

Tacoma Community College

Economic Overview and Program Demand Gap Analysis

EXECUTIVE SUMMARY

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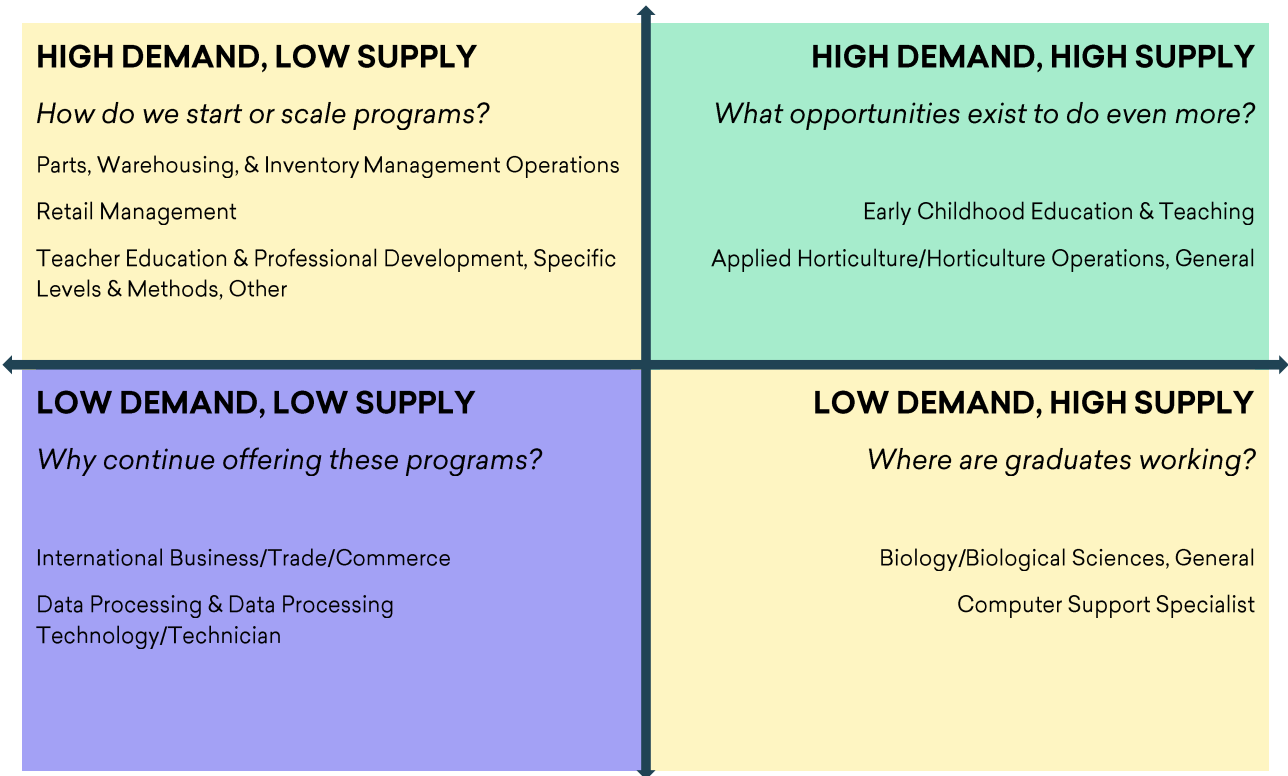
Acknowledgements

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Executive Summary

Tacoma Community College (TCC) is a public, two-year postsecondary educational institution in Washington. To further its goal of providing the county with well-trained and well-educated residents, TCC continually pursues improvement in various forms. An up-to-date understanding of the county economy and the demand for skilled labor is vital to the planning efforts of the college as it seeks to adapt its program offerings to the requirements of an ever-changing workforce. TCC partnered with Emsi, a leading provider of labor market data, to complete a program demand gap analysis, which assesses county job openings against educational program completions.

