

Addressing Regional Economic Need: Labor Market Study

Board of Trustees Committee of the Whole Meeting, July 8, 2021

BACKGROUND

Rock Valley College (RVC) has identified KPI to inform the college community about institutional health and development. The College KPI are presented in five categories aligned to Illinois Board of Higher Education (IBHE) Public Agenda Goals. College KPI categories include *Educational Attainment, Access, and Success; Affordability; Educational Quality; Accountability; and Addressing Regional Economic Need.*

The KPI category of *Addressing Regional Economic Need* aligns to the IBHE goal of integrating assets to meet economic needs by supporting state and regional economic development. This summary report presents results of a labor market study conducted using data from Economic Modeling Specialists Inc. (EMSI).

The labor market study provides evidence of the Higher Learning Commission’s (HLC) criteria by examining the extent to which programs and initiatives of the College address regional needs for workforce development.

**HLC Accreditation Criteria and Core Components**

1.D.3. The institution engages with its identified external constituencies and communities of interest and responds to their needs as its mission and capacity allow.

5.C. The institution engages in systematic and integrated planning.

5.C.3. The planning process encompasses the institution as a whole and considers the perspectives of internal and external constituent groups.

5.C.5. Institutional planning anticipates emerging factors, such as technology, demographic shifts, and globalization.

5.D. The institution works systematically to improve its performance.

RESULTS

The following two dimensions are analyzed to determine whether existing degree and certificate programs meet regional labor market needs:

- Job Growth –compares the number of jobs in 2020 to those projected for 2024, and
- Net Job Openings – compares 2019 program completions, from RVC and other regional institutions of higher education, with annual openings.

In order for the College to proactively serve the region in providing a trained workforce, a balance between regional job growth and net job openings is required. Figure 1 depicts the two-dimensional model used to analyze the regional labor market in conjunction with degree/certificate programs.

**Figure 1: Labor Market Model**



**Labor Market Data for Programs Currently Offered by RVC**

Tables 1 through 4 identify programs currently offered by RVC classified by each quadrant of the Labor Market Model. RVC program clusters are mapped to the National Center for Education Statistics’ (NCES) Classification of Instructional Programs (CIP) codes so that program completions can be combined across regional institutions to calculate net job openings.



Table 1 identifies program clusters currently offered by RVC that fit in the upper-right quadrant of the Labor Market Model. These program clusters are associated with occupations with projected job growth (↑) and positive net openings (+). When net openings are positive, there are not enough regional completions to meet labor market demand.

Information provided in Table 1 indicates the following:

- Eighteen (18) RVC program clusters are categorized by projected job growth and positive net job openings.
- Three (3) of these program clusters are expected to demonstrate job growth of at least 75 jobs between 2020 and 2024, which make them good candidates for expansion. The current programs for which the College has the most potential for growth are primarily related to health industry, Health Professions and Related Clinical Sciences, Other Nursing Aide Certificate, and manufacturing engineering technology.

**Table 1: RVC Programs Associated with Projected Job Growth and Positive Net Openings**

CIP Code	RVC Program Clusters	Regional Jobs (2020)	Projected Job Growth (2020-2024)	Net Job Openings
51.9999	Health Professions and Related Clinical Sciences, Other	6,615	387	852
51.3902	Nursing Aide Certificate	3,724	259	332
51.0713	Medical Coding Certificate	2,327	88	142
51.0908	Respiratory Care AAS	442	32	25
11.0202	C/C++ Programming Certificate Visual Basic Programming Certificate Mobile Application Development Certificate	875	30	58
11.0201	Web Programming & Design AAS Web Development Certificate Web Design Certificate	987	26	63
51.0909	Surgical Technology Certificate	429	24	13
19.9999	Family and Consumer Sciences/Human Sciences, Other	2,117	24	188
51.1009	Phlebotomy Technician Certificate	412	21	19
10.9999	Communications Technologies/Technicians and Support Services, Other	246	9	26
44.9999	Public Administration and Social Service Professions, Other	228	8	20
14.4201	Fundamentals of Mechatronics Certificate	266	6	18
11.1003	Voice Over IP Associate Certificate Data Assurance & IT Security AAS Cisco CCNA Security Certificate	1,692	6	121
52.0203	Fundamentals of Supply Chain Management Certificate	1,766	5	124
15.1001	Construction Engineering Technology/Technician	1,012	5	89
15.1302	CAD Certificate	290	4	21
52.2001	Construction Management	929	3	80

