*. Based on author’s analysis of open enrollment figures.

<sup>10</sup> Georgetown University Center on Education and the Workforce. (2011). *Career clusters: Forecasting demand for high school through college jobs, 2008-2018*. Washington DC: Carnevale, A. P., et al.

**Figure 6.** Postsecondary Pathways



**Figure 7.** Educational requirements for jobs (nationally) in Finance in 2018





### Recommendations

Because of the comparative stability and continued growth in the accounting field with regard to postsecondary requirements and job openings, coupled with the noted decrease in student enrollment in of the Accounting POS, it is recommended that Financial Planning be added as a Level 4 option to the Accounting POS. Financial Planning would provide a greater understanding of various financial offerings and financial analysis skills to students who will continue to pursue Accounting in the postsecondary arena or accounting related positions with financial institutions. Additionally, it would assist schools in increasing the number of potential completers in the Finance career cluster as all course offerings except Level 3 offerings would be the same throughout the entire cluster. Currently there is no enrollment data that depicts student enrollment in Level 4 of this POS with its current offerings.

Additionally, in consideration of conversations with advisory council members, it is recommended that a streamlined focus on the analysis and implications of an annual report be made more clear within the existing Accounting II standards. Another recommended alteration to the Accounting II standards includes adding an exploration of franchising business models.

Finally, a focused effort on improving recruiting approaches will be incorporated in all PD sessions and newsletter submissions. The Finance career cluster significantly shows the fewest number of students enrolled in its courses (by over 7,898 students) and the fewest number of schools offering it as a program of study (by at least 36 schools) as compared to Business and Marketing career clusters. Yet, all research indicates a job market that is currently very strong with even more positive projections within the next decade.

Proposed 2018-19 Program of Study	Level 1	Level 2	Level 3	Level 4
<b>Accounting</b>	Introduction to Business & Marketing (5905)	Accounting I (5910)	Accounting II (5911) -or- <b>Dual Enrollment</b> Accounting (4090)	Financial Planning (5890) -or- Statistics (3136) -or- AP Statistics (3129) -or- <b>Dual Enrollment</b> Accounting (4090)



## References

Georgetown University Center on Education and the Workforce. (2011). *Career clusters: Forecasting demand for high school through college jobs, 2008-2018: State-Level Analysis*. Washington DC: Carnevale, A. P., Green, K. A., Kotamraju, P., Smith, N., Steuernagel, B., Stone, J. R.

Georgetown University Center on Education and the Workforce. (2013). *Recovery: Job growth and education requirements through 2020*. Washington DC: Carnevale, A. P., Smith, N., Strohl, J. Retrieved on June 30, 2017.

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United States Department of Labor, Employment and Training Administration. (2017). *Browse by career cluster: Business management and administration*. Retrieved from <https://www.onetonline.org/find/career?c=4&g=Go>



# Banking and Finance

2017-18 Program of Study	Level 1	Level 2	Level 3	Level 4
<b>Banking and Finance</b>	Introduction to Business & Marketing (5905)	Accounting I (5910)	Banking and Finance (5899) -or- <b>Dual Enrollment</b> Banking & Finance (4091)	Financial Planning (5890) -or- <b>Dual Enrollment</b> Banking & Finance (4091)
				<b>Industry Certification:</b> National Certified Compliance Officer (NCCO)

## Description

The Banking and Finance program of study is designed to prepare students for employment in a career in banking or finance where services such as short-term investments, lending, credit cards, and bill payments are offered to customers via institutions such as commercial banks, savings and loan associations, credit unions, local banks, insurance companies, and brokerage houses. Subject matter is arranged around sequenced, progressive courses that provide students with the opportunity to develop a holistic understanding of banking and finance systems and how they are utilized in personal and commercial banking and other financial services. Course content centers on concepts in business, finance, and marketing; social responsibility and ethics; key business processes; analysis of financial data; banking regulations; and financial services and products. Proficient students will understand money; bank management, policies, and procedures; marketing strategies used by financial institutions; savings, investments, and portfolio theory; impact of taxation on investments; and retirement planning. Upon completion of this POS, students will be prepared to seek employment or advanced training as a bill or account collector, financial analyst, loan officer, credit counselor, teller, or many other careers in banking and finance. Students may gain job experience while still in high school through local Career and Technical Students Organization (CTSO) competitions and through opportunities in work-based learning.