RECOMMENDATIONS



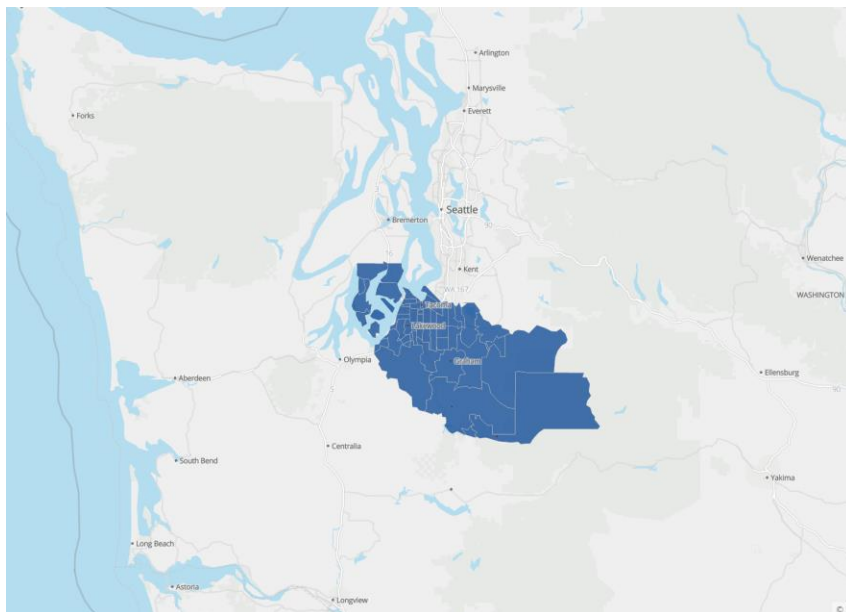
“Strong community colleges assess trends in job growth and salaries to determine what programs will be needed for high-demand jobs. They then structure their programs and enrollment in accordance with those demands.”

Josh Wyner in What Excellent Community Colleges Do: Preparing All Students for Success

INTRODUCTION

For purposes of the program demand gap analysis, TCC serves Pierce County. This report outlines the county’s economy and uses the county’s average annual projected job openings between 2019 and 2029 as a measurement of labor market demand. When job openings are compared to the region’s supply of educational program completions, the analysis determines how well TCC’s program offerings satisfy county workforce demand. In addition, this report offers recommendations for new program development. In its entirety, the PDGA is a starting point for TCC as the college continues to develop programs using data-based decision-making strategies. The following figures and table display key findings of the analyses.

