



**C·O·E**

**CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH**

# **Workforce education, training, and skill needs in the Greater Sacramento region: Findings from an employer survey and a community survey**

**May 2023**

POWERED BY



**California  
Community  
Colleges**

**Center of Excellence for Labor Market Research, Greater Sacramento Region  
Los Rios Community College District  
Aaron Wilcher**

In partnership with:  
**Valley Vision**  
Renee John, Danielle Susa



**valley vision**

Community Inspired Solutions

# TABLE OF CONTENTS

<a href="#">Executive Summary</a> .....	3
<a href="#">Introduction</a> .....	4
<a href="#">Methodology</a> .....	5
<a href="#">Employer survey</a> .....	5
<a href="#">Community survey</a> .....	5
<a href="#">Jobs postings analysis</a> .....	5
<a href="#">Employer Survey Findings</a> .....	6
<a href="#">Respondent characteristics</a> .....	6
<a href="#">Hiring trends and challenges</a> .....	8
<a href="#">Employer skill needs</a> .....	10
<a href="#">Training and education needs and preferences</a> .....	13
<a href="#">Community college partnership opportunities</a> .....	16
<a href="#">Community Survey Findings</a> .....	17
<a href="#">Worker employment status, employability, and job satisfaction</a> .....	17
<a href="#">Worker interest in skill development, education, and training</a> .....	19
<a href="#">Conclusion and Recommendations</a> .....	22
<a href="#">Findings from employer survey</a> .....	22
<a href="#">Findings from community survey</a> .....	23
<a href="#">Recommendations</a> .....	23
<a href="#">Appendix A: Industry-specific and software skills by priority sector</a> .....	25
<a href="#">Appendix B: Survey instruments</a> .....	36



# EXECUTIVE SUMMARY



Throughout the COVID-19 pandemic, community colleges and workforce development organizations mounted numerous recovery and resiliency initiatives to meet the demands of a dynamic and transforming workplace. Regional workforce and education partners sought to better understand training and skill needs to continue serving employers and students.

The Center of Excellence partnered with Valley Vision's 21st Century Workforce Initiative on a survey of employers. That information, along with findings from Valley Vision's Livability Poll of community members, inform this report. Together, these two surveys illuminate hiring trends, skill needs, training preferences, and partnership opportunities. The main findings include the following:

- The community colleges' emphasis on work-based learning and placement addresses employer challenges to find and recruit candidates that meet skill requirements. A large majority of employers expressed interest in partnering with schools to enhance these efforts.
- African Americans, Asians, workers speaking languages other than English at home, younger workers, and workers with less education and experience expressed higher rates of interest in training and in seeking additional employment.
- Workers and employers alike prefer online training and education in asynchronous, online formats. The surveys indicate a need to add more opportunities for training and education that can be completed conveniently within a short time frame.
- Many employers have a budget for training but no capacity to develop or offer training programs on their own. The community colleges engage employers in advisory meetings that offer key opportunities to enhance partnerships and plan specific training offerings that meet employer and worker needs.
- Employers experience significant business impacts due to employees' lack of supervisory skills, basic computer skills, and office applications skills, such as Google Workspace and Microsoft Office. Workers expressed the most interest in training and education related to information and communications technology and digital media.
- Employers indicated that a lack of industry-specific skills has the greatest impact on their business. They cited the need for employees to enhance digital skills relating to customer relationship management, database and cloud applications, web development, cybersecurity, and design software. Project management and sales are two other specialized skill areas in need.



# INTRODUCTION



Throughout the COVID-19 pandemic, community colleges and workforce development organizations mounted numerous recovery and resiliency initiatives to meet the demands of a dynamic and transforming workplace. Sectors like hospitality and government continue to recover. Other sectors like construction and transportation and logistics have continued to thrive and grow.

A tight labor market with low unemployment rates and sometimes increased levels of quitting and turnover have challenged employers and educators to develop pipelines and pathways to stable careers with advancement opportunities. At the same time, workforce development planners and education and training providers have continued to discover new ways to serve employers and students with enhanced distance education efforts, and they have forged new partnerships for industry-specific and digital skill training and education.

To support these efforts, regional workforce partners in the Greater Sacramento region sought to better understand education and training needs and the workplace changes affecting businesses and workers. The Center of Excellence for the Greater Sacramento region partnered with Valley Vision's 21st Century Workforce initiative on a survey of employers. That survey, along with Valley Vision's Livability Poll, a community survey, inform this report.

These surveys contained questions on hiring trends and challenges, needs for digital and industry-specific skill enhancements, training and education opportunities, and opportunities for community colleges and other workforce development organizations to partner with employers.

This report covers the findings from these surveys, and it presents an appendix with related jobs postings data on digital skill needs and industry-specific needs by sector.



# METHODOLOGY



The report contains findings from a survey of businesses and a community survey. It also contains an appendix with related jobs postings data on digital skill needs and industry-specific skill needs by industry.

## Employer survey

The Center of Excellence partnered with Valley Vision and the Sacramento Area Council of Governments (SACOG) on a survey of regional employers. The COE worked with Valley Vision to craft workforce and employment questions. The survey also contained questions relevant to jobs and commuting, including remote work trends. The survey was distributed via email through the Sacramento Employment and Training Agency (SETA), regional chambers of commerce, workforce boards, industry associations, and direct contact with employers during fall 2022. Responding to the survey were 85 employers representing small to large businesses in various industries in the Greater Sacramento region's six counties: El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba.

This COE report presents findings from the employment and the education and training sections of the survey and contains the following elements:

- Industry, size of business, and county location
- Remote work status and trends
- Hiring and recruitment challenges and trends
- Soft skill needs
- Industry-specific skill needs
- Digital (IT) skill needs
- Work experience and educational attainment preferences
- In-house and third-party training offerings and challenges
- Preferred training mode and schedule
- Community college partnership opportunities

## Community survey

The community survey was part of the Livability Poll that Valley Vision conducts annually with Capitol Public Radio and California State University's Institute for Social Research (ISR). The survey produced a statistically relevant +/- 3% margin of error. It was completed by more than 1,800 individuals in El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba counties in late summer and early fall 2022.

The Livability Poll report from October 2022 contained the results of responses to a few of the workforce questions and to questions about quality of life, community engagement, mental health, and childcare.<sup>1</sup> This COE report includes analysis of all the survey's employment and workforce data. The community survey included the following question areas:

- Current employment status
- Employment satisfaction
- Industry, skill, and job changes in the last five years
- Interest in improving skills
- Interest in industry area skill development
- Preferred mode for accessing education and training

## Jobs postings analysis

Appendix A provides an overview of the data analysis for the top digital skill requirements and industry-specific job requirements for the middle-skill occupations in priority industry sectors in the Sacramento region for the calendar year 2022.

1. Isa Avancena et. al. "The Livability Poll: An Annual Wellness Check of the Sacramento Region," Valley Vision, 2022, <https://www.valleyvision.org/resources/the-livability-poll-2022/>

# EMPLOYER SURVEY FINDINGS



This section provides a detailed analysis of the survey findings from the fall 2022 survey of 85 employers in the Sacramento region. The analysis covers employer characteristics (industry, location, firm size), hiring trends and challenges, employer skill needs, training and education needs and preferences, and community college partnership opportunities.

## Respondent characteristics

The survey profiled basic business characteristics, including industry category, county location, and firm size.

Collectively, survey respondents represent a wide range of industry sectors (Exhibit 1). Most represented are government and nonprofits (11 respondents each and together 26% of the total). Least represented are finance and retail trade (2 respondents each and together 4% of the total).

The other category includes organizations that did not designate one of the industry categories. Those organizations identified themselves as IT consultants, educators, architects, chambers of commerce, and staffing agencies.

**Exhibit 1. Survey respondents by industry sector (n = 85)**

Industry	Number	Percent of Total
Government Agency	11	13%
Nonprofit	11	13%
Other (please specify)	11	13%
Transportation	10	12%
Social Service	9	11%
Manufacturing	5	6%
Accommodations (Hotels and Motels)	4	5%
Agriculture	4	5%
Construction	4	5%
Health Care	4	5%
Restaurants/Food Service	4	5%
Wholesale Trade	4	5%
Finance	2	2%
Retail Trade	2	2%
<b>Grand Total</b>	<b>85</b>	<b>100%</b>

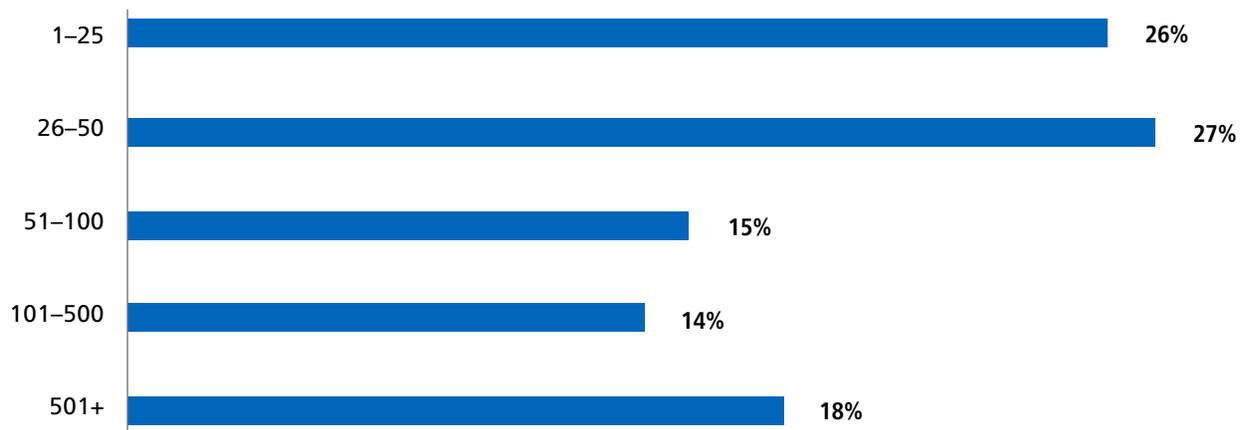
Most of the respondents were in Sacramento County (46 respondents, 54% of the total) and Placer County (17 respondents, 20% of the total) (Exhibit 2). Few respondents were in Sutter, Yolo, and Yuba counties (collectively, 11 respondents, 13% of the total). The other category included respondents representing businesses with a presence in more than one of the counties.

**Exhibit 2. Survey respondents by county (n = 85)**

County	Number	Percent of Total
Sacramento	46	54%
Placer	17	20%
El Dorado	7	8%
Sutter	6	7%
Other (please specify)	4	5%
Yolo	4	5%
Yuba	1	1%
<b>Grand Total</b>	<b>85</b>	<b>100%</b>

In terms of firm size, a majority of respondents represent businesses with 50 or fewer employees (45 respondents, 53% of the total) (Exhibit 3). A significant number of respondents represent businesses with 51 to 100 employees (13 respondents, 15% of the total). A third of the respondents represent organizations with 101 or more employees (17 respondents, 32% of the total).

