










Radiologic Technologists and Technicians

Labor Market Analysis: San Diego County

May 2022

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
 <p>Proceed with New Program</p>	 	 	<input type="checkbox"/> Bachelor's Degree+ <input checked="" type="checkbox"/> Associate Degree <input type="checkbox"/> Some College or Certificate <input type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less than a HS Diploma <input type="checkbox"/> Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
 	<p>MEDIUM</p> 	<p>MEDIUM</p> 	

The San Diego-Imperial Center of Excellence for Labor Market Research (COE) developed this brief to assist the region's community colleges with strategic planning and program development. According to available labor market information, *Radiologic Technologists and Technicians* in San Diego County have a labor market demand of 159 annual job openings (while average demand for a single occupation in San Diego County is 242 annual job openings), and four educational institutions in San Diego County supply 94 awards for this occupation, suggesting that there is a supply gap in the labor market. Entry-level and median earnings are above the living wage for this occupation. This brief recommends proceeding with a new program and supports a program modification because 1) these occupations' entry-level and median earnings are above the living wage, and 2) a supply gap exists for these occupations.

Introduction

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)¹ system:

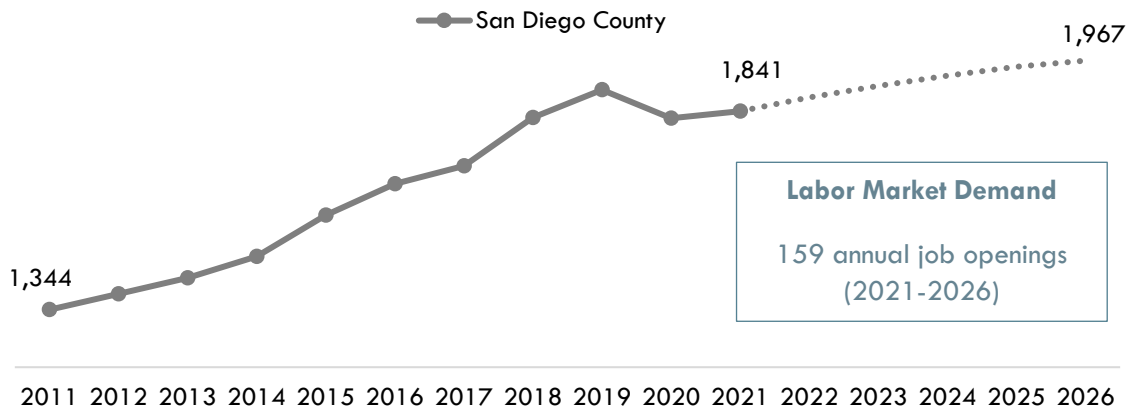
Radiologic Technologists and Technicians (SOC 29-2034): Take x-rays and CAT scans or administer nonradioactive materials into patients' bloodstream for diagnostic or research purposes. Includes radiologic technologists and technicians who specialize in other scanning modalities. Sample reported job titles include:

- Radiographer
- Mammography Technologist
- CAT Scan Technologist (Computed Axial Tomography Technologist)
- X-Ray Technologist (X-Ray Tech)
- Staff Technologist
- Staff Radiographer
- Radiographer, Mammographer

Projected Occupational Demand

Between 2021 and 2026, *Radiologic Technologists and Technicians* are projected to increase by 126 net jobs or seven percent (Exhibit 1). Employers in San Diego County will need to hire 159 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

Exhibit 1: Number of Jobs for Radiologic Technologists and Technicians (2011-2026)²



