



**SOUTHWESTERN COLLEGE**

**3-Year (2022-2024)**

**Economic and Workforce Development**

**December 2021**

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# Acknowledgments

BW Research and Southwestern College (SWC) would like to thank the SWC faculty and staff, regional employers, community-based organizations (CBOs), and other community stakeholders that engaged with the research team to provide their perspectives. Their insights and feedback were instrumental in understanding the current talent and employment landscape and the challenges and opportunities that lie ahead for Southwestern College and San Diego County's southern region.

# Executive Summary

## INTRODUCTION

Southwestern College engaged BW Research to support the development of their 3-Year Economic and Workforce Development Strategic Plan. The first phase of this research included an examination of current activities and outcomes at Southwestern College. This information was then used to develop the 2019 Comprehensive Local Needs Assessment (CLNA), a state-required document that outlines the college's current performance relative to statewide benchmarks. The second phase of this research consisted of a survey that gathered input from more than 280 employers in the South County region, as well as several executive interviews with regional economic stakeholders. The employer survey aimed to provide a granular and timely perspective of the current economic landscape in Southern San Diego County and develop an understanding of employers' perceived challenges and opportunities. This report combines the findings from the two phases of research and examines the internal and external factors at Southwestern College to highlight key opportunities for the college to better serve its students and the broader community as they relate to economic and workforce development.

This report is designed to align closely with Southwestern College's priorities outlined in the 2021-2025 Strategic Plan. Each topic within this report is linked to at least one of these priorities. Because these priorities often interrelate with one another, many subjects within this report have two or more priorities they address. The following conclusions and recommendations build on these priorities and key findings of the research.

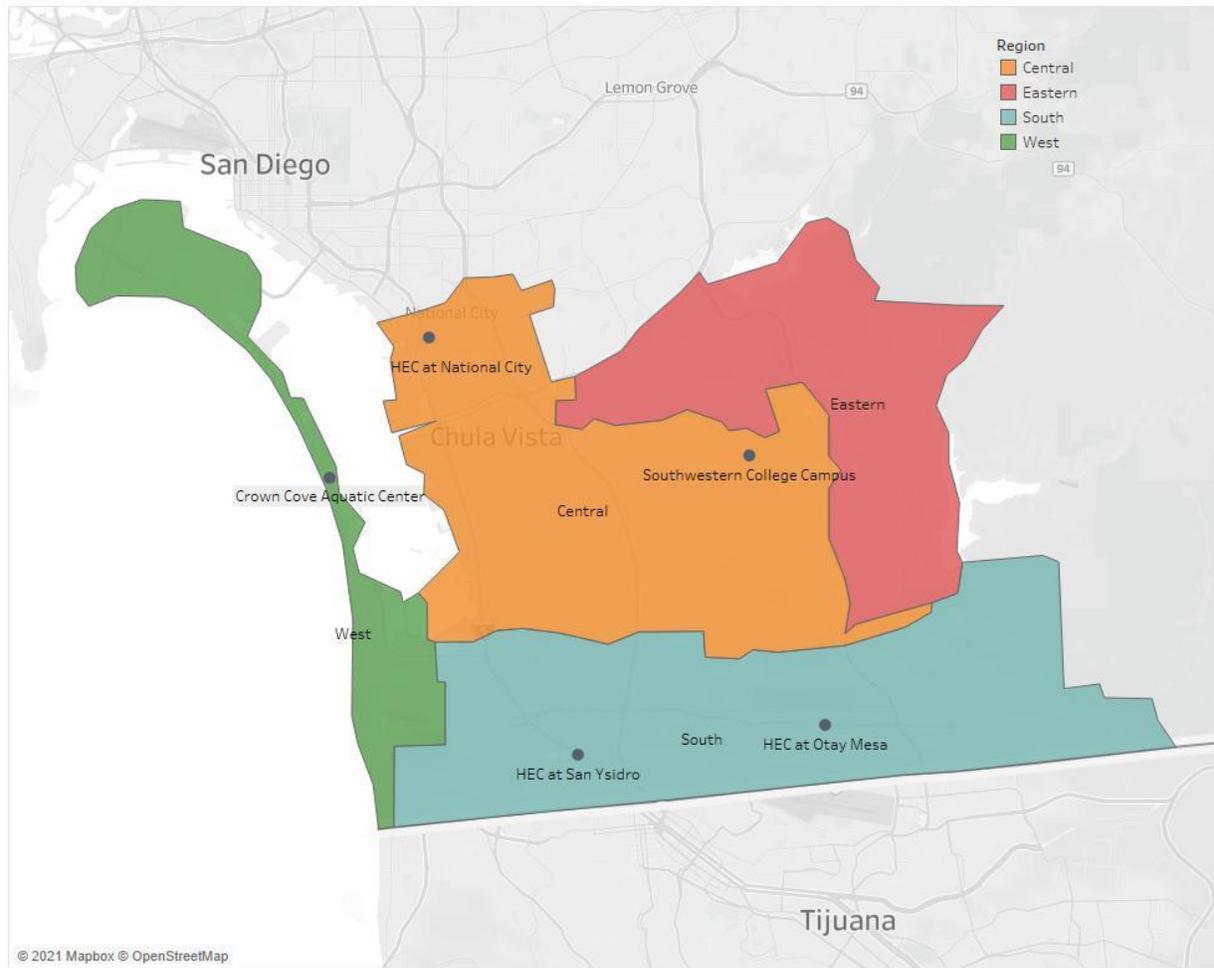
## CONCLUSIONS AND RECOMMENDATIONS

- 1. Increase Work-Based Learning efforts.** Work-Based Learning (WBL) allows students to apply classroom content in professional settings while gaining real-world experience in activities such as guest speakers, informational interviews, field trips, service learning, volunteering, internships and on the job experiences. Increased WBL opportunities and closer collaborations with regional employers can substantially impact student outcomes while also helping local businesses to streamline their talent pipelines. Employers—including employers in industries with relatively low rates of current partnerships, such as Information and Communication Technologies—also demonstrated a strong interest in greater partnerships with SWC. Starting with the list of interested employers developed through this research, SWC should extend invitations for an array of partnership opportunities ranging in levels of participation. Time is a vital resource for employers, and the needs of each employer differ; some employers are curious about program offerings, some are looking for qualified talent immediately, and others are interested in working together to establish lasting talent pipelines. Offering a range of partnership options will allow employers to choose the partnership that best fits their needs, eliminating the concern of time-consuming meetings that may be less applicable to their needs. These actions will also assist SWC's strategic goals to enhance economic, workforce, & community development and foster student success.

- 2. Emphasize “real-world” engagement activities in the classroom that improve essential skills.** Problem-solving and social and verbal communication were the two skills most frequently cited by employers as the most important for job applicants. Improving these abilities may require more group projects that tackle large and more abstract problems that apply several curriculum components at once. Students who can develop these skills in the classroom and can speak to them through interviews and cover letters will have greater success in meeting an employer’s criteria for hiring. Some employers may even be interested in helping to develop these types of skills in classroom scenarios. Building on these foundational skills can bolster student success and drive economic, workforce, and community development.
- 3. Continue the robust set of economic development initiatives conducted by SWC.** In an era of high unemployment, suppressed labor force participation, and a large number of job openings, programs like the Women’s Business Center (WBC)’s Family Childcare In-home Business and the Small Business Development Center Network are essential to supporting local small businesses and their employees and helping people return to work. The pandemic has led many to reconsider their career paths, and entrepreneurship has grown considerably in the aftermath of the pandemic. SWC can support this trend and promote the success of new and small businesses through its continued economic development efforts.
- 4. Consider the implications of increased federal spending and how SWC can help maximize the region’s economic benefit.** The recently passed Infrastructure Investment and Jobs Act is likely to unleash a substantial amount of funding for infrastructure and related projects in the region, and SWC can help businesses and the community maximize the money’s regional benefit. The Procurement Technical Assistance Center (PTAC) can play a particularly pivotal role in improving local businesses’ ability to secure and perform some of these state and federal contracts. Helping to ensure that local projects are conducted by local businesses is one way to ensure that the region comes out of the pandemic in better economic standing than when it was when the pandemic began.
- 5. Enhance programs that support upward career mobility for incumbent (currently employed) workers.** The era of COVID-19 and the accompanying volatility in labor markets has underscored the importance of retaining quality workers and advancing them upward through an organization. Courses that teach Microsoft Office (primarily Word, Excel, and Outlook) received strong interest among employers; 69% of employers are at least “somewhat interested” in courses that teach Microsoft Excel. It is also important that these programs are flexible and available online, as employers and employees alike often do not want to interrupt the work schedules to complete additional training. Supporting advancement opportunities for incumbent workers is a key component to enhancing student access and student success.
- 6. Widen pipelines into Southwestern College.** Recent initiatives, such as the High School Special and California College & Career Access Pathways (CCAP) programs, have had success and growth in student participation. Building on the success of those programs and making the transition and career opportunities clearer for current high school and adult school students can increase the pipeline of students from the Sweetwater Union High School District and others. Additionally, SWC should seek to build relationships with local community-based organizations (CBOs). CBOs often work with the populations that are in the greatest need of support services to complete education. These populations are also often the most difficult to reach through traditional outreach methods. Expanding relationships with CBOs and developing pipelines for people already engaged with the CBOs can bolster enrollments and help expand access and equity to residents in South County. Expanding pipelines into SWC is an effective way to increase student access and while also supporting economic, workforce, & community development.

- 7. Work with regional economic and workforce development organizations to prepare a workforce for the future.** Economic development organizations—such as the San Diego Regional and South County Economic Development Councils, Cleantech San Diego, and San Diego Workforce Partnership—who keep close communication with industries trends, companies, and organizations. Working closely with these regional partners can help streamline worker training, foster communication with key regional employers, and ensure that SWC is developing programming that assists the region in preparing workers that supports the local innovation economy. This report highlights electric vehicle and battery manufacturing and semiconductor design and manufacturing as notable emerging markets likely to see strong growth in the future, though there are several other budding industries within South County. Working with regional economic development organizations and employers is a reliable way to support student success while also enhancing economic, workforce, & community development.
  
- 8. Support programs in key industry clusters.** This report includes a section that focuses on key industry clusters that are likely to see significant growth at the national and regional levels due to macroeconomic events. The COVID-19 pandemic has driven several changes, including an increased desire for domestic supply chains for goods and components critical to national security, bipartisan support for a nationwide infrastructure bill, and renewed interest in constructing more housing. The South County economy, and several industries in particular, are poised to experience growth as initiatives are launched and funding is disbursed. These industry clusters are Architecture, Design, and Engineering; Building and Construction; Information and Communication Technology; Manufacturing; and Logistics and Transportation. This report also highlights several industries which are mainstays of the local economy and SWC’s programmatic offerings. For more information and specific findings for each of these industry clusters, please see page 24. Supporting the region’s existing industry clusters ensures that SWC is building towards greater student success as well as economic, workforce, and community development.

# The Southwestern College Study Region



West	Central	South	Eastern
91932 (Imperial Beach), 92118 (Coronado)	91910 (Chula Vista), 91911 (Chula Vista), 91913 (Chula Vista), 91950 (National City)	92154 (San Diego), 92173 (San Ysidro)	91902 (Bonita), 91914 (Chula Vista), 91915 (Chula Vista)

# Southwestern College and Economic Development

## A PRIMARY MISSION OF THE CALIFORNIA COMMUNITY COLLEGES – ECONOMIC AND WORKFORCE DEVELOPMENT PROGRAM

*“To advance California’s economic growth and global competitiveness through high quality education and services focusing that focus on continuous workforce improvement, technology deployment, and business development, and are consistent with the current needs of the state’s regional economies.” - AB-2836 California Community Colleges Economic and Workforce Development Program*

## SOUTHWESTERN COLLEGE COMMITMENT TO ECONOMIC DEVELOPMENT

Southwestern College has a long history of helping local businesses prosper. Southwestern College’s Economic Development Programs foster the well-being of regional businesses by providing entrepreneurs and small businesses with high-quality education, consulting, support for innovation, and access to information and tools necessary to build successful, sustainable businesses. All of the Economic Development Programs form the Center for Business Advancement and provide a one-stop resource for entrepreneurs launching a business, as well as for companies seeking to enter new markets, to sell to corporations and the government, and to ensure that their employees are properly trained. The Center for Business Advancement is located at the Higher Education Center at National City. The services, offered at no-cost or low-cost, are financed in large part by grants. The synergy of these programs working together helps build a stronger local and regional economy and workforce. Additionally, Southwestern College works with local economic development organizations and workforce development organizations regionally and county-wide to nurture the partnerships established with the community.

## SOUTHWESTERN COLLEGE ECONOMIC DEVELOPMENT PROGRAMS

For over 25 years, the Southwestern Community College District has assisted regional businesses and currently hosts the following Economic Development Programs:

- San Diego & Imperial Women’s Business Center (WBC)
- San Diego, Orange, and Imperial Procurement Technical Assistance Center (PTAC)
- San Diego and Imperial Small Business Development Center Network (SDI SBDC Network)
- South San Diego Small Business Development Center (SBDC)

Over the course of their operations at Southwestern College, the Economic Development Programs have supported the primary mission of the California Community Colleges, Southwestern College’s mission, and the Southwestern College Strategic Plan in multiple ways. The following is a brief overview of their mission and past accomplishments.

## SAN DIEGO AND IMPERIAL WOMEN’S BUSINESS CENTER

The San Diego & Imperial Women's Business (WBC) works to secure women's economic justice and entrepreneurial opportunities by providing training, mentoring, business development, and financing opportunities to women entrepreneurs throughout San Diego and Imperial counties.

The U.S. Small Business Administration partially funds the WBC along with the CA Governor's Business and Economic Development office. The Women's Business Center has a focus on serving the economically disadvantaged. In San Diego and Imperial Counties, the vast majority of women in that target population are

Hispanic, with many being monolingual in Spanish. The WBC offers in Spanish and English 1-on-1 business counseling at no cost, covering steps to start a business, marketing and business strategies, business plan, pricing, access to capital, and financial projections.

The WBC offers a variety of trainings on how to start a business, access to capital, financial literacy, marketing, business plans, and business credit. The 9-week business accelerator program in Spanish and English assists female entrepreneurs to learn to lay the foundation for a new business, covering permits and licenses, business structures, finance, and marketing with the support of business advisors and fellow entrepreneurs.

The Family Childcare In-home Business is one of the most successful programs the WBC offers. San Diego is a childcare desert. The WBC provides women with the skills and resources to start a home-based childcare business through an eight-week course that prepares them for the state's licensing requirements. Often, women from diverse communities struggle to find ways to provide for their families and meet the increasing living costs. At the same time, many parents of young children struggle to find quality affordable childcare. This program aims to provide women with a unique opportunity to start their businesses while helping families in need of affordable childcare. The WBC collaborates with the Chicano Federation to offer an 8-week program in Spanish to open the family childcare that covers two of the certifications needed for the license at no cost for the clients. Low-income graduates can cover the startup cost thanks to a grant offered by the Chicano Federation.

The Mindset Reset virtual series is a 10-week course offered twice a year. The program builds a community for the participants in a safe place to gain real friendship and collaboration in the business world and give them the tools to build confidence, negotiation skills, harness financial empowerment, and take hold of work-life balance. "Illuminate Mujer" is the Spanish version of the program that also includes emotional intelligence for business.

The WBC also offers network opportunities for female entrepreneurs in partnership with SCORE San Diego with the Women's Networking Breakfast; an event offered bimonthly.

Since the program began delivering services on April 1, 2018, the WBC has served 2,016 clients (86% of whom are women), provided 8,117 hours of business counseling, assisted clients to access to capital amounting to \$3,467,346, created 136 new business starts, created 225 jobs, retained 5,311 jobs, and had 501 training events with 5,049 attendees.

## **SAN DIEGO, ORANGE, AND IMPERIAL PROCUREMENT TECHNICAL ASSISTANCE CENTER**

The San Diego, Orange, Imperial Procurement Technical Assistance Center (PTAC), formerly known as the San Diego Contracting Opportunities Center (SDCOC) is one of the economic development programs of Southwestern College. The PTAC's mission is to assist small businesses with the information, resources, and technical assistance they need to effectively compete for and perform on federal, state, and local government contracts. Areas of training and technical assistance include: getting ready to bid on public contracts, obtaining government certifications, conducting market research on the government marketplace, locating bidding opportunities, developing marketing strategies, bidding on contract opportunities, understanding contract language, and related contract management topics.

The PTAC is partially funded by the U.S. Department of Defense. While the PTAC does not charge its small business clients for services, the services are of significant value to small businesses and to the community. Specifically, PTAC helps local public agencies and prime contractors obtain a larger bidding pool, resulting in greater competition and reduced cost. This support keeps local and non-local tax dollars cycling back into our community, resulting in job growth and a stronger regional economy.

Since the program began delivering services in 1994, small business clients of the PTAC have obtained over \$1.7 billion in contract awards. This equates to over 11,333 job years, assuming that \$150,000 in sales is needed to

create or retain each job. The PTAC's services include training, one-on-one technical assistance, and access to an electronic bid-matching/bid locating system.

The PTAC collaborates with numerous professional outreach organizations, councils, industry associations, and business associations. Levels of engagement range from board involvement to meeting participation, co-hosted workshops and events, and participation in the organizations' outreach events. Each of these organizations has an interest to increase the participation and diversification of small businesses on public contracts.

From July 1, 2016 through June 30, 2020, the PTAC provided 9,748 initial and follow-up counseling sessions (one-on-one technical assistance) to 1,962 clients, totaling 9,200 hours; 826 of these clients were new clients of the Center. Additionally, the PTAC sponsored and/or participated in 305 workshops and outreach events, reaching 19,355 participants. During this time frame, small businesses that received PTAC services were successful in obtaining over \$389,413,591 in contract awards.

The PTAC was successful in obtaining additional funding from both the State of California and the Department of Defense.

As a result of this increase in funding the PTAC has recently expanded its service area to include San Diego, Orange, and Imperial counties. Prior to 2019, the service area of the PTAC was limited to San Diego County and there were no other organizations serving small businesses in the surrounding counties with procurement technical assistance. With the additional funding, the PTAC can now assist small businesses located in San Diego, Orange, and Imperial counties with one-on-one advising, training, and bid matching services.

## **SAN DIEGO AND IMPERIAL SMALL BUSINESS DEVELOPMENT CENTER NETWORK**

The San Diego & Imperial Small Business Development Center Network is one of 63 nationwide SBDC Networks funded in part by the U.S. Small Business Administration and hosted by Southwestern Community College. The San Diego & Imperial SBDC provides technical assistance to small businesses and aspiring entrepreneurs in San Diego and Imperial Counties through no cost one-on-one advising and low/no cost workshops to help businesses start and grow profitably.

Awareness of the SBDC's economic development programs grew exponentially during 2020 due to the pivotal role that the SBDC played in supporting businesses as they accessed relief funding during the COVID pandemic. This resulted in significant increase in impact as the SBDC network supported small businesses advertising, free or low-cost training, access to capital and other specialized services that enabled them to survive the pandemic environment. In 2021, the SBDC clients created and supported over 34,000 jobs, helped 220 new businesses start, and helped clients access \$205 million in debt and equity financing within San Diego and Imperial counties. SWC's facilitation of the SBDC showcases the college's direct impact on economic development.

In 2020, SBDC added a new partner as a SBDC service center – the World Trade Center. With the World Trade Center SBDC, small businesses in the San Diego and Imperial Valley region benefit from targeted expertise to support their export needs and be supported by the flagship export assistance program – Metro Connect.

The SBDC continues to maintain strong partnerships with the Asian Business Association of San Diego which will have resulted in ensuring that the Asian and Pacific Islander businesses in San Diego have equitable access to services. The SBDC partnership with the University of San Diego that created San Diego's first innovation focused SBDC service center continues strong and has proven to achieve the goal of assisting early-stage tech entrepreneurs with securing capital and building teams. Additionally, the partnership created in 2018 with CONNECT, the nation's first startup accelerator, has leveraged this expertise to increase access to venture capital funding as well as counseling and training for later stage innovation-based businesses through their Springboard and Frameworks programs. The Brink and CONNECT have allowed the SBDC Network to provide a comprehensive full spectrum of services to innovation focused companies in the San Diego and Imperial Valley region at all stages

of business development. The SBDC Network also was accredited as a Technology designated SBDC which will help in our efforts to create new partnerships in the innovation economy.

The SBDC partnership with the East County Economic Development Council successfully extended business advising and training services to East County which has historically been an underserved geographic area by the SBDC due to funding limitations. Additionally, this partnership helped facilitate the recent partnership with the City of San Diego to run the \$12M City of San Diego Small Business and Nonprofit Relief Fund, which is currently distributing COVID relief funds to small businesses and nonprofits within the City of San Diego.

Another great partnership by the SBDC Network has been with the International Rescue Committee (IRC) to establish services to immigrants as they establish US citizenship and start microenterprise businesses. The IRC SBDC expanded the SBDC's ability to provide services in more than 24 different languages and establish programs to help setup an in-home childcare business, apply for the required licenses, understand the California inspection and pre-licensing requirements, submit applications, then manage and grow the business. The IRC SBDC has recently also launched a community development financial institutions fund which is providing loan-based funding to small business on flexible terms.

During this time, the SBDC continued to participate in Center for Business Advancement-led advocacy visits to legislators locally throughout the San Diego region, and Sacramento, and Washington DC. The SBDC Network Leadership also continued to participate in the annual ASBDC legislative conference in Washington DC, which included virtual visits to the representatives for the region.

The economic programs conducted roundtables with legislators to help small businesses directly communicate their challenges to elected officials and also to cover how the programs have successfully impacted their business. The programs also regularly provide legislators with data regarding the SWC's impact on the economy through these programs. SBDC leadership met with California legislators, state agencies, potential partners, and the Governor's Office of Business and Economic Development on a regular basis and developed close working relationships as everyone pursued the same goal of supporting small businesses as they struggled to survive the pandemic.

## **CENTER FOR BUSINESS ADVANCEMENT:**

**Goal:** SWC will contribute to the region's economic revitalization through resources that support the expansion of local business and industry by expanding programs that generate new and vital workforce and business development opportunities for students and community.

**Objective:** Strengthen consultation and collaboration with business, communities, and labor.

### **Annual Action Steps:**

1. Provide one-on-one counseling to over 7,000 small businesses and entrepreneurs totaling over 22,000 hours.
2. Provide 1,500 training events to over 12,000 participants.
3. Assist small businesses to increase revenue by \$200,000,000 or more
4. Maintain and expand partnerships and collaboration with business, community, industry, and governmental organizations.
5. Increase the awareness of the Economic Development Programs to both internal and external communities.
6. Continue to seek and secure internal and external funding to the Economic Development Programs.
7. Strengthen collaboration with the College's academic and career education programs (CE) through the following activities:
  - a. Participate on CE advisory boards.
  - b. Invite faculty to participate on Economic Development Program advisory boards.

- c. Invite faculty to participate in Economic Development Program training events.
- d. Serve as a resource for curriculum development/modification of business and entrepreneurial programs.
- e. Provide student worker, internship, and cooperative work experience opportunities within the Economic Development Programs.
- f. Serve as a resource to the College to assist in promoting internship, cooperative work experience, employment opportunities, and advisory board membership to the business community.
- g. Distribute Economic Development Programs' research related to the small business community with the relevant academic and CE programs.

# Organizational Findings and Suggestions

This section highlights the primary themes and suggestions uncovered through Phase I and Phase II of the economic and workforce development research concluded in fall 2020. These findings reveal several opportunities and challenges for SWC in its economic and workforce development planning.

## Strengthening Ties to Employers

Close employer engagement and support is a crucial component of SWC’s mission. If the region does not have a sufficient number of employers looking to hire, SWC students will have fewer employment prospects. This scenario underscores symbiotic nature between employers and employees and emphasizes Southwestern College’s role in supporting both sides of this ecosystem.

This section first examines the current challenges that regional employers face, as well as the strategies they currently utilize to onboard new talent. Examining the hiring challenges employers have can help SWC better make the case for collaborative efforts by working with employers to alleviate their hiring challenges. The data then dive into employers’ interests in collaboration and potential for development and expansion of Work-Based Learning (WBL) opportunities.

SWC can support its Vision for Success goal to increase the share of exiting Career Education (CE) students employed in their field of study by working with employers to develop WBL opportunities. WBL allows students to use the knowledge and skills developed in the classroom in real-world applications. This type of hands-on experience helps enhance student motivation and retention, encourages students to define career goals, and gives students practical experience towards in-demand skills and competencies. In addition to discussions with singular employers, SWC may also look to increase ties to industry associations and other interest groups, including chambers of commerce. Outreach to these organizations would have a multiplier effect, reaching several employers at once. This strategy could also allow SWC to better target specific industries and match them with SWC programs and students.