**Exhibit 3. Count of survey respondents by number of employees (n = 85)**

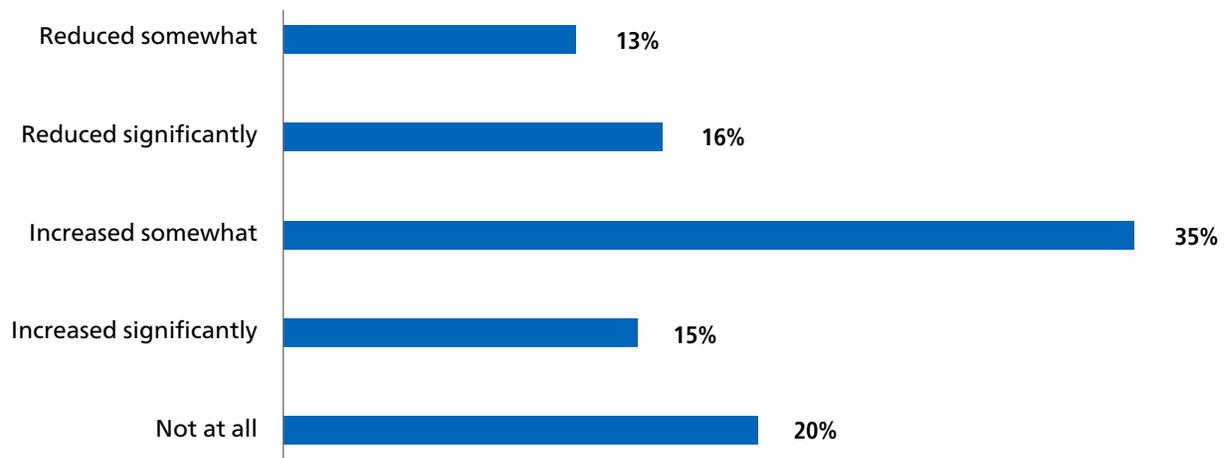


## Hiring trends and challenges

The survey asked employers about hiring challenges and trends, including recent workforce additions and reductions, levels of difficulty recruiting and hiring, and workforce factors influencing hiring.

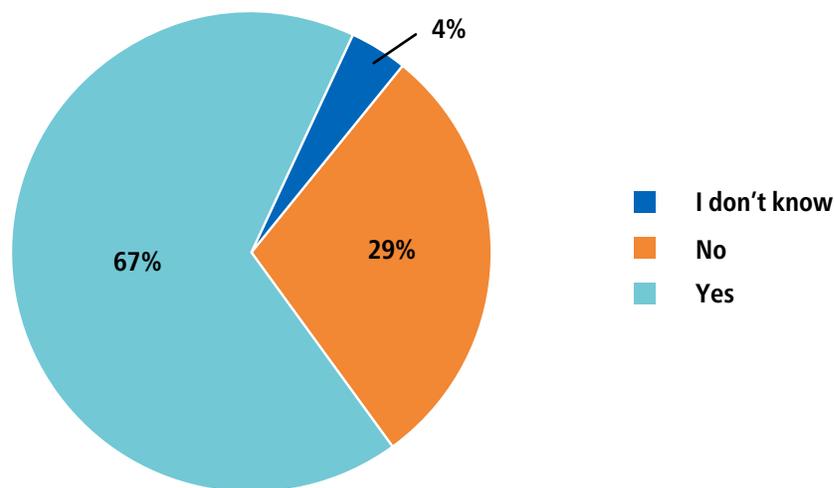
Nearly a fifth of the employers (17 respondents, 20% of the total) saw no change in number of employees during the pandemic (Exhibit 4). Half of the employers saw a slight or significant increase (43 respondents, 50% of the total). Fewer than a third saw reductions (25 respondents, 29% of the total).

**Exhibit 4. Increases or reductions in employment during the pandemic (n = 85)**



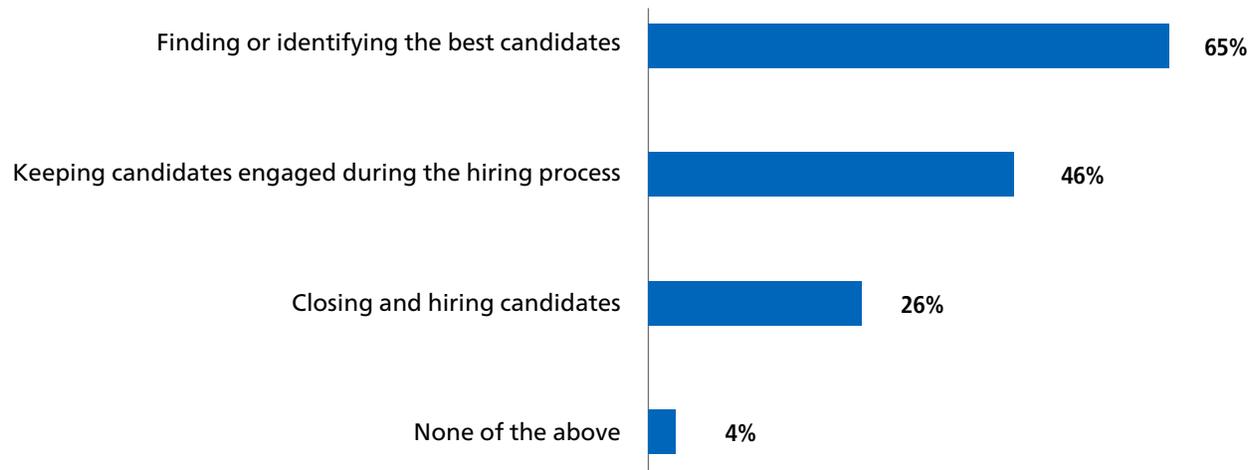
Nearly 7 of 10 employers (57 respondents, 67% of the total) have difficulty recruiting and hiring workers (Exhibit 5). Nearly a third indicated no difficulty recruiting and hiring employees (25 respondents, 29% of the total).

**Exhibit 5. Difficulty hiring employees (n = 85)**



Most employers with hiring challenges indicated that they had difficulty identifying candidates (37 respondents, 65% of the total) (Exhibit 6). Nearly half indicated that they had difficulty keeping candidates engaged during the hiring process (26 respondents, 46% of the total). Less than a third had difficulty closing candidates (15 respondents, 26% of the total).

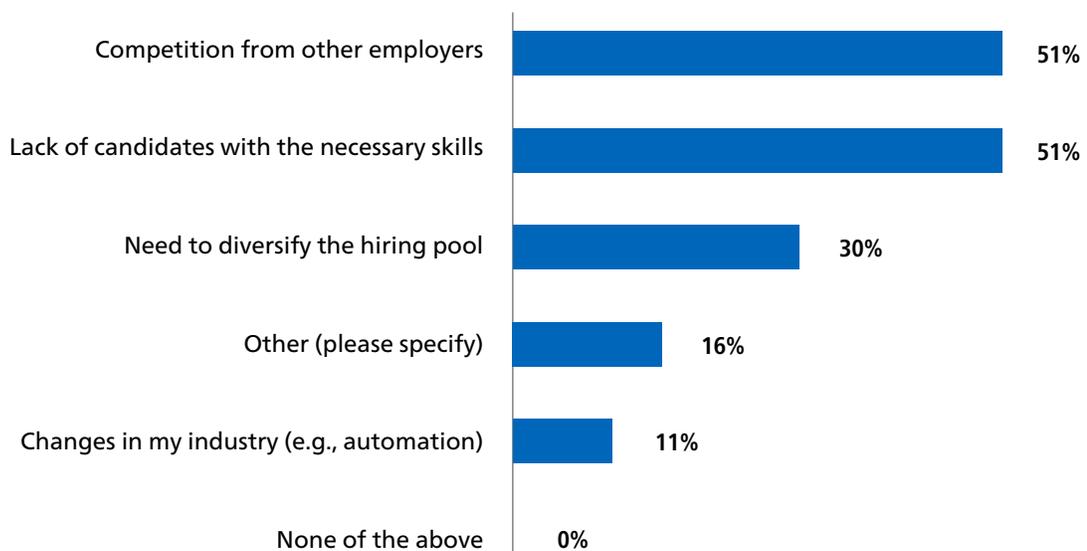
**Exhibit 6. Most challenging phase of the hiring process (n = 57)**



The survey asked those employers experiencing hiring challenges about the workforce factors influencing the hiring process. Half cited competition from other employers (29 respondents, 51% of the total). Half also cited a lack of candidates with required skills (29 respondents, 51% of the total). A third cited a need to diversify the hiring pool (17 respondents, 30% of the total).

Only 11% of employers said that industry changes affected hiring (6 respondents, 11% of the total) (Exhibit 7). Those changes included desire for remote work and increased salary demands.

**Exhibit 7. General workforce factors making hiring challenging (n = 57)**



## Employer skill needs

The survey elicited data on deficits related to employees' industry-specific and specialized skills, soft skills, and software skills. It asked employers to rate from 0 to 100 the level of negative impact that such deficits have on business operations (Exhibit 8). Specialized industry skill deficits rated highest (average score of 58). Information technology, soft skills, and work experience deficits each rated only slightly lower (average score of between 50 and 52). Educational attainment ranked lowest for impact (average score of 44).

**Exhibit 8. Employee skill deficits impacting business operations, average rating on a scale of 0 (no impact) to 100 (highest impact) (n = 85)**

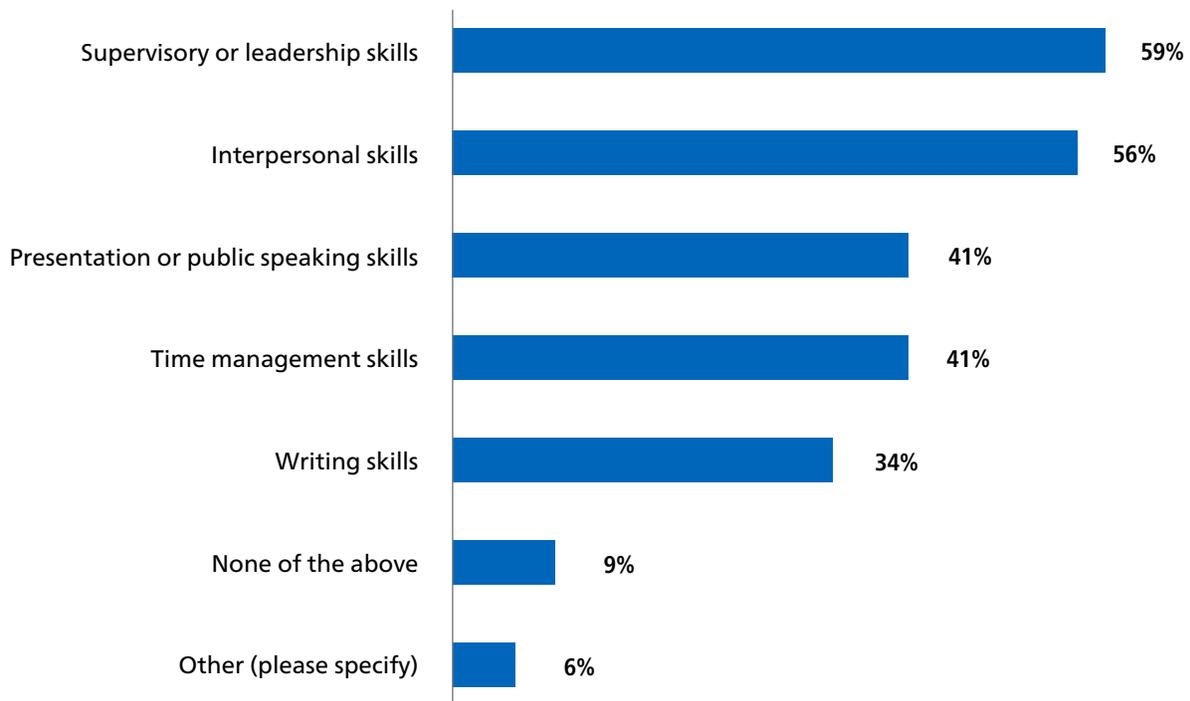


The survey asked employers to specify the industry-specific specialized skills for which job candidates and existing employees need training. They cited information technology, customer service, project management, and sales skills. Commonly cited skills needs included