Figure 1: Map of Pierce County

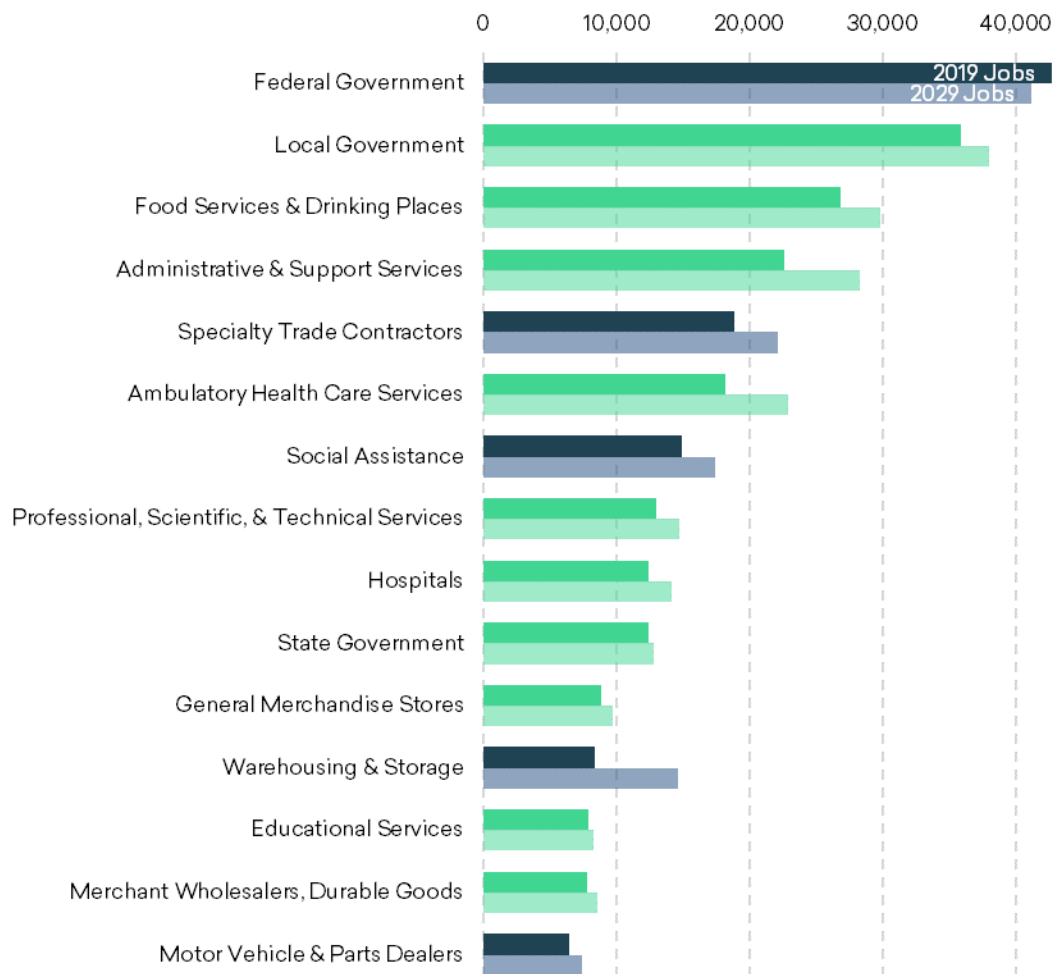


Source: Emsi Analyst. Region provided by TCC.