Source: EMSI Program Table - RVC Programs 2020-2024



Table 2 identifies programs currently offered by RVC that fit in the upper-left quadrant of the Labor Market Model. These programs are associated with occupations with projected job growth (↑) and negative net openings (-). When net openings are negative, there are more than enough regional completions to meet labor market demand. If the region does not substantially increase the number of completions in these programs, the current gap between completions and openings should narrow as the market grows. The size of these programs should be maintained and monitored.

**Table 2: RVC Programs Associated with Projected Job Growth and Negative Net Openings**

CIP Code	RVC Program Clusters	Regional Jobs (2018)	Projected Job Growth (2018-2022)	Net Job Openings
<b>51.3801</b>	Associate Degree Nursing AAS	4,684	319	(130)
<b>47.0607</b>	Aviation Maintenance Technology AAS Aviation Maintenance Certificate Airframe Technician Certificate	256	6	(130)
<b>47.0608</b>	Powerplant Technician Certificate	231	6	(62)

Source: EMSI Program Table - RVC Programs 2020-2024



Table 3 identifies programs currently offered by RVC that fit in the lower-right quadrant of the Labor Market Model. These programs are associated with occupations with projected job decline (↓) and positive net openings (+). When net openings are positive, there are not enough regional completions to meet labor market demand. However, these programs should be monitored so that the market does not become saturated as the number of jobs declines. Saturation is not likely in apprenticeship programs (i.e., Tool and Die/Precision Machinist Certificate), because students are already employed as part their programs.

**Table 3: RVC Programs Associated with Projected Job Decline and Positive Net Openings**

CIP Code	RVC Active Programs	Regional Jobs (2020)	Projected Job Growth (2020-2024)	Net Job Openings
<b>52.0201</b>	Business Administration AAS	15,129	(418)	1,203
<b>52.0401</b>	Office Professional AAS Administrative Assistant Certificate	6,214	(385)	653
<b>52.9999</b>	Business, Management, Marketing, and Related Support Services, Other	11,533	(305)	999
<b>52.0407</b>	MOS/Word Certificate MOS/Excel Certificate MOS/PowerPoint Certificate MOS/Access Certificate	3,790	(256)	381
<b>48.0507</b>	Tool and Die/Precision Machinist Certificate	4,742	(223)	438
<b>48.9999</b>	Precision Production, Other	5,631	(191)	523
<b>15.0613</b>	Manufacturing Engineering Technology AAS CNC Certificate Basic Quality Certificate Certified Manufacturing Associate Certificate	12,557	(128)	985
<b>52.0302</b>	Accounting AAS Accounting/Income Tax Fundamentals Certificate Professional Bookkeeper Certificate	2,385	(107)	186

<b>47.0604</b>	Automotive Service Technology AAS Automotive Technician Certificate Automotive Engine Certificate Automotive Suspension & Brakes Certificate Automotive Electrical Certificate Automotive Engine Performance Certificate Automotive Transmission Certificate Automotive Heating & Air Conditioning Certificate	3,366	(82)	226
<b>31.0501</b>	Coaching Education Certificate Personal Training Certificate	3,530	(76)	313
<b>52.0703</b>	Entrepreneurship Certificate Management Certificate	5,521	(74)	432
<b>52.1804</b>	Marketing Certificate	2,472	(63)	251
<b>48.0508</b>	Advanced Welder Certificate Industrial Welder Certificate	3,772	(62)	279
<b>52.1899</b>	General Merchandising, Sales, and Related Marketing Operations, Other	2,755	(58)	254
<b>47.9999</b>	Mechanic and Repair Technologies/Technicians, Other	2,674	(54)	239
<b>46.0302</b>	Electrician Apprenticeship AAS Electrician Apprenticeship Certificate	1,442	(51)	127
<b>43.0107</b>	Criminal Justice AAS	766	(48)	35
<b>19.0709</b>	Early Childhood Educator Certificate Early Childhood Educator Assistant Certificate Early Childhood Education AAS	3,521	(41)	388
<b>31.0504</b>	Fitness, Wellness & Sport AAS	694	(40)	90
<b>10.0305</b>	Prepress Certificate Graphic Design AAS Cross Media Production AAS	244	(38)	8
<b>52.0101</b>	Business Fundamentals Certificate	6,853	(33)	512
<b>31.9999</b>	Parks, Recreation, Leisure, and Fitness Studies, Other	384	(30)	56
<b>43.0203</b>	Fire Science AAS Basic Operations Firefighter Certificate	677	(28)	33
<b>43.0201</b>	Fire Prevention and Safety Technology/Technician	687	(27)	41
<b>11.0103</b>	Computers & Information Systems AAS	1,641	(21)	113
<b>43.0202</b>	Fire Services Administration	986	(20)	68
<b>15.9999</b>	Engineering Technologies and Engineering- Related Fields, Other	778	(16)	69
<b>51.0904</b>	Emergency Medical Technician Certificate	1,142	(12)	66
<b>43.9999</b>	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	2,008	(12)	154
<b>15.0303</b>	Electronic Engineering Technology AAS Basic Electronics Certificate	807	(7)	73