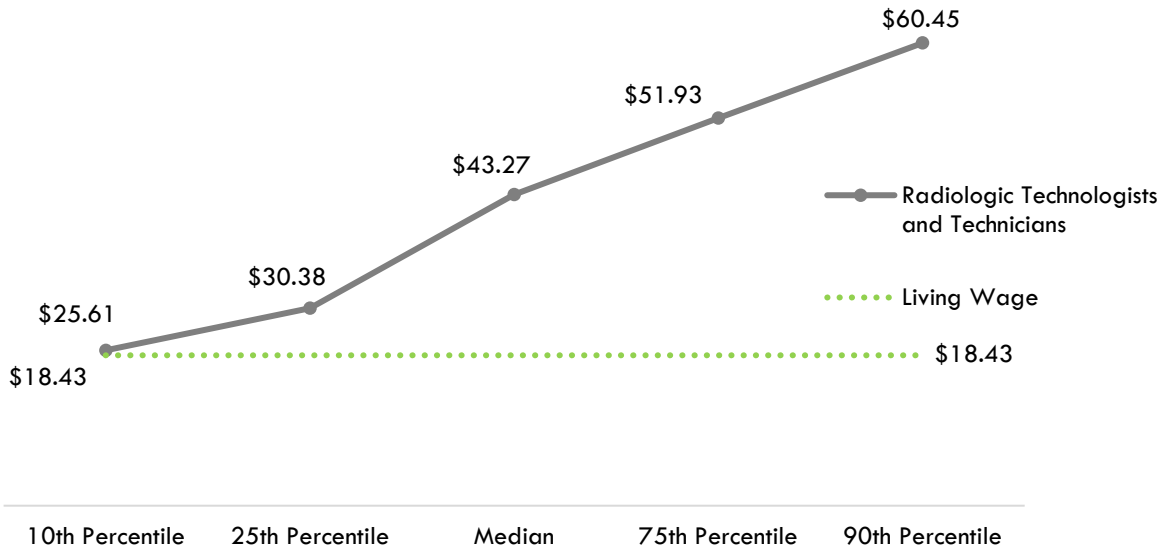
¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc/).

² EMSI 2022.01; QCEW, Non-QCEW, Self-Employed.

Earnings

Radiologic Technologists and Technicians receive entry-level hourly earnings of **\$30.38**; this is more than the living wage for a single adult in San Diego County, which is **\$18.43** per hour (Exhibit 2).³

**Exhibit 2: Hourly Earnings⁴ for Radiologic Technologists and Technicians
in San Diego County⁵**



³ "Family Needs Calculator (formerly the California Family Needs Calculator)," Insight: Center for Community Economic Development, last updated 2021. insightccd.org/family-needs-calculator/.

⁴ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

⁵ EMSI 2022.01; QCEW, Non-QCEW, Self-Employed.

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.⁶ There are **two** TOP codes and **two** CIP codes related to *Radiologic Technologists and Technicians* (Exhibit 3).

Exhibit 3: Related TOP and CIP Codes for Radiologic Technologists and Technicians

TOP or CIP Code	TOP or CIP Program Title
TOP 1225.00	Radiologic Technology
TOP 1226.00	Radiation Therapy Technician
CIP 51.0907	Medical Radiologic Technology/Science - Radiation Therapist
CIP 51.0911	Radiologic Technology/Science - Radiographer

According to TOP data, **one** community college supplies the region with awards for this occupation, **San Diego Mesa College**. According to CIP data, **three** non-community-college institutions supply the region with awards: **National University, Pima Medical Institute-Chula Vista and San Diego State University** (Exhibit 4).

Exhibit 4: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2016-17 through PY2019-20 Average)

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY17-18 to PY19-20)	Other Educational Institutions 3-Yr Annual Average Awards (PY16-17 to PY18-19)	3-Yr Total Average Supply (PY16-17 to PY19-20)
1225.00	Radiologic Technology	41	0	41
	<ul style="list-style-type: none"> San Diego Mesa 	0	0	
51.0907	Medical Radiologic Technology/Science - Radiation Therapist	0	14	14
	<ul style="list-style-type: none"> National University 	0	14	
	<ul style="list-style-type: none"> San Diego State University 	0	0	
51.0911	Radiologic Technology/Science - Radiographer	0	39	39
	<ul style="list-style-type: none"> Pima Medical Institute-Chula Vista 	0	39	
			Total	94

⁶ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁷ suggests that there is a **supply gap** for this occupation in San Diego County, with **159** annual openings and **94** awards. Comparatively, there are **1,608** annual openings in California and **1,111** awards, suggesting that there is a supply gap across the state⁸ (Exhibit 5).