ECONOMIC OVERVIEW

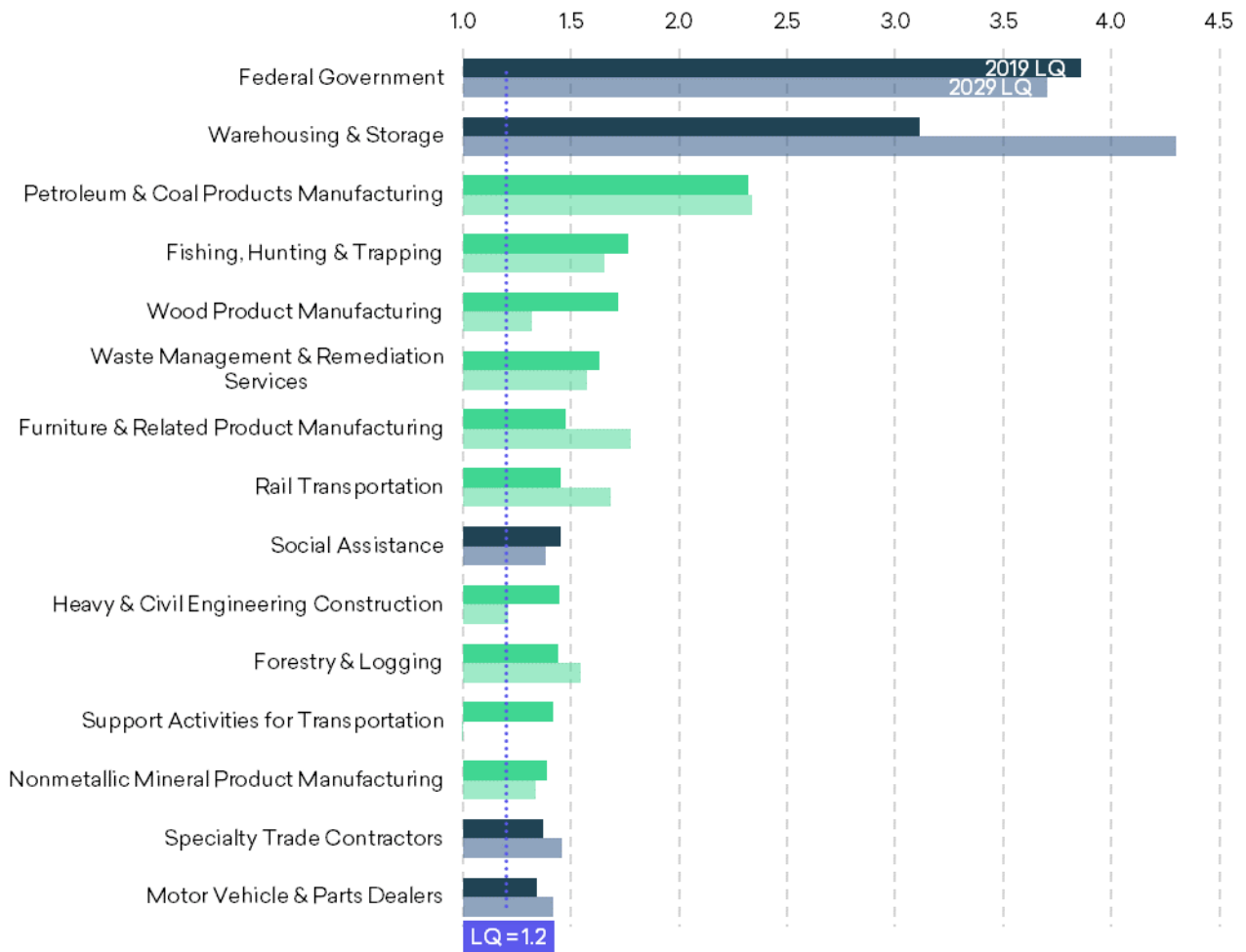
Figure 2 displays the top industry subsectors in terms of employment in Pierce County, and Figure 3 shows the top industry subsectors in terms of employment concentrations, referred to as location quotients (LQs). High LQs (usually anything greater than 1.2) are an indication that the county has a comparative advantage or specialization in certain industry subsectors relative to the rest of the nation or potentially to other regions.

Figure 2: Top Industry Subsectors in Pierce County by Jobs



Source: Employees & Self-Employed 2019.4.

Figure 3: Top Industry Subsectors in Pierce County by Employment Concentration (LQ)



Source: Employees & Self-Employed 2019.4.