- Customer relationship management (CRM)
- Database management
- Project management
- Industry-specific communication / knowledge
- Cloud services
- Web development
- Cybersecurity
- Design software for architecture and construction
- SAP
- Sales

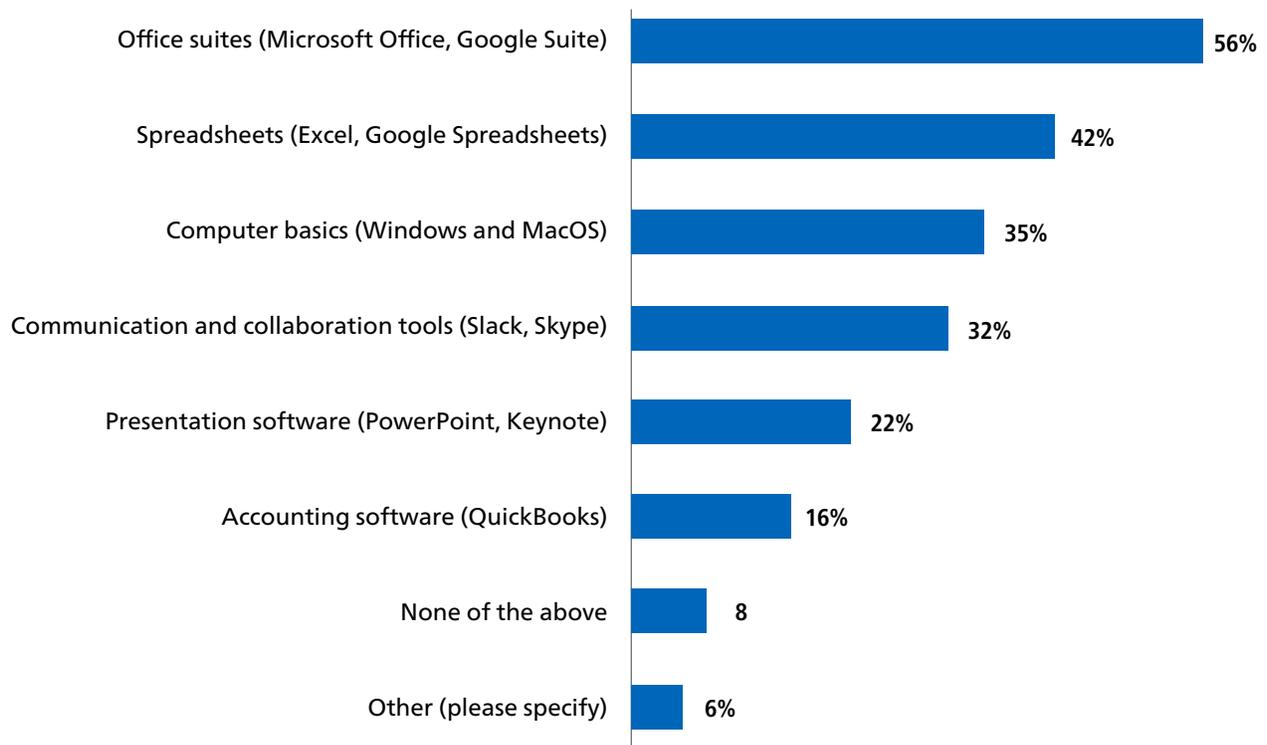
The survey asked employers about soft skill training needs for existing and incoming employees (Exhibit 9). The most-cited training need was supervisory or leadership skills (50 respondents, 59% of total). More than half of employers also cited interpersonal skills training needs (48 respondents, 48% of the total). An equal number of employers (35 respondents, 41% of the total) indicated the need for training in presentation skills and time management skills. Roughly a third of employers identified the need for training in writing skills (29 respondents, 34% of the total).

**Exhibit 9. Percent of respondents indicating areas of soft skills in which current and incoming employees need training (n = 85)**



Regarding software skills, more than half of employers said that existing and incoming employees need training on general office suites like Microsoft Office and Google (48 respondents, 56% of the total) (Exhibit 10). Four of 10 respondents pointed to the need for training on spreadsheet software like Excel (36 respondents, 42% of the total). About a third of employers identified training in computer basics (30 respondents, 35% of the total) and communication and collaboration tools like Slack and Skype (27 respondents, 32% of the total). Less than a third cited training for presentation software like PowerPoint (19 respondents, 22% of the total) or accounting software (14 respondents, 16% of the total). In the “other” category, employers identified the need for training in Adobe graphics programs, Software as a Service (SaaS), Revit, and computer programming.

**Exhibit 10. Percent of respondents indicating software skills for which current and incoming employees need training (n = 85)**

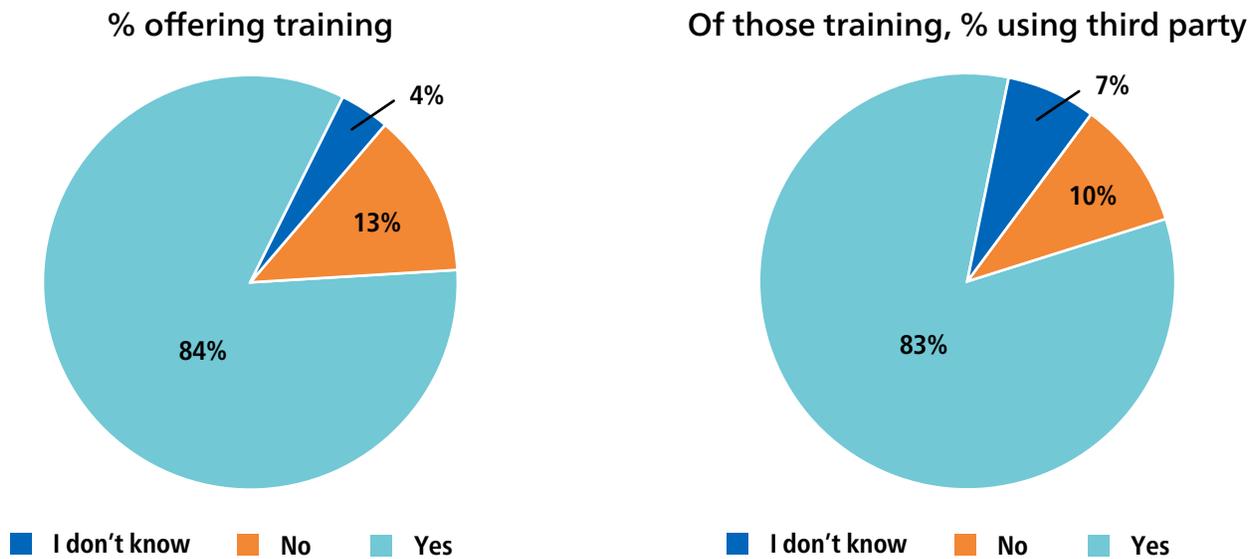


## Training and education needs and preferences

The survey queried employers about their employee training, use of third-party training providers, and challenges in offering training. It also queried employers about remote work trends and the preferred mode of and schedule for training provided by third parties, including community colleges.

A large majority of the employers offer training to employees (71 respondents, 84% of the total) (Exhibit 11). Of those offering training, 8 of 10 use third-party providers (59 respondents, 83% of the total).

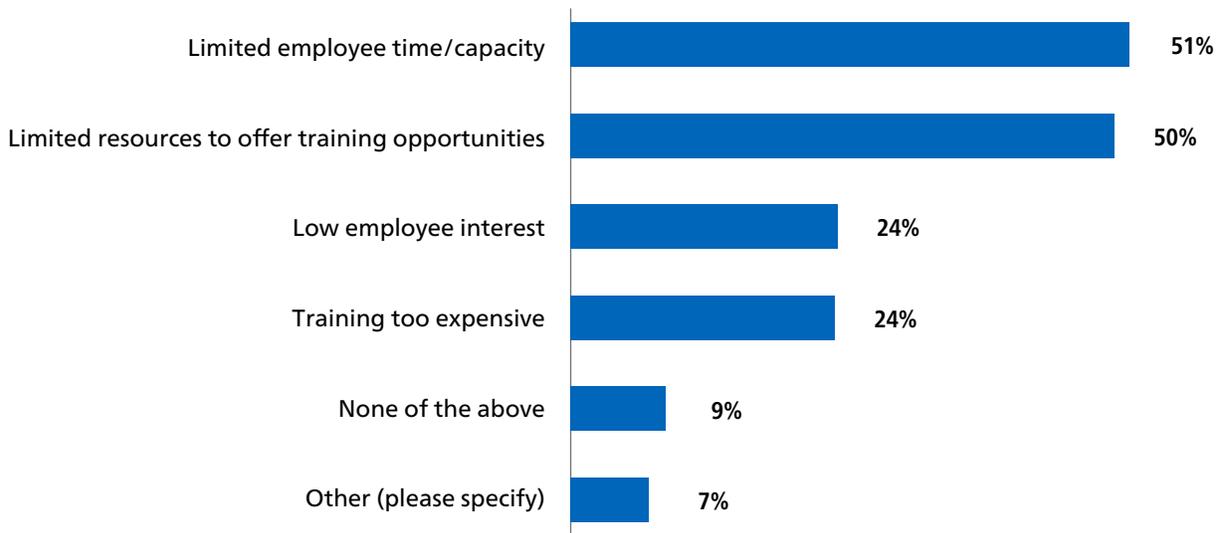
**Exhibit 11. Percentage of respondents offering training to employees (n = 85) and percentage using third-party training providers (n = 71)**



Regarding training challenges, half of employers cited limited employee time for training (36 respondents, 51% of the total) and inadequate resources (35 respondents, 50% of the total). Some employers identified low employee interest (17 respondents, 24% of the total) or high training costs (17 respondents, 24% of the total).

In open-ended responses, employers indicated other challenges: supervisors’ lack of awareness of training needs and delayed approval of training, lack of space for training programs, lack of accountability for employees to take advantage of training, and lack of immediate rewards for employees who complete training.

**Exhibit 12. Challenges for respondents to offer training (n = 71)**



The data on remote work are included in the section on training because they inform potential modes of training and education delivery.

Employers indicated that hybrid work arrangements became more common during the pandemic and that they are likely to endure. Prior to the pandemic, 6 of 10 employers said their operations were fully in person (54 respondents, 64% of the total); less than a third had a hybrid arrangement (28 respondents, 33% of the total).

These numbers changed during the pandemic: nearly 7 of 10 employers said their operations were hybrid (58 respondents, 68% of the total), less than a third said their operations were fully in person (22 respondents, 26% of the total).

When asked to project their workplace structure in 12 to 24 months, almost all employers said it would not change from the current structure (Exhibit 13). Few respondents anticipated a fully remote workplace.