<b>11.0901</b>	Cisco Networking Certificate Cisco Advanced Networking Certificate Microsoft Server Administration Certificate Network Technician Certificate Cisco Networking AAS	1,732	(1)	117
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Source: EMSI Program Table - RVC Programs 2020-2024



Table 4 identifies programs currently offered by RVC that fit in the lower-left quadrant of the Labor Market Model. These programs are associated with occupations with projected job decline (↓) and negative net openings (-). When net openings are negative, there are more than enough regional completions to meet labor market demand. Such market saturation could be exacerbated if the number of jobs declines.

**Table 4: RVC Programs Associated with Projected Job Decline and Negative Net Openings**

CIP Code	RVC Program Clusters	Regional Jobs (2018)	Projected Job Growth (2018-2022)	Net Job Openings
<b>51.0602</b>	Dental Hygiene/Hygienist	187	(6)	(5)

Source: EMSI Program Table - RVC Programs 2018-2022

Monitoring strategies for program clusters characterized by projected job decline and negative net openings may vary.

- Dental Hygiene/Hygienist - The decline in jobs associated with Dental Hygiene/Hygienist is less than 10. In addition, the number of regional completions exceeded the number of annual openings. These data do not suggest an immediate need for program revision; however, the program should be reviewed and monitored with respect to labor market alignment.

**Labor Market Data for Programs Not Currently Offered by Rock Valley College**

Tables 1-4 do not capture data for those programs not currently offered by RVC. Table 5 identifies programs offered by other regional institutions with the most potential based on high projected job growth (i.e., an increase greater than or equal to 75 jobs by 2022) in conjunction with positive net job openings.

**Table 5: Additional Regional Programs with High Projected Job Growth and Positive Net Openings**

CIP Description	Regional Institution(s)	Level of Regional Awards <sup>1</sup>	Regional Jobs (2018)	Projected Job Growth (2018-2022)	Net Job Openings
<b>51.1501</b> - Substance Abuse/Addiction Counseling	<ul style="list-style-type: none"> <li>• Rasmussen College</li> <li>• Rockford Career College</li> </ul>	<ul style="list-style-type: none"> <li>• Award of less than 1 academic year</li> <li>• Award of at least 1 but less than 2 academic years</li> <li>• Associate's Degree</li> </ul>	1,387	78	627

Source(s): EMSI Program Table - All Programs 2018-2022; EMSI Program Overview Reports

<sup>1</sup> Programs with most awards occurring at the Master's degree level or higher were excluded, because RVC does not offer nor directly prepare students for such programs.

Information presented in Table 5 indicates that labor market demand for Substance Abuse/Addiction Counselling (51.1501) may present opportunities for the College to develop new programs or expand existing programs.

**Labor Market Data for Occupations with No Current Regional Completions (Including RVC)**

Another important component of this study is to look at those occupations that have no regional completions but for which job growth is projected. Table 6 includes those occupations in the RVC region that have projected job growth and no regional completions. Only occupations requiring community college level education<sup>2</sup> for entry are included. Some of the programs listed in Table 6 are already offered through noncredit programs at RVC (e.g., Truck Driver Training and Dental Assisting). Aside from a growing need for Heavy and Tractor-Trailer Truck Drivers, the most growth potential is in health-related fields.

