

# Massasoit Community College

## Economic Overview and Program Demand Gap Analysis

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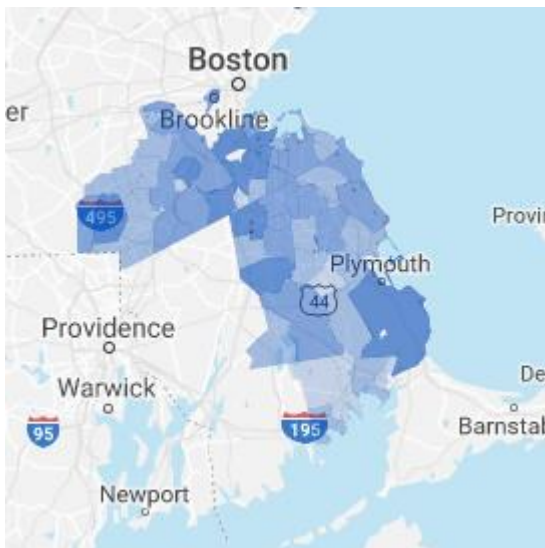


# Executive Summary

Massasoit Community College (Massasoit) is a public, two-year postsecondary educational institution in Massachusetts. An up-to-date understanding of the regional economy and the demand for skilled labor is vital to the planning efforts of colleges and universities seeking to adapt their program offerings to the requirements of an ever-changing workforce.

For purposes of this report, Massasoit serves a larger region beyond Plymouth County. This region, called the Massasoit Service Area, is comprised of two counties in Massachusetts: Plymouth and Norfolk Counties (Figure 1). This report outlines the region's economy and provides a program demand gap analysis to determine how well Massasoit's program offerings satisfy regional workforce demand. This report also offers recommendations for new program development. The following figures and table display key findings of the analyses.