**Exhibit 13. Workplace structure before and during the pandemic and anticipated in the next 12 to 24 months (n = 85)**

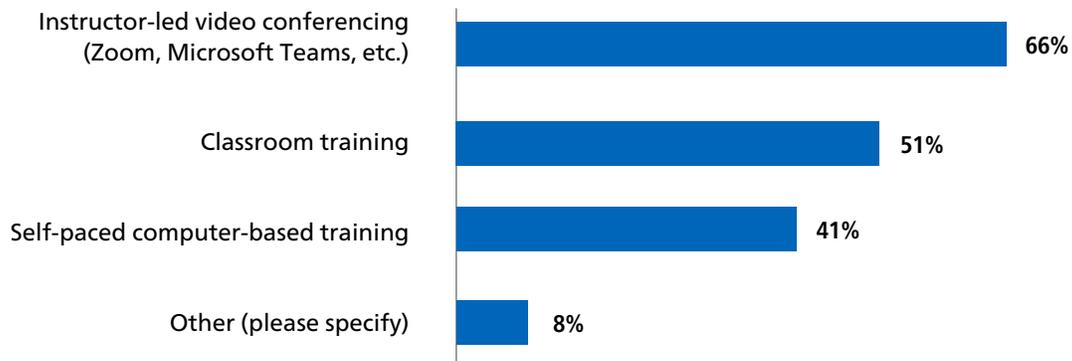
Workplace Structure	Pre-pandemic	Current	Anticipated
A mix of in-person and remote	33%	68%	67%
Fully in-person	64%	26%	26%
Fully remote	4%	6%	7%

All employers were asked about their preferred mode of training delivery if they partnered with a third-party provider, including community colleges (Exhibit 14).

A majority said their preferred mode of delivery is instructor-led video conferencing in a medium like Zoom (57 respondents, 70% of total). Four of 10 respondents also said they preferred self-paced (asynchronous) computer-based training (34 respondents, 41% of the total). Just less than half of respondents preferred in-person classroom training (38 respondents, 46% of the total).

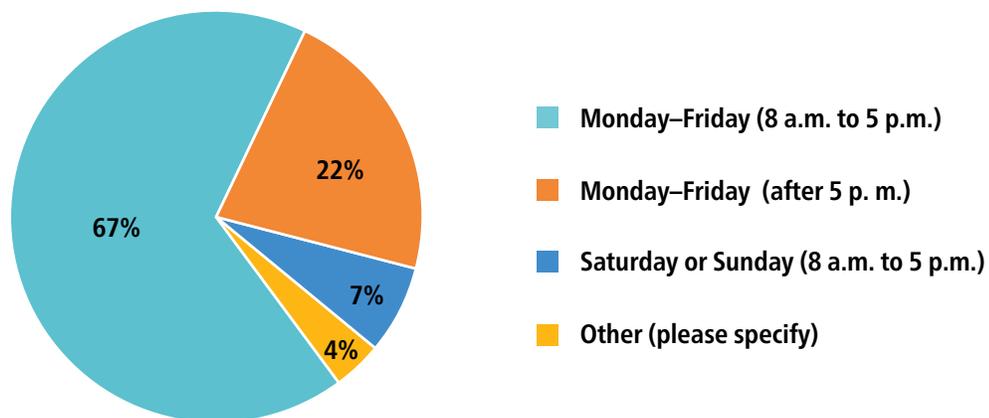
Responses in the “other” category included hands-on and on-the-job training (work-based learning).

**Exhibit 14. Preferred employee training mode if respondent partnered with a college or other training provider (n = 82)**



Employers were asked about their preferred time for training if they were partnering with a third-party training provider (Exhibit 15). A majority said that the preferred training time was during regular business hours Monday through Friday (48 respondents, 67% of the total). Nearly a quarter indicated evening hours after 5 p.m. during the week (16 respondents, 22% of the total). Few said weekend days were preferred.

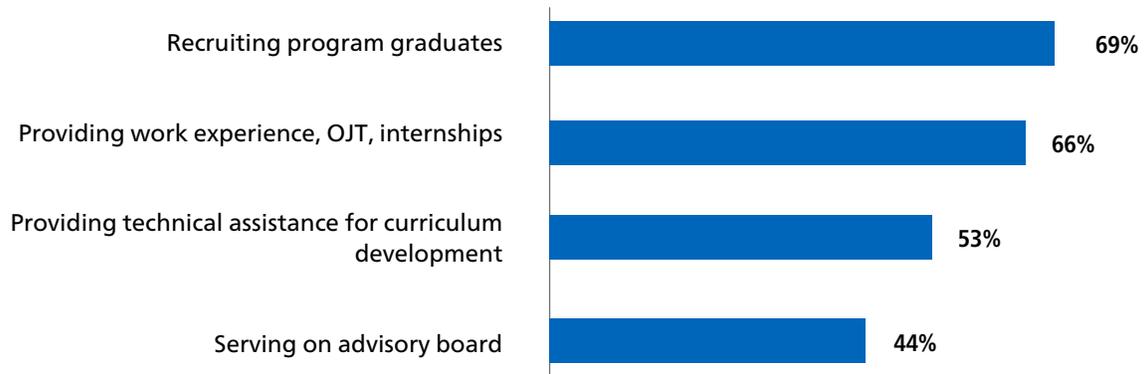
**Exhibit 15. Preferred time for delivery of employee training if respondent partnered with a college or other training provider (n = 72)**



## Community college partnership opportunities

A large majority of employers indicated interest in community college partnerships (Exhibit 16). Most are interested in recruiting program graduates (59 respondents, 69% of the total). A similar number (56 respondents, 66% of the total) are interested in providing work-based learning opportunities like on-the-job training and internships. Half are willing to provide technical assistance for curriculum development (37 respondents, 44% of the total). Just less than half (37 respondents, 44% of the total) are interested in serving on an advisory board.

**Exhibit 16. Respondent interest in community college partnership opportunities (n = 85)**



# COMMUNITY SURVEY FINDINGS



This section presents analysis of the community survey undertaken as part of the Livability Poll conducted by Valley Vision and ISR during late summer and early fall 2022. The more than 1,800 respondents answered questions about their employment status (full-time, part-time), search for employment, job satisfaction and reasons for dissatisfaction, changes in employability in the last five years, interest in improving skills and preferred industries for skill development, and preferred mode of and schedule for education and training programs.

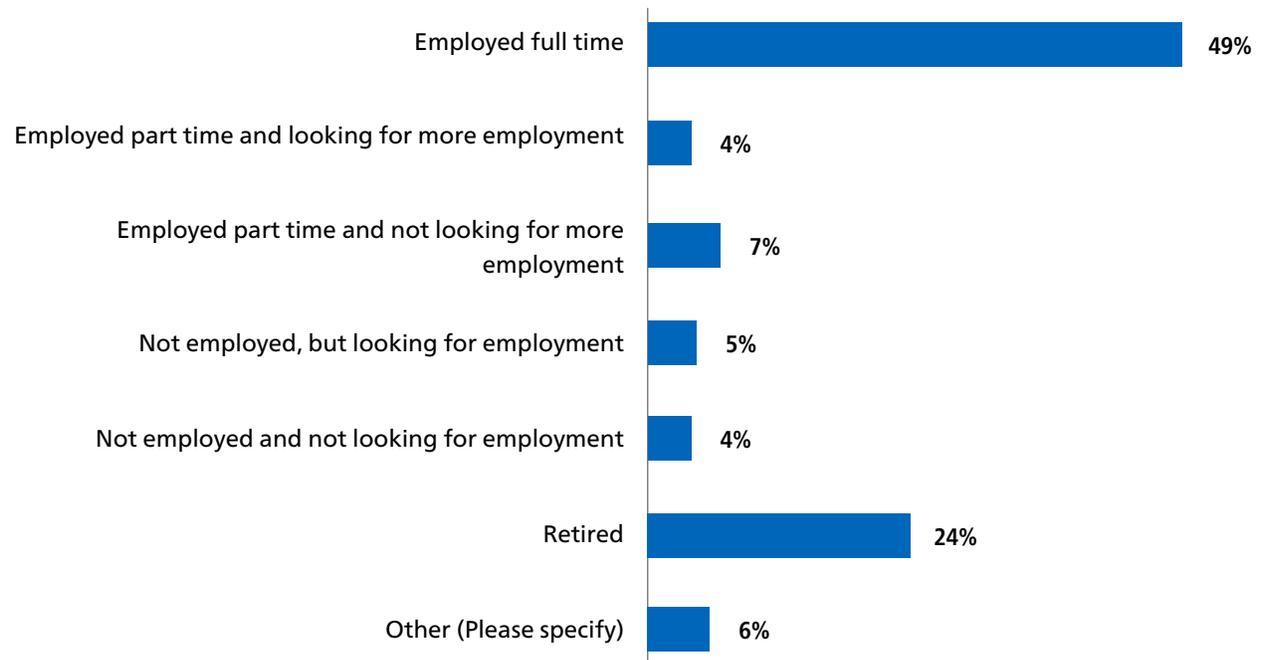
The analysis highlights responses according to demographics, including age and race/ethnicity when relevant.

## Worker employment status, employability, and job satisfaction

Workers were asked about their employment status and search for more employment. Half were employed full time (911 respondents, 49% of the total) (Exhibit 17). A small minority (168 respondents, 9% of the total) were employed part time or were unemployed and were looking for more employment. A similar number (208 respondents, 11% of the total) were employed part time or were unemployed but were not looking for more employment. Nearly a quarter said they were retired (449 respondents, 24% of the total).

African Americans and Asians, workers speaking languages other than English at home, workers aged 34 and under, students, and those whose educational attainment is less than a bachelor's degree have higher rates of more employment seeking. Workers in these demographic groups have double the rates of employment seeking than other demographic groups.

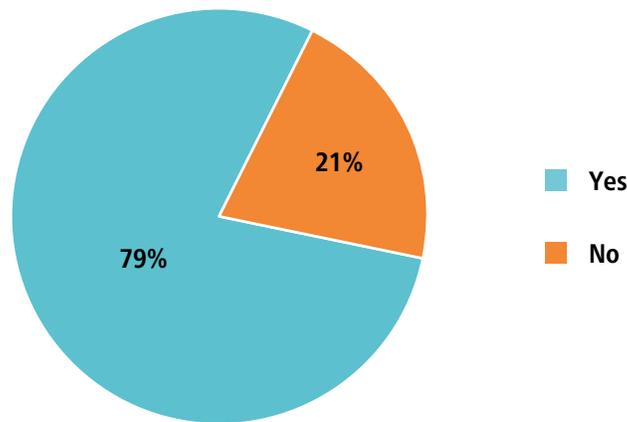
**Exhibit 17. Employment status (n = 1,843)**



Of those workers who were employed full or part time and not seeking employment, about 8 of 10 said they were satisfied in their current job (817 respondents, 79% of the total) (Exhibit 18). A fifth said they were not satisfied (215 respondent, 21% of the total).

Just more than half of African Americans answering the question (55%) reported dissatisfaction in their current jobs. They were three times more likely than any other demographic group to be unsatisfied with their current employment.