Exhibit 5: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	159	94	65
California	1,608	1,111	497

Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

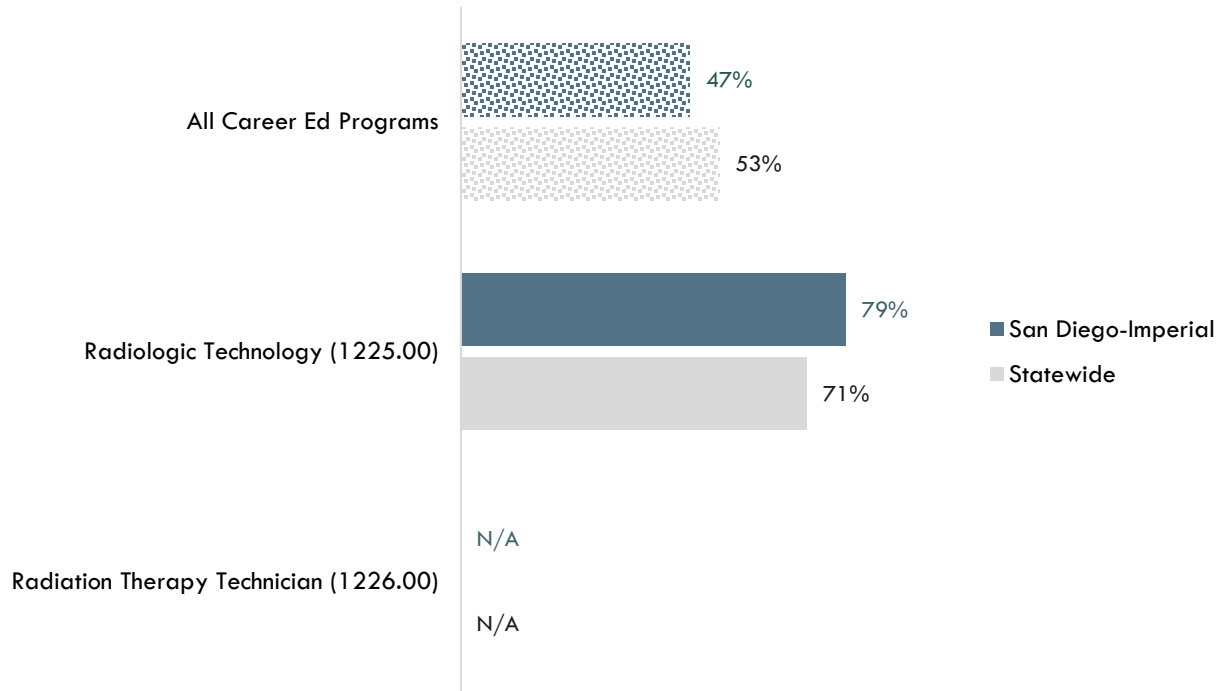
⁷ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

⁸ "Supply and Demand," Centers of Excellence Student Outcomes, coecc.net/Supply-and-Demand.aspx.

Student Outcomes and Regional Comparisons

According to the California Community Colleges LaunchBoard, 79 percent of students in the San Diego-Imperial region earned a living wage after completing a program related to *Radiologic Technologists and Technicians*, compared 71 percent statewide and 53 percent of students in Career Education programs in general across the state (Exhibit 6a).⁹

Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program, PY2018-19¹⁰

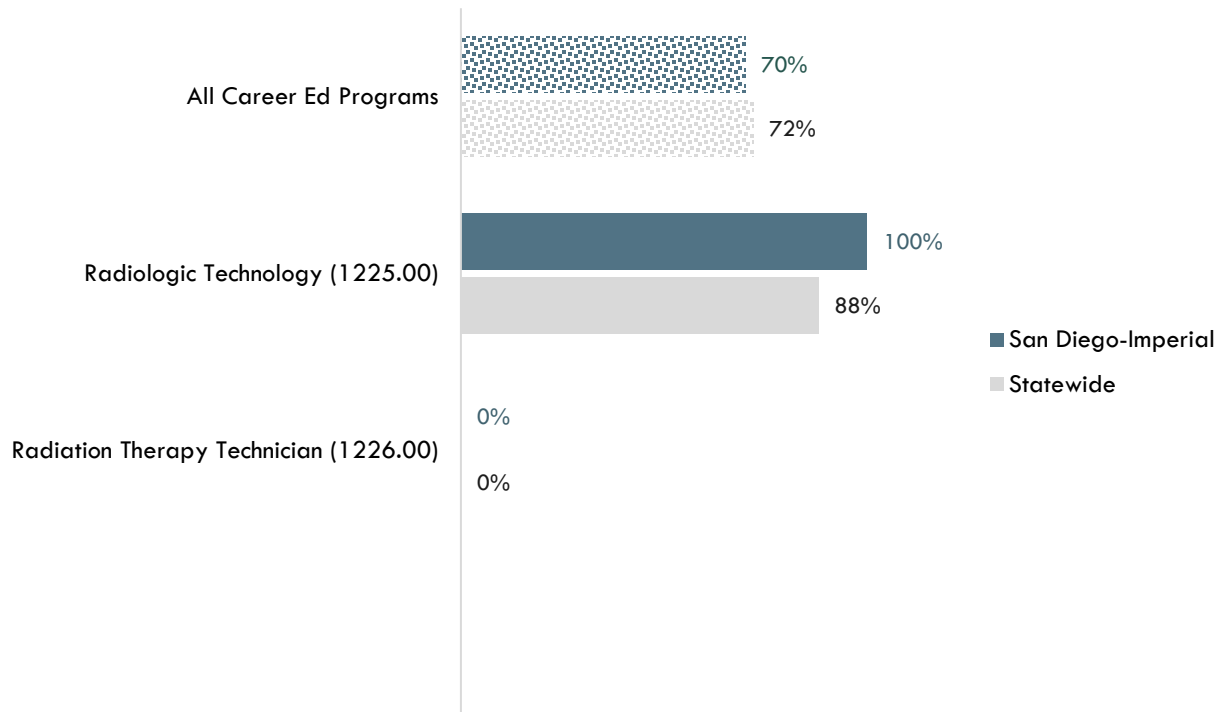


⁹ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹⁰ Among completers and skills builders who exited, the percentage of students who attained a living wage.

According to the California Community Colleges LaunchBoard, 100 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a program related to *Radiologic Technologists and Technicians*, compared to 88 percent statewide and 72 percent of students in Career Education programs in general across the state (Exhibit 6b).¹¹

Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2017-18¹²



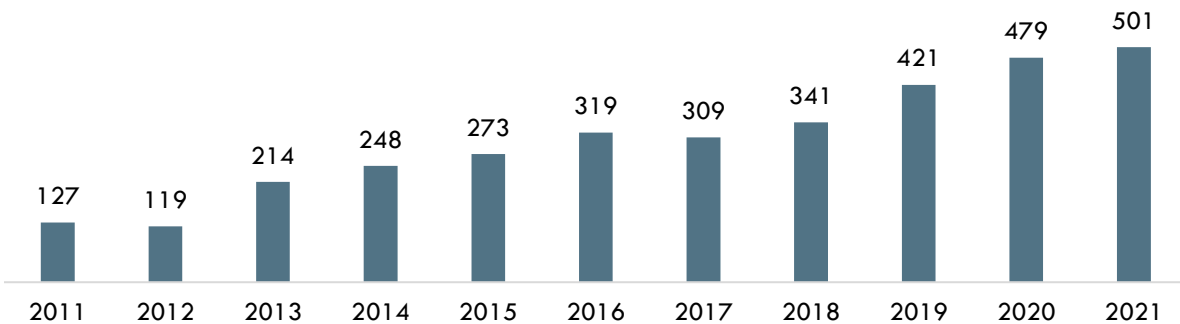
¹¹ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹² Most recent year with available data is Program Year 2017-18. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2011 and 2021, there was an average of 305 online job postings per year for *Radiologic Technologists and Technicians* in San Diego County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

Exhibit 7: Number of Online Job Postings for *Radiologic Technologists and Technicians*, in San Diego County (2011-2021)¹³



¹³ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2011-2021.

Top Employers

Between January 1, 2019 and December 31, 2021, the top five employers in San Diego County for *Radiologic Technologists and Technicians* were [University of California San Diego](#), [Sharp Healthcare](#), [Concentra](#), [Prime Healthcare Services](#), and [Healthcare Traveler Allied Health](#) based on online job postings (Exhibit 8).