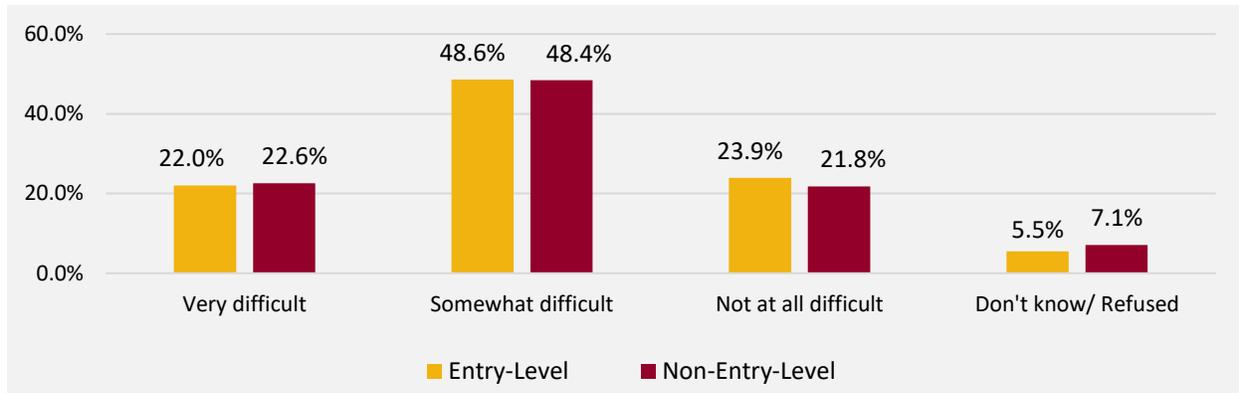
## REGIONAL EMPLOYER CHALLENGES AND STRATEGIES



**Employers reported moderate difficulty hiring qualified talent for entry-level and non-entry-level positions.**

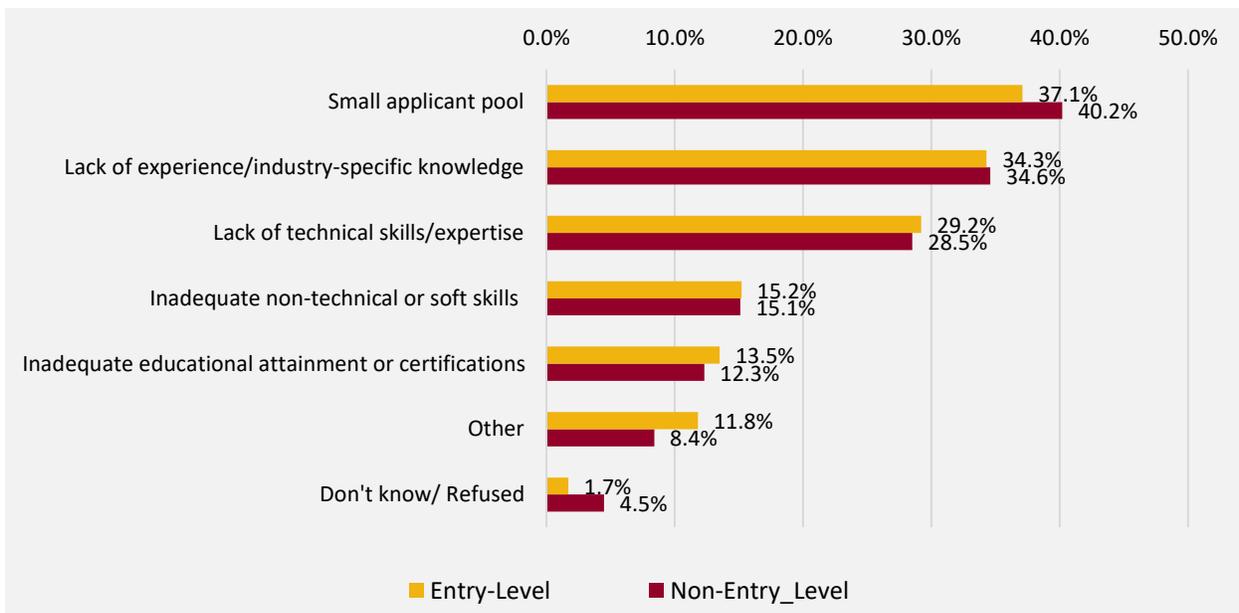
Surveyed employers reported similar levels of difficulty for finding qualified talent for both entry-level and non-entry-level positions. Nearly half of the respondents reported finding qualified talent is “somewhat difficult” for both entry-level and non-entry-level positions. Approximately one in five employers reported finding qualified talent for both entry-level and non-entry-level positions as “very difficult” (Figure 1). It should be noted that the employer survey was fielded between mid-April and early June 2021. Since this survey has been taken, hiring difficulties may have changed, particularly among certain industries that have seen the greatest turnover in staff.

Figure 1. Difficulty Finding Qualified Talent



**Employers reported similar reasons for hiring difficulties for both entry-level and non-entry-level positions.** For both entry-level (37%) and non-entry-level (40%) positions, a small applicant pool was the most commonly cited reason for hiring difficulties. A “lack of experience/industry specific knowledge” was also common for both entry-level (34%), and non-entry-level positions (35%) (Figure 2.). Most of the “Other” free responses cited bolstered unemployment benefits and inability to pay attractive wages.

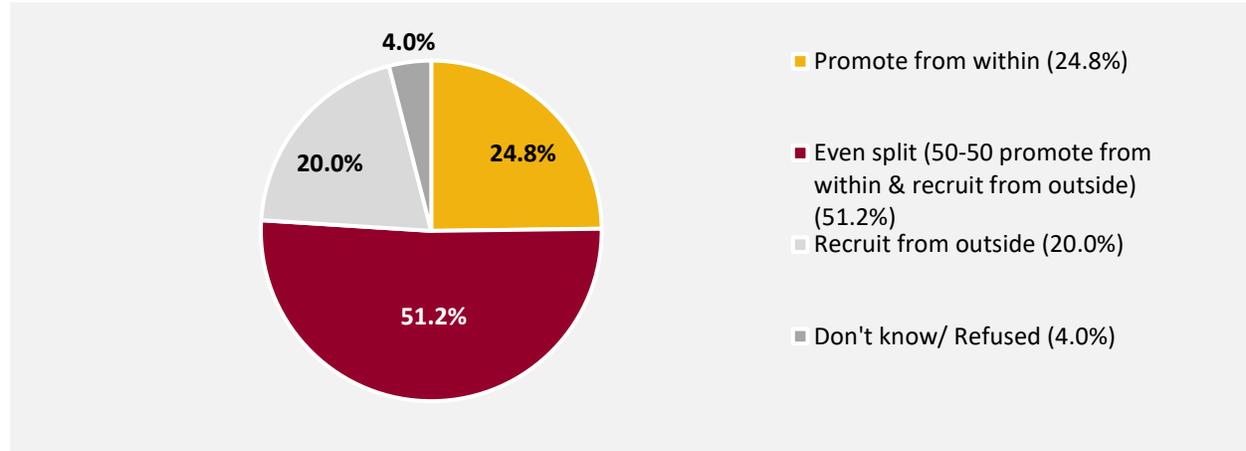
Figure 2. Two-Greatest Reasons for Hiring Difficulty



## CURRENT HIRING AND RECRUITMENT SOURCES

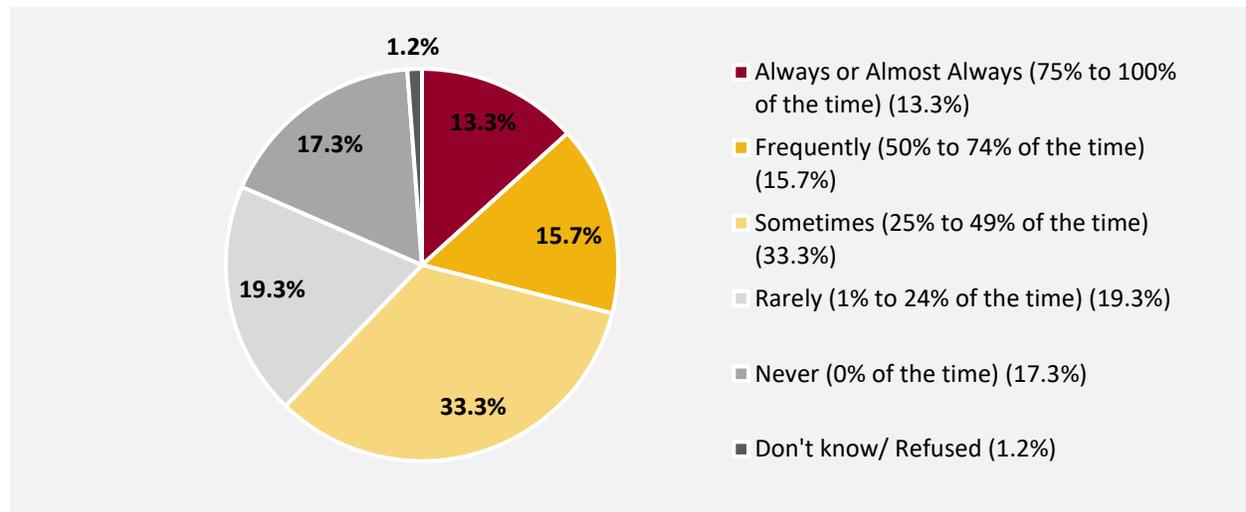
Talent for non-entry-level positions comes from both internal and external sources. Half (51%) of respondents reported using a mix of internal promotion and recruiting outside talent for non-entry-level positions. One-quarter (25%) of respondents reported primarily promoting from within, while one-fifth (20%) reported recruiting from outside for non-entry-level positions (Figure 3.).

Figure 3. Sources of Non-Entry-Level Talent



Most (69%) employers recruit talent from outside Southern San Diego County less than half of the time. Roughly one-third (37%) of the respondents reported recruiting from outside Southern San Diego County less than a quarter of the time, whereas 29% reported recruiting talent from outside Southern San Diego County more than half of the time (Figure 4.). This high percentage of primarily-local recruitment suggests that employers are largely able to find talent within the region and do not have to look outside Southern San Diego County.

Figure 4. How Often Do You Recruit Talent Outside of Southern San Diego County?



General online job boards are the most common way of finding talent, with 60% of employers using this option. Word of mouth, or asking current employees about potential candidates, was also common (53%) (Figure 5). Of the respondents who specified the community college boards they used, Southwestern College was the most

frequently named (30%). Most of the “Other” responses simply stated local colleges without specifying (Figure 6). Among the free-response recruitment sources listed, staffing agencies, Craigslist, and more specific online job sites, such as ZipRecruiter, were common. The “Other” responses included professional organizations and networks and veteran staffing programs (Figure 7).

Figure 5. Where do you Search for Talent When Hiring?

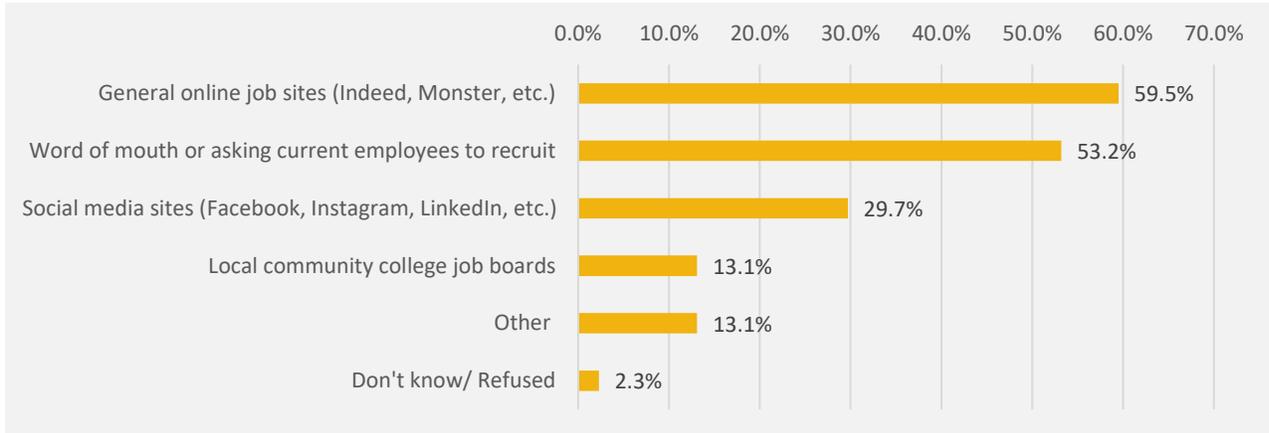


Figure 6. Local Community College Boards Used

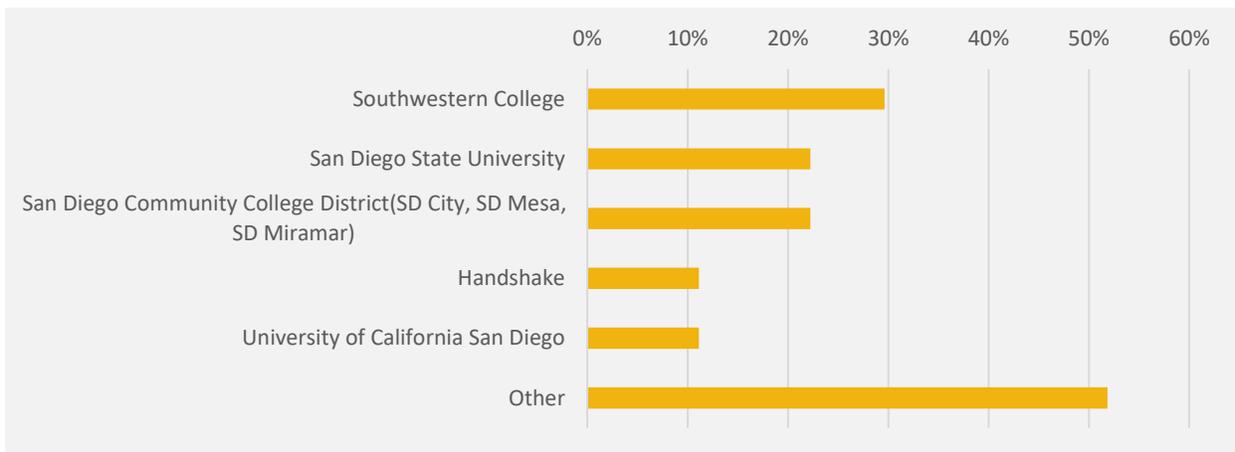
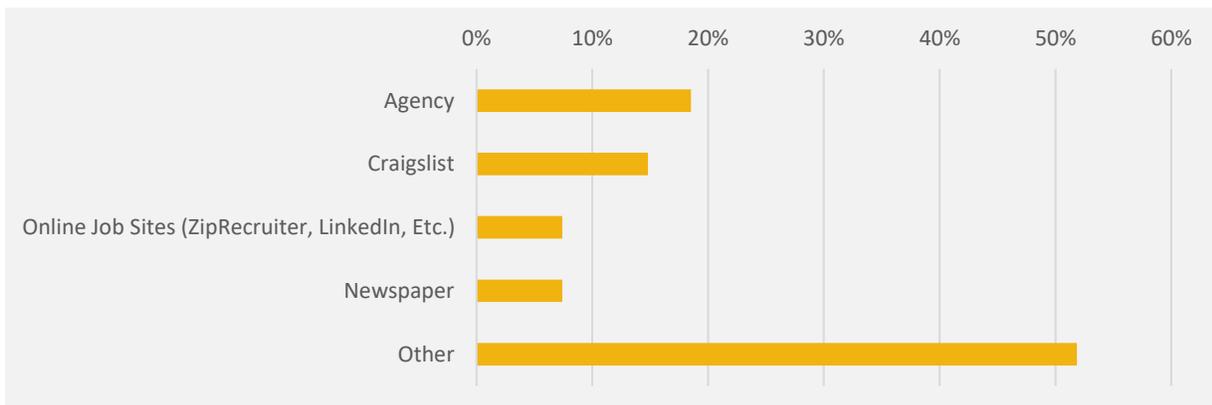


Figure 7. Other Recruitment Sources



## STRONG INTEREST IN COLLABORATION WITH SOUTHWESTERN COLLEGE

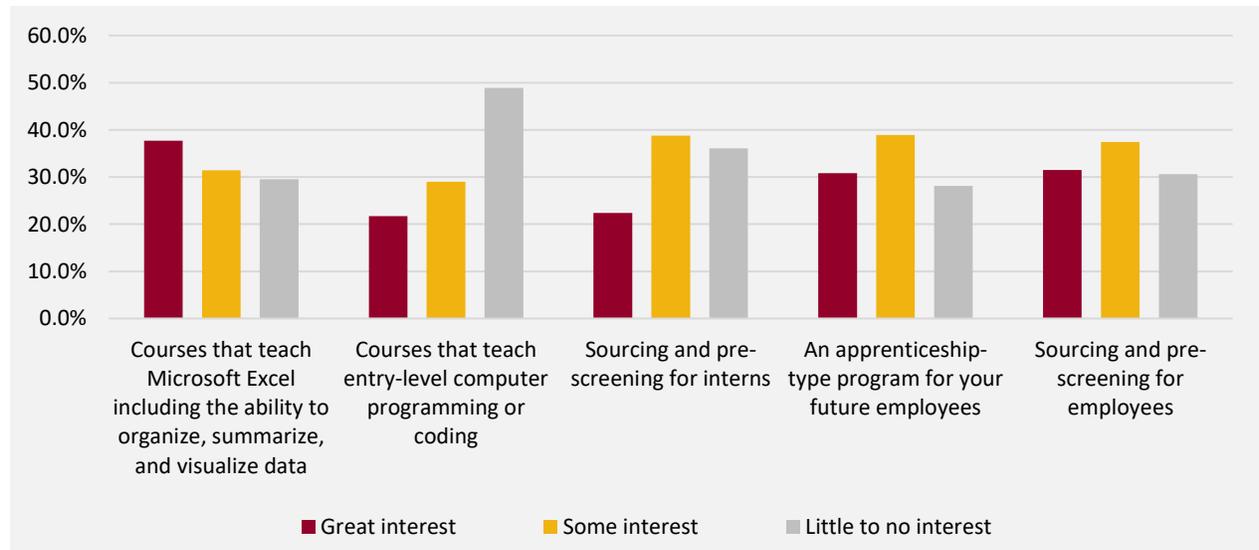


### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

Regional employers indicated a strong interest in programs that help with “Sourcing and pre-screening for employees,” with 32% of employers reporting “great interest” and 37% with “some interest.” Apprenticeship-type programs received similar levels of interest. Almost one-half (49%) of employers surveyed reported having ‘little to no interest’ in courses that teach entry-level computer programming or coding (Figure 8).

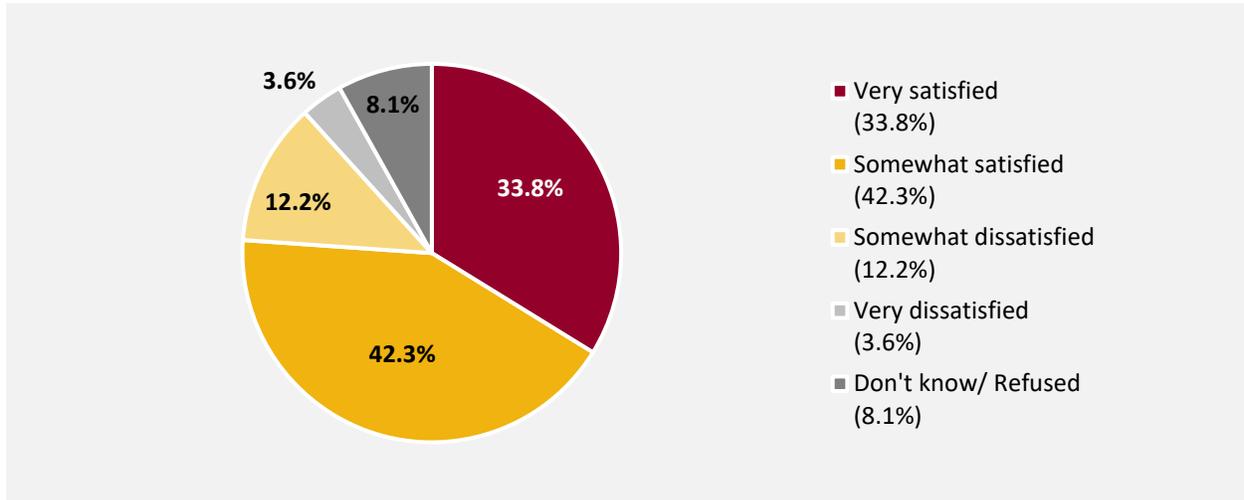
Figure 8. Organizations Interest in Training



More than three-quarters (76%) of employers are at least “somewhat satisfied” with regional education and training institutions.<sup>1</sup> Only 12% of employers surveyed are dissatisfied. A small share (8%) of employers reported they “don’t know,” suggesting that most employers in the region are at least somewhat familiar with regional education and training institutions (Figure 9).

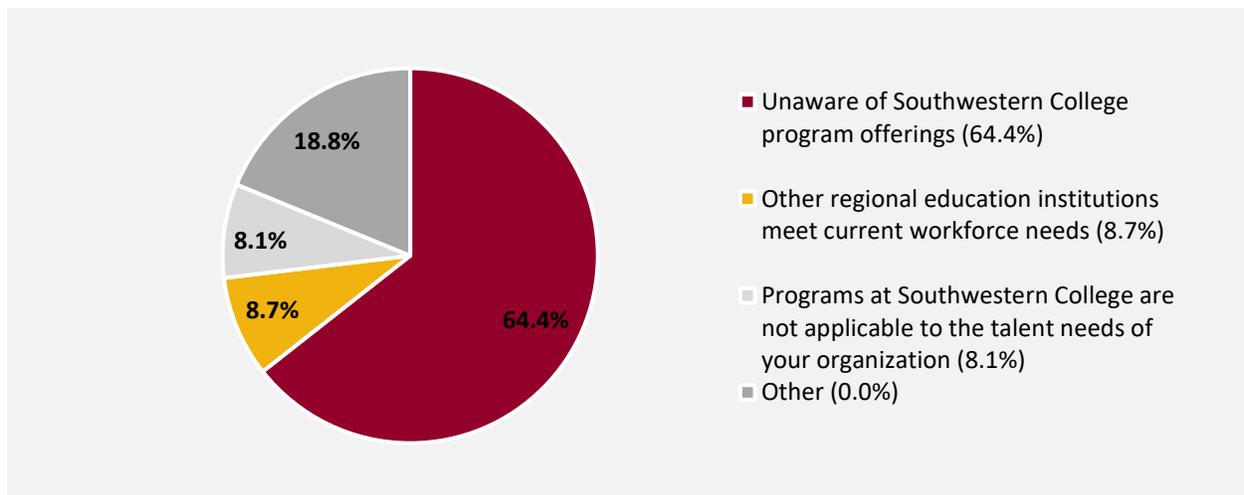
<sup>1</sup> This includes community colleges, universities, private schools, and training centers.

Figure 9. Satisfaction with Regional Education and Training Institutions



**Only one quarter (26%) of employers reported having recruited workers from Southwestern College. Among employers that had not recruited from Southwestern College, almost two-thirds (64%) reported they are unaware of Southwestern College program offerings.** This lack of awareness of program offerings was confirmed through executive interviews with employers, several of which asked whether Southwestern College offered specific programs. This suggests there is substantial opportunity for considerable increased partnership. Only 8% of employers reported the “programs at Southwestern College are not applicable to the talent needs of their organization,” and 9% reporting that “other regional education institutions meet current workforce needs” (Figure 10.).

Figure 10. Why has your Organization not Worked with Southwestern College?



**Fifty-one percent of employers are interested in working with Southwestern College to develop work-based learning opportunities.** Responses by local employers demonstrate the possibility for Southwestern College to

increase its reach and partnerships with interested firms. This opens the door for better feedback and placement rates, as well as better tailored programs to satisfy local employers' needs.

## Enhancing Pipelines to Southwestern College

This section discusses aspects of key pipelines into Southwestern College. These pathways include incoming students from high school, adult schools, community-based organizations, and the rising role of internet access. The end of this section highlights the crucial role Southwestern College plays in helping current workers expand their skillsets and advance their careers while remaining in the workforce.