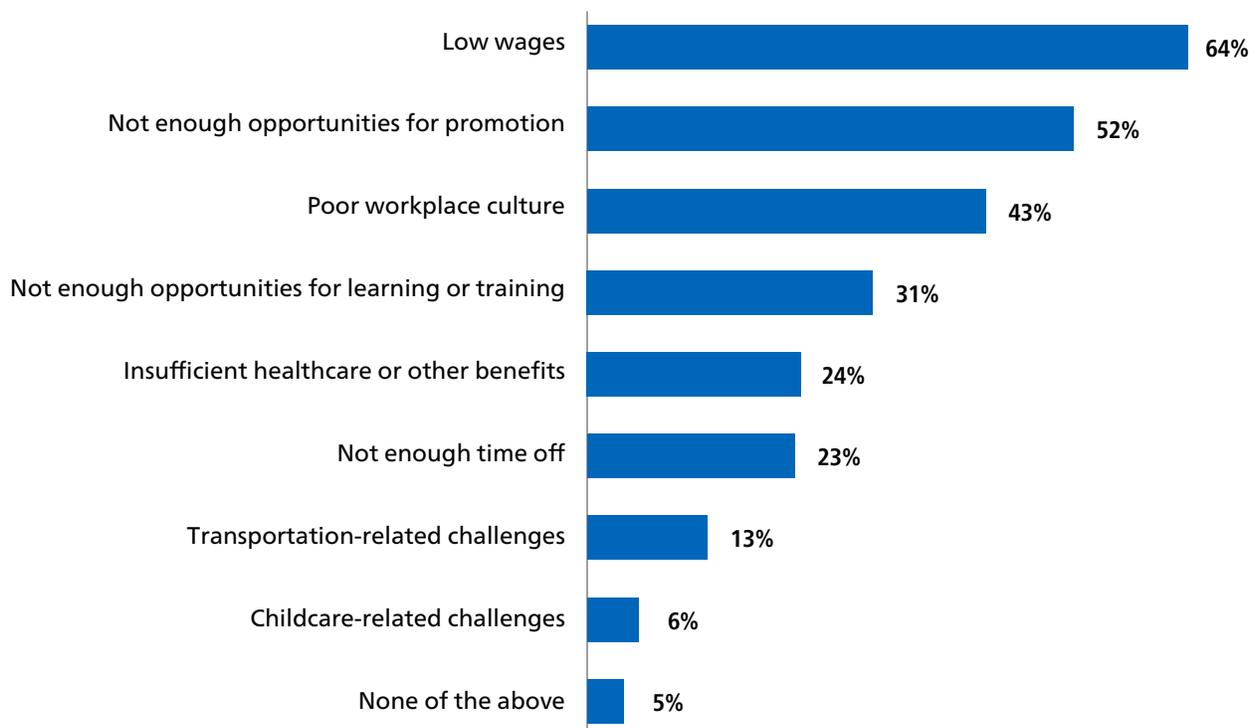
**Exhibit 18. Percentage of workers satisfied or not satisfied with their current job (n = 1,032)**



Of workers reporting dissatisfaction with their current employment, more than half cited wages as the reason (173 respondents, 64% of the total) (Exhibit 19). Latinos were the most likely to cite wages as a concern.

Other reasons for dissatisfaction were insufficient opportunities for promotion (112 respondents, 52% of the total), workplace culture (92 respondents, 43% of the total), and insufficient opportunities for training (66 respondents, 31% of the total). Three-quarters of African Americans cited training as a concern. Fifteen percent more African Americans cited this concern than Asian Americans.

**Exhibit 19. Reasons that workers are dissatisfied with their current employment (n = 215)**



The survey asked workers whether their employability had changed over the last five years in terms of skills, job availability, and changes in industry (Exhibit 20).

Workers were most optimistic about their prospects in terms of skills. Just under half (766 respondents, 43% of the total) said they were more employable in terms of skills. A significant minority (206 respondents, 12% of the total) said they were less employable in terms of skills.

The results were similar for job availability and changes in industry. About a third of workers reported they were either more employable or had no change in employability in terms of these factors. A minority said they were less employable in terms of job availability (307 respondents, 17% of the total) or changes in industry (273 respondents, 15% of the total).

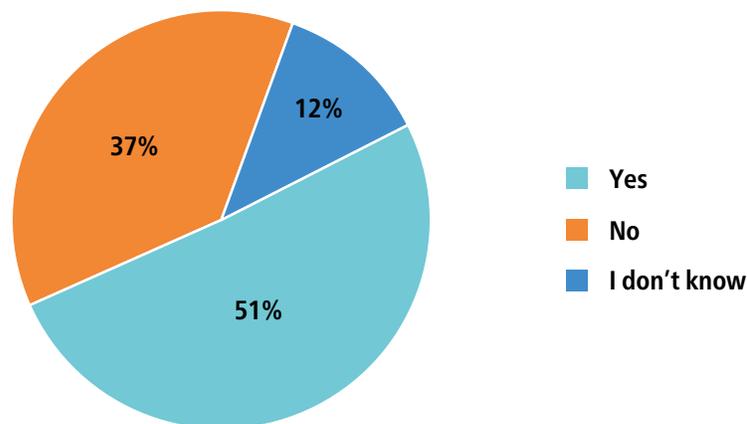
**Exhibit 20. Level of employability in the last five years based on skills, job availability, and industry changes (n = 1,800)**

Employability	Skills	Job Availability	Industry Changes
More employable	43%	30%	27%
No change in employability	39%	34%	38%
Less employable	11%	17%	15%
Don't know	7%	19%	20%

### Worker interest in skill development, education, and training

The survey queried workers about their interest in skill development and education and training programs (Exhibit 21). Just over half indicated they are interested in improving skills or learning new skills in education and training programs (932 respondents, 51% of the total). A third said they are not interested in education and training programs (677 respondents, 37% of the total).

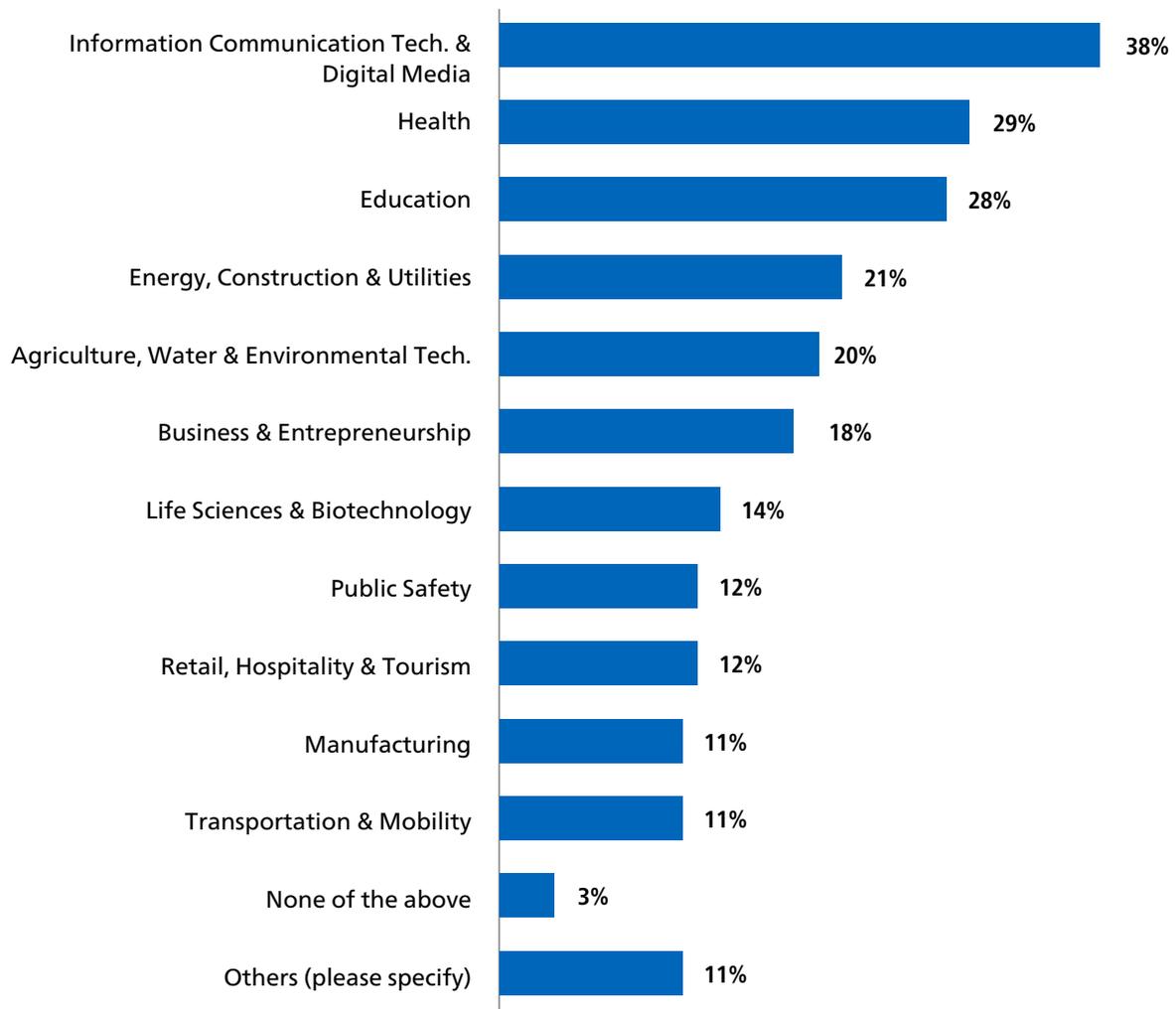
**Exhibit 21. Percentage of workers interested in improving skills or learning new skills in education and training programs (n = 1,820)**



More than a third of workers interested in education and training programs (339 respondents, 38% of the total) identified Information and Communication Technology and Digital Media as an industry sector of interest (Exhibit 22). Another third cited Health (255 respondents, 29% of the total), and a third cited Education (250 respondents, 28% of the total).

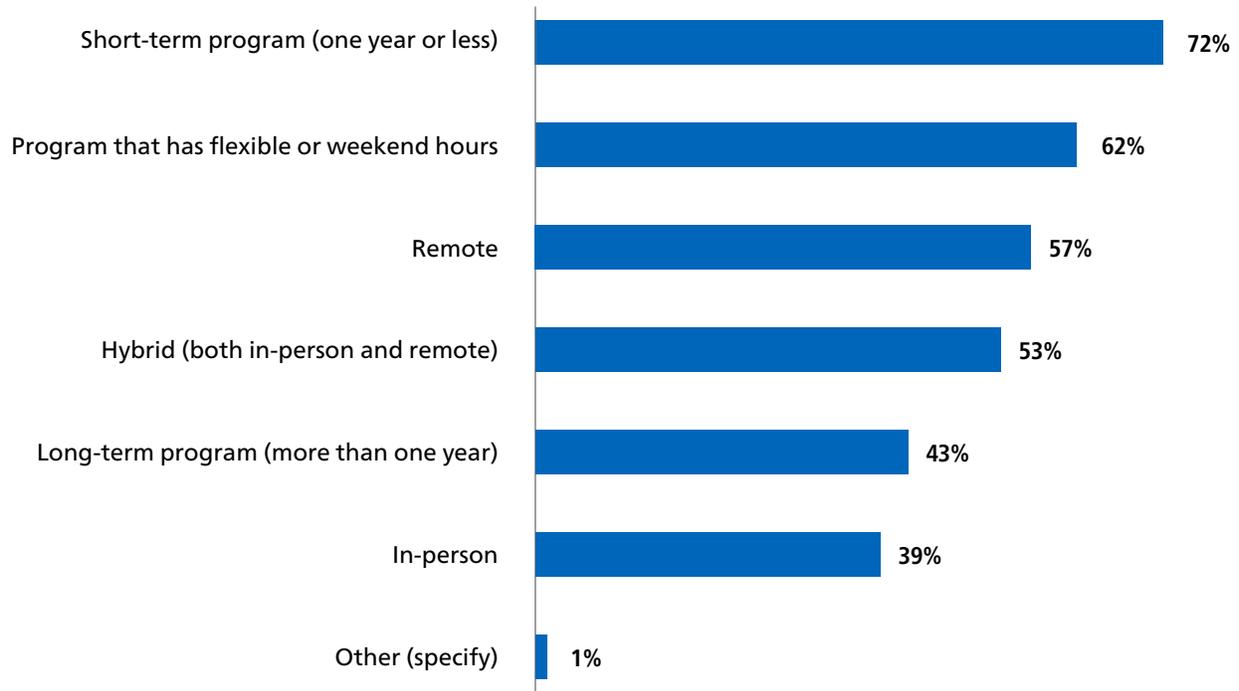
Fewer workers expressed interest in skill development in Transportation and Mobility (100 respondents, 11% of the total) and Manufacturing (102 respondents, 11.3% of the total).