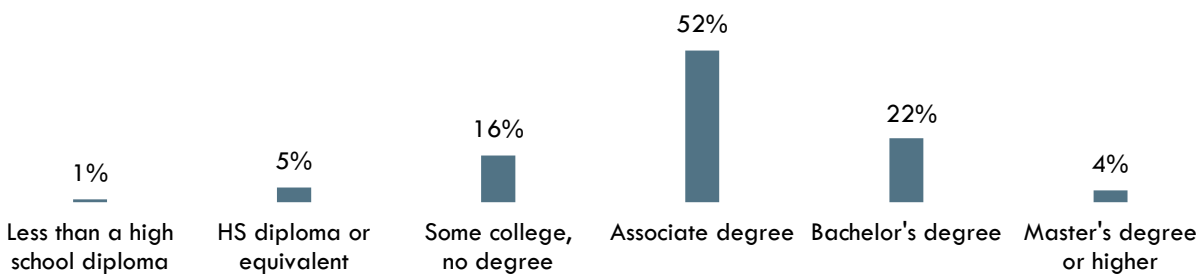
**Exhibit 8: Top Employers for Radiologic Technologists and Technicians
in San Diego County¹⁴**

Top Employers	
<ul style="list-style-type: none"> • University of California San Diego • Sharp Healthcare • Concentra • Prime Healthcare Services • Healthcare Traveler Allied Health 	<ul style="list-style-type: none"> • Scripps Health • Kaiser Permanente • Providence Health & Services • Select Medical • Rady Children's Hospital

Education, Skills, and Certifications

Exhibit 9 indicates that the typical educational attainment for this occupation found currently in the national labor force is an [associate degree](#). The typical entry-level education is an [associate degree](#).¹⁵

Exhibit 9: National Educational Attainment of Radiologic Technologists and Technicians¹⁶



*may not total 100 percent due to rounding

¹⁴ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2019-2021.

¹⁵ EMSI 2022.01; QCEW, Non-QCEW, Self-Employed.

¹⁶ "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified September 8, 2021. bls.gov/emp/tables/educational-attainment.htm.

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2019 and December 31, 2021.

**Exhibit 10: Top Skills for Radiologic Technologists and Technicians
in San Diego County¹⁷**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Radiology • Radiologic Technology • X-Rays • Radiography • Mammography • Patient Care • Ultrasound • Patient Positioning • Scheduling • Cardiopulmonary Resuscitation (CPR) • Radiation Protection • Diagnostic Radiology • Quality Assurance and Control • Hospital Experience • Customer Contact 	<ul style="list-style-type: none"> • Communication Skills • Computer Literacy • Building Effective Relationships • Research • Presentation Skills • Teamwork / Collaboration • English • Problem Solving • Spanish • Bilingual • Troubleshooting • Physical Abilities • Multi-Tasking • Typing • Writing 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft PowerPoint • Microsoft Access • Microsoft Word • Ansible • UNIX • Microsoft SharePoint • Microsoft Outlook • Python • Software Engineering • Database Software • SAP • Software Quality Assurance • Enterprise Resource Planning • ICD-9-CM Coding

¹⁷ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2019-2021.

Exhibit 11 lists the top certifications that appeared in online job postings between January 1, 2019 and December 31, 2021.

**Exhibit 11: Top Certifications for Radiologic Technologists and Technicians
in San Diego County¹⁸**

Top Certifications in Online Job Postings

1. American Registry of Radiologic Technologists (ARRT) Certification
 2. Basic Cardiac Life Support Certification
 3. Basic Life Saving (BLS)
 4. Certified Radiology Technician
 5. First Aid CPR AED
 6. American Heart Association Certification
 7. Advanced Cardiac Life Support (ACLS) Certification
 8. Security Clearance
 9. IV (Intravenous) Certification
 10. Diagnostic Radiologic Technologists
 11. American Registry for Diagnostic Medical Sonography (ARDMS)
 12. Certified Medical Assistant
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¹⁸ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2019-2021.

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Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.