FIGURE 1: MAP OF THE MASSASOIT SERVICE AREA

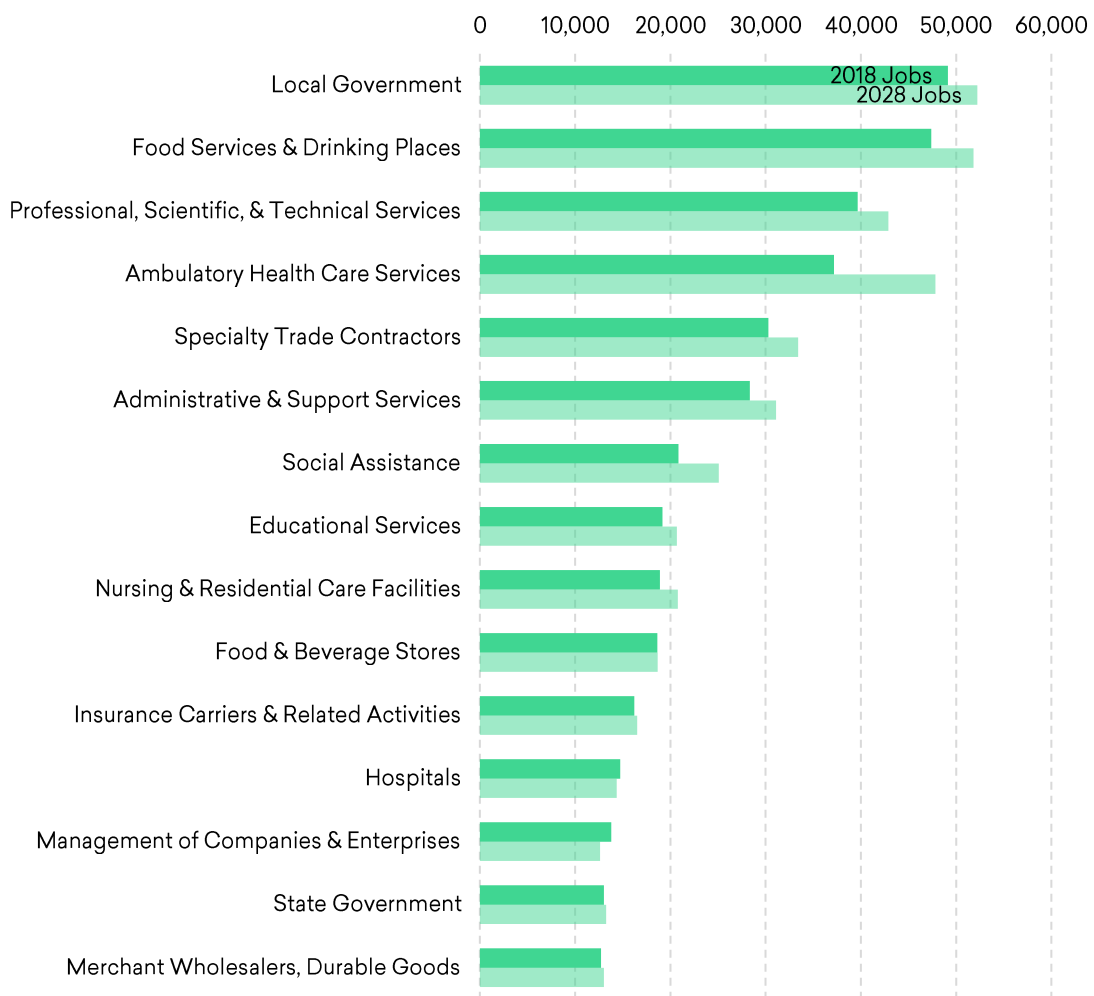


Source: Emsi Analyst. Region provided by Massasoit.

## ECONOMIC OVERVIEW

Figure 2 displays the top industry subsectors in terms of employment in the Massasoit Service Area, 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 region has a comparative advantage or specialization in certain industry subsectors relative to the rest of the nation or potentially to other competing regions.

FIGURE 2: TOP INDUSTRY SUBSECTORS IN THE MASSASOIT SERVICE AREA BY JOBS



Source: Emsi program demand gap model.



FIGURE 3: TOP INDUSTRY SUBSECTORS IN THE MASSASOIT SERVICE AREA BY EMPLOYMENT CONCENTRATION (LQ)



Source: Emsi program demand gap model.

Across all of Massasoit Service Area’s industry subsectors, five are within the top 15 in terms of jobs and relatively large 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. The five industry subsectors are:

- Specialty Trade Contractors
- Nursing & Residential Care Facilities
- Food & Beverage Stores
- Insurance Carriers & Related Activities



- Management of Companies & Enterprises

## **PROGRAM DEMAND GAP ANALYSIS**

The program demand gap analysis provides results across all of Massasoit's certificate, degree, and non-credit level programs, referred to by their formal CIP code titles.<sup>1</sup> The analysis connects the college's program completers with the availability of regional job openings. For Massasoit's non-credit programs, the analysis is similar in that it connects the college's completers with the availability of regional jobs, regardless of the industry or program, but without the additional reference to non-credit program completers from other postsecondary educational institutions in the Massasoit Service Area. Furthermore, the analysis focuses on the gaps and surpluses in the programs by award level. A gap or surplus larger than 300 is considered beyond normal labor market fluctuations and therefore an area of consideration for program development.

Massasoit offers 22 certificate level programs, five of which have a significant gap above the 300-job level of significance, as shown in Figure 4. The five programs are:

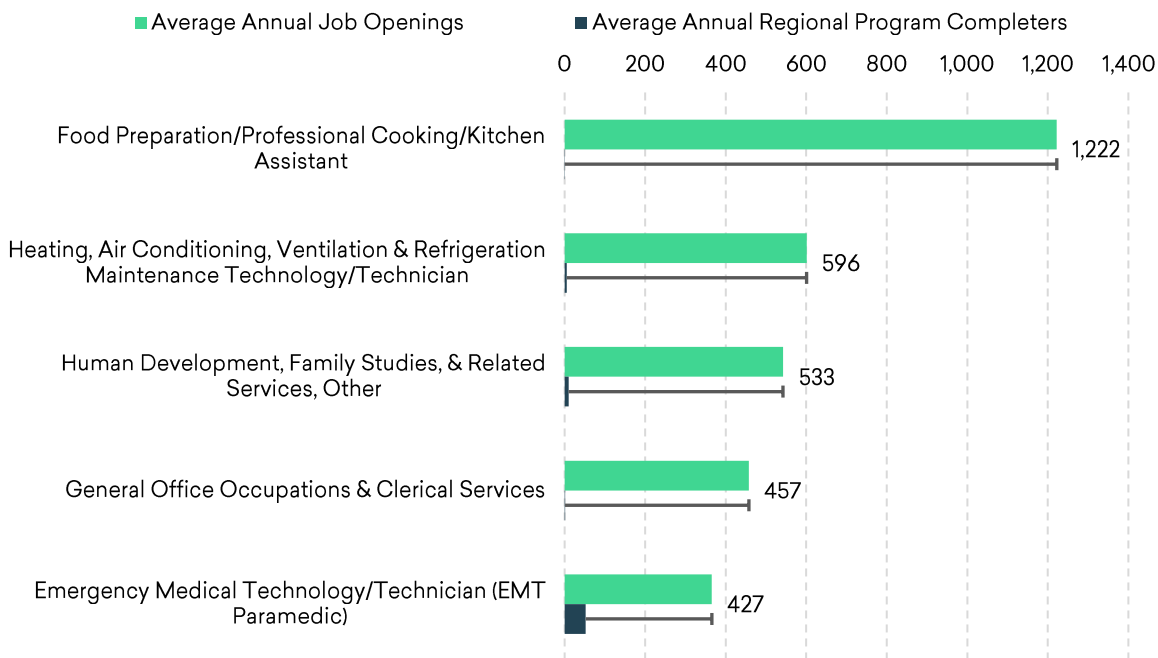
- Food Preparation/Professional Cooking/Kitchen Assistant
- Heating, Air Conditioning, Ventilation & Refrigeration Maintenance Technology/Technician
- Human Development, Family Studies, & Related Services, Other
- General Office Occupations & Clerical Services
- Emergency Medical Technology/Technician (EMT Paramedic)

All should be considered for expansion at the certificate level, considering the industries and occupations of the Massasoit Service Area. No programs at this award level have a significant surplus.

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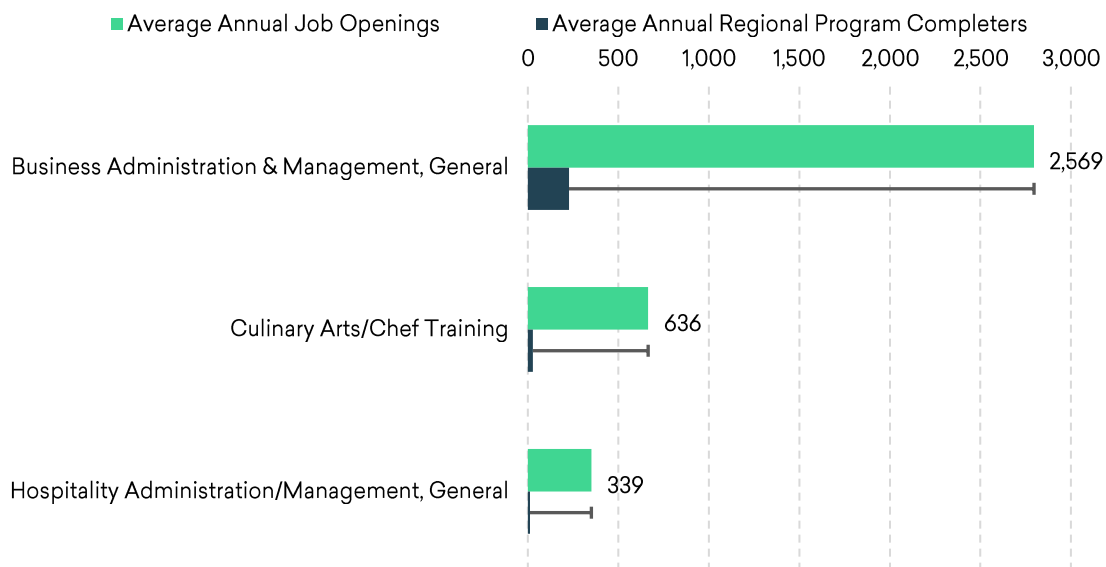
1 CIP refers to the Classification of Instructional Program and was originally developed by the U.S. Department of Education's National Center for Education Statistics (NCES).