### ENTRANCE RAMPS FOR HIGH-SCHOOL AND ADULT SCHOOL STUDENTS



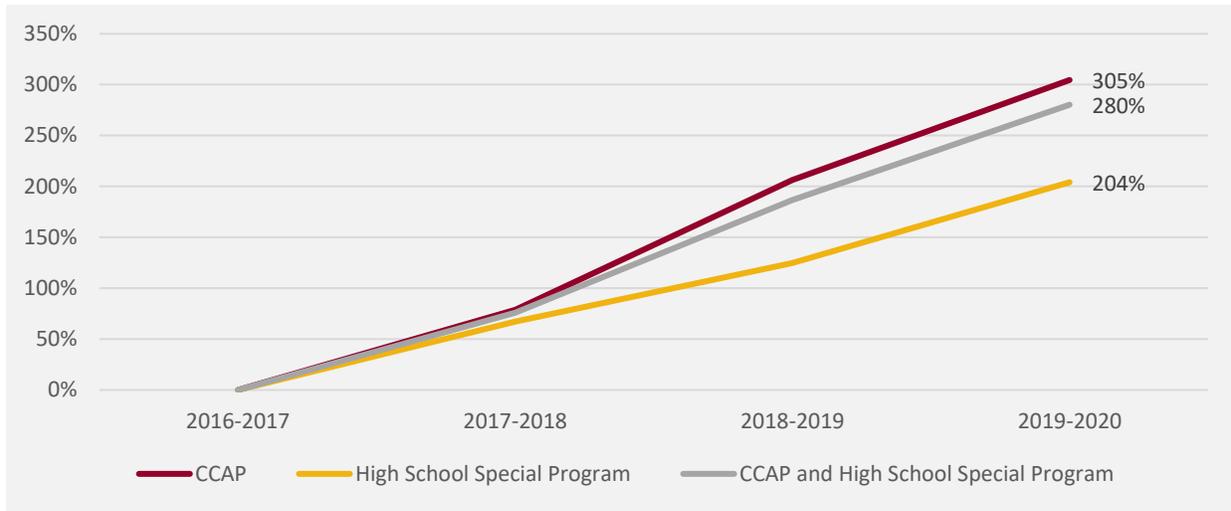
#### SWC STRATEGIC PRIORITY

Student Access and Economic,  
Workforce, & Community  
Development

**One finding developed through the creation of the Comprehensive Local Needs Assessment (CLNA) and discussions with stakeholders was the need to better encourage career exploration at the early stages of interest or enrollment.** Tools that help incoming and/or potential students identify which courses and careers might best fit their needs and interests should increase efficiency and retention across the enrollment process and in their coursework. This career exploration process should provide students the opportunity to identify their interests and passions, as well as the career pathways that are relevant and available within the region. Before selecting a course of study, students should have the opportunity to explore careers. In the long run this will save students precious time and financial resources. Connecting career pathway programs between institutions, when applicable, can also help students transition and better direct their educational and career development. This effort should also include relevant educational pathways going forward, as Southwestern College is not the final educational institution for many students. Early development of interests and preliminary understanding of career pathways can help increase accessibility and awareness by boosting the size of the pipeline from local high schools, adult schools, and community-based organizations.

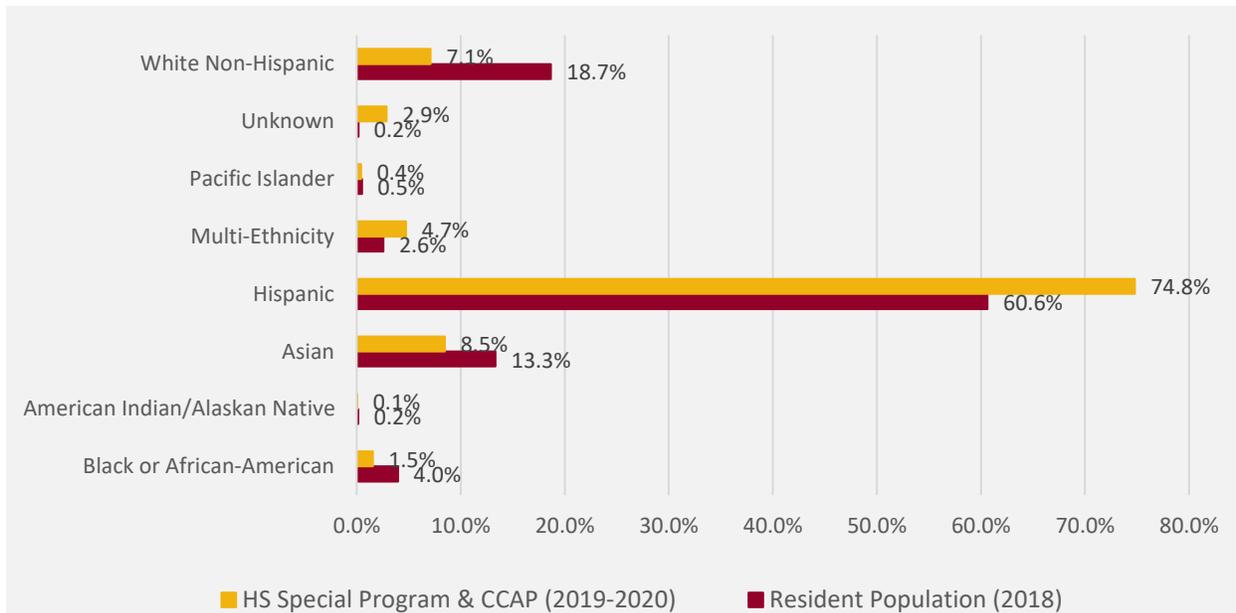
**SWC is already seeing some success in this area, as high school students are reaching higher benchmarks in greater numbers.** There are two programs for high school students; the High School Special Program allows high school students in grades 10-12 to concurrently enroll at Southwestern College, and the California College & Career Access Pathways (CCAP) Program allows high school students to earn elective college credits at high school that are transferrable to Southwestern College or any University of California or California State University campus. Over four academic years, Southwestern College has increased the number of high school students receiving college credit and those that were CCAP nearly four-fold. Much of this growth has been driven by an increase in CCAP students, which has increased by more than 300% (Figure 11). It is worth noting that if a student qualifies as both High School Special Program and CCAP, they will be counted as CCAP only. For example, while there were 482 students who counted under the High School Special Program, 1,986 students qualified under both High School Special Program *and* CCAP.

Figure 11. Growth in High School Special Program and California College & Career Access Pathways (CCAP) Students<sup>2</sup>



**High School Special program and CCAP students are relatively representative of the SWC regional population;** in fact, about three in four students are of Hispanic background, and nearly 9% are Asian (including Filipino). These representations are important and demonstrate that the program is successful in providing access to youth across race and ethnicity (Figure 12). Stakeholders and former students introduced the idea of reaching out specifically to local high school special education departments in order to ensure that these early education opportunities are made known to these students.

Figure 12. Representation Among HS Special Program & CCAP Students<sup>3</sup>



While the High School Special program and CCAP data is helpful, the two charts above highlight the extent of the data available to SWC. Tracking metrics--such as number of articulations and student outcomes (i.e. how do these

<sup>2</sup> Data provided by Southwestern College

<sup>3</sup> Data provided by Southwestern College

students do as they transition to Southwestern College) --may better illuminate some strengths and opportunities for these programs. For more information on the importance of data for SWC, please see page 26.

Articulation is another important factor when considering students entering SWC directly from high school or adult school. Articulation--or the process of developing a formal, written, and published agreement that identified comparable courses between academic institutions—is an important step in ensuring that students are on an efficient and effective pathway. Articulation not only prevents students from having to take redundant coursework, but it also signals to students that they are using their time and money efficiently, which may help in program retention and completion. SWC should continue to work with other regional educational institutions to develop articulation agreements where possible, thus maximizing students’ efficiency and flexibility across institutions.

## ENTRANCE RAMPS FROM LOCAL ORGANIZATIONS



### SWC STRATEGIC PRIORITY

Student Access and Economic,  
Workforce, & Community  
Development

**Another opportunity to increase the breadth and scale of pipelines into Southwestern College is through the development of close partnerships with local Community Based Organizations (CBOs).** Organizations like South Bay Community Services, MAAC, and the San Diego Workforce Partnership’s One-Stop Operator are already deeply involved with populations that are often the hardest to reach, attract, and retain. Expanding partnerships with these organizations that provide wrap-around services can help increase SWC’s access to and support of these target populations. Strong relationships can also reinforce retention and completion rates, as students will be able to maintain established networks and communications as they enter the new world of community college.

The Southwestern College Foundation also works to increase the accessibility of SWC for a range of prospective students. Stronger collaboration between the SWC Foundation, SWC, and CBOs can help maximize resources and minimize gaps in resources that may lead to adverse student outcomes.

## INTERNET ACCESS IN AN INCREASINGLY DIGITAL WORLD

**Internet access has been a paramount issue since the pandemic, yet between one and two out of every ten households in six zip codes within the SWC study region do not have broadband internet access in the home** (Figure 13). More critically, households with lower educational attainment levels tend to have lower rates of broadband internet access (Figure 14). This creates a situation where some of the very students who need the greatest support will have trouble accessing education. Even in the era of mobile phones and 5G networks, it is important to consider that some populations may have difficulties accessing online education. SWC has made significant efforts to make internet available to its students, and these efforts should continue long after COVID-19 cases recede.

Figure 13. Internet Access Among Households with a Computer (2018)<sup>4</sup>

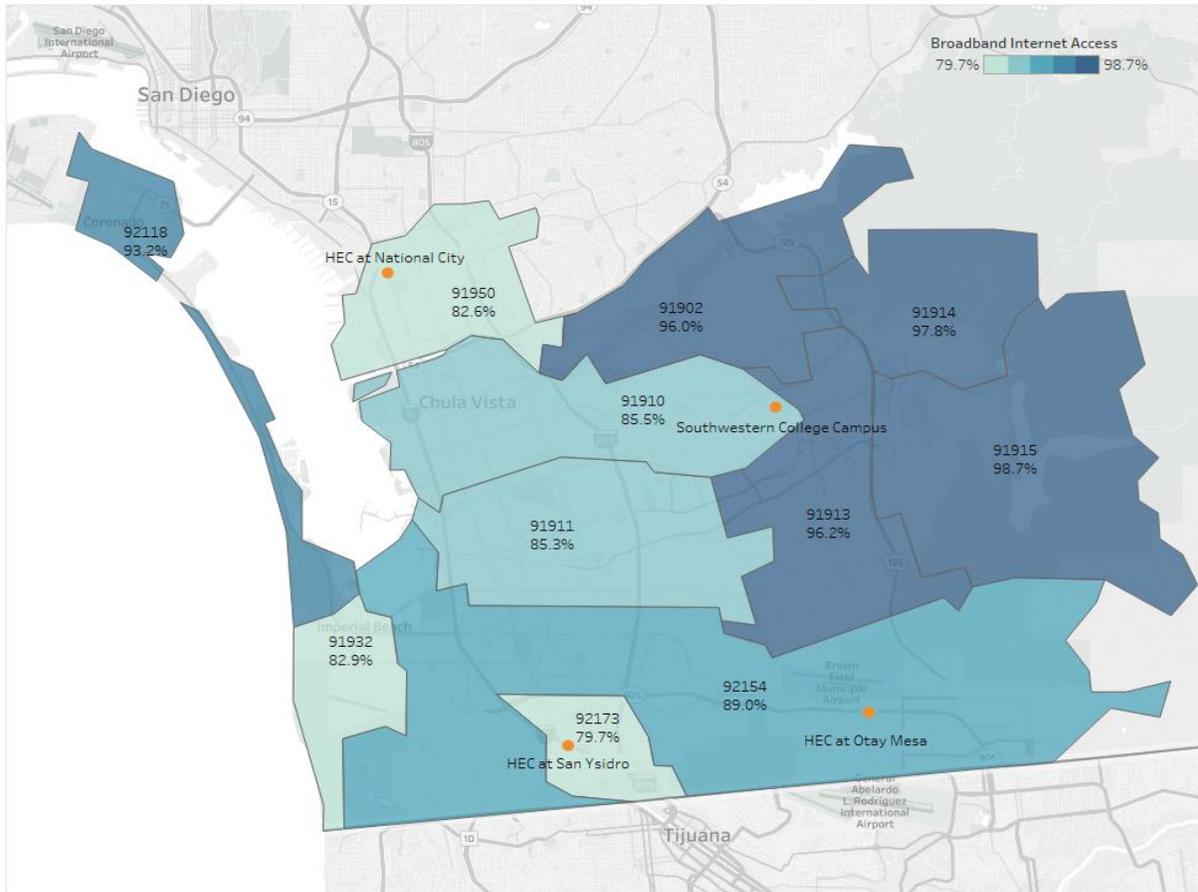
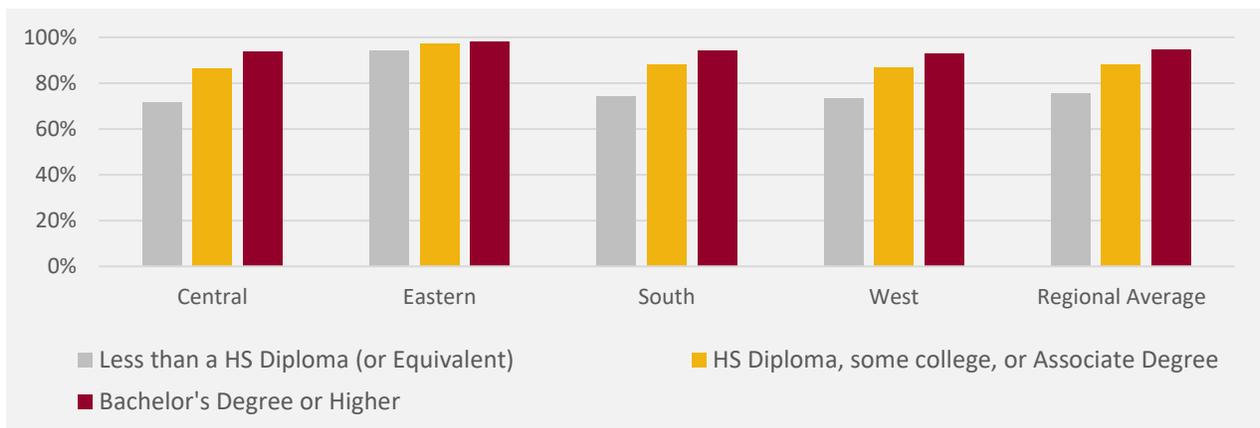


Figure 14. Internet Access by Household Educational Attainment<sup>5</sup>



<sup>4</sup> U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.

<sup>5</sup> U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.

## ADVANCEMENT OPPORTUNITIES FOR INCUMBANT (CURRENTLY EMPLOYED) WORKERS



### SWC STRATEGIC PRIORITY

### Student Access and Student Success

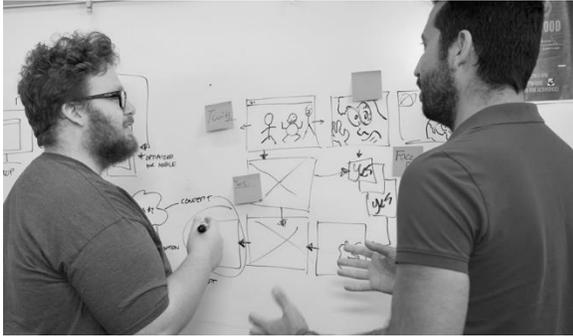
**Advancement opportunities for current workers is another area that numerous regional employers expressed interest in.** SWC already has nearly 2,900 non-credit students, but the COVID-19 pandemic has accelerated labor market volatility, leading employers to increasingly seek ways to upskill their current workers, potentially increasing the demand for non-credit programming. Continuing Education and non-credit offerings, such as those that cover ESL, Microsoft Suite, Project Management, and Customer Service, were all cited as important offerings in allowing current employees to advance. It should also be noted that these programs were often taken online, and the accessibility of online courses seemed to make the courses attractive options for employers and employees alike. Close collaboration with employers could help further tailor these non-credit courses to meet employer needs and could open the door to contract education opportunities. The Center for Business Advancement can also continue to play an important role in this effort as it supports the needs of emerging and medium-sized businesses.

SWC should also consider the increasing demand for four-year degrees among existing workers. Several employers noted that their current employees would need a four-year degree to advance further within the company. Maximizing the transferability of credits and outline which pathways are most likely to eventually require a four-year degree may assist in greater upward mobility for students and alumni. These clear pathways may also help attract workers who are looking to attain a four-year degree but have more than two-years of education remaining.

## Essential Skills Attainment

This section highlights the foundational skills that regional employers have deemed most important for job applicants and/or are the most difficult to find and are in greatest need for incoming workers. The section then concludes with a section that highlights faculty perceptions of SWC students' abilities and challenges.

## INCREASED IMPORTANCE IN FOUNDATIONAL SKILLS

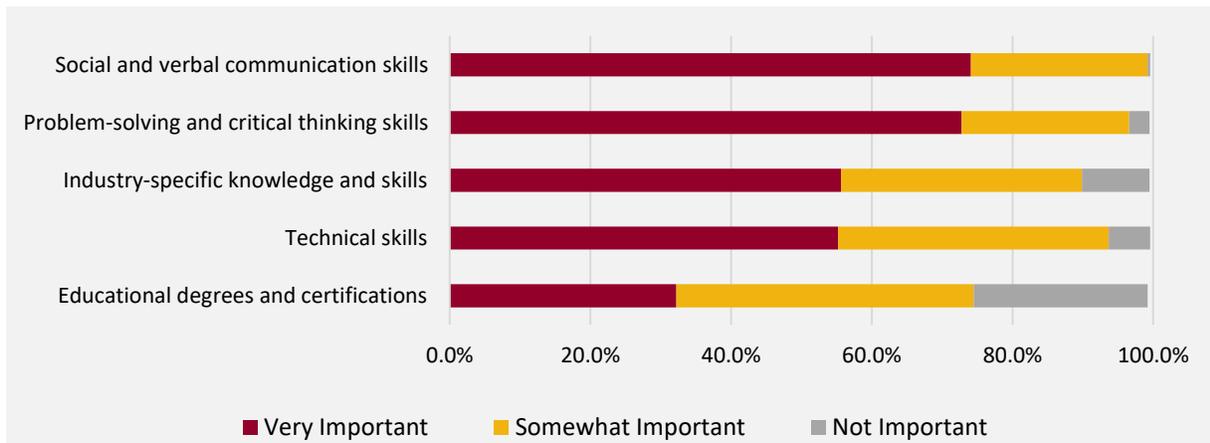


### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

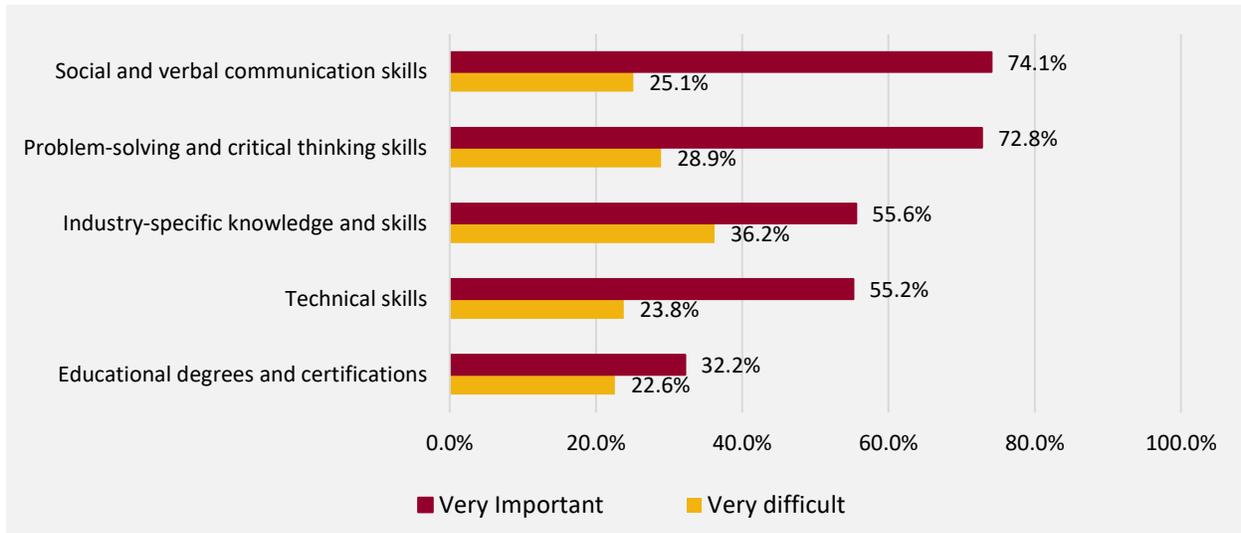
“Social and verbal communication” and “problem-solving and critical thinking” are the two skills employers find most important for positions requiring less than a four-year degree. Nearly three-quarters (74%) of respondents reported “social and verbal communication” skills are “very important.” Respondents also cited “problem-solving and critical thinking” skills as highly valuable, with 73% reporting it to be “very important.” Educational degrees and certifications are seen as the least important for these positions, with 25% of respondents reporting that it is not important for positions requiring less than a four-year degree (Figure 15.).

Figure 15. Importance of Each for Positions Requiring Less Than a Four-Year Degree



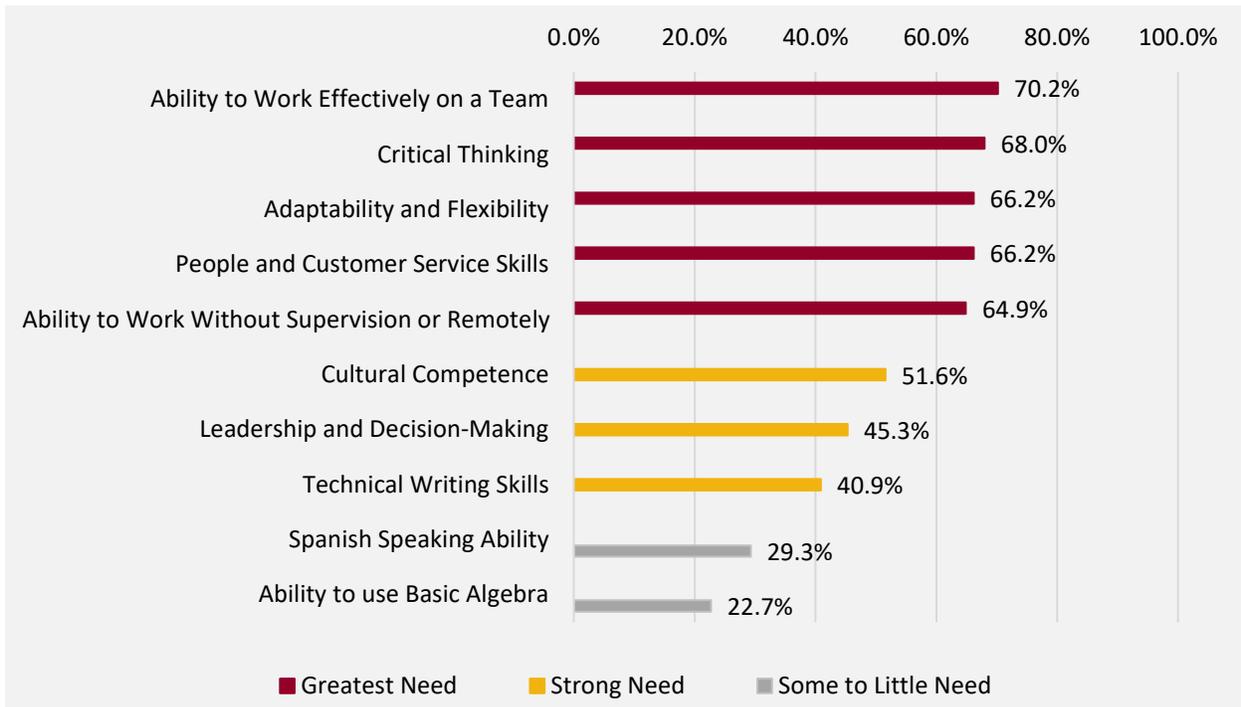
“Social and verbal communication skills” and “problem-solving and critical thinking skills” are the skills most commonly cited as “very important.” Almost three-quarters (74%) of employers reported “social and verbal communication skills” as “very important,” and only one-quarter (25%) of respondents reported it as being “very difficult” to find. Employers (36%) most frequently reported “industry-specific knowledge” to be “very difficult” to find for positions requiring less than a four-year degree. (Figure 16).

Figure 16. Difficulty Finding Talent with Each of the Following Skills and their Importance



The five skills and abilities in greatest need are “ability to work effectively on a team,” “critical thinking,” “adaptability and flexibility,” “people and customer service skills,” and “ability to work without supervision or remotely.” More than two-thirds of respondents reported there is “great need” for each of these skills and abilities. In contrast, only 29% and 23% of employers cited “great need” for “Spanish speaking ability” and “ability to use algebra,” respectively (Figure 17.). However, in some industries—including Finance, Insurance, Banking, and Real Estate (FIRE), and Logistics and Transportation—there was notably greater need for the ability to speak Spanish.