## Job Outlook

Banking and finance careers incorporate talents in saving, investing, and protecting monetary assets for businesses as well as the general public. Many careers in the finance industry are projected to grow at a faster rate than other occupations through 2024.<sup>11</sup> United States jobs related to banking and finance are expected to increase at a rate of 7.2% through the year 2024. The United States Department of Labor Bureau of Labor Statistics lists several careers in the area of financial services that will experience significant growth to 2024, among them, Financial Analysts, Loan Officers, Credit Counselors, Personal Financial Advisors, and Financial Managers.<sup>12</sup> In addition, the Tennessee Department of Labor and Workforce Development includes Financial Managers and Bill and Account Collectors among the *Hot Careers to 2022*.<sup>13</sup> Jobs within the Finance cluster will enjoy a 16% increase, higher than more than half of other clusters, through 2018.<sup>14</sup> **Figure 1** outlines career opportunities related to banking and finance along with the education level and work experience required for each.

**Figure 1.** Tennessee employment projections for banking and finance related occupations with openings projected 2014 – 2024.<sup>15</sup>

Occupation	Average Annual Openings, 2014 – 2024	Total % Change, 2014 – 2024	Annual Median Wage, 2016	Level of Education	Minimum Work Experience Required
<b>Credit Analysts</b>	70	21.50%	\$60,460	Bachelor's Degree	1 – 2 years
<b>Credit Counselors</b>	20	25.20%	\$36,490	Bachelor's Degree	1 – 2 years
<b>Financial Analysts</b>	145	32.10%	\$67,490	Bachelor's Degree	2 – 5 years
<b>Financial Managers, Branch or Department</b>	465	18.30%	\$90,290	Bachelor's Degree	2 – 5 years
<b>Loan Officers</b>	165	9.90%	\$58,590	Bachelor's Degree	1 – 2 years
<b>Personal Financial Advisors</b>	70	23.90%	\$70,780	Bachelor's Degree	1 – 2 years
<b>Tellers</b>	475	-1.40%	\$25,700	High School Diploma	Entry level

<sup>11</sup> O\*Net Online on the Internet at <https://www.onetonline.org/find/industry?i=52&g=Go> (visited June 30, 2017).

<sup>12</sup> Bureau of Labor Statistics, U. S. Department of Labor, on the internet at [http://www.bls.gov/emp/ep\\_table\\_102.htm](http://www.bls.gov/emp/ep_table_102.htm) (visited July 13, 2017).

<sup>13</sup> Tennessee Department of Labor and Workforce Development on the internet at <https://www.tn.gov/workforce/topic/occupations-in-demand> (visited July 13, 2017).

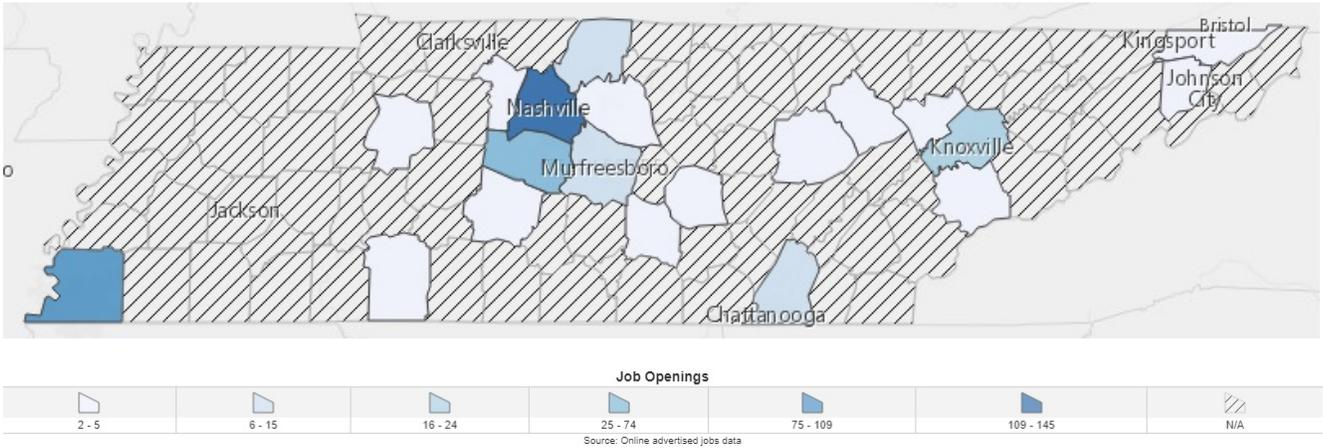
<sup>14</sup> Georgetown University Center on Education and the Workforce. (2013). *Career clusters: Forecasting demand for high school through college jobs, 2008-2018: State-Level Analysis*. Washington DC: Carnevale, A. P., et al.