FIGURE 4: CERTIFICATE LEVEL PROGRAMS WITH SIGNIFICANT GAPS



Source: Emsi program demand gap model.

FIGURE 5: ASSOCIATE DEGREE LEVEL PROGRAMS WITH SIGNIFICANT GAPS



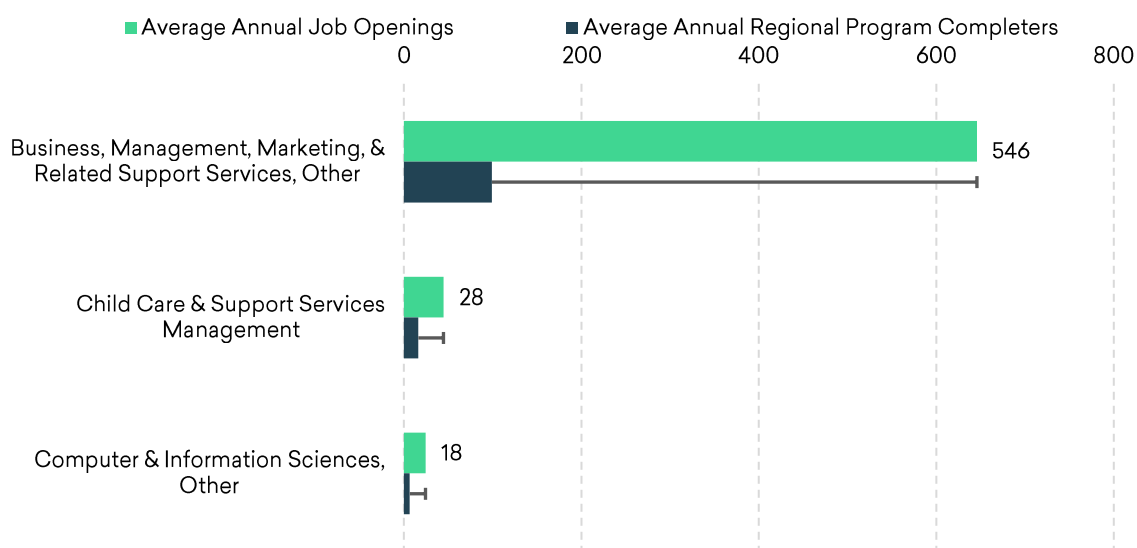
Source: Emsi program demand gap model.



At the associate degree level, three programs have a significant gap (Figure 5). Several should be considered for a college-wide expansion, many of which are related to other associate degree level programs without a significant 300-job 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. The five programs with a significant gap are:

- Business Administration & Management, General
- Culinary Arts/Chef Training
- Hospitality Administration/Management, General

**FIGURE 6: TOP TRANSFER-TRACK ASSOCIATE DEGREE LEVEL GAPS**



Source: Emsi program demand gap model.

Massasoit offers nine transfer-track associate degrees. One of these programs has a significant gap, Business, Management, Marketing, & Related Support Services, Other, with a gap of 546 (Figure 6). Considering the strength of business industries in the Massasoit Service Area, a program expansion should be considered for this program.