Figure 17. Organizations Greatest Need for Skills and Abilities



## GAPS IN STUDENT WRITING



### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

When asked in an open-ended question about frequent student deficiencies, about a third (32%) of faculty and administrators surveyed noted that SWC students underperform in their writing abilities. This presents a challenge for students as they continue their education and there are noteworthy downstream effects for students who are unable to communicate effectively in writing; securing, maintaining, and advancing at many jobs requires at least some amount of written communication. Some potential ways to close this gap include encouraging faculty to embrace curriculum that requires writing in a multitude of courses and disciplines. This type of writing across the curriculum is similar to what is required in the professional world. This could also include increasing marketing, support, and resources for remedial and noncredit writing courses; and embracing faculty's ability to recommend students for remedial writing courses and any other strategies or programs that they recommend for improved writing.

## Continue to Collect and Leverage Institutional Data



### SWC STRATEGIC PRIORITY

Institutional Effectiveness and  
Student Success

**Continue to increase the use of data at Southwestern College.** While Southwest College has robust data and research in many regards, some aspects of the system could benefit from increased tracking of metrics and other data. Some areas for increased data collection efforts include:

- a. Increase tracking efforts for special population students. Perkins V introduces new special populations, some of which Southwestern College tracks more rigorously than others. Thorough tracking of all of these populations will ensure that gaps do not go unnoticed and unaddressed.

- b. Align and track industry certifications and their relevance in different industry clusters and occupational pathways. This was one area of the Comprehensive Local Needs Assessment that the research team struggled to incorporate since tracking of industry credentials is inconsistent or nonexistent. For example, a course may prepare students to take a CompTIA certification, but then do not track students' performance on these examinations. Knowing how students are performing could be helpful in highlighting areas where curriculum could be expanded or better developed.
- c. Track incoming students from participating High Schools and Adult Schools. Tracking these students as they navigate the transition to courses at SWC may reveal areas in which these students excel or face challenges. Knowing these areas of success or chokepoints can allow decision makers to better decide policy.
- d. Track employment and educational outcomes of students that have completed certificates, degrees, or other CTE related courses. Southwestern's CTE Employment Outcomes Survey (CTEOS) has collected much of this useful data, though response rates remain low (below 35% since 2017). Long-term tracking could provide a more robust picture of the value of SWC courses to a broad spectrum of students.

## Sector-Specific Findings and Suggestions

This portion of the report discusses the key findings and suggestions that are geared towards specific sectors and programs at Southwestern College. These sector-specific findings and recommendations discuss ways to expand or improve existing Southwestern College programs. These sectors were selected through communication with SWC as well as the South County Economic Development Council to ensure that key growth industries and opportunities were prioritized. The Centers of Excellence (COE) have also developed a series of occupation-specific reports, many of which are common occupations within the industries below. For more information on the COE reports, please see <http://www.coecc.net/region/SanDiegoImperial.aspx>. The survey findings included in the sections below highlight responses among industry respondents that varied notably from the responses of employers from all industries. Thus, if an industry reported hiring challenges largely similar to those cited by employers overall, the findings will not be repeated in the sections below.

## Industry Fast Facts

### Manufacturing

- Half (50%) of Manufacturing employers reported that they have great interest in trainings that provide machining experience and 33% have great interest in trainings that provide digital manufacturing experience to prepare students for work in this industry.

### Architecture, Design, and Engineering

- Three-quarters (75%) of Architecture, Design, and Engineering employers reported to have some difficulties finding qualified applicants for entry-level positions. Inadequate non-technical or soft skills was one of the most cited reasons for hiring difficulty.

### Building or Construction

- Half (50%) of the respondents in the Building and Construction industry find it “very difficult” to hire qualified entry-level talent, and 44% of respondents find it very difficult to hire qualified non-entry-level talent.

### Technology or Information & Communication Technologies (ICT)

- Approximately two-thirds (65%) of ICT employers have not recruited workers from SWC. Employers in this industry are really interested in working with SWC; 71% reported that they are interested in working with SWC to develop work-based learning opportunities, suggesting a significant opportunity for partnerships.

### Logistics and Transportations

- Nearly two-thirds (63%) of employers reported a great interest in programs that cover supply chain management, warehousing, and international business (including customs and international regulations).

### Healthcare (including Dental)

- In the Healthcare industry, employers report the greatest difficulty finding qualified applicants for Certified Nursing Assistants, Registered Nurses, and Medical Assistant.

### Professional and Business Services

- Professional and Business Services employers cite that social and communication skills, and industry-specific knowledge as two skills that new-hires for middle-skill positions are frequently deficient in.

### Finance, Business, Insurance, or Real Estate

- More than half (52%) of the employers in this industry require successful applicants to have specific credentials or certifications, and another 20% prefer successful applicants to have specific credentials/certifications. The most common credentials and certifications required or preferred are insurance licenses, accounting certifications, and real estate licenses.

### Tourism, Recreation, and Hospitality

- Approximately two-thirds (68%) of employers in the Tourism, Recreation, and Hospitality industry reported that their business was shut down by COVID-19, but that they have since reopened.

# Supporting the Design and Manufacture of Innovation Products

## MANUFACTURING

Manufacturing<sup>6</sup> in San Diego's South County relies primarily around product design, entrepreneurship, and innovation. This type of activity is geared towards high-technology production, including sectors such as defense and aerospace, as well as industries of growing interest such as semiconductors and electric vehicles and their batteries. Although the manufacturing jobs in South County are often high-education and high-technology roles, there is need for technician and assembler roles that require less than a four year degree. These types of manufacturing jobs also tend to offer higher wages and greater benefits than other roles with similar educational requirements. This section outlines some of the perspectives and challenges of current manufacturing employers in the SWC region and highlights new manufacturing employment opportunities in the region. SWC does not currently have a program dedicated to advanced design and manufacturing. SWC's existing Engineering Program is theory-based and geared towards transfers. A program that is dedicated towards manufacturing and maintenance technicians may have some success in meeting the needs of local employers.



### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

## HIRING CHALLENGES

**Most Defense, Aerospace, and Transportation Manufacturing, and Other Manufacturing firms, demonstrated at least some difficulties in finding qualified candidates, for either entry-level or non-entry-level positions.**

**Responses demonstrate many candidates lack technical skills or expertise.** Finding qualified entry-level workers was at least "somewhat difficult" for 89% of firms, although only 21% reported it is "very difficult." Notably, candidates for all levels demonstrated a lack of technical skills according to firms. Experience or industry-specific knowledge was also a common issue in finding qualified applicants.

## SKILLS AND CERTIFICATIONS

**Problem-solving and critical thinking skills were very valuable to most firms in this cluster, and proved essential for employers, most of whom reported having at least some difficulties finding candidates with the skillset.**

Social and verbal communication skills was the other factor of major importance to every employer surveyed in this cluster. Manufacturing companies reported that finding most of the surveyed skills was "somewhat difficult," but technical skills were the most difficult for manufacturing employers to find. Among occupations that require or prefer certifications, welding and aircraft maintenance were the two most-common desired certifications mentioned.

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<sup>6</sup> Due to the number of survey respondents and similarities between skillsets, this section combines Defense, Aerospace, and Transportation Manufacturing as well as Other Manufacturing industry clusters.

## TRAINING PROVIDERS AND HIRING

**Training programs providing machining experience stand out as the most valued by firms in Defense, Aerospace, Transportation Manufacturing, and Other Manufacturing.** One half of responding firms demonstrated great interest in a program that provides experience in machining. Trainings providing knowledge of safety rules and regulation were also of great interest to 39% of firms involved in manufacturing. One third of respondents also demonstrated great interest in trainings that provide digital manufacturing experience. On the other hand, only 17% of firms in this cluster demonstrated great interest in trainings that provide welding experience.

**Firms in Defense, Aerospace, and Transportation Manufacturing, and Other Manufacturing were more satisfied with education institutions' supply of qualified workers locally than to other surveyed clusters.** Overall, 79% of responders provided positive feedback; 32% of them were "very satisfied," and no manufacturing firms are "very dissatisfied." Many (47%) firms are somewhat satisfied, which shows that there can still be improvements in this aspect for this industry cluster.

## COMPUTER-AIDED DESIGN AND DRAFTING AT SWC

The Computer-Aided Design and Drafting program at SWC has strong regional demand for graduates and relatively high skill attainment (84%), completion (83%), and persistence (89%) rates. However, placement rates are low; about two in three students (67%) find employment within half a year after graduating (Table 1). Expanded partnerships with regional employers could help more graduates find employment. Crucially, half of all Manufacturing survey respondents reported interest in working with SWC to develop WBL employment opportunities. Partnerships with local unions may also help drive WBL opportunities in improvement employment placement rates upon graduation.

Table 1. 2018-2019 Computer-Aided Design and Drafting (095300) Program Summary

	2018-2019
<b>Skill Attainment</b>	84%
<b>Completion</b>	83%
<b>Persistence</b>	89%
<b>Placement</b>	67%
<b>2018-2019 Enrolled</b>	247
<b>Females Enrolled</b>	46
<b>WBL Completions</b>	164
<b>Program Articulations</b>	5
<b>Program Completions</b>	4
<b>Annual SWC Regional Openings</b>	18
<b>Annual County Openings</b>	120
<b>Median Annual Earnings of SWC Graduates (2016-2017)</b>	\$24,720

## MANUFACTURING ELECTRIC VEHICLES, ENERGY STORAGE, AND ADVANCED ELECTRONICS



### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

Electric vehicles have received increased attention in discussions at the state and federal levels as substantial new infrastructure spending is being discussed. The domestic production of electric vehicles and their various components—including semiconductors or microprocessors—has become an area of national focus<sup>7</sup> as the resilience of vital supply chain gains attention. These production jobs present opportunities within the Southwestern College region. While the region currently does not have substantial production facilities in these sectors, Southwestern College could work with economic and development organizations and key employers in the space to develop training programs to support these burgeoning industries.

### ELECTRIC VEHICLES AND THEIR POWER SUPPLY

The rise of electric vehicles is becoming increasingly apparent, particularly in California. Electric Vehicles<sup>8</sup> accounted for 2.45% of all vehicles sales in the U.S. in 2020, compared to 0.91% five years earlier in 2016.<sup>9</sup> Because of their strong electric currents and advanced components, these electric vehicles will require maintenance technicians that are experienced with new technologies and components. Given this extensive growth and the emphasis on domestic production, SWC could also work with regional economic development organizations, including Cleantech San Diego, to reach out to employers within the sector—such as Nuvve, Aptera, and other electric vehicle startups—to support current and projected talent needs. Battery design and production is another crucial component of electric vehicles. The Greater San Diego area already has some leading projects around automotive battery design and production, and SWC could work with these programs to develop trainings necessary for technician and support roles.

### SEMICONDUCTORS AND ELECTRICAL COMPONENTS

Semiconductors and other advanced electronic components are another critical component of electric vehicles, while also playing an integral role in the electronic devices that people, businesses, and communities rely on. San Diego County (particularly around Mira Mesa and Carmel Valley) already has a number of semiconductor design and manufacturing firms. As the U.S. substantially bolsters its semiconductor production capabilities through legislature—such as the CHIPS Act and U.S. Innovation and Competition Act (USICA) that will provide more than \$50 billion in funding to domestic semiconductor production—these firms are likely to scale and onboard qualified talent. SWC can help provide a prepared workforce of technicians and fabricators to support this industry that is set to see substantial growth. Working with the South County Economic Development Council and the San Diego Workforce Partnership may allow SWC to gain access to employers in need of talent.

<sup>7</sup> <https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf>

<sup>8</sup> Including Battery Electric Vehicles and Plug-in Hybrid Electric Vehicles.

<sup>9</sup> <https://www.autosinnovate.org/resources/electric-vehicle-sales-dashboard>

## Designing and Building the Future of South County

This section begins by highlighting the key findings from firms that are involved in Design, Architecture, and Engineering. The section then discusses the survey findings from the firms that carry out the Building and Construction. Although Building and Design, which combines these two sectors, is considered one industry cluster in the CLNA and previous research, BW Research has separated this industry cluster into two different categories due to the difference in skills and training required for each. Architecture, Design, and Engineering includes firms that design and generate the blueprints for new structures and infrastructure. The Building and Construction section includes firms that build and construct the structures and infrastructure.

### ARCHITECTURE, DESIGN, AND ENGINEERING



#### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

### HIRING CHALLENGES

**A majority of Architecture, Design, and Engineering firms have moderate difficulties finding qualified applicants for middle-skilled positions.** Seeking qualified applicants was described as “somewhat difficult” by 75% of firms when hiring for entry-level workers, and 63% when hiring non-entry-level workers. The hiring process demonstrated that the main reason for difficulty hiring for entry-level positions is that candidates have inadequate non-technical skills such as critical thinking, communication, and teamwork. Challenges for non-entry-level candidates are different, as employers mainly cited a lack of experience, technical skills, and educational attainment.

### SKILLS AND CERTIFICATIONS

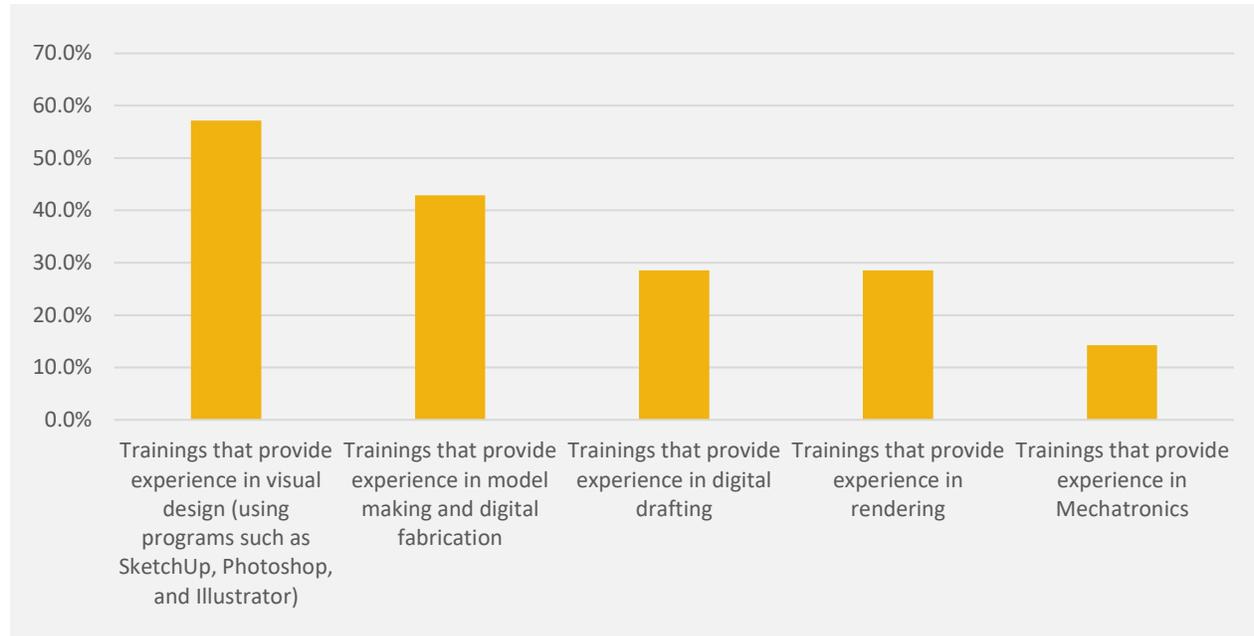
**The skills most valued by these firms are problem-solving and critical thinking, and social and verbal communication – 50% of firms reported it is “very difficult” to find candidates with the latter.** All respondent Architecture, Design, and Engineering firms noted that social and verbal communication skills are either “very difficult” or “somewhat difficult” to find, and 87% reported industry-specific knowledge is at least “somewhat difficult” to find and is a skill that is at least “somewhat important” to 75% of firms. Generally, firms did not have trouble finding candidates with the required educational degrees and certifications and technical skills. Bachelors and Masters degrees were noted as preferences or requirements for some respondent Architecture, Design, and Engineering firms, suggesting that not all firms have middle-skill positions.

### TRAINING PROVIDERS AND HIRING

**Trainings that provide experience in visual design (using programs such as SketchUp, Photoshop, and Illustrator) received the most interest from firms in Architecture, Design, and Engineering industries.** Such programs are of

great interest to over 57% of surveyed employers. Trainings that offer experience in model making and digital fabrication are also of interest to firms - about 43% of employers reported great interest in such programs.

Figure 18. 'Great Interest' in Programs for Architecture, Design, or Engineering Firms



**Architecture, Design, and Engineering firms demonstrated satisfaction with training providers' ability to provide local qualified workers. Two-thirds of firms also stated they are interested in working with SWC to develop WBL opportunities.** Although only 14% of employers were "very satisfied" in training providers' provision of qualified talent, another 71% reported being "somewhat satisfied." This indicates that there is room for improvement in institutions' ability to provide qualified workers, but training programs seem to be in the right track.

### ARCHITECTURE AND ARCHITECTURAL TECHNOLOGY PROGRAM AT SWC

The Architecture and Architectural Program at SWC has many strengths, including high completion and persistence rates, relatively even distribution of student genders, and relatively numerous WBL opportunities. However, placement rates are noticeably low (53%), though this program has a considerable proportion of students that transfer to other learning institutions (Table 2). Architecture is a field in which experience, skills, and one's portfolio are given great consideration. Ensuring that students are given plenty of field experience and opportunity to develop their portfolio and experience is essential. This program also has a large portion of students who transfer to postsecondary institutions upon completing the program at SWC.

Table 2. 2018-2019 Architecture (020100) Program Summary

	2018-2019
<b>Skill Attainment</b>	82%
<b>Completion</b>	88%
<b>Persistence</b>	88%

Placement	53%
2018-2019 Enrolled	374
Females Enrolled	138
WBL Completions	282
Program Articulations	5
Program Completions	28
Annual SWC Regional Openings	9
Annual County Openings	170
Median Annual Earnings of SWC Graduates (2016-2017)	\$19,940

## BUILDING AND CONSTRUCTION

The Building and Construction sector in the Southwestern College Study Region grew 34% between 2014 and 2019. A housing shortage, elevated home prices, and the recent passage of SB 9 and 10 indicate that the sector is likely to continue to grow in coming years. The survey of regional employers also revealed that this sector had the greatest level of hiring difficulty of any sector. SWC could help to address these challenges and support economic development by developing building and construction programs and the facilities to support the training of these workers.



### SWC STRATEGIC PRIORITY

Student Success and Economic, Workforce, & Community Development

## HIRING CHALLENGES

**Building and Construction firms reported great difficulty finding qualified applicants for middle-skilled positions, mainly due to a small applicant pool.** Of all Building and Construction firms surveyed, 50% described their search for qualified entry-level applicants as “very difficult” and another 44% described it as “somewhat difficult.” The main reasons cited were a small applicant pool and lack of industry-specific knowledge. In firms’ search for non-entry-level applicants, the pattern was maintained, with 88% of firms reporting at least some difficulty in finding qualified workers. Small applicant pools were again presented as the main reason for hiring challenges.

## SKILLS AND CERTIFICATIONS

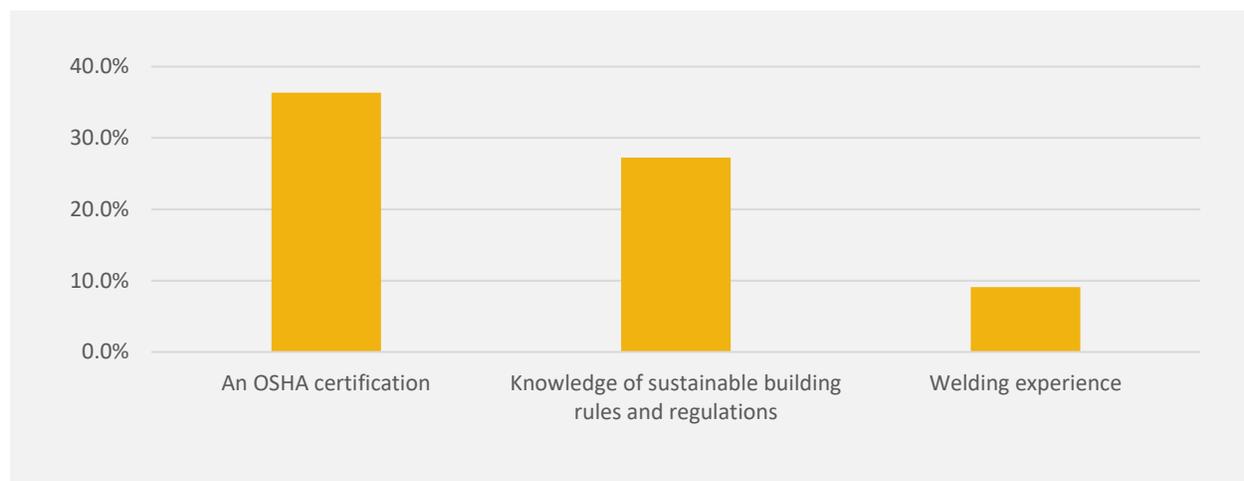
**Problem-solving and critical thinking, social and communication skills, and industry-specific knowledge are the most valued skills by Building and Construction employers looking for applicants in middle-skill positions.** These

skills were deemed “very important” by 50% of employers, and over 86% of firms deemed those skills at least “somewhat important.” Notably, all surveyed Building and Construction firms described finding applicants with industry-specific knowledge as at least “somewhat difficult” and over 85% had reported similar difficulties finding applicants with social and verbal communication, and problem-solving and critical thinking skills. For occupations which employers require or prefer certifications, project management, purchasing, OSHA, and the Institute of Inspection Cleaning and Restoration Certification (IICRC) were among the certifications listed.

## TRAINING PROVIDERS AND HIRING

**Building and Construction firms reported great interest in apprenticeship-type programs for future employees, and all of them showed “great interest” in trainings providing machining experience.** In these industries, around 45% of firms reported “great interest” in apprenticeship-type of preparation programs. Over a third (36%) of firms are interested in OSHA certification courses, and courses focused on sustainable building rules and regulations, and welding experience, received less interest (Figure 19).

Figure 19. ‘Great Interest’ in Programs for Building and Construction firms



**Building and Construction firms demonstrated less satisfaction with education and training institutions’ ability to provide qualified workers in their area, compared to firms in other industry clusters.** No employer reported being “very satisfied” with education institutions’ ability to provide qualified workers nearby, while over 27% are “very dissatisfied.” Only 36% reported some satisfaction with regional education and training providers - a number well below what was reported by other industry clusters.

## CIVIL AND CONSTRUCTION MANAGEMENT TECHNOLOGY

The Civil Construction and Management Technology program at SWC has relatively strong performance among the core indicators of skill attainment (88%), completion (82%), and persistence (83%), but notably low placement rates of only 60% (Table 3). Given that San Diego County has 566 annual openings in relevant occupations, increasing employer relationships and WBL opportunities may help the program reach its full potential. As previous discussion highlights, employers’ relatively low satisfaction with regional training providers likely presents a challenge to SWC students seeking employment. Working with regional Building and Construction employers, unions, and trade organizations will be crucial to boosting student outcomes. Forty-four percent of Building and Construction employer respondents reported interest in working with SWC to develop WBL opportunities. Increased coordination and cooperation with organized labor may also help expand WBL opportunities.

Table 3. 2018-2019 Civil and Construction Management Technology (095700) Program Summary

	2018-2019
<b>Skill Attainment</b>	88%
<b>Completion</b>	82%
<b>Persistence</b>	83%
<b>Placement</b>	60%
<b>2018-2019 Enrolled</b>	132
<b>Females Enrolled</b>	18
<b>WBL Completions</b>	78
<b>Program Articulations</b>	4
<b>Program Completions</b>	17
<b>Annual SWC Regional Openings</b>	84
<b>Annual County Openings</b>	566
<b>Median Annual Earnings of SWC Graduates (2016-2017)</b>	\$46,180

## The Next Generation of Tech Workers

With robust growth and among the highest wages of any industry, Information and Communications Technology (ICT) is often seen as an attractive potential career pathway. This section highlights San Diego County’s unique ICT sector, along with discussing some regional employers’ perspectives and challenges.



### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

### HIRING CHALLENGES

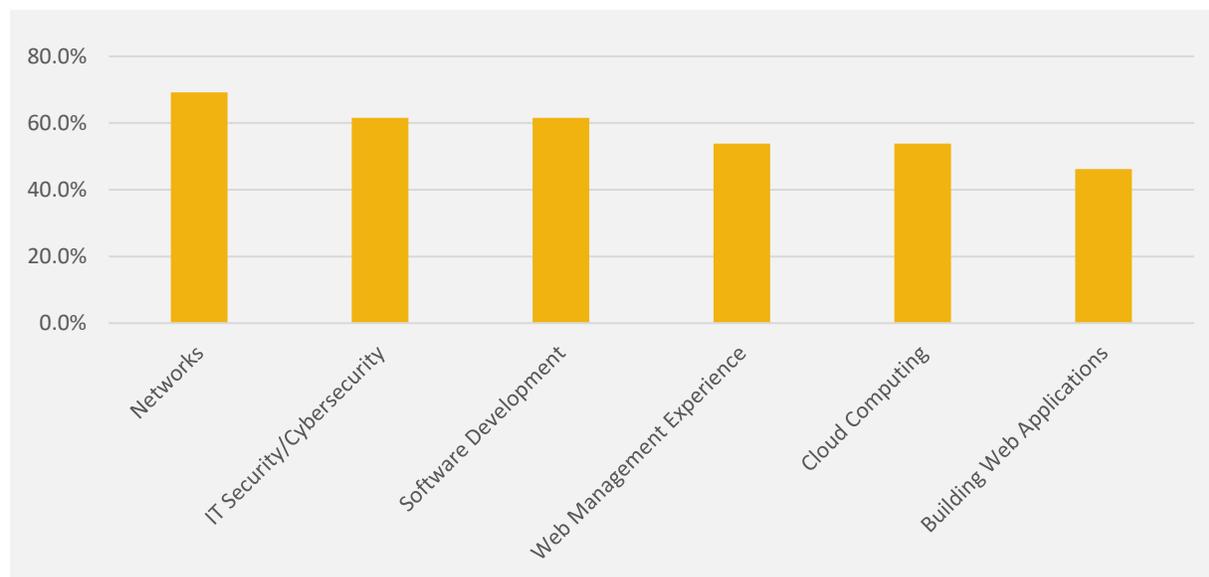
ICT—particularly in San Diego County—is heavily influenced by defense and national security, and firms are often focused on cyber security and other cutting-edge fields. Because of the extremely advanced sophistication and specialization required, many of these employers often seek candidates with at least a four-year degree and frequently even advanced degrees. This makes entry into ICT difficult. Although ICT firms cited levels of hiring difficulty similar to overall survey respondents, the reasons behind the difficulty were unique. Over 52% of

respondents cited a lack of technical skills or expertise as a primary reason behind hiring challenges for entry-level workers, which is 23 percentage-points higher than the regional average. Both electrical and general engineering were the most-cited occupations that ICT firms found difficult for which to hire, though these occupations are not middle-skill since they virtually always require 4-year or advanced degrees. When asked about required or preferred credentials, five ICT employers noted the need for bachelors or master’s degrees. This instance also underscores the importance in offering pathways to four-year degrees for those truly devoted to entering the industry. Some other desired certificates included Microsoft Certified Solutions Developer (MCSD), Certified Telecommunications Analyst (CTA), and Certified VoIP Analyst (CVA).

## TRAINING PROVIDERS AND HIRING

Nearly 70% of ICT firms indicated “great interest” in programs that teach students about networks. ICT firms also reported strong interest in programs that teach IT security and cybersecurity (62%) and software development (62%) (Figure 20).

Figure 20. ‘Great Interest’ in Programs for ICT Firms



A significant number of ICT companies also reported interest in other student preparation programs. Forty percent of firms reported “great interest” in programs that taught Microsoft Excel, and another 36% reported “great interest” in programs that help source and pre-screen for interns.

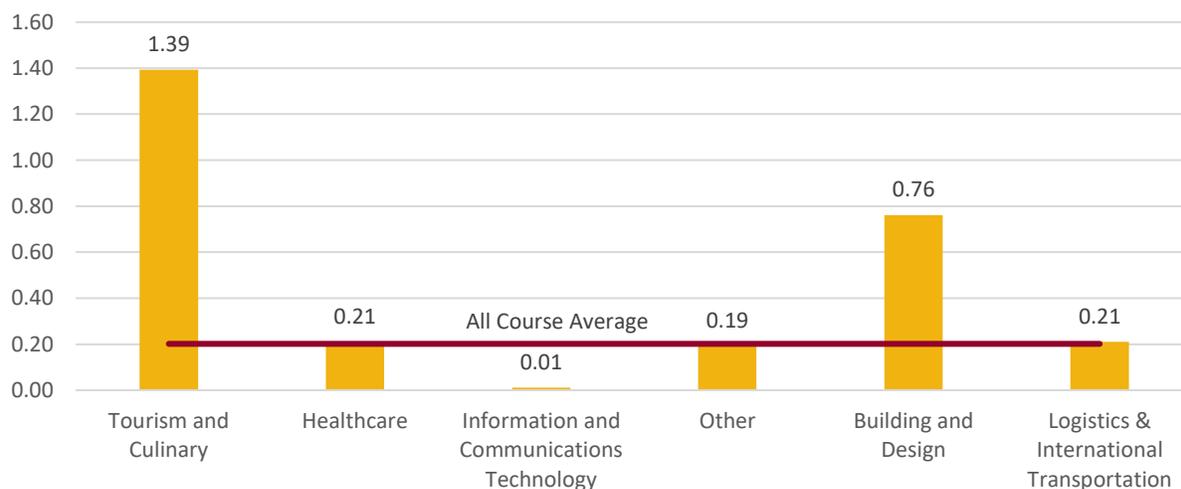
**Overall, ICT firms reported a moderate to high rate of satisfaction with the ability of area training providers to provide qualified workers.** Nearly 31% of firms stated that they were “very satisfied,” which was slightly lower than the regional average. However, 54% of ICT respondents indicated that they were “somewhat satisfied” with regional training providers, which was 12 percentage points above the average. No ICT firms indicated that they were ‘very dissatisfied’ with area training providers.

Of the ICT firms that have not previously recruited students from Southwestern College, nearly 77% were unaware of Southwestern College’s programs, a rate 10 percentage-points higher than the overall average business response. Additionally, nearly 12% of firms indicated that Southwestern’s programs did not apply to their hiring needs, however, a majority (71%) of ICT firms indicated that they were interested in working with Southwestern

College to develop work-based learning opportunities. Reaching out to South County EDC and the SDWP may help SWC engage with employers in need of talent.

Developing these partnerships will help students gain exposure to the field, establish industry connections and networks, and may help reduce formal education requirements that would otherwise serve as a barrier. This interest in collaboration is important, because ICT has among the fewest WBL opportunities of any program at SWC. Figure 21 shows the average number of WBL experiences per course completion. This means that, on average, a student at SWC will complete one WBL experience for every five courses taken. However, this value varies greatly by program; on average, a student in Tourism and Culinary will have 1.4 WBL opportunities per course. In comparison, ICT students only average WBL experiences for one out of every 100 courses.<sup>10</sup>

Figure 21. Work Based Learning Experiences per Completion for Selected Industries (2018-2019 Academic Year)<sup>11</sup>



## COMPUTER INFORMATION SYSTEMS AND DIGITAL MEDIA AT SWC

The Computer Information Systems (CIS) and Digital Media programs at SWC have high completion rates but low placement rates. These programs also have very few WBL opportunities. Increased partnerships with regional employers would help boost placement rates. Additionally, low skill attainment and persistence rates in CIS and Digital Media, respectively, suggest that many students are struggling in these programs (Table 4). Increasing resources available to students may help remedy these areas of performance. It is also worth mentioning that the high number of entrepreneurs in this field mean that the number of openings in these fields are often undercounted.

Table 4. 2018-2019 CIS (070000) and Digital Media (061400) Program Summary

	2018-2019 CIS	2018-2019 Digital Media
<b>Skill Attainment</b>	70%	87%
<b>Completion</b>	98%	90%

<sup>10</sup> This is based on total students per course. A small class that offers a WBL opportunity will result in a lower number than a larger section with a WBL opportunity.

<sup>11</sup> Data provided by Southwestern College

<b>Persistence</b>	90%	65%
<b>Placement</b>	59%	52%
<b>2018-2019 Enrolled</b>	2,426	48
<b>Females Enrolled</b>	871	24
<b>WBL Completions</b>	18	0
<b>Program Articulations</b>	9	10
<b>Program Completions</b>	17	23
<b>Annual SWC Regional Openings</b>	210	9
<b>Annual County Openings</b>	4,367	169
<b>Median Annual Earnings of SWC Graduates (2016-2017)*</b>	\$29,792	\$22,956

*\*These figures are from the Information and Communication Technology -Digital Media Sector*

### **San Diego’s Marine and Blue Economy**

San Diego’s Naval Base and shipyards support the county’s strong maritime sector, often referred to as the “Blue Economy.” Alongside activities associated with the Naval base and accompanying shipyard, San Diego’s Blue Economy is supported through activities like aquaculture (including commercial shellfish and seaweed production), shoreline stabilization technologies, stormwater monitoring, and debris and contaminant removal. The Port of San Diego’s Aquaculture & Blue Technology Program is a leading supporter of many of these Blue Economy technologies. These ventures and technologies promote economic opportunity while also supporting cleaner and safer shores and waters.

## Leverage the College’s International Nexus

SWC’s unique geographic location means that the college is well poised to prepare and place students into the bustling world of international trade and business. International business is also a strong fit for SWC’s strong bilingual population—as employers in this field have a strong need for workers who can communicate across languages.



### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

### SKILLS AND CERTIFICATIONS

**Sixty-three percent of Logistics and Transportation firms reported requiring applicants for middle-skill positions to have previously obtained specific credentials and certifications, the highest rate of industries surveyed.**

Computer skills (including MS Excel), forklift certifications, and applicable drivers’ licenses (Class A) were among the most common. All respondent Logistics and Transportation firms reported that problem-solving and critical thinking skills were very important for middle-skill applicants to have. However, 88% percent of these firms responded that it was either “very difficult” or “somewhat difficult” to find applicants with these skills. Eighty-eight percent of respondents in the Logistics and Transportation field also reported that there is great need for employees with the ability to work on a team along with adaptability and flexibility.

### TRAINING PROVIDERS AND HIRING

**Firms in the Logistics and Transportation industry are more likely than businesses overall to have a great interest in programs that teach Microsoft Excel.** Fifty percent of firms in this industry also reported great interest in programs that source and pre-screen for future employees. Additionally, sixty-three percent of Logistics and Transportation firms reported that they have great interest in programs that provide experience in supply chain management, warehousing, and international business (including customs and international regulation) (Figure 22).

Figure 22. 'Great Interest' in Programs for Logistics and Transportation Firms



**Firms in the Logistics and Transportation field are the most likely to be at least somewhat satisfied with educational and training institutions' ability to provide qualified workers than other businesses.** Two-thirds (67%) of Logistics and Transportation firms that had not recruited from Southwestern were unaware of Southwestern College's program offerings, indicating a gap in community awareness and publicity. Fifty percent of the Logistics and Transportation firms reported that they are interested in working with Southwestern College to develop work-based learning opportunities, indicating strong potential for future community partnerships. Half of all Logistics and Transportation firms reported that they are interested in working with SWC to develop WBL opportunities.

### LOGISTICS/MATERIALS TRANSPORT AT SWC

The Southwestern College Study Region's proximity to the U.S.-Mexico Border mean that occupations relevant to the Logistics and Materials Transport program are in high demand. Students involved in the Logistics and Materials Transportation Program perform well in skill attainment, but seem to underperform in completion (50%), persistence (78%), and placement (67%) (Table 5). These low indicator rates suggest that this program could benefit from a revamping effort. One such area could be an increased partnership with both U.S. and Mexico-based businesses. To develop international ties, SWC may lean on Mexican organizations, such as the U.S.-Mexico Chamber of Commerce to reach out to regional employers. Another option would be to work with existing U.S. partnerships, and then use those connections to make new linkages with their cross-border clients or vendors. The strong positive perceptions from regional employers in the space, and a large number of annual openings in relevant occupations, suggests that this program has great potential.

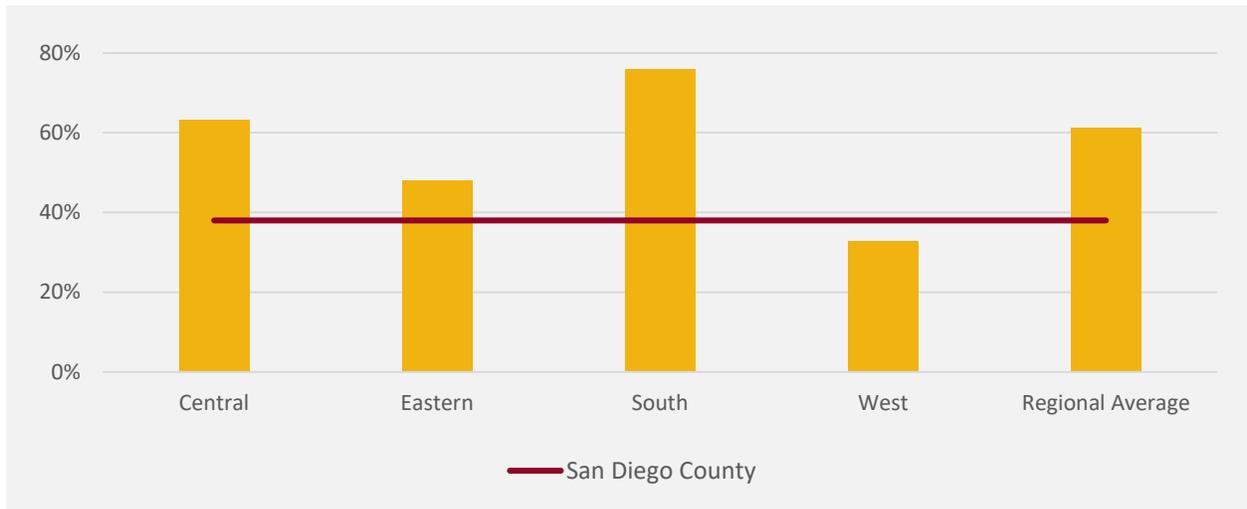
Table 5. 2018-2019 Logistics/Materials Transport (051000) Program Summary

	2018-2019
<b>Skill Attainment</b>	100%
<b>Completion</b>	50%
<b>Persistence</b>	78%
<b>Placement</b>	67%
<b>2018-2019 Enrolled</b>	74

<b>Females Enrolled</b>	24
<b>WBL Completions</b>	100
<b>Program Articulations</b>	3
<b>Program Completions</b>	8
<b>Annual SWC Regional Openings</b>	276
<b>Annual County Openings</b>	1,030
<b>Median Annual Earnings of SWC Graduates (2016-2017)</b>	\$42,052

The region’s population is also naturally positioned to communicate across international boundaries; nearly eight in ten residents within the south sub-region speak a language other than English at home (Figure 23). Of the residents in the study region who speak a language other than English at home, Spanish is by far the most common language (Figure 24).

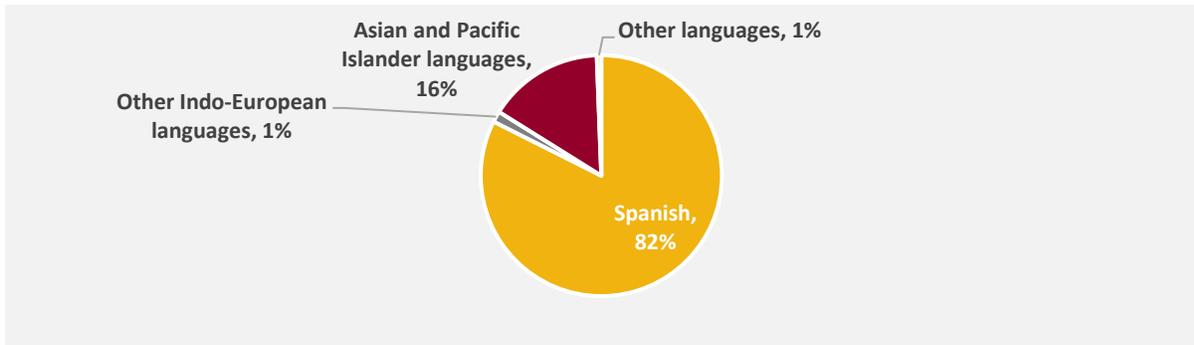
Figure 23. Language Other Than English Spoken at Home (2018)<sup>12 13</sup>



<sup>12</sup> U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.

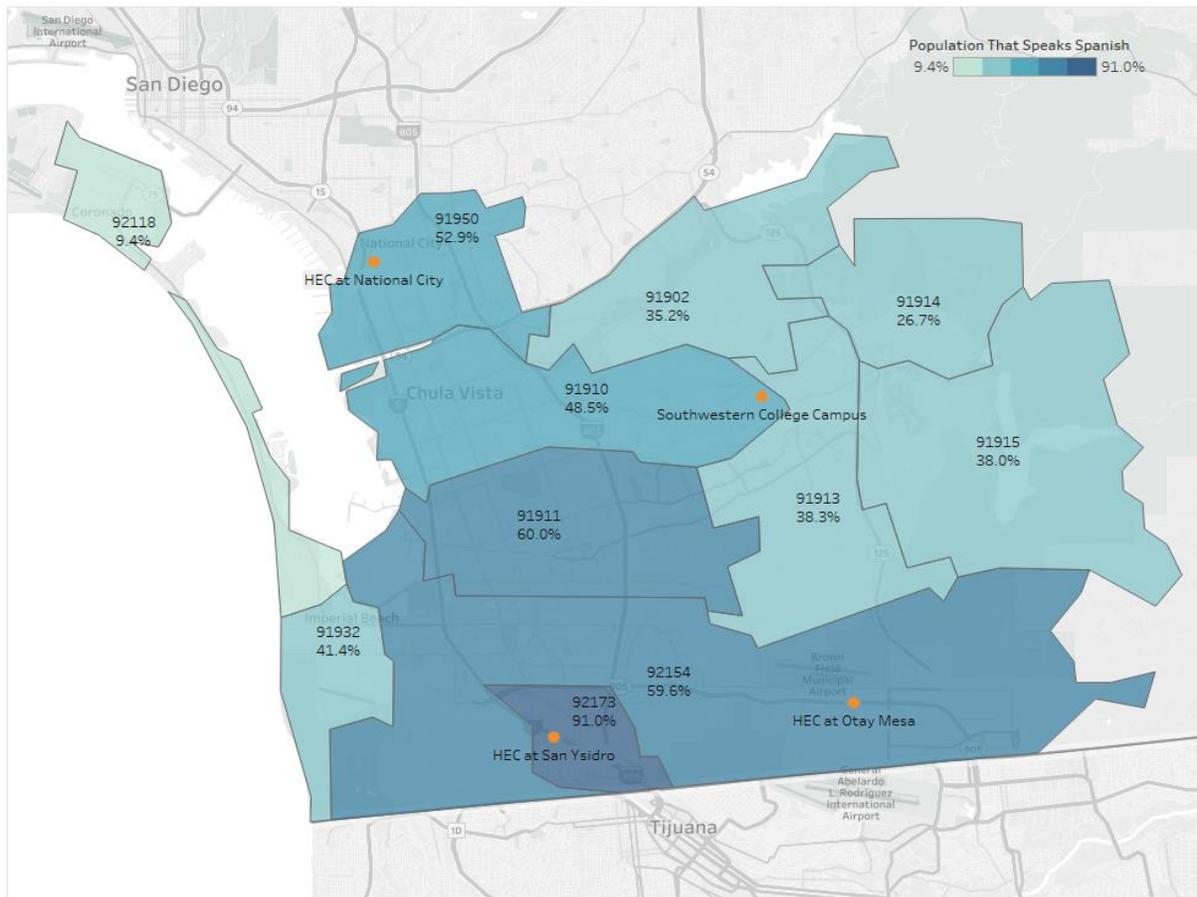
<sup>13</sup> Many of these people also speak English in addition to the other language(s).

Figure 24. Languages Other Than English Spoken at Home (2018)<sup>14</sup>



Not surprisingly, zip codes closer to the U.S.-Mexico border tend to have higher rates of households that speak Spanish. In fact, 91% of households in the zip code 92173 (San Ysidro) speak Spanish (Figure 25).

Figure 25. Percent of Population that Speak Spanish at Home (2018)<sup>15</sup>



Among the 16% of the population that speak an Asian or Pacific Islander language, Tagalog (including Filipino), is by far the most common, accounting for nearly three-fourths (74%) of those who do speak an Asian or Pacific

<sup>14</sup> U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.

<sup>15</sup> U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.

Islander Language (Figure 26). The zip code of Coronado (92118) has the greatest concentration of residents who speak an Asian or Pacific Islander language (Figure 27).

Figure 26. Asian and Pacific Islander Languages Spoken at Home (2018)<sup>16</sup>

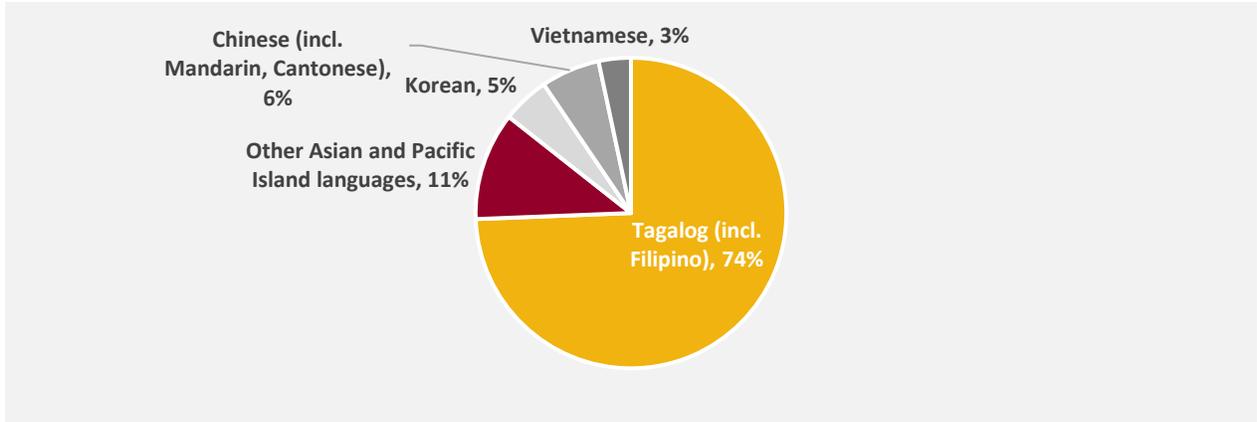
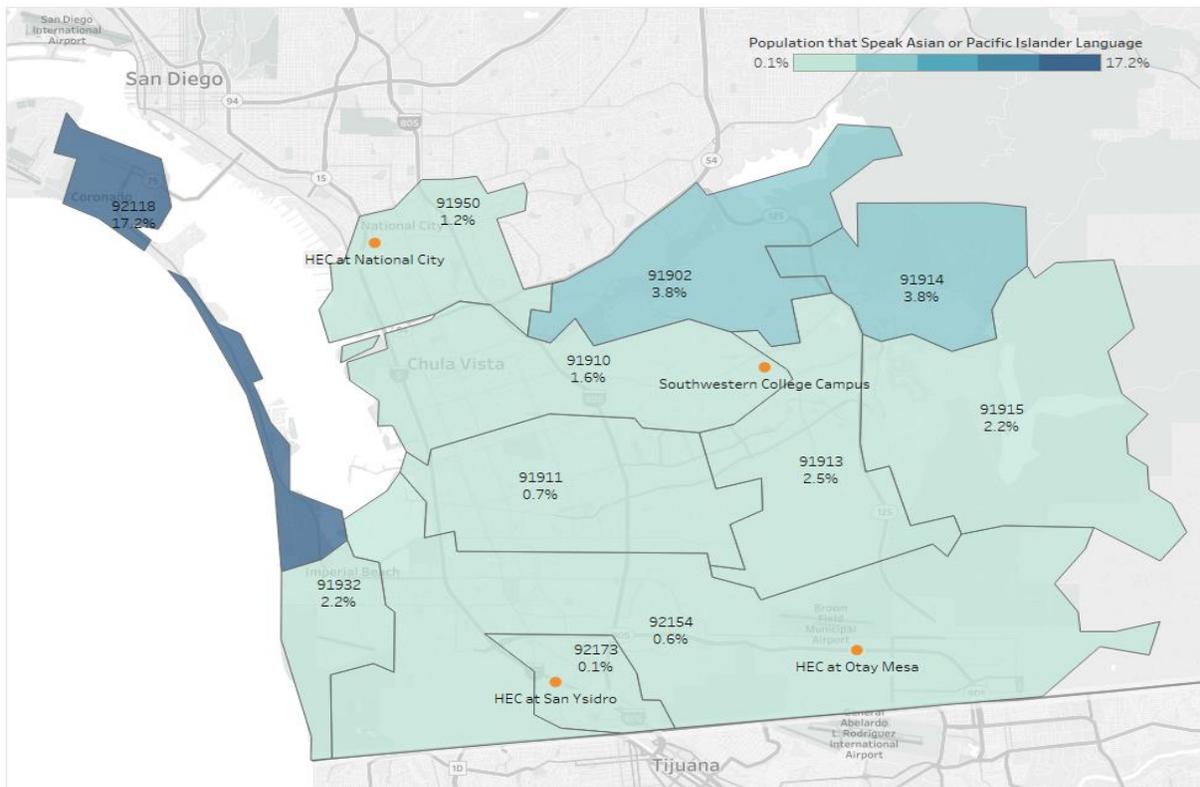


Figure 27. Percentage of Population that Speaks Asian or Pacific Islander Language (2018)<sup>17</sup>



<sup>16</sup> U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.