**Exhibit 22. Industry sectors in which workers are interested in improving skills or learning new skills (check all that apply) (n = 932)**



The survey asked workers interested in training and education about their preferred mode of delivery and schedule (Exhibit 23). Nearly three-quarters would prefer programs lasting less than a year (654 respondents, 72% of the total). More than half indicated a preference for flexible and weekend hours (563 respondents, 62% of the total), remote offerings (517 respondents, 57% of the total), and hybrid (in-person or remote) offerings (485 respondents, 53% of the total). In-person education and training programs were least preferred, though that answer choice still represented a significant minority (359 respondents, 40% of the total).

**Exhibit 23. Preferred type and mode of education and training programs for improving skills or learning new skills (check all that apply) (n = 932)**



# CONCLUSION AND RECOMMENDATIONS



Throughout the COVID-19 pandemic, community colleges and workforce development organizations mounted numerous recovery and resiliency initiatives to meet the demands of a dynamic and transforming workplace. The Greater Sacramento region, like the nation, has experienced tight labor markets. Many sectors surpassed pre-pandemic employment levels, while others like government and hospitality struggled to recover lost jobs.

Regional workforce and education partners sought to better understand training and skill needs to continue serving employers and students. The Center of Excellence partnered with Valley Vision's 21st Century Workforce Initiative on a survey of businesses and a survey of workers. The surveys illuminated trends on hiring needs and challenges, digital and industry-specific skills, training and education preferences, and partnership opportunities.

The research resulted in the following key findings and recommendations.

## Findings from employer survey

### ***The pandemic produced a mix of employment impacts in the businesses surveyed.***

About half of employers in the survey increased employment. A third reduced employment. A fifth of the employers had no changes.

### ***Most employers struggle to recruit candidates. They expressed interest in partnering with community colleges to recruit program graduates and offer work-based learning.***

Of the employers surveyed, 7 of 10 had difficulty hiring employees, citing challenges related to recruitment and keeping candidates engaged during the hiring process. About 7 of 10 employers expressed interest in partnering with community colleges to recruit graduates for employment and to offer work-based learning opportunities.

### ***Half of employers have difficulty finding candidates with necessary skills. Deficits in industry-specific skills, digital skills, and soft skills result in business impacts.***

The employers rated skill deficits higher than work experience or educational attainment for their impacts on business. The deficits include industry-specific, specialized skills; information technology (software) skills; and soft skills. Educational attainment rated lowest on the list of business impacts. Appendix A includes jobs postings data outlining specialized and software skill requirements for middle-skill occupations.

### ***Employers express the need for digital skills training on office suites, spreadsheets, and computer basics. They also cite need for more advanced, industry-specific information technology skills.***

Employers indicated the need for employee training in Microsoft Office, Excel, and computer basics; customer relationship management software; database and cloud applications; web development; cybersecurity; and design software for architecture and construction. Training on communication and collaboration tools, presentation software like PowerPoint, and accounting software like Quickbooks ranked lowest in the survey. Appendix A includes jobs postings data outlining software skill requirements.

### ***Employers indicated a greater need for supervisory and leadership skills than for other general and soft skills.***

Six of 10 employers cited the need for supervisory and leadership skills; 4 in 10 cited the need for presentation, time management, and writing skills.

### ***Most employers who offer training use third-party providers. Employers cite inadequate resources and employee time for training.***

Most employers provide training, and most rely on third-party training providers. Employee interest and training costs posed far less of a challenge for employers than training resources and employee time constraints.

### ***Employers prefer online and asynchronous formats for accessing education and training.***

During the pandemic, hybrid work arrangements increased markedly. Before the pandemic, one-third of employers offered such arrangements; after the pandemic, more than two-thirds did. Nearly 7 of 10 employers said they preferred online training options using Zoom or a similar delivery system.

### ***Employers are also interested in traditional classroom training during regular business hours.***

Employers also indicate that classroom training is a preferred mode for accessing training and education when partnering with a community college. Nearly 7 of 10 employers prefer to have training and education offered during regular business hours. A fifth of employers prefer to access training during the week in the evening.

## Findings from community survey

### ***Most workers are not seeking more employment, but several key demographics are.***

Only about 10% of the workers surveyed reported they were looking for more work. But African Americans and Asians, workers speaking languages other than English at home, workers aged 34 and under, students, and those whose educational attainment is less than a bachelor's degree are seeking employment at double the rates of other demographic groups.

### ***A fifth of workers are dissatisfied in their current jobs. They cited low wages and a lack of advancement and education and training opportunities.***

The vast majority of workers reported satisfaction with their employment. But 6 of 10 of those reporting dissatisfaction cited low wages as a concern. Half cited lack of promotion opportunities. A third cited lack of training opportunities. More than half of African Americans reported job dissatisfaction. Three-quarters of these respondents cited lack of training as a concern.

### ***Most workers report they are at least as employable or more employable as they were five years ago. A significant minority said they are less employable.***

When asked to rate their level of employability in terms of skills, job availability, and industry changes, between 11% and 17% of respondents said they are less employable than five years ago. A quarter of African Americans reported feeling less employable with respect to skills.

### ***Half of workers said they were interested in improving skills or learning skills in an education and training program. These workers are interested in training and education in all priority industry sectors.***

Workers expressed the most training and education interest in a few key industry sectors: information and communications technology and digital media, health, and education. There was significant interest in all priority industry sectors.

### ***Workers are primarily interested in short-term training and programs offered in remote or hybrid formats. Some workers prefer in-person training.***

The survey findings show that the market for long-term and in-person training is smaller than for short-term and remote options. Long-term training had 30% less responses than short-term training. Remote training had nearly 20% more responses than in-person training. Four of 10 workers expressed a preference for long-term and in-person training.

## Recommendations

### ***The community colleges' emphasis on work-based learning and job placement addresses employer challenges related to finding and recruiting candidates with required skills.***

The community colleges' career education strategy encourages additional work-based learning opportunities and referrals of students to employment opportunities. A large majority of employers expressed interest in partnering with schools to enhance these efforts. The schools have made new investments in career development and employer outreach capacity. The community colleges should continue investing in and expanding this capacity.

### ***The community colleges need to do more to provide training and career development resources to specific demographics identified in the survey. Certain groups expressed notably higher levels of interest in and need for training and education.***

Counter to what enrollment trends suggest, a large segment of the workforce is interested in training and skill enhancements. African Americans, Asians, workers speaking languages other than English at home, younger workers, and workers with less education and experience expressed higher rates of interest in training. These groups also have higher rates of seeking additional or different employment. The community colleges and other workforce education and training providers should do more to connect with these communities and to design education and training programs and career services that meet their needs.

### ***The community colleges should explore ways to provide additional training and education opportunities in short-term, asynchronous, and online formats.***

Workers and employers alike prefer training and education in asynchronous, online formats. To meet the needs of the incumbent workforce and job seekers, the survey research indicates a need to create additional opportunities for training and education that can be completed conveniently within a short time frame. Traditional day schedules and in-person classroom training will continue to play a key role, but the survey indicates that the market for classes in those formats is smaller than that for digital formats.

***Sector-based workforce development planning should lead to training and education partnerships with employers with similar training needs.***

The employer survey makes clear that employers have widespread skill and training gaps that the community colleges can fulfill. Many employers have a budget for training but no capacity to develop or offer training programs on their own. The community colleges and other workforce entities can do more to create partnerships that result in training programs that meet specific employer needs. The community colleges engage employers in advisory meetings in a sector-based format. These meetings offer one key opportunity to enhance partnerships and to plan specific training offerings that meet employer and worker needs. Community colleges' employer outreach staff can facilitate planning and partnerships with employers.

***The community colleges should offer additional training and education in topics related to supervisory skills, basic digital skills, and office applications.***

The survey makes clear that employers experience significant business impacts due to employees' lack of supervisory skills, basic computer skills, and office applications skills, such as skills using Google Workspace and Microsoft Office. Workers expressed the most interest in training and education related to information and communications technology and digital media. The community colleges should work with employers to plan and offer more of these classes in asynchronous and online formats. They should also offer courses in general skills and soft skills, like writing, time management, and communication, which are also of interest to employers. Appendix A offers additional jobs postings data on employer requirements for industry-specific and software skills.

***Regional planning for education and training should target industry-specific digital skills and specialized skills that employers cite as pain points.***

Employers indicated that a lack of industry-specific skills most impacts their business. The community colleges should work with employers to plan and offer training in key software and digital skills related to customer relationship management, database and cloud applications, web development, cybersecurity, and design software. Project management and sales are two other specialized skill areas employers and colleges should consider. Appendix A presents additional information from jobs postings data on employer needs for specialized and software skills.



# APPENDIX A:

## Industry-specific and software skills by priority sector



### Advanced Manufacturing

The tables below show the top industry-specific skills and software skills listed in jobs postings for 40 related middle-skill occupations in the Advanced Manufacturing sector during 2022 in the six-county Greater Sacramento region.

**Exhibit A1. Top industry-specific, specialized skills in Advanced Manufacturing (n = 7,011)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Machinery	752	10.7%
Hand Tools	727	10.4%
Power Tool Operation	480	6.8%
Blueprinting	424	6.0%
Forklift Truck	414	5.9%
Welding	394	5.6%
Auditing	381	5.4%
Safety Standards	363	5.2%
Electronics	354	5.0%
Test Equipment	348	5.0%
Warehousing	347	4.9%
Fabrication	344	4.9%
Preventive Maintenance	322	4.6%

Source: Lightcast, 2023.1

**Exhibit A2. Top software skills in Advanced Manufacturing (n = 7,011)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Office	575	8.2%
Microsoft Excel	560	8.0%
Microsoft Outlook	367	5.2%
Microsoft Word	230	3.3%
AutoCAD	216	3.1%
Microsoft PowerPoint	199	2.8%
SAP Applications	119	1.7%
Autodesk Revit	93	1.3%
SolidWorks (CAD)	89	1.3%
G-Codes	84	1.2%
Microsoft Windows	79	1.1%
Python (Programming Language)	76	1.1%

Source: Lightcast, 2023.1

## Advanced Transportation and Logistics

The tables below show the top industry-specific skills and software skills listed in jobs postings for 38 related middle-skill occupations in the Advanced Transportation and Logistics sector during 2022 in the six-county Greater Sacramento region.