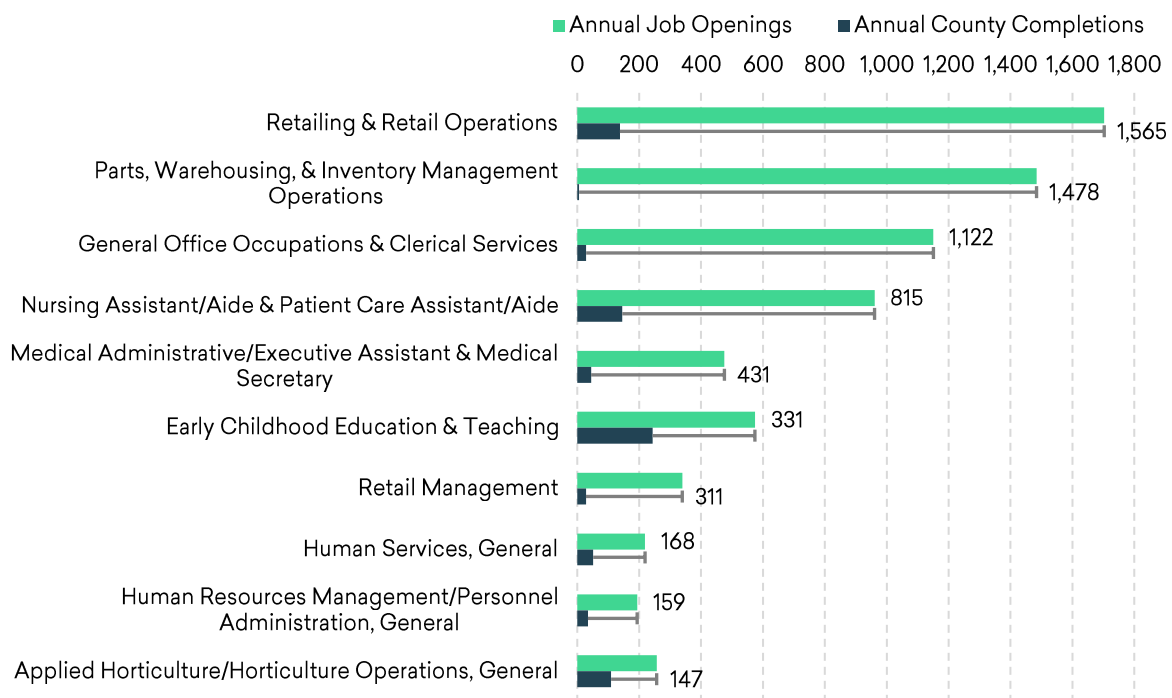
Note the dark blue colored bars in the figures. Across all of Pierce County’s industry subsectors, five are within the top 15 in terms of jobs with relatively high LQs. The appearance of these industry subsectors provides an indication of their strength in the region’s economy and offers the college insight into potential employment opportunities for its students. These industry subsectors, ranked by 2019 jobs, are:

- Federal Government
- Specialty Trade Contractors
- Social Assistance
- Warehousing & Storage
- Motor Vehicle & Parts Dealers

PROGRAM DEMAND GAP ANALYSIS

TCC offers 35 certificate level programs. Twelve of the programs have a significant gap above the 100-openings level of significance, the top 10 of which are shown in Figure 4. Many of the programs should be considered for expansion, although more consideration should be given to programs with high median hourly wages. No programs at this award level have a significant surplus.

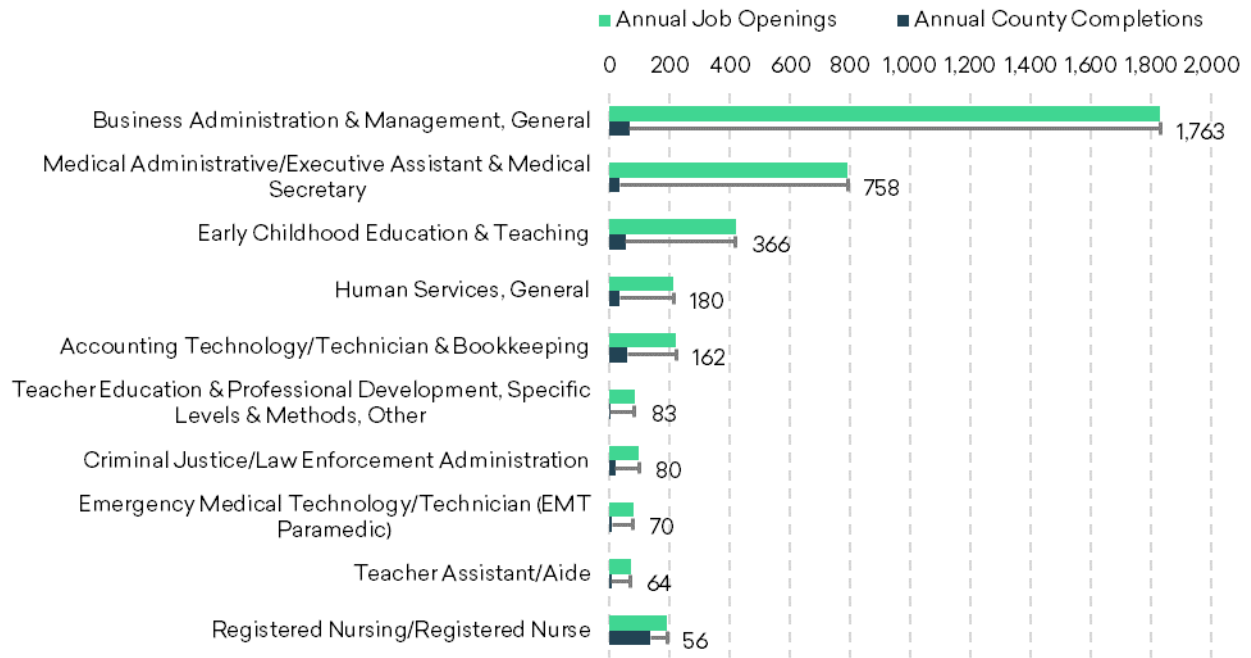
Figure 4: TCC's Top 10 Certificate Level Gaps