<sup>17</sup> U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.

## Support SWC’s Existing Programmatic Strengths

This section provides an overview of the survey responses from employers in several industry clusters in which SWC already has substantial program offerings. Understanding these employers’ perspectives and challenges will help SWC better prepare students as the future workforce of South County.



### SWC STRATEGIC PRIORITY

Student Success and Economic,  
Workforce, & Community  
Development

## HEALTHCARE

The Healthcare industry cluster includes industries and firms that provide medical diagnosis and treatment, and includes allied health roles.

### HIRING CHALLENGES

**Healthcare firms were more likely to cite difficulty hiring for entry-level middle-skill positions than businesses overall.** Twenty-eight percent of Healthcare firms found it ‘very difficult’ to find entry-level applicants for middle-skill positions. Small applicant pools were the most cited cause of this hiring difficulty. Healthcare employers also noted that hiring for non-entry-level middle-skill positions is similarly, if not slightly more, difficult.

### SKILLS AND CERTIFICATIONS

**Certifications are crucial for Healthcare positions.** Fifty-eight percent of Healthcare firms reported requiring applicants for middle-skill positions to have previously obtained specific credentials and certifications, which is 17 percentage-points higher than the rate across all respondent firms. Medical Assistants were the most commonly-cited occupation with hiring challenges, as well as the most commonly-sought after certification. Employers also noted hiring difficulty with Certified-Nursing Assistants (CNAs) and other nursing positions, such as LVNs and RNs. Dental Assistant certifications were also cited by several employers as high-demand certifications.

Eighty-nine percent of Healthcare firms reported that it was ‘very important’ for middle-skill position candidates to have social and verbal communication skills, which is more than 15 percentage points higher than the average rate of all respondent firms. Problem-solving and critical thinking skills were also very frequently cited as ‘very important’ (79%). However, 78% of Healthcare firms reported at least some difficulty finding applicants with social and verbal communication skills, and 83% reported similar difficulty finding candidates with problem-solving and critical thinking abilities.

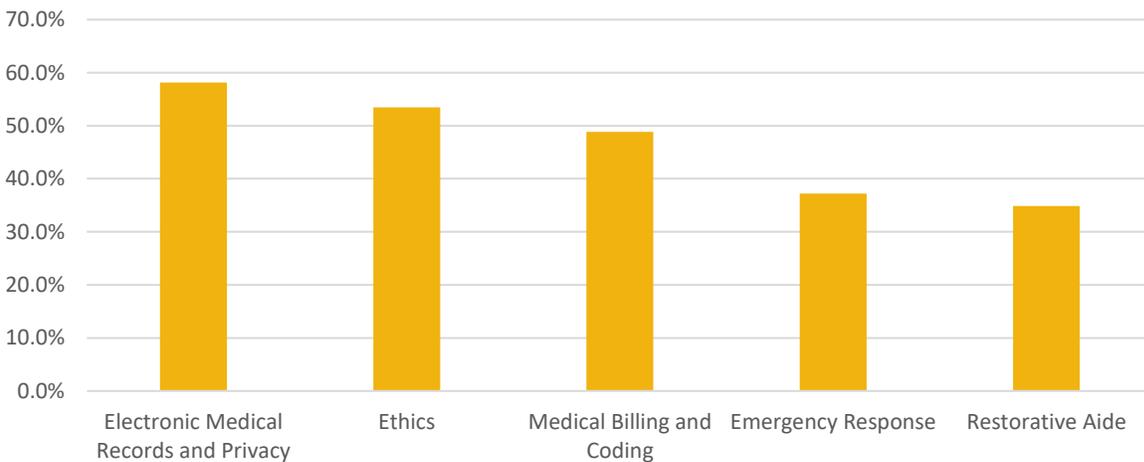
Eight-in-ten (82%) Healthcare firms stated that there is ‘great need’ for their employees to work as a team. Seventy-five percent of firms also cited a high need for employees to have people and customer service skills along with adaptability and flexibility.

## TRAINING PROVIDERS AND HIRING

**Healthcare firms showed strong interest in collaboration with higher education institutions.** Around 41% of respondents cited ‘great interest’ in an apprenticeship-type program for future employees, a full 10 percentage points above the overall respondent rate. Another 39% noted ‘great interest’ in participating in a sourcing and pre-screening program.

Many Healthcare firms also show interest in specific programs. Fifty-eight percent of Healthcare firms indicated ‘great interest’ in programs that teach students about electronic medical records and privacy. More than half of respondents (54%) also noted ‘great interest’ in programs that teach ethics (Figure 20).

Figure 20. ‘Great Interest’ in Programs for Healthcare Firms



**Overall, regional Healthcare firms reported a moderate to high level of satisfaction with area training providers.** Thirty-six percent of respondents reported being ‘very satisfied’ and around 45% of respondents stated that they were ‘somewhat satisfied’, which was similar to the regional average. No respondent Healthcare firms reported being ‘very dissatisfied’.

Of the Healthcare firms that have not recruited from Southwestern College, sixty-three percent of reported that they were unaware of Southwestern College’s program offerings, which is roughly the same as the response rate of all industry respondents. However, about six-in-ten (59%) of firms cited interest in working with Southwestern College to develop work-based learning opportunities, which is 10 percentage points greater than the rate of all-industry respondents. This suggests local Healthcare firms are very interested in working collaboratively with Southwestern College.

## PROFESSIONAL AND BUSINESS SERVICES

Firms in Professional and Business Services industries provide a range of services, including legal, accounting, landscaping, consulting, and other specialty services.

## FUTURE OF REMOTE WORK

**Professional and Business Services firms were more likely to report that remote work would continue after public health orders cease to require it.** Nearly 30% of Professional and Business Services firms reported that all or

most employees could continue to work remotely, nearly twice the rate of all respondent firms. Only around 15% of respondents reported that none of their workers would be able to work any amount of time remotely in the future. Of the firms that responded that at least some of their employees could continue to work remotely, around 52% reported that workers would frequently or almost always work remotely, and another 22% could decide on their own.

## HIRING CHALLENGES

**Approximately 32% of Professional and Business Services firms found it ‘somewhat difficult’ to find qualified entry-level applicants to middle skill positions, and another 9% found it ‘very difficult.’** Respondents reported similar difficulty levels in hiring for non-entry level middle-skill positions. Small applicant pools were the most cited cause of this difficulty for both cohorts, with slightly fewer firms naming a lack of experience and industry-specific knowledge. Professional and Business services firms were the second-most likely industry to mention these difficulties as a source for hiring challenges.

## SKILLS AND CERTIFICATIONS

**Seventy-three percent of Professional and Business Services firms identified problem-solving and critical thinking skills as ‘very important’ for applicants for middle-skill positions to have.** Sixty-nine percent similarly state social and verbal communication skills are ‘very important’ for such applicants. However, around 79% of firms responded that it was either ‘very difficult’ or ‘somewhat difficult’ to find applicants with problem-solving and critical thinking skills. A further 67% of firms responded in the same manner for social and verbal communication skills.

The skills most cited as necessary for employees of Professional and Business Services firms were technical writing and the ability to work without active supervision. Amongst all industries surveyed, Professional and Business Services firms were the most likely to cite a need for technical writing skills. Paralegal certificates were the most commonly sought-after certifications among employers.

## TRAINING PROVIDERS AND HIRING

**A sizable number of Professional and Business Services firms stated interest in student preparation programs.** Around 32% of firms reported ‘great interest’ in a sourcing and pre-screening program for future employees. Slightly fewer firms (29%) expressed similar levels of interest in programs that teach future students to use Microsoft Excel, including the ability to organize, summarize, and visualize data. These response rates were similar to the overall response rates of all respondents.

Regional Professional and Business Services firms were mostly positive when asked about their satisfaction with area training providers’ ability to provide qualified workers. Forty-five percent of firms reported being ‘very satisfied’ and another 32% reported being ‘somewhat satisfied’. However, a small but significant 10% of respondents stated they are ‘very unsatisfied’ with area training providers, which is the highest rate of dissatisfaction of all industries surveyed. This may be related to the relatively low proportion of Professional and Business Services firms (19%) that have worked with regional education and training providers.

Additionally, of the Professional and Business Services firms that have not recruited from Southwestern College, 72% reported being unaware of Southwestern College’s program offerings, which is 8 percentage points higher than the average for all businesses. This finding indicates a community awareness gap that should be addressed.

## FINANCE, BUSINESS, INSURANCE, AND REAL ESTATE (FIRE)

The Finance, Insurance, Banking, and Real Estate industry cluster includes industries and firms that specialize in financial management and transactions, insurance and actuarial activities, and real estate transactions.

## FUTURE OF REMOTE WORK

**Regional Finance, Business, Insurance, and Real Estate (FIRE) businesses were the most likely to report that remote work would continue beyond when public health orders mandate it.** Over 46% of respondents reported that all or most employees could work remotely, which was the highest percentage of all industries surveyed. Of firms that responded that at least some of their workers could continue remotely in some capacity, 58% indicated that those employees could work remotely either frequently or almost always. Another 26% reported the amount of remote work would be the employees' decision. Conversely, about a quarter of firms (23%) responded that none of their workers could continue remotely.

## HIRING CHALLENGES

**FIRE firms were also more likely to report challenges in finding qualified applicants.** Seventy-seven percent of FIRE firms stated that they were having at least some difficulty finding candidates for entry-level middle-skill positions. Similar levels of difficulty were reported for non-entry-level middle-skill positions.

## SKILLS AND CERTIFICATIONS

**Firms in the FIRE sector were more likely than overall survey respondents to require specific credentials and certificates.** Fifty-two percent of firms—10 percentage points higher than the overall business average—reported that applicants for middle-skill positions needed credentialing or specific certifications. Another 20% reported that certifications were preferred. Insurance licenses and accounting certifications were the most cited examples, although several respondents also mentioned interest in real estate licenses.

**FIRE firms are also more likely to value industry knowledge.** Eighty-four percent of firms reported that it was 'very important' for applicants of middle-skill positions to have industry-specific knowledge and skills. This is nearly 30 percentage points higher than the regional average amongst all industries. Furthermore, nearly all respondents (96%) said that it was either 'very difficult' or 'moderately difficult' to find applicants with this knowledge.

Social and verbal communication skills were cited as the second most sought-after skill for middle-skill positions, with 80% of respondents reporting it as 'very important'. Problem solving and critical thinking skills were rated similarly (76% 'very important'). It is also important to note that employers feel these skills are difficult to find; nearly 83% of firms stated that it is 'very difficult' or 'somewhat difficult' to find applicants with problem-solving and critical thinking skills, and around 70% stated the same regarding social and verbal communication skills.

Nearly all (91%) FIRE survey respondents indicated that there is 'great need' for employees with people and customer service skills, the highest of any sector covered in this survey.

## TRAINING PROVIDERS AND HIRING

**A significant number of FIRE firms expressed interest in student preparation programs.** Programs and training that teaches Microsoft Excel, including the ability to organize, summarize, and visualize data, were cited as being of 'great interest' to nearly 44% of firms. A further 39% expressed interest in apprenticeship-type programs. FIRE firms were more likely to report great interest in these programs than survey respondents overall.

FIRE firms were slightly more likely to indicate dissatisfaction with area training provider's ability to provide quality workers. While most survey respondents reported being either 'very satisfied' or 'somewhat satisfied', nearly 22% reported being 'somewhat unsatisfied' with a further 4% stating that they were 'very unsatisfied'. FIRE respondents were more likely to be unsatisfied with area training providers than the regional average, with 10-percentage points more FIRE employers reporting being 'somewhat unsatisfied.'

Fifty-three percent of firms indicated that they were unaware of Southwestern College's program offerings, which was slightly less than the average of all respondents. However, around twelve percent stated that the college's

programs were not applicable to the talent needs of their organization, which is 4 percentage points above the regional response rate. A slightly lower-than average share (46%) of FIRE respondents indicated that they would be interested in working with Southwestern College to develop more work-based learning opportunities, indicating possible avenues for program development.

## TOURISM, RECREATION, AND HOSPITALITY

This includes industries and firms that are involved in providing food, entertainment, and accommodation services.

### COVID-19 IMPACTS

**Tourism, Recreation, and Hospitality firms were more likely to report negative impacts to their business from COVID-19 than businesses overall.** Approximately two-thirds (68%) of Tourism, Recreation, and Hospitality businesses reported that they had to temporarily close due to COVID-19 but had since reopened. Nearly twice as many Tourism, Hospitality, and Recreation businesses (26%) reflected uncertainty about when their business would recover compared to all business respondents (14%). Only 47% of the Tourism, Recreation, and Hospitality firms reported that they did not furlough employees compared to 76% of businesses overall.

### SKILLS AND CERTIFICATIONS

**Tourism, Recreation, and Hospitality firms are more likely to not require any credentials or certifications for middle-skill positions than overall businesses.** Similarly, 80% of Tourism, Recreation, and Hospitality respondents reported that people and customer service skills are in great need, compared to 66% of respondents overall. Of employers that require or prefer certifications, food handling certificates, a culinary degree, and accounting software were mentioned.

### TRAINING PROVIDERS AND HIRING

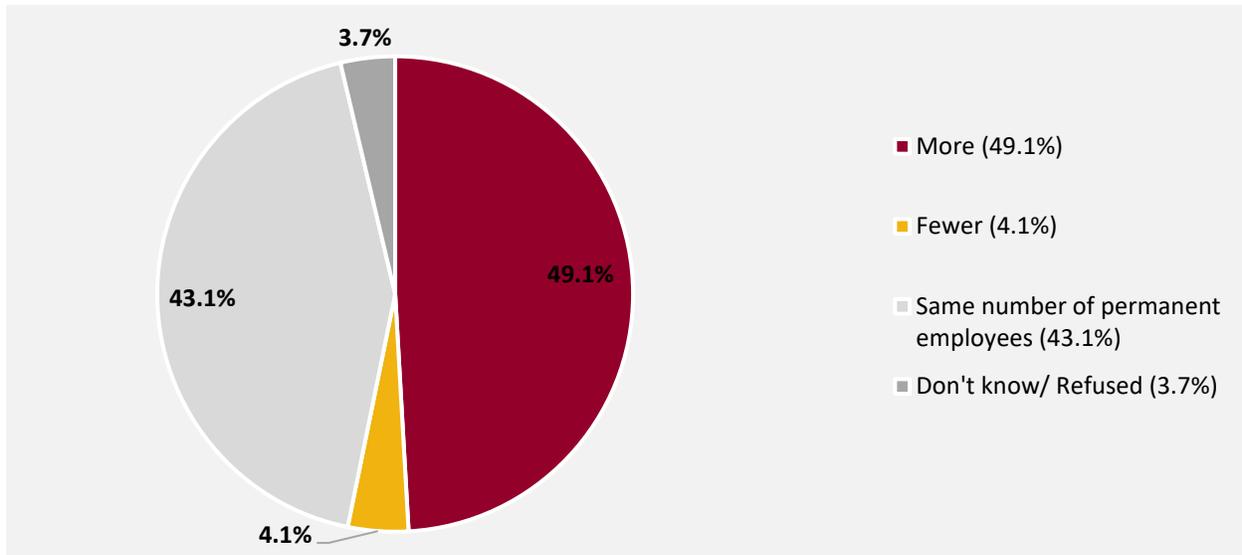
**Tourism, Recreation, and Hospitality firms are generally satisfied with education and training institutions' ability to provide qualified workers, but Southwestern College is not their primary source of talent.** Two-thirds of Tourism, Recreation, and Hospitality respondents reported being satisfied with regional education and training institutions, but only 13% reported previously recruiting from Southwestern College, much lower than businesses overall (26%). Of those who had not worked with Southwestern College, a quarter (25%) reported other regional educational institutions meeting their needs.

## COVID-19 Impacts and Implications

This section highlights the impacts and employers' expectations of the future related to COVID-19. Even as the rollout of vaccines dampens the number of COVID-19 cases, staffing expectations and remote work models, will have lasting impacts on the local economy and the workforce that drives it.

**Nearly half (49%) of employers surveyed expect to have more permanent employees 12 months from the time of taking the survey, and only 4% of employers reported that they expect to have fewer permanent employees (Figure 2).**

*Figure 2 Expected Number of Permanent Employees 12 Months from Now*



**While a majority of businesses experienced negative impacts from COVID-19, most anticipate a quick recovery.**

More than half (55%) of the employers surveyed experienced negative impacts to their business from COVID-19. One in five (21%) respondents had to completely shut down due to COVID-19 but have since reopened, and another 21% of respondents had little to no impact on their business from COVID-19 (Figure 3). The expected recovery time for businesses varies; 43% of respondents expect to fully recover within the next few months as people get back to work and out of the house, and another 26% reported their business has already fully recovered. Of the employers surveyed, 14% are unsure when their business will fully recover, and another 9% anticipate fully recovering when there is a vaccine, or treatment for COVID-19, and everyone feels safe again (Figure 4).

Figure 3 Has COVID-19 had a Negative Impact on Your Business?

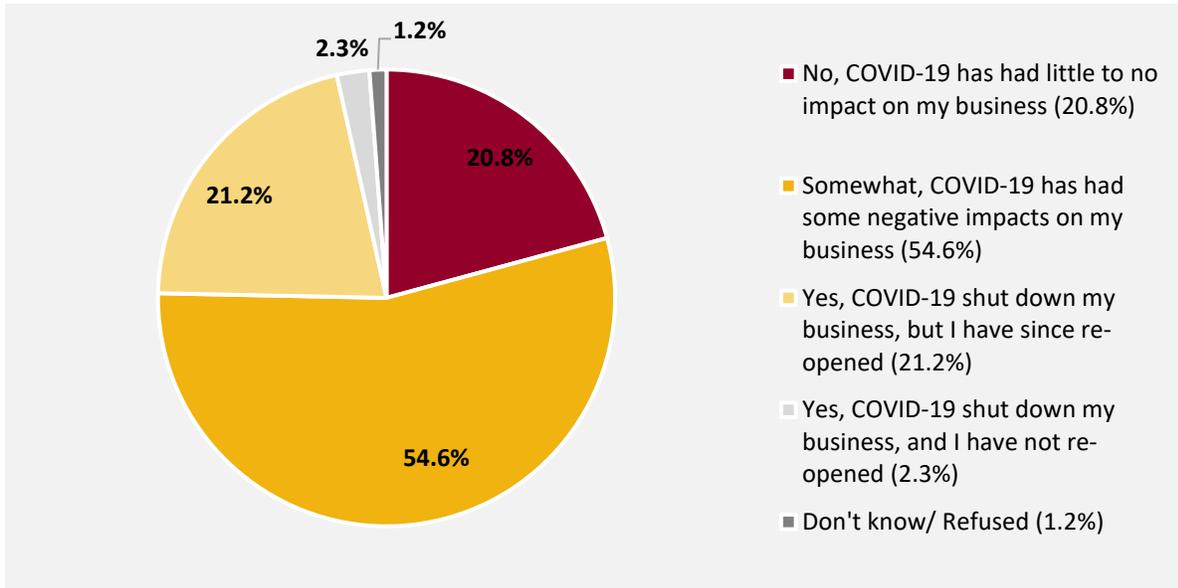
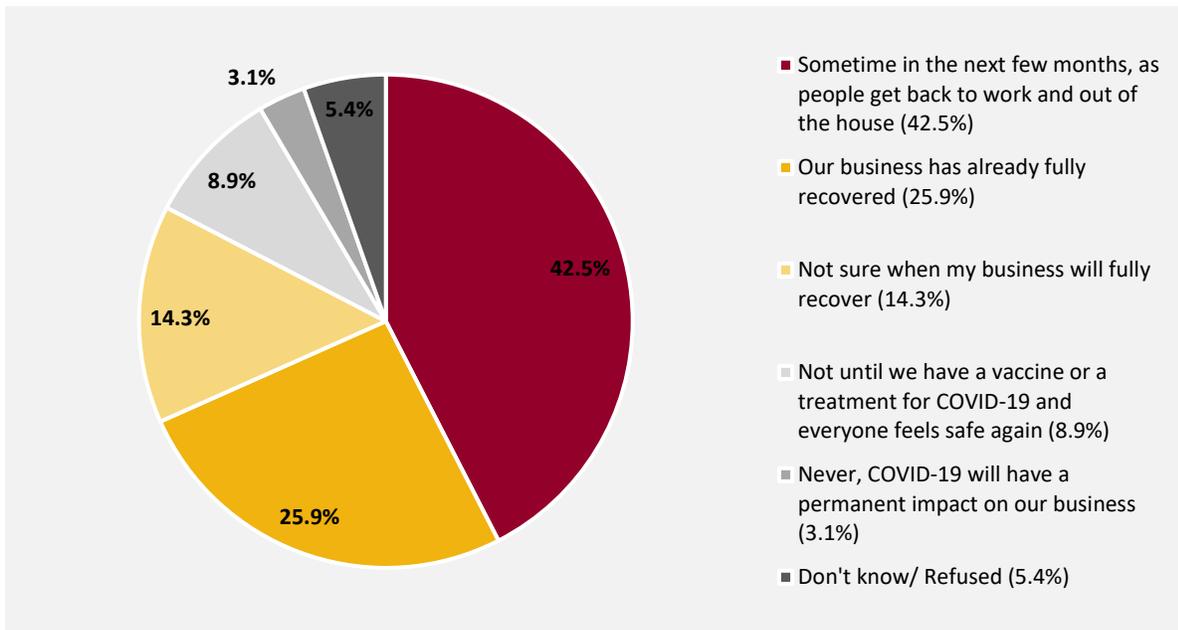


Figure 4 When do You Expect Your Business to Fully Recover from the Impacts of COVID-19?



**Most employees will not be able to work remotely once public health orders are relaxed.** Approximately one-third (36%) of respondents reported that none of their employees will be able to work remotely once public health orders no longer require them to do so. In contrast, 17% of employers reported that all or most of their employees will be able to work remotely (Figure 5). Of the 61% of employers that are allowing at least some of their employees to work remotely, 23% reported that their employees will be able to ‘always’ or ‘almost always’ work remotely. Another 35% of employers reported that their employees will be able to work remotely less than half of the time (Figure 6).

Figure 5 How Many of Your Employees will be Able to Work Remotely Once Public Health Orders no Longer Require them to do so?