**Table 6: Occupations with Projected Job Growth and No Regional Completers**

Occupation Description	Regional Jobs (2020)	Job Growth (2020 - 2024)	Annual Openings
Fast Food and Counter Workers	3,751	132	727
Light Truck Drivers	1,416	119	176
Electrical Power-Line Installers and Repairers	54	58	19
Industrial Machinery Mechanics	315	43	37
Ushers, Lobby Attendants, and Ticket Takers	185	41	55
Licensed Practical and Licensed Vocational Nurses	473	32	42
Heavy and Tractor-Trailer Truck Drivers	1,851	32	197
Cashiers	3,431	29	590
Industrial Truck and Tractor Operators	228	29	30
Cooks, Restaurant	908	24	129
Paper Goods Machine Setters, Operators, and Tenders	47	22	11
Physician Assistants	115	19	11
Tire Builders	74	19	12
Radiologic Technologists and Technicians	485	17	28
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	394	17	41
Bakers	227	17	33
Control and Valve Installers and Repairers, Except Mechanical Door	45	12	7
Animal Caretakers	237	12	37
Diagnostic Medical Sonographers	135	11	9
Crossing Guards and Flaggers	181	9	33

<sup>2</sup> Community college level education includes the following: Associate’s degree, postsecondary nondegree award, and some college, no degree.

<b>Physical Therapists</b>	180	9	9
<b>Butchers and Meat Cutters</b>	246	9	29
<b>Meter Readers, Utilities</b>	80	9	9
<b>Sewing Machine Operators</b>	64	9	9
<b>Stockers and Order Fillers</b>	2,157	8	257
<b>Production, Planning, and Expediting Clerks</b>	313	8	31
<b>Medical Equipment Repairers</b>	87	8	10
<b>Chemical Equipment Operators and Tenders</b>	31	8	5
<b>Bus and Truck Mechanics and Diesel Engine Specialists</b>	210	8	19
<b>Bartenders</b>	502	8	82
<b>Power Distributors and Dispatchers</b>	17	7	3
<b>Residential Advisors</b>	55	7	10
<b>Logisticians</b>	166	7	16
<b>Psychiatric Technicians</b>	56	7	6
<b>Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity</b>	488	6	59
<b>Coating, Painting, and Spraying Machine Setters, Operators, and Tenders</b>	220	6	22
<b>Health Information Technologists, Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers,</b>	123	6	8
<b>Audio and Video Technicians</b>	72	6	9
<b>Physical Therapist Assistants</b>	55	6	7
<b>Gambling Dealers</b>	22	5	5
<b>Cutting and Slicing Machine Setters, Operators, and Tenders</b>	35	5	5
<b>Couriers and Messengers</b>	70	5	7
<b>Computer, Automated Teller, and Office Machine Repairers</b>	36	5	5
<b>Amusement and Recreation Attendants</b>	137	5	30
<b>Metal-Refining Furnace Operators and Tenders</b>	23	5	3
<b>Pest Control Workers</b>	41	4	7
<b>Cardiovascular Technologists and Technicians</b>	95	4	6
<b>Speech-Language Pathologists</b>	111	4	7
<b>Parking Attendants</b>	31	4	6
<b>Ophthalmic Medical Technicians</b>	74	4	7
<b>Acupuncturists and Healthcare Diagnosing or Treating Practitioners, All Other</b>	25	4	2
<b>Occupational Therapists</b>	64	4	4
<b>Dispatchers, Except Police, Fire, and Ambulance</b>	149	4	14
<b>Interior Designers</b>	66	3	7