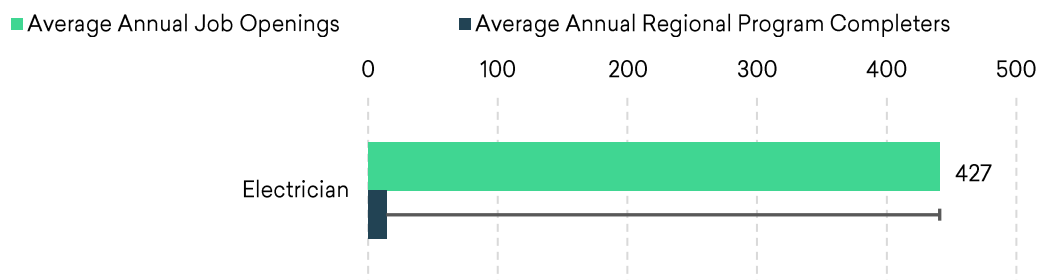
Massasoit offers 13 non-credit programs, when grouped by their six-digit CIP codes. The non-credit programs can be designed for self-enrichment; however, Massasoit offers them with workforce skills in mind. Using a customized non-credit program-to-occupation map, the programs are analyzed using similar methods to the program demand gap analysis. One non-credit program has a significant gap – Electrician





(Figure 7). However, the Massasoit Service Area is quite large, and completion of any one of the non-credit programs could lead to successful regional employment.

FIGURE 7: NON-CREDIT COURSE WITH A SIGNIFICANT GAP



Non-credit programs are grouped by their six-digit CIP code.  
Source: Emsi program demand gap model.

A liberal arts program expansion is not recommended at this time, but Massasoit 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, customer service representatives, as well as a variety of managers and supervisors. These occupations have a considerable number of job openings in the Massasoit Service Area. 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

Twenty certificate, eleven associate, and twenty transfer-track associate degree level programmatic areas of opportunity have been identified in the program demand gap analysis, many of which are related to recreation, healthcare, engineering, or business programs. Many program additions are related to Massasoit's current program offerings, which indicates an opportunity for a curriculum adjustment to better align with the region's current and projected labor market demand. A selection of these occupations, which have the most regional job openings by award level, appear in Table 1.

TABLE 1: PROGRAM ADDITIONS BY EDUCATION LEVEL

SOC CODE	SOC TITLE	ANNUAL JOB OPENINGS	ANNUAL REGIONAL COMPLETERS	GAP	MEDIAN HOURLY WAGE	EDUCATION LEVEL
39-9031	Fitness Trainers and Aerobics Instructors	264	0	264	\$22.06	Certificate
39-9032	Recreation Workers	190	0	190	\$12.59	Certificate
29-2061	Licensed Practical and Licensed Vocational Nurses	203	25	177	\$26.24	Certificate
39-9041	Residential Advisors	171	0	171	\$14.47	Certificate
27-2022	Coaches and Scouts	144	0	144	\$17.28	Certificate
29-2021	Dental Hygienists	61	0	61	\$41.84	Associate
31-2021	Physical Therapist Assistants	52	2	50	\$30.34	Associate
31-2011	Occupational Therapy Assistants	36	0	36	\$27.97	Associate
31-2022	Physical Therapist Aides	20	1	19	\$14.98	Associate
17-3013	Mechanical Drafters	13	3	10	\$26.85	Associate
41-3099	Sales Representatives, Services, All Other	237	4	233	\$28.91	Transfer-Track
41-3021	Insurance Sales Agents	150	0	150	\$31.54	Transfer-Track
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	147	0	147	\$38.40	Transfer-Track
41-3031	Securities, Commodities, and Financial Services Sales Agents	121	0	121	\$35.18	Transfer-Track
23-2011	Paralegals and Legal Assistants	74	1	73	\$24.05	Transfer-Track

SOC refers to the Standard Occupational Classification system used to classify occupations. Average annual job openings represent regional data from 2018 to 2028. Numbers may not sum due to rounding. Due to insufficient data, the region's median hourly wage rates by occupation are aggregated across all educational levels.

Source: Emsi program demand gap model.