### Exhibit A3. Top industry-specific, specialized skills in Advanced Transportation and Logistics (n = 16,291)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Truck Driving	1,823	11.2%
Warehousing	1,543	9.5%
Hand Tools	865	5.3%
Forklift Truck	844	5.2%
Automotive Services	794	4.9%
HVAC	681	4.2%
Machinery	636	3.9%
Vehicle Maintenance	626	3.8%
Vehicle Inspection	621	3.8%
Mechanics	621	3.8%
Purchasing	602	3.7%
Supply Chain	564	3.5%
Auditing	548	3.4%
Power Tool Operation	526	3.2%

Source: Lightcast, 2023.1

### Exhibit A4. Top software skills in Advanced Transportation and Logistics (n = 16,291)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Excel	1,024	6.3%
Microsoft Office	939	5.8%
Microsoft Outlook	551	3.4%
Microsoft PowerPoint	484	3.0%
Microsoft Word	323	2.0%
Spreadsheets	302	1.9%
SAP Applications	300	1.8%
Inventory Control Systems	214	1.3%
Inventory Management System	130	0.8%
Warehouse Management Systems	97	0.6%
Microsoft Access	89	0.5%
Google Workspace	76	0.5%

Source: Lightcast, 2023.1

## Agriculture, Water & Environmental Technologies

The tables below show the top industry-specific skills and software skills listed in jobs postings for 17 related middle-skill occupations in the Agriculture, Water, and Environmental Technologies sector during 2022 in the six-county Greater Sacramento region.

### Exhibit A5. Top industry-specific, specialized skills in Agriculture, Water & Environmental Technologies (n = 1,908)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Anesthesia	285	14.9%
Surgery	235	12.3%
Irrigation (Landscaping and Agriculture)	214	11.2%
Venipuncture	177	9.3%
Radiology	151	7.9%
Safe Restraining Techniques (Veterinary)	145	7.6%
Biology	136	7.1%
Customer Relationship Management	133	7.0%
Medical Records	133	7.0%
Animal Care	125	6.6%
Dentistry	125	6.6%
Radiography	125	6.6%
Forestry	125	6.6%

Source: Lightcast, 2023.1

### Exhibit A6. Top software skills in Agriculture, Water & Environmental Technologies (n = 1,908)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Outlook	121	6.3%
Microsoft Excel	94	4.9%
Microsoft Office	61	3.2%
Microsoft Word	51	2.7%
Geographic Information Systems	37	1.9%
Spreadsheets	33	1.7%
Microsoft PowerPoint	22	1.2%
Microsoft Access	18	0.9%
Medical Software	17	0.9%
Materials Management Information Systems	15	0.8%
ArcGIS (GIS Software)	9	0.5%
Project Management Software	8	0.4%

Source: Lightcast, 2023.1

## Business and Entrepreneurship

The tables below show the top industry-specific skills and software skills listed in jobs postings for 48 related middle-skill occupations in the Business and Entrepreneurship sector during 2022 in the six-county Greater Sacramento region.

### Exhibit A7. Top industry-specific, specialized skills in Business and Entrepreneurship (n = 57,862)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Accounting	7,167	12.4%
Marketing	6,216	10.7%
Invoicing	5,321	9.2%
Selling Techniques	4,507	7.8%
Auditing	4,267	7.4%
Customer Relationship Management	4,051	7.0%
Sales Prospecting	3,922	6.8%
Administrative Support	3,666	6.3%
Billing	3,576	6.2%
Accounts Payable	3,261	5.6%
Finance	3,193	5.5%
Purchasing	2,908	5.0%

Source: Lightcast, 2023.1

### Exhibit A8. Top software skills in Business and Entrepreneurship (n = 57,862)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Excel	9,972	17.2%
Microsoft Office	8,545	14.8%
Microsoft Outlook	6,525	11.3%
Microsoft PowerPoint	4,098	7.1%
Microsoft Word	3,577	6.2%
Spreadsheets	2,849	4.9%
Salesforce	1,470	2.5%
QuickBooks (Accounting Software)	1,402	2.4%
Microsoft Access	762	1.3%
Google Workspace	724	1.3%
Yardi (Property Management Software)	711	1.2%
SAP Applications	570	1.0%
Zoom (Video Conferencing Tool)	491	0.8%
Human Resources Information System (HRIS)	440	0.8%

Source: Lightcast, 2023.1

## Education and Human Development

The tables below show the top industry-specific skills and software skills listed in jobs postings for five related middle-skill occupations in the Education and Human Development sector during 2022 in the six-county Greater Sacramento region.

### Exhibit A9. Top industry-specific, specialized skills in Education and Human Development (n = 5,410)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Preschool Education	1,554	28.7%
Child Development	1,280	23.7%
Early Childhood Education	872	16.1%
Working with Children	474	8.8%
Lesson Planning	407	7.5%
Classroom Management	339	6.3%
Autism Spectrum Disorders	315	5.8%
Interactive Learning	290	5.4%
Special Education	249	4.6%
Treatment Planning	239	4.4%
Caregiving	238	4.4%
Telehealth	231	4.3%
Applied Behavior Analysis	178	3.3%
Individualized Education Programs (IEP)	162	3.0%
Cardiopulmonary Resuscitation (CPR)	135	2.5%

Source: Lightcast, 2023.1

### Exhibit A10. Top software skills in Education and Human Development (n = 5,410)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Google Workspace	57	1.1%
Productivity Software	54	1.0%
Microsoft Excel	35	0.6%
Microsoft Word	33	0.6%
Microsoft Outlook	30	0.6%
Microsoft Office	25	0.5%
Zoom (Video Conferencing Tool)	20	0.4%
Student Information Systems	20	0.4%
Spreadsheets	19	0.4%
Microsoft PowerPoint	13	0.2%

Source: Lightcast, 2023.1

## Energy, Construction & Utilities

The tables below show the top industry-specific skills and software skills listed in jobs postings for 51 related middle-skill occupations in the Energy, Construction, and Utilities sector during 2022 in the six-county Greater Sacramento region.

**Exhibit A11. Top industry-specific, specialized skills in Energy, Construction & Utilities (n = 7,211)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Construction	1,300	18.0%
Hand Tools	1,065	14.8%
HVAC	1,000	13.9%
Power Tool Operation	700	9.7%
Plumbing	655	9.1%
Electrical Wiring	582	8.1%
Roofing	511	7.1%
Carpentry	472	6.5%
Blueprinting	444	6.2%
Telecommunications	408	5.7%
Machinery	379	5.3%
Electrical Systems	343	4.8%
Safety Standards	313	4.3%
AutoCAD	301	4.2%
Construction Management	288	4.0%

Source: Lightcast, 2023.1

**Exhibit A12. Top software skills in Energy, Construction & Utilities (n = 7,211)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Excel	462	6.4%
Microsoft Office	448	6.2%
Microsoft Outlook	325	4.5%
AutoCAD	301	4.2%
Microsoft Word	165	2.3%
Microsoft PowerPoint	146	2.0%
Spreadsheets	134	1.9%
Geographic Information Systems	115	1.6%
Autodesk Revit	95	1.3%
AutoCAD Civil 3D	84	1.2%
Operating Systems	74	1.0%
ArcGIS (GIS Software)	43	0.6%

Source: Lightcast, 2023.1

## Health

The tables below show the top industry-specific skills and software skills listed in jobs postings for 41 related middle-skill occupations in the Health sector during 2022 in the six-county Greater Sacramento region.

**Exhibit A13. Top industry-specific, specialized skills in Health (n = 56,096)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Nursing	14,061	25.1%
Caregiving	7,760	13.8%
Meal Planning and Preparation	6,033	10.8%
Medical Records	5,308	9.5%
Medical Terminology	4,243	7.6%
Pediatrics	3,806	6.8%
Home Health Care	3,720	6.6%
Nursing Care	3,445	6.1%
Medication Administration	3,222	5.7%
Electronic Medical Record	3,051	5.4%
Acute Care	3,043	5.4%
Intensive Care Unit	3,036	5.4%

Source: Lightcast, 2023.1

**Exhibit A14. Top software skills in Health (n = 56,096)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Office	2,499	4.5%
Microsoft Outlook	2,211	3.9%
Microsoft Excel	2,155	3.8%
Epic EMR	1,556	2.8%
Microsoft Word	833	1.5%
Microsoft PowerPoint	571	1.0%
Spreadsheets	437	0.8%
Dentrix	316	0.6%
eClinicalWorks (ECW)	283	0.5%
Patient Management Software	229	0.4%
Microsoft Access	215	0.4%
Google Workspace	128	0.2%
Database Software	122	0.2%

Source: Lightcast, 2023.1

## Information and Communications Technologies (ICT)/Digital Media

The tables below show the top industry-specific skills and software skills listed in jobs postings for 14 related middle-skill occupations in the Information and Communications Technology/Digital Media sector during 2022 in the six-county Greater Sacramento region.

### Exhibit A15. Top industry-specific, specialized skills in ICT/Digital Media (n = 6,671)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Computer Science	1,170	17.5%
Help Desk Support	1,131	17.0%
Active Directory	639	9.6%
JavaScript (Programming Language)	598	9.0%
Computer Hardware	588	8.8%
SQL (Programming Language)	559	8.4%
Cascading Style Sheets (CSS)	504	7.6%
Desktop Support	497	7.5%
Linux	471	7.1%
Workflow Management	470	7.0%
Customer Support	469	7.0%
User Experience (UX)	447	6.7%
HyperText Markup Language (HTML)	435	6.5%

Source: Lightcast, 2023.1

### Exhibit A16. Top software skills in ICT/Digital Media (n = 6,671)

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Office	752	11.3%
Active Directory	639	9.6%
JavaScript (Programming Language)	598	9.0%
Microsoft Excel	598	9.0%
SQL (Programming Language)	559	8.4%
Cascading Style Sheets (CSS)	504	7.6%
Microsoft Outlook	474	7.1%
Linux	471	7.1%
HyperText Markup Language (HTML)	435	6.5%
Firewall	414	6.2%
Microsoft Azure	345	5.2%
Python (Programming Language)	340	5.1%
Amazon Web Services	307	4.6%

Source: Lightcast, 2023.1

## Life Science/Biotech

The tables below show the top industry-specific skills and software skills listed in jobs postings for seven related middle-skill occupations in the Life Sciences/Biotech sector during 2022 in the six-county Greater Sacramento region.

**Exhibit A17. Top industry-specific, specialized skills in Life Science/Biotech (n = 3,165)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Biology	696	22.0%
Medical Laboratory	463	14.6%
Chemistry	363	11.5%
Laboratory Equipment	350	11.1%
Sterile Processing	337	10.6%
Laboratory Testing	316	10.0%
Laboratory Experience	256	8.1%
Auditing	254	8.0%
Sterilization	235	7.4%
Workflow Management	217	6.9%
Medical Terminology	215	6.8%
Laboratory Procedures	206	6.5%
Microbiology	201	6.4%
Phlebotomy	200	6.3%
Data Analysis	193	6.1%

Source: Lightcast, 2023.1

**Exhibit A18. Top software skills in Life Science/Biotech (n = 3,165)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Excel	272	8.6%
Microsoft Office	201	6.4%
Microsoft PowerPoint	113	3.6%
Microsoft Word	111	3.5%
Microsoft Outlook	101	3.2%
Laboratory Information Management Systems	66	2.1%
SAP Applications	49	1.5%
Microsoft Access	43	1.4%
Epic EMR	36	1.1%
Laboratory Management System	35	1.1%
R (Programming Language)	33	1.0%

Source: Lightcast, 2023.1

## Public Safety

The tables below show the top industry-specific skills and software skills listed in jobs postings for 19 related middle-skill occupations in the Public Safety sector during 2022 in the six-county Greater Sacramento region.