<b>Surveying and Mapping Technicians</b>	26	3	4
<b>Family Medicine Physicians</b>	46	3	2
<b>Farmworkers, Farm, Ranch, and Aquacultural Animals</b>	75	3	12
<b>Food Servers, Nonrestaurant</b>	204	3	31
<b>First-Line Supervisors of Housekeeping and Janitorial Workers</b>	105	3	12
<b>Rail-Track Laying and Maintenance Equipment Operators</b>	46	3	5
<b>Occupational Health and Safety Specialists</b>	23	3	2
<b>Engine and Other Machine Assemblers</b>	166	3	18
<b>Magnetic Resonance Imaging Technologists</b>	55	3	3
<b>Podiatrists</b>	19	3	2
<b>Maintenance Workers, Machinery</b>	78	3	7
<b>Radiation Therapists</b>	74	3	4
<b>Forest and Conservation Workers</b>	12	2	3
<b>Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders</b>	52	2	6
<b>Gambling Change Persons and Booth Cashiers</b>	11	2	3
<b>Food Cooking Machine Operators and Tenders</b>	27	2	5
<b>Demonstrators and Product Promoters</b>	31	2	6
<b>Therapists, All Other</b>	26	2	2
<b>Cooks, Fast Food</b>	66	2	9
<b>Counselors, All Other</b>	58	2	6
<b>Airline Pilots, Copilots, and Flight Engineers</b>	36	2	4
<b>Merchandise Displayers and Window Trimmers</b>	69	2	6
<b>Cabinetmakers and Bench Carpenters</b>	57	2	6
<b>Nuclear Medicine Technologists</b>	49	2	3
<b>Stationary Engineers and Boiler Operators</b>	14	2	2
<b>Atmospheric and Space Scientists</b>	25	2	2
<b>Weighers, Measurers, Checkers, and Samplers, Recordkeeping</b>	58	2	6
<b>First-Line Supervisors of Farming, Fishing, and Forestry Workers</b>	15	2	2
<b>First-Line Supervisors of Gambling Services Workers</b>	11	2	2
<b>Military-only occupations</b>	356	2	37
<b>Occupational Therapy Assistants</b>	21	1	2
<b>Purchasing Managers</b>	59	1	4
<b>Physical Scientists, All Other</b>	15	1	1
<b>Farmworkers and Laborers, Crop, Nursery, and Greenhouse</b>	179	1	27
<b>Agricultural Workers, All Other</b>	33	1	5

<b>Rail Car Repairers</b>	93	1	9
<b>Food Processing Workers, All Other</b>	32	1	3
<b>Crane and Tower Operators</b>	27	1	3
<b>Automotive and Watercraft Service Attendants</b>	55	1	8
<b>Credit Counselors</b>	14	1	1
<b>First-Line Supervisors of Food Preparation and Serving Workers</b>	845	1	117
<b>Upholsterers</b>	29	1	3
<b>Avionics Technicians</b>	34	1	3
<b>Motorcycle Mechanics</b>	27	1	3
<b>Surveyors</b>	17	1	2
<b>Agricultural Equipment Operators</b>	25	1	4
<b>Pharmacists</b>	245	1	10
<b>Healthcare Support Workers, All Other</b>	38	1	5
<b>Sawing Machine Setters, Operators, and Tenders, Wood</b>	31	1	4
<b>Pourers and Casters, Metal</b>	11	1	1
<b>Pediatricians, General</b>	28	1	1
<b>Cooks, Short Order</b>	46	1	6
<b>Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders</b>	16	1	2
<b>Opticians, Dispensing</b>	87	1	6
<b>Artists and Related Workers, All Other</b>	19	1	2
<b>Meat, Poultry, and Fish Cutters and Trimmers</b>	22	1	3
<b>Optometrists</b>	21	1	1
<b>Cargo and Freight Agents</b>	70	1	7
<b>Anesthesiologists</b>	36	1	1
<b>Transportation Security Screeners</b>	37	1	3

Source: EMSI Occupation Table

Insf. Data = insufficient data available to calculate annual openings

## FINDINGS AND CONCLUSIONS

*Addressing Regional Economic Need* is an institutional KPI category that examines the College's ability to support state and regional economic development. In this summary report, labor market data is specifically analyzed to determine the degree to which the College is meeting regional economic need through adequate and appropriate workforce development.

Labor market data for the RVC region generally suggests that the programs offered by the College fill an economic need within the community. While several program clusters should be monitored over the next five years, data within this labor market study do not support the immediate withdrawal of any current programs. The greatest potential for growth, either through the expansion of existing programs or the addition of new programs, are

within the fields of business, healthcare (administrative support and technicians), information technology / computer science, and manufacturing engineering technology.