<sup>15</sup> Tennessee Department of Labor and Workforce Development, Jobs4TN Online. (2017). Occupational Projections on the internet at <https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=occpj> (visited June 30, 2017).



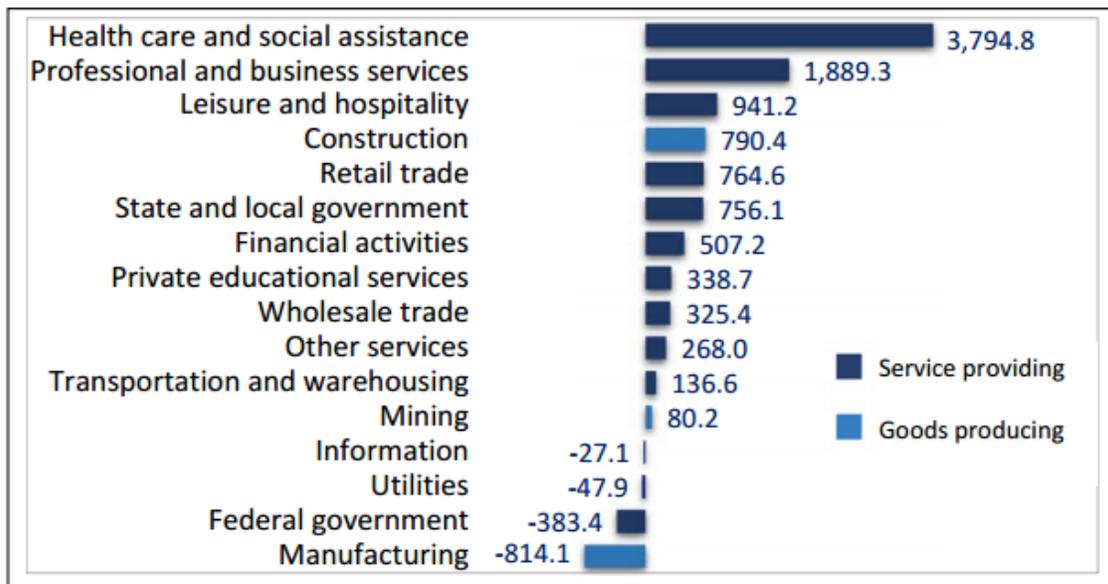
Job opportunities for banking and finance related occupations are strongest in urban and surrounding areas in Tennessee. **Figure 2** reflects that more professionals in the area of finance are needed in Nashville, Chattanooga, Memphis, and Knoxville and other counties in the mid-Cumberland region than in surrounding areas. <sup>16</sup>

**Figure 2.** Financial Analyst Job Openings for June 2017



On a national level, the industry sector of Financial Activities, in which the Banking and Finance POS would be included, is projected to show the seventh largest amount of growth in industry by 2024. This placement is well above the midrange for growth as compared to other industry sectors, as reflected in **Figure 3.** <sup>17</sup>

**Figure 3.** Employment change by industry sector



<sup>16</sup> Tennessee Department of Labor and Workforce Development, Jobs4TN Online. (2017). Occupational Projections on the internet at <https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=ocproj> (visited July 13, 2017).