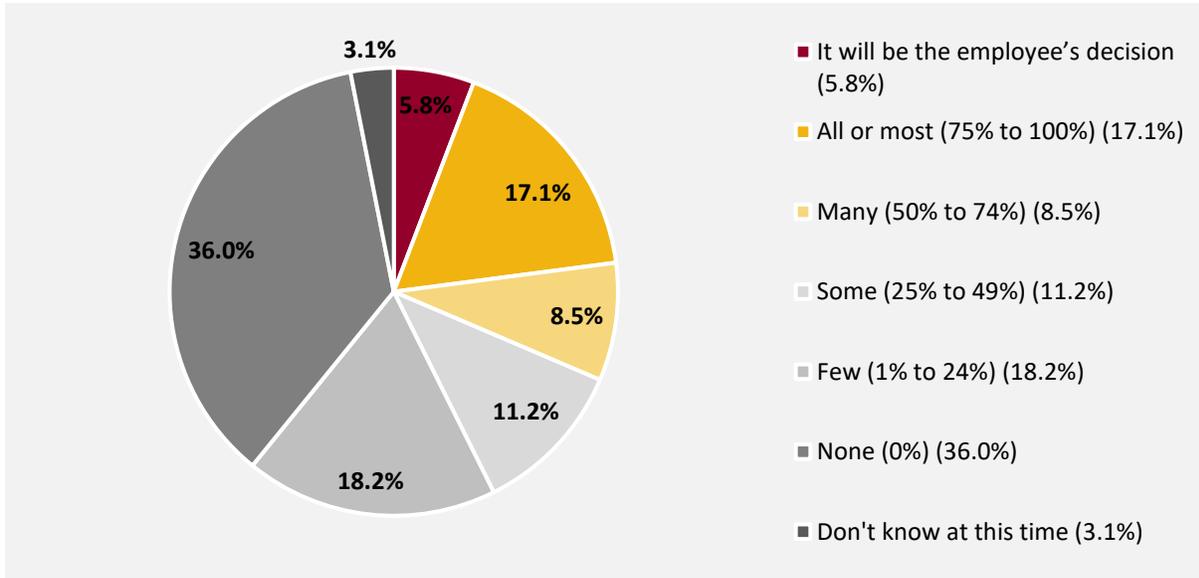
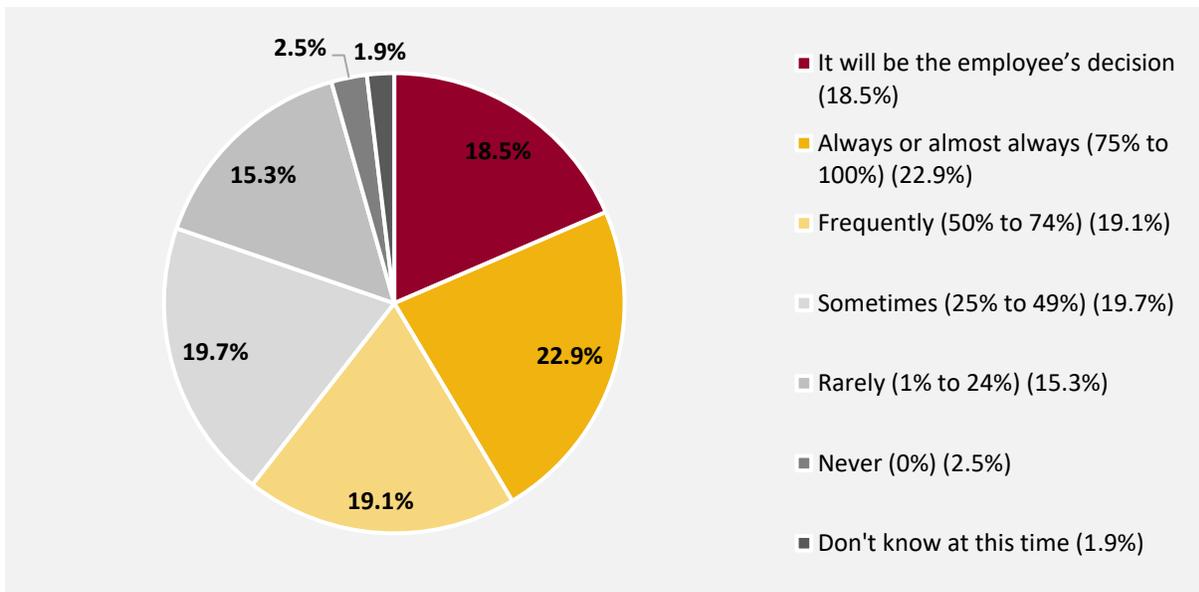


Figure 6 How Often Will Those Employees be Able to Work Remotely Once Public Health Orders no Longer Require Them to do so?



## Appendix A: Survey Methodology

BW Research conducted online employer surveys with businesses in the following zip codes in San Diego County. These zip codes were determined to be within a 30-minute drive from the primary Southwestern College campus in Chula Vista.

Zip Code	Primary City	Zip Code	Primary City	Zip Code	Primary City
91901	Alpine	92040	Lakeside	92119	San Diego
91902	Bonita	92071	Santee	92120	San Diego
91910	Chula Vista	92101	San Diego	92121	San Diego
91911	Chula Vista	92102	San Diego	92122	San Diego
91913	Chula Vista	92103	San Diego	92123	San Diego
91914	Chula Vista	92104	San Diego	92124	San Diego
91915	Chula Vista	92105	San Diego	92126	San Diego
91932	Imperial Beach	92106	San Diego	92131	San Diego
91935	Jamul	92107	San Diego	92132	San Diego
91941	La Mesa	92108	San Diego	92134	San Diego
91942	La Mesa	92109	San Diego	92135	San Diego
91945	Lemon Grove	92110	San Diego	92139	San Diego
91950	National City	92111	San Diego	92140	San Diego
91977	Spring Valley	92113	San Diego	92145	San Diego
91978	Spring Valley	92114	San Diego	92147	San Diego
92019	El Cajon	92115	San Diego	92154	San Diego
92020	El Cajon	92116	San Diego	92155	San Diego
92021	El Cajon	92117	San Diego	92173	San Ysidro
92037	La Jolla	92118	Coronado		

The survey was programmed and tested in-house by BW Research. Respondents were recruited through third-party employer phone samples, employer email samples, and third-party email online panels. Southwestern College also disseminated the survey to known employers and partners in the region. In total, 7,879 emailed invites were distributed business locations in the zip code region, with approximately 2,250 phone calls to records without emails. To qualify for the survey, respondents were required to be knowledgeable about hiring or staffing at their firm.

The survey was fielded between April 16<sup>th</sup> and June 2<sup>nd</sup>, 2021. There were 284 respondents in total for the employer survey. The average length for the survey was just under 13 minutes. The margin of error is +/- 5.81% for the zip code region at a 95% confidence interval. BW Research also conducted six executive interviews, including discussions with the South County Economic Development Council, as well as several follow-up interviews with employers.

# Appendix B: Hiring Difficulty by Industry

Figure 28 Difficulty Finding Qualified Talent - Manufacturing

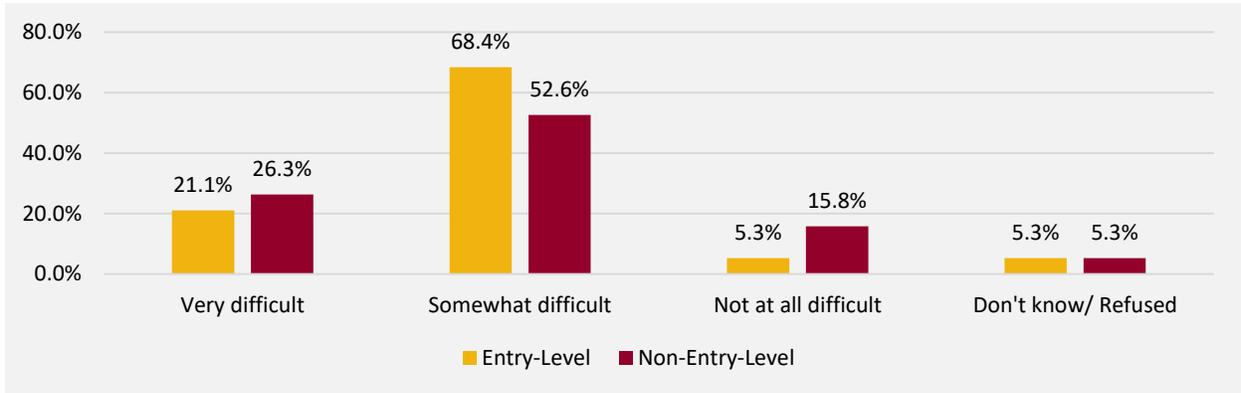


Figure 29 Difficulty Finding Qualified Talent - Architecture, Design, or Engineering

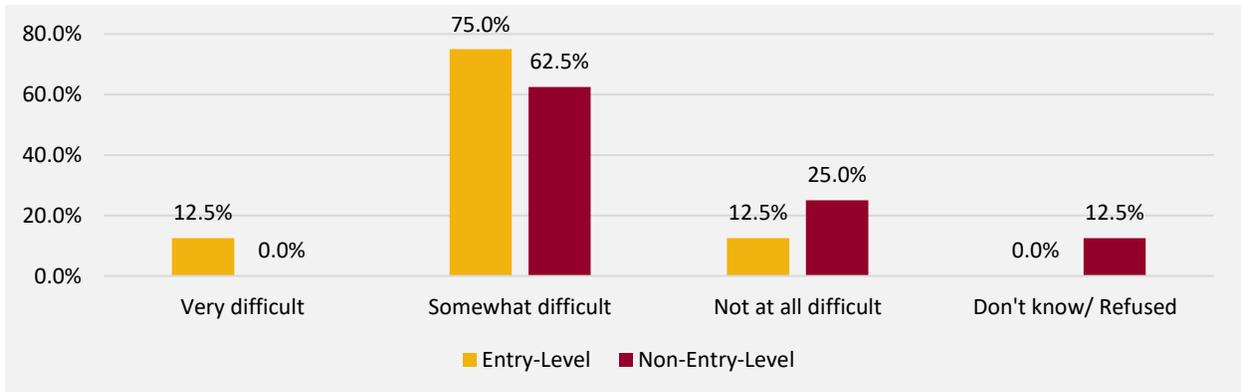


Figure 30 Difficulty Finding Qualified Talent - Building or Construction

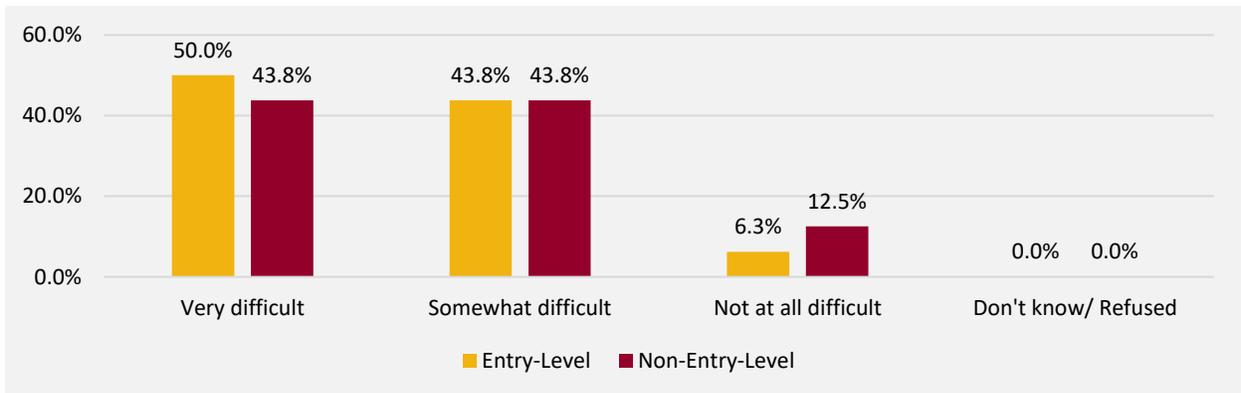


Figure 31 Difficulty Finding Qualified Talent - Technology or Information & Communication Technologies

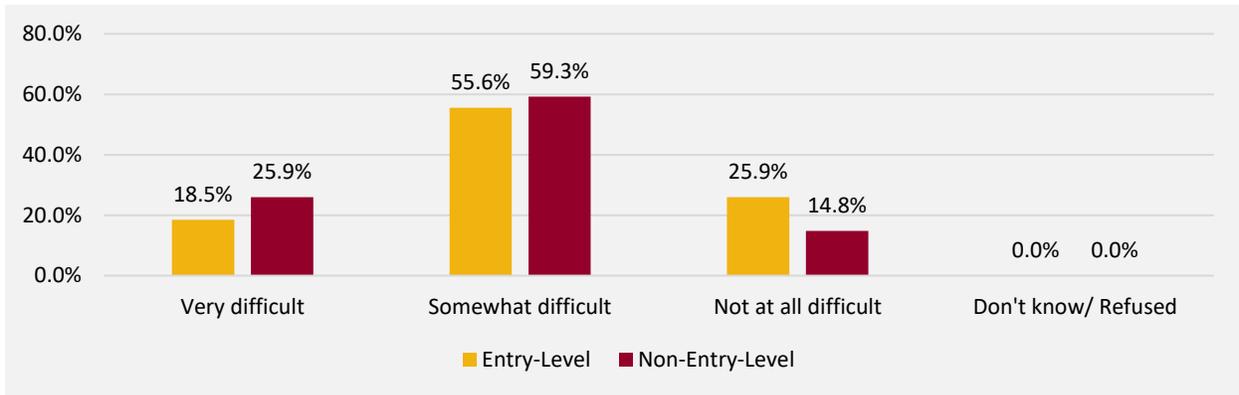


Figure 32 Difficulty Finding Qualified Talent - Logistics and Transportations

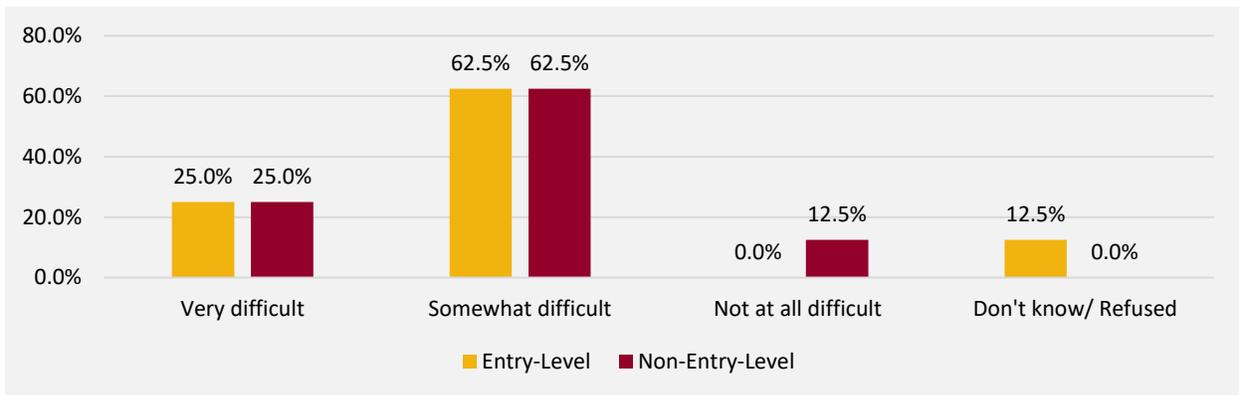


Figure 33 Difficulty Finding Qualified Talent - Healthcare (including Dental)

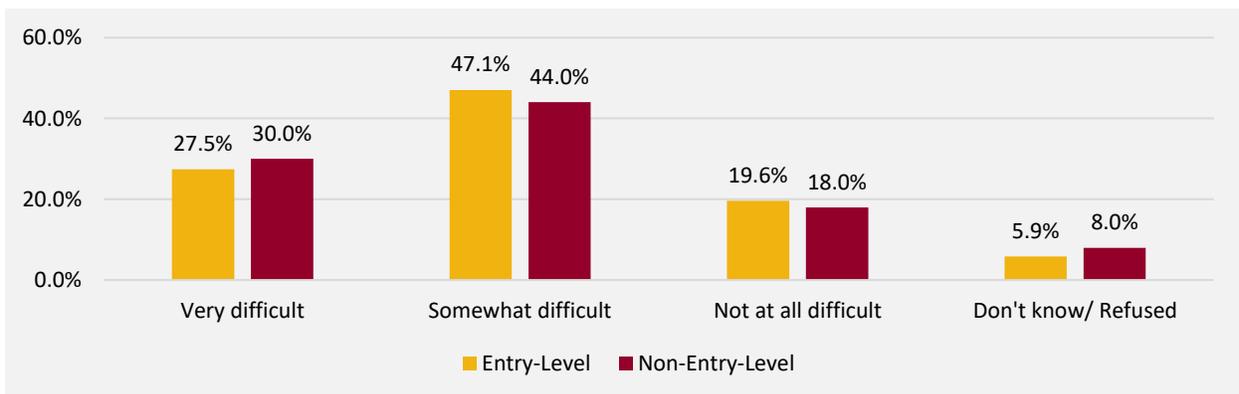


Figure 34 Difficulty Finding Qualified Talent - Professional and Business Services

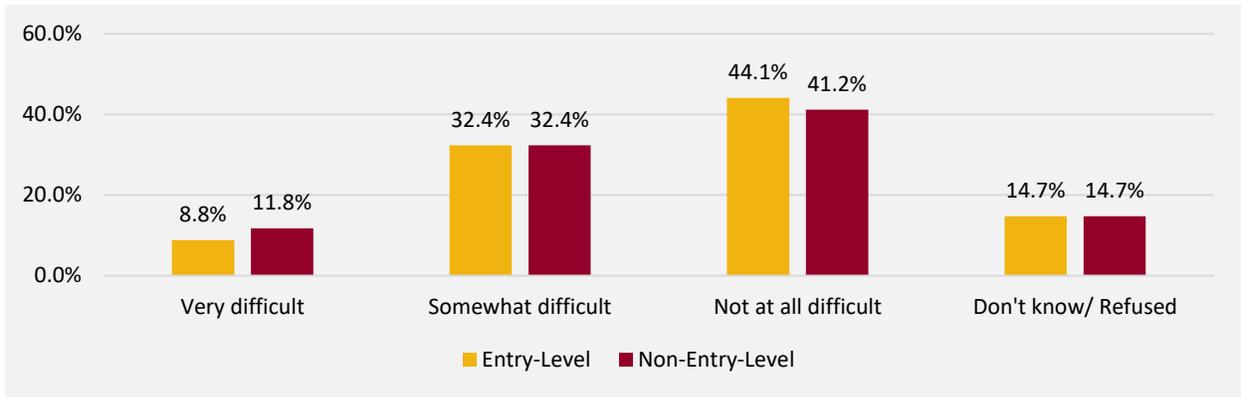


Figure 35 Difficulty Finding Qualified Talent - Finance, Business, Insurance, or Real Estate

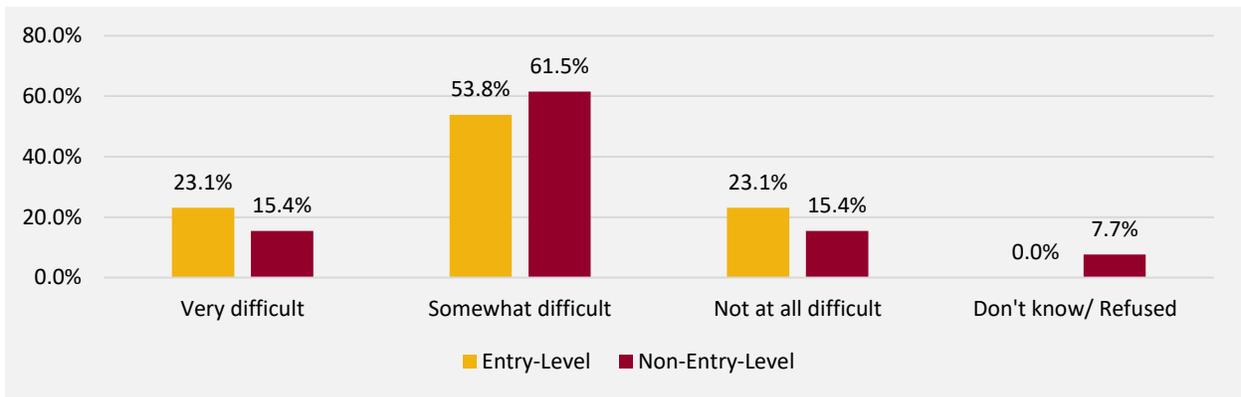


Figure 36 Difficulty Finding Qualified Talent - Tourism, Recreation, and Hospitality

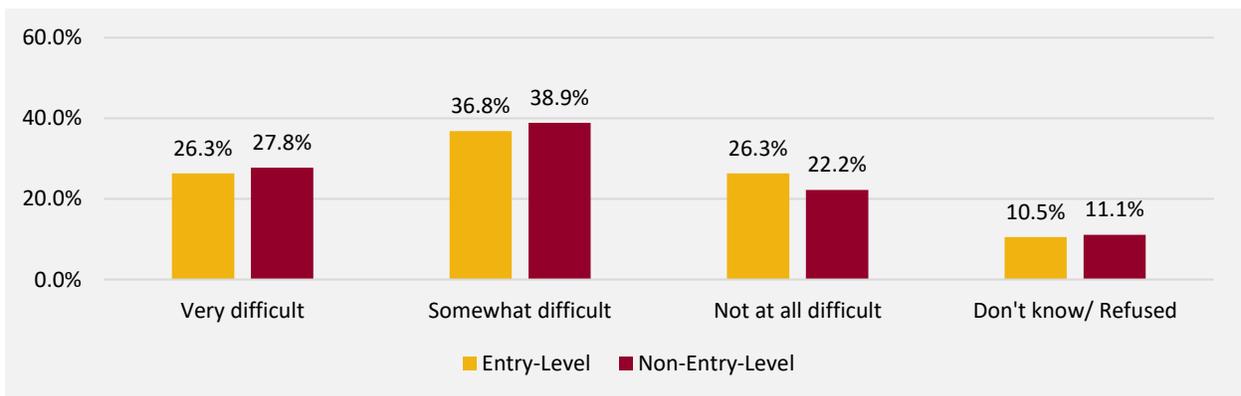


Figure 37 Difficulty Finding Qualified Talent - Education and Childcare Services

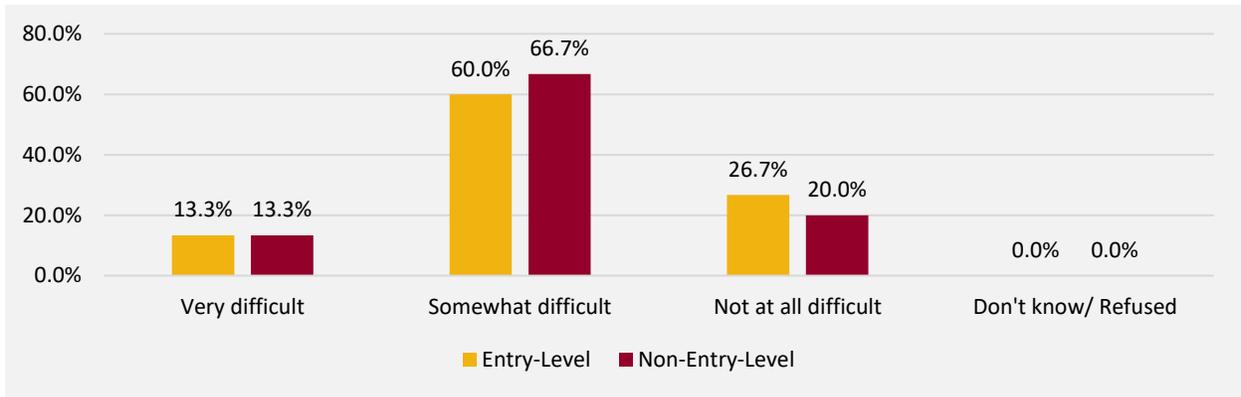
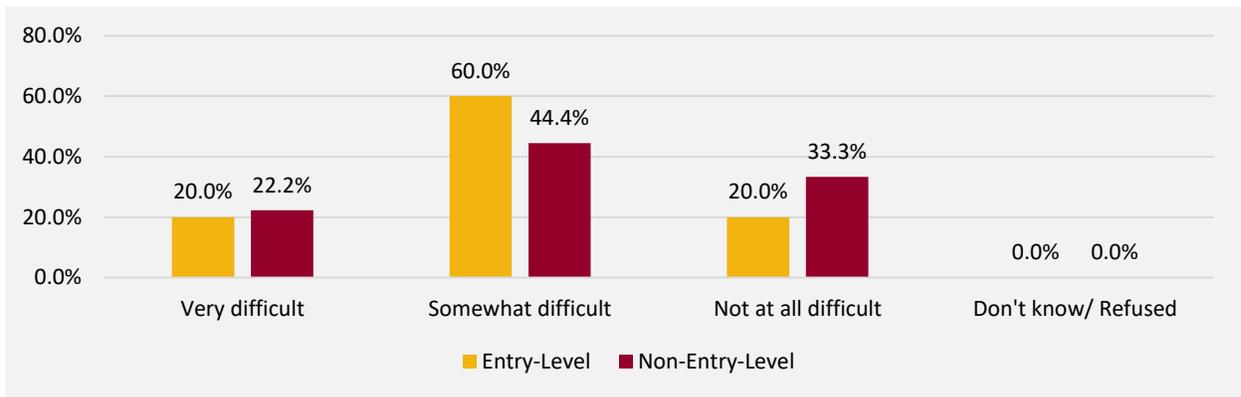


Figure 38 Difficulty Finding Qualified Talent - Human Services (including Addiction Treatment and Family Service Workers)



# Appendix C: Survey Toplines



Southwestern College  
Employer Survey  
June 2021  
Preliminary Toplines (n=284)

## Southwestern College Employer Survey - Preliminary Toplines

.....

### Introduction:

[FIRMS WITH LESS THAN 25 EMPLOYEES]

Hello, my name is \_\_\_\_\_. May I please speak to a senior manager or someone involved with staffing at [organization]?

[IF NEITHER A MANAGER OR SOMEONE WITH STAFFING IS AVAILABLE] Can I speak to a decision maker at your location?

[FIRMS WITH MORE THAN 25 EMPLOYEES]

Hello, my name is \_\_\_\_\_. May I please speak to someone involved in Human Resources or staffing at [organization]?

[IF NEITHER A MANAGER OR SOMEONE WITH STAFFING IS AVAILABLE] Can I speak to a decision maker at your location?