Source: Emsi program demand gap model.

At the associate degree level, five programs have a significant gap (Figure 5) and none of the programs have a significant surplus. Several should be considered for a college-wide expansion, many of which are related to other associate degree level programs without a significant 100-openings gap. Furthermore, if the associate degree level program is associated with a formal industry-specific certificate, permit, or license required for employment, it is also recommended for expansion.

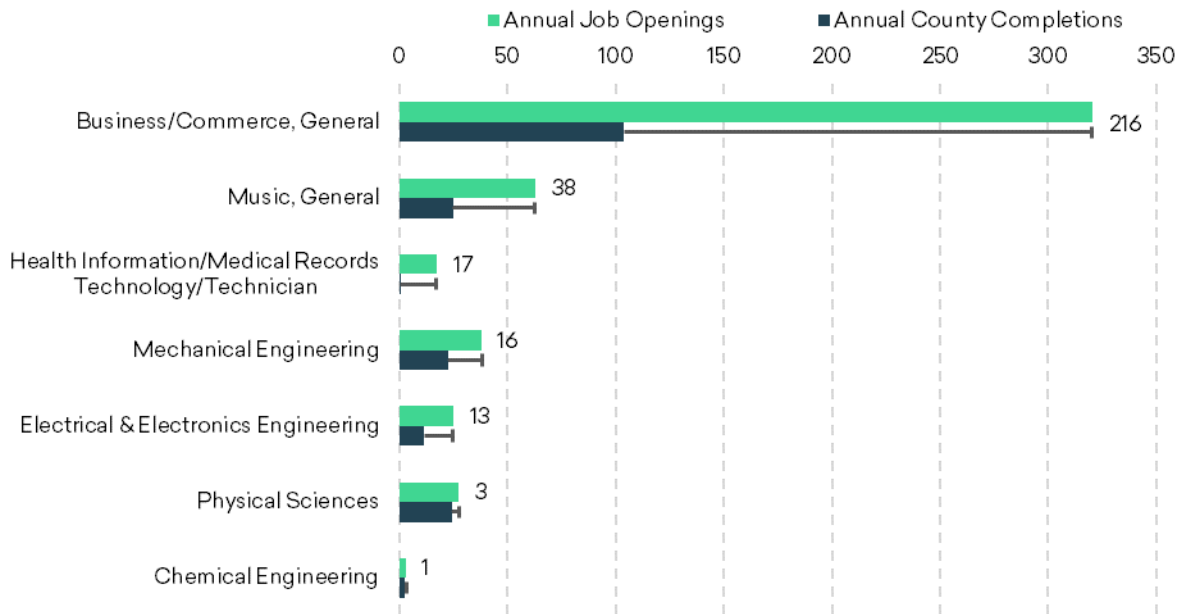
Figure 5: TCC's Top 10 Associate Degree Level Gaps



Source: Emsi program demand gap model.