<sup>17</sup> Bureau of Labor Statistics. [http://www.bls.gov/emp/ep\\_handout.pdf](http://www.bls.gov/emp/ep_handout.pdf)



### Current Secondary Landscape

In the 2015-2016 school year, 12,288 students were enrolled in a course within the Banking and Finance POS as indicated in **Figure 4**.<sup>18</sup> Initially this appears to be an increase of 3,360 students from the 2014-2015 school year. However, the growth is evident in the new course, Introduction to Business & Marketing, which now serves as the first year course for seven programs of study. The number of students enrolling in the level 2, 3, and 4 courses for the Banking and Finance POS actually dropped by 1,144, a 21% decrease in enrollment. **Figure 5** shows a minimal decrease in the number of schools in 2016-2017 that chose the Banking and Finance POS in comparison to quite a significant decrease just one year prior as reflected by an analysis of open enrollment from the previous three years.<sup>19</sup>

**Figure 4.** Student Enrollment 2015-2016

Introduction to Business & Marketing	Accounting I	Banking and Finance	Financial Planning Dual Enrollment
8239	2957	848	244

**Figure 5.** Open Enrollment Figures

Banking & Finance	2014-2015 Open Enrollment Selections	2015-2016 Open Enrollment Selections	2016-2017 Open Enrollment Selections
	100	67	65

The establishment on high school campuses of onsite bank and credit union branches provides a unique work-based learning opportunity for students in the banking and finance POS. These school-based enterprises provide the real life work experience necessary for students to progress in this field of expertise; therefore, continuation of these programs is strongly suggested.

### Postsecondary Opportunities

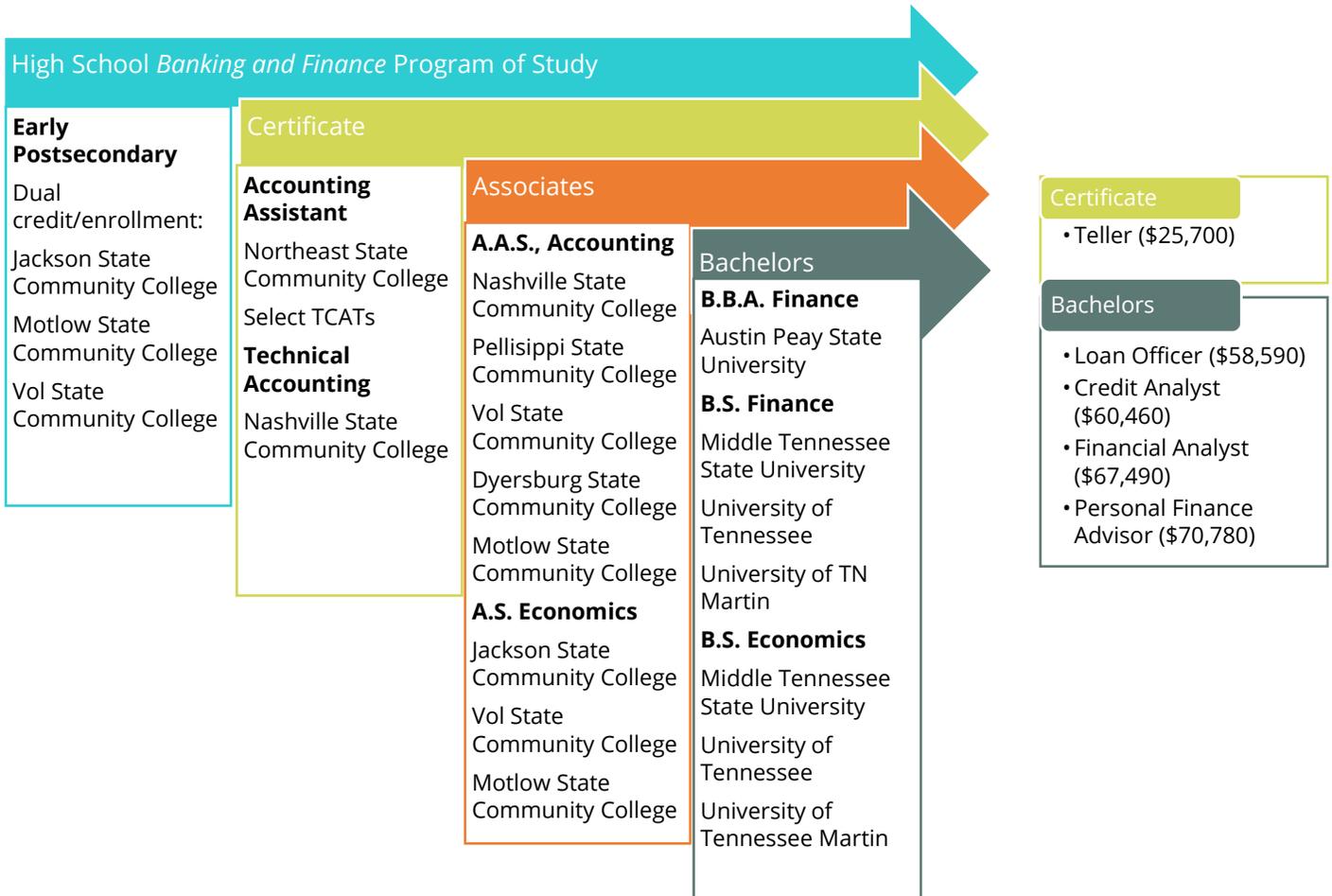
Upon completion of this POS, students will be prepared to further their training at technical schools and universities in the areas of finance, financial services, and economics, among others. **Figure 6** outlines the related career opportunities and the training necessary for each. Whereas a few occupations require a high school diploma only, most occupations in the area of banking and finance require a minimum of a bachelor’s degree. **Figure 7** reflects that more 57% of occupations in the career cluster of Finance will require at least a Bachelor’s degree by 2018. Occupations in the Finance cluster, of which Banking and Finance is a component, offer significantly higher salaries to employees with a minimum of a Bachelor’s degree.<sup>20</sup> Postsecondary institutions in Tennessee offer banking and finance degree programs in many areas, among them: Finance, Financial Services, and Economics.