**Exhibit A19. Top industry-specific, specialized skills in Public Safety (n = 4,414)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Emergency Response	734	16.6%
Law Enforcement	702	15.9%
Patrolling	335	7.6%
Alarm Devices	235	5.3%
Access Controls	189	4.3%
Cardiopulmonary Resuscitation (CPR)	152	3.4%
Two-Way Radios	150	3.4%
Emergency Medical Services	148	3.4%
Firefighting	139	3.1%
Auditing	135	3.1%
Crime Prevention	122	2.8%
Physical Security	120	2.7%
Traffic Control	113	2.6%
Fire Service	113	2.6%

Source: Lightcast, 2023.1

**Exhibit A20. Top software skills in Public Safety (n = 4,414)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Office	153	3.5%
Microsoft Excel	139	3.1%
Microsoft Outlook	72	1.6%
Microsoft PowerPoint	65	1.5%
Microsoft Word	64	1.4%
Spreadsheets	60	1.4%
Operating Systems	28	0.6%
IBM WebSphere MQ	25	0.6%
SQL (Programming Language)	23	0.5%
Microsoft Access	21	0.5%
Geographic Information Systems	17	0.4%
Python (Programming Language)	17	0.4%
SAS (Software)	15	0.3%

Source: Lightcast, 2023.1

## Retail, Hospitality & Tourism

The tables below show the top industry-specific skills and software skills listed in jobs postings for 15 related middle-skill occupations in the Retail, Hospitality, and Tourism sector during 2022 in the six-county Greater Sacramento region.

**Exhibit A21. Top industry-specific, specialized skills in Retail, Hospitality & Tourism (n = 14,564)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Merchandising	3,946	27.1%
Restaurant Operations	3,829	26.3%
Retail Operations	2,320	15.9%
Food Safety and Sanitation	1,649	11.3%
Inventory Management	1,622	11.1%
Marketing	1,502	10.3%
Selling Techniques	1,348	9.3%
Restaurant Management	1,135	7.8%
Auditing	1,105	7.6%
Profit and Loss (P&L) Management	940	6.5%
Visual Merchandising	844	5.8%
Customer Complaint Resolution	799	5.5%
Cooking	792	5.4%

Source: Lightcast, 2023.1

**Exhibit A22. Top software skills in Retail, Hospitality & Tourism (n = 14,564)**

Skill or Qualification	Unique Postings from Jan 2022 to Dec 2022	% of Total Middle-Skill Jobs Postings in the Sector
Microsoft Office	779	5.3%
Microsoft Excel	685	4.7%
Microsoft Outlook	494	3.4%
Microsoft Word	412	2.8%
Microsoft PowerPoint	252	1.7%
Inventory Management System	169	1.2%
Salesforce	94	0.6%
Enterprise Application Software	84	0.6%
Microsoft Access	57	0.4%
SAP Applications	47	0.3%
Google Workspace	47	0.3%
Property Management Systems	46	0.3%

Source: Lightcast, 2023.1

# APPENDIX B:

## Survey instruments



### Employer survey

1. Please provide your name, email address, and ZIP code.
2. Which of the following industries best describes your organization/business?  
Accommodations, Agriculture, Construction, Finance, Government Agency, Health Care, Manufacturing, Nonprofit, Restaurants, Retail, Social Service, Transportation, Other (please specify)
3. What county is your business/organization located in?  
El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba, Other (please specify)
4. How many employees does your business/organization employ?  
1–25, 26–50, 51–100, 101–500, 501+
5. Has the size of your workforce changed due to the COVID-19 pandemic?  
No, not at all; Yes, increased significantly; Yes, increased slightly; Yes, increased somewhat; No, decreased significantly; No, decreased slightly; No, decreased somewhat
6. Which workplace structure was your business/organization using prior to the COVID-19 pandemic?  
A mix of in person and remote, Fully in person, Fully remote
7. Which workplace structure are you currently using in your business/organization?  
A mix of in person and remote, Fully in person, Fully remote
8. Which workplace structure do you anticipate using in the next 12–24 months?  
A mix of in person and remote, Fully in person, Fully remote
9. Currently, which phase of the hiring process do you think is most challenging for your business/organization? [check all that apply]  
Finding or identifying the best candidates, Keeping candidates engaged during the hiring process, Closing candidates and successfully hiring them, Other (please specify)
10. Currently, what do you think are the factors that make hiring challenging? [check all that apply]  
Competition from other employers, Lack of candidates with the necessary skills, Need to diversify the hiring pool, Changes in my industry (e.g., automation), Other (please specify)
11. Using the sliding scale below, please estimate the level of negative impact each factor may have on your business/organization's operations:  
Current employees do not have the necessary soft skills (communication, organization, collaboration, etc.), Current employees do not have the necessary industry-specific skills (specialized skills), Current employees do not have the necessary information technology skills, Current employees do not have the preferred amount of work experience, Current employees do not have the preferred level of educational attainment
12. Which of the following "soft skill" areas do your current and incoming employees need training on? [check all that apply]  
Interpersonal skills, Supervisory or leadership skills, Presentation or public speaking skills, Writing skills, Time management skills, None of the above, Other (please specify)
13. Which of the following software skills do your current and incoming employees need training on? [check all that apply]  
Computer basics (Windows and MacOS), Office suites (Microsoft Office, Google Suite), Presentation software (PowerPoint, Keynote), Spreadsheets (Excel, Google Spreadsheets), Communication and collaboration tools (Slack, Skype), Accounting software (QuickBooks), None of the above, Other (please specify)
14. Briefly, what are some of the technical skills specific to your industry or business/organization that your current and incoming employees need training on? (open-ended)
15. Is your business/organization currently offering any training programs to its employees?  
Yes, No
16. [If you answered "Yes" to Question 15] Do you utilize a third-party trainer or education partner, or do you offer in-house training?  
Yes, No

17. [If you answered “Yes” to Question 15] What are some of the challenges, if any, that your business/organization encounters in offering these training programs? [check all that apply]  
 Limited resources to offer training opportunities, Low employee interest, Limited employee time/capacity, Training too expensive, None of the above, Other (please specify)
18. [If you answered “Yes” to Question 15] Which of the following training mediums have you found work best for employee training programs? [check all that apply]  
 Classroom training, Instructor-led video conferencing (Zoom, Microsoft Teams, etc.), Self-paced computer-based training, Other (please specify)
19. [If you answered “No” to Question 15] What are some of the reasons that your business/organization does not provide training programs to its employees? [check all that apply]  
 Not necessary, Limited training resources, Low employee interest, Limited employee time/capacity, Training too expensive, None of the above, Other (please specify)
20. If a third party (private provider, college) could provide customized training for your business/organization, which of the following training mediums would work best for your employees?  
 Classroom training, Instructor-led video conferencing (Zoom, Microsoft Teams, etc.), Self-paced computer-based training, Other (please specify)
21. If a third party (private provider, college) could provide customized training for your business/organization, when would you like this training to take place?  
 Monday–Friday days (between 8 a.m. and 5 p.m.), Monday–Friday evenings (after 5 p.m.), Saturday or Sunday (between 8 a.m. and 5 p.m.), Other (please specify)
22. Would your business/organization be interested in any of the following community college partnership opportunities?  
 Providing work experience, internship, and/or on-the-job training opportunities to students; Providing technical expertise for curriculum development; Serving on an advisory board; Recruiting graduates from community college programs



## Community survey

1. How would you characterize your current primary employment status?  
Employed full time, Employed part time and looking for more employment, Employed part time and not looking for more employment, Not employed but looking for employment, Not employed and not looking for employment, Retired, Other (please specify)
2. [Asked only of those who answered “Employed full time” and “Employed part time and not looking for more employment” in previous question] Are you satisfied with your current employment?  
Yes, No
3. [Asked only of those who answered “No” in previous question] Which of the following, if any, are some of the reasons that you are unsatisfied with your current employment? (check all that apply)  
Low wages, Not enough opportunities for learning or training, Not enough opportunities for promotions, Poor workplace culture, Not enough time off, Insufficient healthcare or other benefits, Childcare-related challenges, Transportation-related challenges, None of the above
4. In the last five years, how has your employability changed in terms of skills?  
More employable, Less employable, No change in employability, Don’t know
5. In the last five years, how has your employability changed in terms of availability of jobs?  
More employable, Less employable, No change in employability, Don’t know
6. In the last five years, how has your employability changed in terms of changes to your industry?  
More employable, Less employable, No change in employability, Don’t know
7. Are you interested in improving your skills or learning new skills through education and training programs?  
Yes, No, I don’t know
8. [Asked only of those who answered “Yes” to Question 7] Thinking about your interest in improving your skills or learning new skills, which of the following sectors are you most interested in? (check all that apply)  
Agriculture, Water and Environmental Technologies; Business and Entrepreneurship; Education; Energy, Construction, and Utilities; Health; Information Communication Technology and Digital Media; Lifesciences and Biotechnology; Manufacturing; Public Safety; Retail, Hospitality, and Tourism; Transportation and Mobility; None of the above; Other (please specify)
9. [Asked only of those who answered “Yes” to Question 7] Thinking about your interest in improving your skills or learning new skills, which of the following types of education or training programs would you consider participating in? (check all that apply)  
A long-term program (more than one year), A short-term program (a year or less), In person, Remote, Hybrid (both in person and remote), A program that has flexible or weekend hours, Other (specify)





C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

## MORE ABOUT THE CENTERS OF EXCELLENCE

The Centers of Excellence (COE) for Labor Market Research deliver regional workforce research and technical expertise to California community colleges for program decision making and resource development. This assistance has proven valuable to colleges in beginning, revising, or updating economic development and career education (CE) programs; strengthening grant applications; facilitating the accreditation process; and supporting strategic planning efforts.

The Centers of Excellence Initiative is funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The centers aspire to be the leading source of regional workforce information and insight for California community colleges. More information about the Centers of Excellence is available at [www.coecc.net](http://www.coecc.net).

For more information on this study, contact

Aaron Wilcher, Director  
Greater Sacramento (North) COE  
(916) 563-3233  
[wilchea@losrios.edu](mailto:wilchea@losrios.edu)

### Important Disclaimer

All representations included in this report have been produced from primary research, secondary review of publicly and privately available data, and research reports. Efforts have been made to qualify and validate the accuracy of the data and the reported findings. The Centers of Excellence, the COE host district, and the California Community Colleges Chancellor's Office are not responsible for applications or decisions made by recipient community colleges or their representatives on the basis of this study.

© 2023 California Community Colleges  
Chancellor's Office Economic and  
Workforce Development Program

*Please consider the environment  
before printing. This document is  
designed for double-sided printing.*

POWERED BY



California  
Community  
Colleges