TCC offers seven transfer-track degree programs and one bachelor's degree level program. In other words, a program completer could readily transfer into a similar bachelor's degree level program at another postsecondary educational institution in the state. Of these programs, one has a significant gap above the 100-openings level of significance, as shown in Figure 6, this program should be considered for expansion. A program expansion should consider the process by which TCC's students transfer into regional bachelor's degree level programs. Administrative and academic support measures at TCC would enable student success.

Figure 6: TCC's Transfer-Track Degree Level Programs With a Gap



Source: Emsi program demand gap model.

A liberal arts program expansion is not recommended at this time, but TCC administrators should be aware that students can find success in a variety of business-related occupations. Using Emsi's Profile Analytics database, many liberal arts program completers are currently employed as retail salespersons, administrative assistants, and customer service representatives, as well as a variety of managers and supervisors. These occupations have a considerable number of job openings in Pierce County. The college's liberal arts program, therefore, serves as a starting point to students' career goals beyond an associate degree level of education.

PROGRAM ADDITIONS

Fifty certificate level programmatic areas of opportunity have been identified in the program demand gap analysis, many of which are related to construction & extraction occupations and installation, maintenance, & repair occupations. At the associate degree level, there are fewer opportunities for new programs, considering the college's current offerings. Nonetheless, TCC should consider new programs related to healthcare practitioners & technical occupations, whether its focus is on job openings in Pierce County or Washington. Twenty-five programmatic areas of opportunity were identified at the transfer-track degree

level, many of which are related to finance, real estate, and insurance occupations, a demand which TCC could establish or adjust existing transfer-track degrees to meet. For all award levels, many program additions are related to the college's current program offerings, which indicates an opportunity for a curriculum adjustment to better align with the county's current and projected labor market demand. A selection of these occupations, which have the most county job openings by award level, appear in Table 1.

Table 1: Program Additions by Education Level

SOC TITLE	2019 JOBS	2029 JOBS	JOB CHANGE	ANNUAL JOB OPENINGS	MEDIAN HOURLY WAGE	EDUCATION LEVEL
Heavy and Tractor-Trailer Truck Drivers	4,974	5,273	299	424	\$22.94	CERT
Construction Laborers	4,454	5,093	639	321	\$20.86	CERT
Industrial Truck and Tractor Operators	2,102	2,995	893	279	\$19.15	CERT
Carpenters	3,841	4,305	464	272	\$25.82	CERT
First-Line Supervisors of Food Preparation and Serving Workers	2,307	2,557	249	257	\$17.43	CERT
Security Guards	2,259	2,443	185	234	\$15.84	CERT
Hairdressers, Hairstylists, and Cosmetologists	2,164	2,297	133	212	\$16.09	CERT
Maintenance and Repair Workers, General	3,863	4,308	445	309	\$19.53	CERT
Light Truck Or Delivery Services Drivers	2,219	2,597	378	218	\$17.64	CERT
Bartenders	1,342	1,453	111	156	\$16.05	CERT
Dental Hygienists	618	710	91	28	\$45.95	ASSOC
Respiratory Therapists	261	337	76	14	\$31.10	ASSOC
Physical Therapist Assistants	121	182	61	14	\$27.13	ASSOC
Real Estate Sales Agents	1,704	1,847	143	92	\$25.61	TRANS TRACK
Insurance Sales Agents	1,432	1,487	55	74	\$24.03	TRANS TRACK
Civil Engineers	1,011	1,094	83	55	\$40.21	TRANS TRACK
Postsecondary Teachers, General	1,795	1,812	16	52	\$32.95	TRANS TRACK
Office and Administrative Support Workers, All Other	821	883	61	44	\$18.45	TRANS TRACK

SOC refers to the Standard Occupational Classification system used to classify occupations. Average annual job openings represent regional data from 2019 to 2029. Numbers may not sum due to rounding.

Source: Emsi program demand gap model.