<sup>18</sup> Tennessee Department of Education. (2017). *Student Enrollment Data*. Based on author’s calculation of student enrollment data.

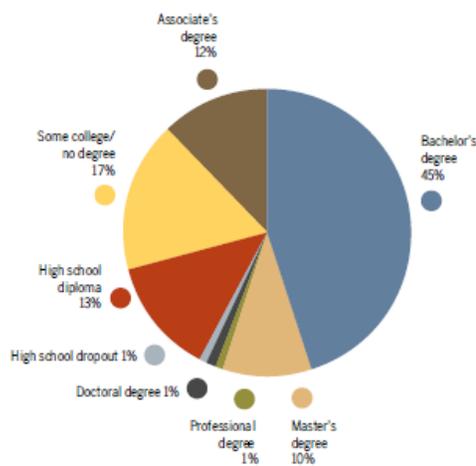
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<sup>20</sup> Georgetown University Center on Education and the Workforce. (2011). *Career clusters: Forecasting demand for high school through college jobs, 2008-2018*. Washington DC: Carnevale, A. P., et al.

**Figure 6.** Postsecondary Pathways



**Figure 7.** Educational requirements for jobs (nationally) in Finance in 2018





### Recommendations

The noteworthy continued strength and projected growth of occupations in the banking and finance sector of Tennessee will provide significant career opportunities in this field. Many of these occupations are regionally concentrated and most require a minimum of a Bachelor’s degree, though some occupations hire employees who have only a high school diploma with no postsecondary coursework.

It is recommended that a focused effort on improving recruiting approaches be incorporated in all PD sessions and newsletter submissions. The Finance career cluster significantly shows the fewest number of students enrolled in its courses (by over 7,898 students) and the fewest number of schools offering it as a program of study (by at least 36 schools) as compared to Business and Marketing career clusters. Yet, all research indicates a job market that is currently very strong with even more positive projections within the next decade. The largest decreases in enrollment of any course within the career cluster is found in Financial Planning, with a decrease of 1,014 students enrolled in just one school year. This could be due to only those schools offering Banking & Finance or operating a school bank being the only schools feeding students into Financial Planning. Therefore, it is additionally recommended that Financial Planning be added as a Level 4 course in the Accounting POS as well, providing a greater opportunity for students to enroll in the course at more schools.

Proposed 2018-19 Program of Study	Level 1	Level 2	Level 3	Level 4
<b>Banking and Finance</b>	Introduction to Business & Marketing (5905)	Accounting I (5910)	Banking and Finance (5899) -or- <b>Dual Enrollment</b> Banking & Finance (4091)	Financial Planning (5890) or- <b>Dual Enrollment</b> Banking & Finance (4091)



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Georgetown University Center on Education and the Workforce. (2011). *Career clusters: Forecasting demand for high school through college jobs, 2008-2018: State-Level Analysis*. Washington DC: Carnevale, A. P., Green, K. A., Kotamraju, P., Smith, N., Steuernagel, B., Stone, J. R.

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