Executive Summary

Lane Community College (LCC) is a public, two-year postsecondary educational institution in Oregon. To further its goal of providing the county with well-trained and well-educated residents, LCC 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. LCC 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.



HIGH DEMAND, LOW SUPPLY	HIGH DEMAND, HIGH SUPPLY
How can we expand these program opportunities?	Can we maintain focus on program quality & student success?
Business Administration & Management, General (ASSOC & T-T)	Health & Medical Administrative Services, Other (CERT)
Manufacturing Engineering Technology/Technician (ASSOC)	Child Care & Support Services Management (CERT) Registered Nursing/Registered Nurse (ASSOC) & T-T)
Construction Trades, General (CERT & ASSOC)	
LOW DEMAND, LOW SUPPLY	LOW DEMAND, HIGH SUPPLY
LOW DEMAND, LOW SUPPLY Should we discontinue these programs?	LOW DEMAND, HIGH SUPPLY Are we connecting these programs to opportunities outside the county?
	Are we connecting these programs to
Should we discontinue these programs? Computer and Information Systems	Are we connecting these programs to opportunities outside the county? Somatic Bodywork and Related Therapeutic Services

Source: Emsi program demand gap model.



For purposes of the program demand gap analysis, LCC serves Lane County in Oregon. 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 LCC's program offerings satisfy county workforce demand. In addition, this report offers recommendations for new program development. In its entirety, the analysis is a starting point for LCC 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 Lane County



Source: Emsi Analyst. Region provided by LCC.



Figure 2 displays the top industry subsectors in terms of employment in Lane 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 Lane County by Jobs

Source: Employees & Self-Employed 2020.4.







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Note the green bars in the figures. Across all of Lane County's industry subsectors, three 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:

- Local Government
- Nursing & Residential Care Facilities
- Wood Product Manufacturing



The program demand gap analysis provides results across all of LCC's non-credit, certificate, and degree level programs, which have been classified by their formal CIP code.¹ The analysis connects the college's program completers with the availability of county job openings. For LCC's non-credit programs, the analysis is similar in that it connects the college's completers with the availability of county job openings but without the additional reference to non-credit program completions from other postsecondary educational institutions in Lane County. Furthermore, the analysis focuses on the gaps and surpluses in the programs by award level. A gap or surplus larger than 100 is considered beyond normal labor market fluctuations and therefore an area of consideration for program development.

LCC offers 47 non-credit programs, when grouped by their six-digit CIP codes. Using a customized non-credit program-to-occupation map, the programs are analyzed using similar methods to the program demand gap analysis. Two non-credit programs have a significant gap (Figure 4) and eight have a significant surplus. The non-credit program analysis shows that entry-level jobs in industries related to business are plentiful in Lane County, some of which are associated with high wage rates. Furthermore, not receiving an LCC Certificate of Completion in one of the various non-credit programs at the college with a significant gap does not preclude someone from employment. Industry-specific employment credentials can be obtained during on-the-job training. However, the results of the analysis are an indication of the potential labor market demand for LCC's non-credit programs, whether those programs are for people seeking employment or looking to learn new skills.

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: Gaps for Non-Credit Programs



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

LCC offers 36 certificate level programs, nine of which have a significant gap above the 100openings level of significance, as shown in Figure 5. Program expansions at this award level should be given careful consideration if the program awards completers with an LCC certificate and a certification, license, or industry-specific credential required for employment in an occupation. No programs at this award level have a significant surplus.

Figure 5: Top 10 Certificate Level Gaps



Source: Emsi program demand gap model.

At the associate degree level, nine programs have a significant gap (Figure 6). Several should be considered for a college-wide expansion, some of which are related to other associate degree level programs without a significant 100-openings gap. Specifically, the county's labor market has the most opportunity for occupations related to business professionals working in a variety of industries. For LCC administrators, it is advised that the college engage with the local community on behalf of its students to best discern local need, particularly for the broader business programs. No programs have a significant surplus at this award level.

Figure 6: Top 10 Associate Degree Level Gaps



Source: Emsi program demand gap model.

LCC offers 11 transfer-track degree programs. 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 7. This program should be considered for expansion. A program expansion should consider the process by which LCC's students transfer into regional bachelor's degree level programs. Administrative and academic support measures at LCC would enable student success. One program at this award level has a significant surplus. However, since the degrees being earned are associate degrees, not actually bachelor's degrees, this likely does not actually represent a problematic surplus.

Figure 7: Transfer-Track Degree Level Gaps



Source: Emsi program demand gap model.

A liberal arts program expansion is not recommended at this time, but LCC 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 Lane County. The college's liberal arts program, therefore, serves as a starting point to students' career goals beyond an associate degree level of education.



Twenty certificate level programmatic areas of opportunity have been identified in the program demand gap analysis, some of which are related to education, training, & library occupations. At the associate degree level, there are fewer opportunities for new programs, considering the college's current offerings. Nonetheless, LCC should consider new

programs related to healthcare practitioners & technical occupations, whether its focus is on job openings in Lane County or in Oregon. Another 20 programmatic areas of opportunity were identified at the transfer-track degree level, many of which are related to sales & related occupations, a demand which LCC 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.

SOC TITLE	2019 JOBS	ANNUAL JOB OPENINGS	ANNUAL COMPL.	GAP	MEDIAN HOURLY WAGE	ED. LEVEL
Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	1,173	133	0	133	\$16.12	CERT
Tutors and Teachers and Instructors, All Other	576	45	0	45	\$23.84	CERT
Pharmacy Technicians	528	29	0	29	\$20.76	CERT
Self-Enrichment Teachers	407	30	0	30	\$21.29	CERT
Substitute Teachers, Short-Term	370	25	0	25	\$22.40	CERT
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	298	23	0	23	\$26.49	CERT
Healthcare Support Workers, All Other	211	19	0	19	\$18.35	CERT
Reservation and Transportation Ticket Agents and Travel Clerks	159	12	0	12	\$16.46	CERT
Library Assistants, Clerical	104	11	0	11	\$18.40	CERT
Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	150	10	0	10	\$31.84	CERT
Occupational Therapy Assistants	113	13	0	13	\$34.89	ASSOC
Respiratory Therapists	159	8	0	8	\$24.58	ASSOC
Radiologic Technologists and Technicians	158	6	0	6	\$34.16	ASSOC
Insurance Sales Agents	749	38	0	38	\$21.52	T-T
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	518	37	0	37	\$21.63	T-T
Office and Administrative Support Workers, All Other	587	38	0	38	\$19.45	T-T
Paralegals and Legal Assistants	383	24	0	24	\$20.84	T-T
Buyers and Purchasing Agents	426	23	0	23	\$23.75	T-T

Table 1: Program Additions by Education Level

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.