Hello, my name is \_\_\_\_\_ and I'm calling on behalf of **Southwestern College (SWC)** who would value your participation in a brief survey about the region's talent.

**(If needed):** This survey has been commissioned by the SWC, which is committed to supporting the County's businesses and job-seekers.

**(If needed):** The survey is being conducted by BW Research, an independent research organization, and should take approximately ten minutes of your time.

**(If needed):** Your individual responses will **not** be published; only aggregate information will be used in the reporting of the survey results.

**(If needed):** The SWC develops innovative strategies that help students achieve their educational and economic goals.

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## Section 1. Screener Questions

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- A. Are you involved in staffing or hiring decisions at your firm or organization? (If not, could you please connect me to the appropriate person?)

**100.0%** Yes, I am involved in staffing or hiring decisions at my firm [CONTINUE]

**0.0%** Yes, I can connect you to the appropriate person [SKIP TO END FOR CONTACT INFORMATION]

**0.0%** No [TERMINATE]

**0.0%** Not sure [TERMINATE]

- B. What is the zip code of your primary business location or the business location at which you spend most of your time?

**100.0%** Enter zip code [CHECK ZIP CODE OR CITIES TO SEE IF THEY QUALIFY, TERMINATE FOR ZIP CODES NOT LISTED]

- C. At the start of 2020 (Before COVID-19), did your business location have two or more employees (including yourself)?

**100.0%** Yes [CONTINUE]

**0.0%** No [TERMINATE]

## Section 2. Firm Profile & Hiring Expectations

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I'd like to begin by asking you a few general questions about your firm and your current employees. For this survey, **please only answer for your current business location**. If your firm has other locations, please do not include their data.

1. Including yourself and all full-time and part-time employees, how many **permanent** employees currently work at your location? [DO NOT ACCEPT 0 AS A RESPONSE] [IF NEEDED: THIS DOES NOT INCLUDE ANY WORKERS FURLOUGHED DUE TO COVID-19 – WE WILL ASK ABOUT THOSE EMPLOYEES LATER IN THE SURVEY]

**100.0%** Record # of employees

**0.0%** We have shut-down due to COVID-19 and have not re-opened [SKIP TO Q0]

**0.0%** Refused [DON'T READ]

[IF REFUSED, OFFER INTERVALS]

**24.5%** 1 to 4 employees

**24.5%** 5 to 9 employees

- 19.3% 10 to 24 employees
- 9.1% 25 to 49 employees
- 16.8% 50 employees or more
- 5.8% Don't know/ Refused

2. If you currently have [INSERT Q1] full-time and part-time **permanent** employees at your location, how many more or fewer employees do you expect to have at your location 12 months from now? (n=267)

**Projected growth: 7.4%**

- 49.1% More
- 4.1% Fewer
- 43.1% Same number of permanent employees
- 3.7% Don't know/ Refused

[If amount differs by 10% or more in either direction, ask: ]

Just to confirm, you currently have \_\_\_\_ **permanent** employees and you expect to have \_\_\_\_\_ (more/fewer) employees, for a total of \_\_\_\_ **permanent** employees 12 months from now.

3. Including all full-time and part-time employees, how many **temporary** [IF NEEDED: this includes seasonal, contract and any other temporary employees] employees currently work at your location? (n=265)

- 63.8% No temporary employees
- 17.4% 1 to 4 employees
- 1.5% 5 to 9 employees
- 4.9% 10 to 24 employees
- 8.7% 25 employees or more
- 3.8% Don't know/ Refused

4. What industry or industries best describe the work your firm is engaged in? [DO NOT READ, ALLOW MULTIPLE RESPONSES]. **Multiple responses permitted, percentages may sum to more than 100%** (n=262)

- 20.2% Healthcare (including Dental)
- 11.1% Professional and Business Services (including legal, consulting, advertising, etc.)
- 10.3% Technology or Information & Communication Technologies (including digital media)

- 8.8%** Finance, Business, Insurance, or Real Estate
- 6.1%** Building or Construction
- 6.1%** Tourism, Recreation, and Hospitality (including restaurants, breweries, and wineries)
- 6.1%** Education and Childcare Services
- 5.0%** Arts, Media, and Fashion
- 4.2%** Human Services (including Addiction Treatment and Family Service Workers)
- 3.8%** Other Manufacturing (includes manufacturing for any sector other than defense, aerospace, and transportation)
- 3.4%** Defense, Aerospace, and Transportation Manufacturing
- 3.4%** Architecture, Design, or Engineering
- 3.4%** Logistics and Transportation
- 1.9%** Automotive Technology
- 1.5%** Agriculture and Food Production
- 1.5%** Biotechnology & Biomedical Devices
- 1.5%** Public Services (including criminal justice, fire, and infrastructure)
- 13.00%** Other – *see verbatim responses*

### Section 3. COVID-19 Profile

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Next, I want to ask a few questions about how COVID-19 has impacted your business?

5. Has COVID-19 had a negative impact on your business? (n=260)

- 20.8%** No, COVID-19 has had little to no impact on my business
- 54.6%** Somewhat, COVID-19 has had some negative impacts on my business
- 21.2%** Yes, COVID-19 shut down my business, but I have since re-opened
- 2.3%** Yes, COVID-19 shut down my business, and I have not re-opened
- 1.2%** Don't know/ Refused

6. Do you have any furloughed employees that you expect to bring back as the region re-opens? If yes, how many employees do you expect to bring back? [IF NEEDED: This would just be for your current location.] (n=259)

- 76.1%** No, we did not furlough any of our employees.
- 9.7%** Yes, we furloughed employees but do not expect to bring any of them back.
- 14.3%** Yes, we expect to bring back furloughed employees as the region re-opens.

7. When do you expect your business to fully recover from the impacts of COVID-19? (n=259)
- 42.5%** Sometime in the next few months, as people get back to work and out of the house
  - 25.9%** Our business has already fully recovered
  - 14.3%** Not sure when my business will fully recover
  - 8.9%** Not until we have a vaccine or a treatment for COVID-19 and everyone feels safe again
  - 3.1%** Never, COVID-19 will have a permanent impact on our business
  - 5.4%** Don't know/ Refused
8. How many of your employees will be able to work remotely (for any amount of time) once public health orders no longer require them to do so? (n=258)
- 5.8%** It will be the employee's decision
  - 17.1%** All or most (75% to 100%)
  - 8.5%** Many (50% to 74%)
  - 11.2%** Some (25% to 49%)
  - 18.2%** Few (1% to 24%)
  - 36.0%** None (0% of the time)
  - 3.1%** Don't know at this time

[IF Q8 = "None" OR "Don't know at this time", SKIP Q9

9. How often will your employees be able to work remotely once public health orders no longer require them to do so? (n=157)
- 18.5%** It will be the employee's decision
  - 22.9%** Always or almost always (75% to 100%)
  - 19.1%** Frequently (50% to 74%)
  - 19.7%** Sometimes (25% to 49%)
  - 15.3%** Rarely (1% to 24%)
  - 2.5%** Never (0% of the time)
  - 1.9%** Don't know at this time

#### Section 4. General Hiring Profile

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Next, I would like to ask you about your general talent and hiring needs **as they pertain to middle skill jobs. These are jobs that typically require more than a high school diploma but less than a 4-year degree.**

10. Thinking of the applicants for open positions over the last 12 months, please indicate your level of difficulty finding qualified **entry-level** applicants to fill these middle skill positions. (n=255)

- 22.0% Very difficult
- 48.6% Somewhat difficult
- 23.9% Not at all difficult
- 5.5% Don't know/ Refused

[IF SELECTED “Very difficult’ OR “Somewhat difficult” AT Q10, ASK Q11, OTHERWISE SKIP]

11. What are the two biggest reasons for the hiring difficulty of entry-level applicants for middle skill positions? [ALLOW UP TO TWO RESPONSES] *Multiple responses permitted, percentages may sum to more than 100%* (n=178)

**RANDOMIZE**

- 37.1% Small applicant pool
- 34.3% Lack of experience/industry-specific knowledge
- 29.2% Lack of technical skills/expertise
- 15.2% Inadequate non-technical or soft skills (problem-solving, critical thinking, communication, teamwork, adaptability, etc.)
- 13.5% Inadequate educational attainment or certifications
- 11.8% Other – *see verbatim responses*
- 1.7% Don't know/ Refused

12. Thinking of the applicants for open positions over the last 12 months, please indicate your level of difficulty finding qualified **non-entry-level/experienced** applicants to fill these middle skill positions. (n=252)

- 22.6% Very difficult
- 48.4% Somewhat difficult
- 21.8% Not at all difficult
- 7.1% Don't know/ Refused

**[IF SELECTED "Very difficult" OR "Somewhat difficult" AT Q12, ASK Q 13, OTHERWISE SKIP]**

13. What are the two biggest reasons for the reported hiring difficulty of non-entry-level/experienced applicants for middle skill positions? **Multiple responses permitted, percentages may sum to more than 100%** [ALLOW UP TO TWO RESPONSES] (n=179)

**RANDOMIZE**

- 40.2% Small applicant pool**
- 34.6% Lack of experience/industry-specific knowledge**
- 28.5% Lack of technical skills/expertise**
- 15.1% Inadequate non-technical or soft skills (problem-solving, critical thinking, communication, teamwork, adaptability, etc.)**
- 12.3% Inadequate educational attainment or certifications**
- 8.4% Other – see verbatim responses**
- 4.5% Don't know/ Refused**

14. When a non-entry-level middle skill position becomes available in your firm, do you more often promote from within, hire from outside the company, or is it an even split between the two? (n=250)

- 24.8% Promote from within**
- 51.2% Even split (50-50 promote from within & recruit from outside)**
- 20.0% Recruit from outside**
- 4.0% Don't know/ Refused**

15. How often does your business recruit individuals from outside of Southern San Diego County (IF NEEDED: This is the area from National City, Coronado, and Bonita to the U.S.-Mexico Border)? (n=249)

- 13.3% Always or Almost Always (75% to 100% of the time)**
- 15.7% Frequently (50% to 74% of the time)**
- 33.3% Sometimes (25% to 49% of the time)**
- 19.3% Rarely (1% to 24% of the time)**
- 17.3% Never (0% of the time)**
- 1.2% Don't know/ Refused**

16. Are there any middle skill occupations that you are having difficulty finding qualified applicants for? (n=249)

- 27.8% Yes – *see verbatim responses*
- 64.9% No
- 7.3% Don't know/ Refused

**Section 5. Certifications & Skills**

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Thinking specifically about the middle skill occupations and positions at your firm **that typically require more than a high school diploma but less than a 4-year college degree**:

17. Are there any middle skill occupations your firm hires that requires or prefers specific credentials or certifications? (n=241)

- 41.1% Yes we require successful applicants to have (please specify certification(s) and occupation(s)) - *see verbatim responses*
- 8.7% Yes we prefer successful applicants to have (please specify certification(s) and occupation(s)) - *see verbatim responses*
- 44.0% No
- 6.2% Don't know/ Refused

18. How **important** are each of the following for middle skill positions that require less than a four-year degree (Very important, Somewhat Important, Not too important, DK/NA [DON'T READ]): (n=239)

	Very important	Somewhat important	Not important	Don't know/ Refused
<b>A. Technical skills</b>	55.2%	38.5%	5.9%	0.4%
<b>B. Problem-solving and critical thinking skills</b>	72.8%	23.8%	2.9%	0.4%
<b>C. Social and verbal communication skills</b>	74.1%	25.1%	0.4%	0.4%
<b>D. Industry-specific knowledge and skills</b>	55.6%	34.3%	9.6%	0.4%
<b>E. Educational degrees and certifications</b>	32.2%	42.3%	24.7%	0.8%

19. How **difficult** is it to find qualified applicants with each of the following (Very difficult, Somewhat difficult, Not at all difficult, DK/NA [DON'T READ]): (n=235)

	Very <u>difficult</u>	Somewhat <u>difficult</u>	Not <u>difficult</u>	Don't know/ <u>Refused</u>
<b>A. Technical skills</b>	<b>23.8%</b>	<b>51.9%</b>	<b>20.9%</b>	<b>3.4%</b>
<b>B. Problem-solving and critical thinking skills</b>	<b>28.9%</b>	<b>52.8%</b>	<b>16.2%</b>	<b>2.1%</b>
<b>C. Social and verbal communication skills</b>	<b>25.1%</b>	<b>48.5%</b>	<b>23.8%</b>	<b>2.6%</b>
<b>D. Industry-specific knowledge and skills</b>	<b>36.2%</b>	<b>44.7%</b>	<b>17.0%</b>	<b>2.1%</b>
<b>E. Educational degrees and certifications</b>	<b>22.6%</b>	<b>36.2%</b>	<b>36.6%</b>	<b>4.7%</b>

20. Please list the top three skills that new-hires for middle skill positions frequently lack or are deficient in?

*See verbatim responses*

21. Now, we're going to present a list of skills and abilities that may or may not be needed for at least some of your organization's employees.

Here's the (first/next) one \_\_\_\_\_ (READ ITEM): Please tell me whether your organization has a great need, some need, or little to no need for the following skills and abilities. (n=225)

	Great <u>need</u>	Some <u>need</u>	Little to no <u>need</u>	Don't know/ <u>Refused</u>
<b>A. Ability to Work Effectively on a Team. Ability to work well with others to achieve objectives.</b>	<b>70.2%</b>	<b>22.2%</b>	<b>7.1%</b>	<b>0.4%</b>
<b>B. People and Customer Service Skills: Ability to work with a broad range of customers</b>	<b>66.2%</b>	<b>24.0%</b>	<b>8.4%</b>	<b>1.3%</b>
<b>C. Technical Writing Skills: Ability to write clearly and effectively</b>	<b>40.9%</b>	<b>36.9%</b>	<b>21.8%</b>	<b>0.4%</b>
<b>D. Ability to Work Without Active Supervision or Remotely: Ability to work without constant oversight.</b>	<b>64.9%</b>	<b>27.6%</b>	<b>5.3%</b>	<b>2.2%</b>
<b>E. Spanish Speaking Ability: Ability to communicate verbally in Spanish.</b>	<b>29.3%</b>	<b>38.7%</b>	<b>30.2%</b>	<b>1.8%</b>
<b>F. Ability to use Basic Algebra: Ability to set up and solve simple algebraic equations and understand fractions and conversions.</b>	<b>22.7%</b>	<b>35.1%</b>	<b>40.0%</b>	<b>2.2%</b>
<b>G. Critical Thinking: Using logic and reasoning to develop solutions to complex problems.</b>	<b>68.0%</b>	<b>27.1%</b>	<b>4.4%</b>	<b>0.4%</b>
<b>H. Cultural Competence: Ability to understand, communicate, and work well with people across cultures.</b>	<b>51.6%</b>	<b>34.2%</b>	<b>12.9%</b>	<b>1.3%</b>
<b>I. Leadership and Decision-Making: Management of others, decision making, and accountability.</b>	<b>45.3%</b>	<b>40.4%</b>	<b>12.4%</b>	<b>1.8%</b>
<b>J. Adaptability and Flexibility: Ability to adjust to changes and continue to perform.</b>	<b>66.2%</b>	<b>28.0%</b>	<b>4.9%</b>	<b>0.9%</b>

22. Lastly, I want to ask you about some potential training, educational and certificate programs and services that would be used to prepare students for work in your industry?

As I read each of the following programs, please tell me whether your firm would have no interest, some interest, or great interest in these opportunities.

**RANDOMIZE**

	<u>Great interest</u>	<u>Some interest</u>	<u>Little to no interest</u>	<u>Don't know/Refused</u>
<b>A. Courses that teach Microsoft Excel including the ability to organize, summarize, and visualize data (n=220)</b>	<b>37.7%</b>	<b>31.4%</b>	<b>29.5%</b>	<b>1.4%</b>
<b>B. Courses that teach entry-level computer programming or coding (n=221)</b>	<b>21.7%</b>	<b>29.0%</b>	<b>48.9%</b>	<b>0.5%</b>
<b>C. Sourcing and pre-screening for interns (n=219)</b>	<b>22.4%</b>	<b>38.8%</b>	<b>36.1%</b>	<b>2.7%</b>
<b>D. An apprenticeship-type program for your future employees (n=221)</b>	<b>30.8%</b>	<b>38.9%</b>	<b>28.1%</b>	<b>2.3%</b>
<b>E. Sourcing and pre-screening for employees (n=219)</b>	<b>31.5%</b>	<b>37.4%</b>	<b>30.6%</b>	<b>0.5%</b>
<b>F. Other (n=99)</b>	<b>23.2%</b>	<b>12.1%</b>	<b>22.2%</b>	<b>42.4%</b>

[Skip Pattern Based on Previous Industry Question]

1. Healthcare (including Dental) (n=43)

	<u>Great interest</u>	<u>Some interest</u>	<u>Little to no interest</u>	<u>Don't know/Refused</u>
<b>A. Trainings that provide knowledge of medical billing and coding</b>	<b>48.8%</b>	<b>25.6%</b>	<b>25.6%</b>	<b>0.0%</b>
<b>B. Trainings that provide knowledge of restorative aide</b>	<b>34.9%</b>	<b>30.2%</b>	<b>30.2%</b>	<b>4.7%</b>
<b>C. Trainings that provide knowledge of ethics</b>	<b>53.5%</b>	<b>30.2%</b>	<b>14.0%</b>	<b>2.3%</b>
<b>D. Trainings that provide knowledge of electronic medical records and privacy</b>	<b>58.1%</b>	<b>25.6%</b>	<b>16.3%</b>	<b>0.0%</b>
<b>E. Trainings that provide knowledge of emergency response</b>	<b>37.2%</b>	<b>32.6%</b>	<b>30.2%</b>	<b>0.0%</b>

2. Building or Construction (n=11)

	<u>Great interest</u>	<u>Some interest</u>	<u>Little to no interest</u>	<u>Don't know/Refused</u>
<b>A. Trainings that provide an OSHA certification</b>	<b>36.4%</b>	<b>36.4%</b>	<b>27.3%</b>	<b>0.0%</b>
<b>B. Trainings that provide welding experience</b>	<b>9.1%</b>	<b>36.4%</b>	<b>54.5%</b>	<b>0.0%</b>
<b>C. Trainings that provide knowledge of sustainable building rules and regulations</b>	<b>27.3%</b>	<b>45.5%</b>	<b>27.3%</b>	<b>0.0%</b>

3. Architecture, Design, or Engineering (n=7)

	<u>Great interest</u>	<u>Some interest</u>	<u>Little to no interest</u>	<u>Don't know/Refused</u>
<b>A. Trainings that provide experience in Mechatronics</b>	<b>14.3%</b>	<b>42.9%</b>	<b>42.9%</b>	<b>0.0%</b>
<b>B. Trainings that provide experience in digital drafting</b>	<b>28.6%</b>	<b>42.9%</b>	<b>28.6%</b>	<b>0.0%</b>
<b>C. Trainings that provide experience in rendering</b>	<b>28.6%</b>	<b>28.6%</b>	<b>42.9%</b>	<b>0.0%</b>
<b>D. Trainings that provide experience in visual design (using programs such as SketchUp, Photoshop, and Illustrator)</b>	<b>57.1%</b>	<b>14.3%</b>	<b>28.6%</b>	<b>0.0%</b>
<b>E. Trainings that provide experience in model making and digital fabrication</b>	<b>42.9%</b>	<b>42.9%</b>	<b>14.3%</b>	<b>0.0%</b>

4. Technology or Information & Communication Technologies (n=26)

	<u>Great interest</u>	<u>Some interest</u>	<u>Little to no interest</u>	<u>Don't know/Refused</u>
<b>A. Trainings that provide web management experience</b>	<b>53.8%</b>	<b>26.9%</b>	<b>19.2%</b>	<b>0.0%</b>
<b>B. Trainings that provide experience with IT security/cyber security</b>	<b>61.5%</b>	<b>23.1%</b>	<b>15.4%</b>	<b>0.0%</b>
<b>C. Trainings that provide experience with networks</b>	<b>69.2%</b>	<b>23.1%</b>	<b>7.7%</b>	<b>0.0%</b>
<b>D. Trainings that provide experience with software development</b>	<b>61.5%</b>	<b>23.1%</b>	<b>15.4%</b>	<b>0.0%</b>
<b>E. Trainings that provide experience with cloud computing</b>	<b>53.8%</b>	<b>34.6%</b>	<b>11.5%</b>	<b>0.0%</b>
<b>F. Trainings that provide experience with building web applications</b>	<b>46.2%</b>	<b>30.8%</b>	<b>23.1%</b>	<b>0.0%</b>

5. Manufacturing (n=18)

	<u>Great interest</u>	<u>Some interest</u>	<u>Little to no interest</u>	<u>Don't know/Refused</u>
<b>A. Trainings that provide welding experience</b>	<b>16.7%</b>	<b>38.9%</b>	<b>44.4%</b>	<b>0.0%</b>

<b>B. Trainings that provide machining experience</b>	<b>50.0%</b>	<b>33.3%</b>	<b>16.7%</b>	<b>0.0%</b>
<b>C. Trainings that provide knowledge of safety rules and regulations</b>	<b>38.9%</b>	<b>44.4%</b>	<b>16.7%</b>	<b>0.0%</b>
<b>D. Trainings that provide digital manufacturing experience</b>	<b>33.3%</b>	<b>55.6%</b>	<b>11.1%</b>	<b>0.0%</b>
<b>E. Trainings that provide experience in maintaining and repairing industrial automation machinery</b>	<b>27.8%</b>	<b>50.0%</b>	<b>22.2%</b>	<b>0.0%</b>

6. Transportation or Logistics (n=8)

	<u>Great interest</u>	<u>Some interest</u>	<u>Little to no interest</u>	<u>Don't know/ Refused</u>
<b>A. Trainings that provide knowledge on supply chain management</b>	<b>62.5%</b>	<b>37.5%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>B. Trainings that provide experience in warehousing</b>	<b>62.5%</b>	<b>12.5%</b>	<b>25.0%</b>	<b>0.0%</b>
<b>C. Trainings that provide knowledge on bookkeeping and basic accounting</b>	<b>37.5%</b>	<b>37.5%</b>	<b>25.0%</b>	<b>0.0%</b>
<b>D. Trainings that provide experience with international business (including customs, international regulations, etc.)</b>	<b>62.5%</b>	<b>37.5%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>E. Trainings that provide project management experience</b>	<b>50.0%</b>	<b>50.0%</b>	<b>0.0%</b>	<b>0.0%</b>

**Section 6. Training Providers & Hiring Channels**

23. How satisfied are you with the education and training institutions in and around Southern San Diego County and their ability to provide qualified workers for your firm? (n=222)

- 33.8% Very satisfied**
- 42.3% Somewhat satisfied**
- 12.2% Somewhat dissatisfied**
- 3.6% Very dissatisfied**
- 8.1% Don't know/ Refused**

24. Have you worked with any training or educational institutions, to find or train workers, if yes, could you specify the institutions? [ALLOW MULTIPLE RESPONSES FOR OPTION 1] (n=222)

- 27.9% Yes, our firm has worked with: - *verbatim response to be provided***
- 66.2% No**
- 5.9% Don't know/ Refused**

25. Have you ever recruited workers from Southwestern College in the past? (n=222)

- 26.1% Yes**
- 67.1% No**
- 6.8% Don't know/ Refused**

[IF Q25 = 'No', ASK Q26, OTHERWISE SKIP]

26. Why has your organization not recruited talent from Southwestern College? [RANDOMIZE] (n=149)

- 64.4% Unaware of Southwestern College program offerings**
- 8.7% Other regional education institutions meet current workforce needs**
- 8.1% Programs at Southwestern College are not applicable to the talent needs of your organization**
- 0.0% Other industry members have had bad experiences**
- 18.8% Other – see verbatim responses**

27. Are there new training programs or certificates that you would like to see developed in the region that would help prepare students for your firm's hiring needs? (n=222)

- 29.3% Yes - verbatim response to be provided**
- 70.7% No**

28. Would you be interested in working with Southwestern College to develop work-based learning opportunities, such as internships, site visits, career fairs, and other collaborative efforts? (n=122)

- 50.8% Yes**
- 49.2% No**

29. Where do you typically search for qualified talent when hiring for new or open positions at your company? **Multiple responses permitted, percentages may sum to more than 100%** (n=222)

**RANDOMIZE**

- 59.5% General online job sites (Indeed, Monster, etc.)**
- 53.2% Word of mouth or asking current employees to recruit**
- 29.7% Social media sites (Facebook, Instagram, LinkedIn, etc.)**
- 13.1% Local community college job boards**
- 13.1% Other**
- 2.3% Don't know/ Refused**

## Section 7. Closing Questions

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30. May we contact you with any additional questions regarding this research? (n=122)

**73.8% Yes**

**26.2% No**

31. Would you be willing to provide us with your contact information? (n=122)

**71.3% Yes**

**28.7% No**

[ASK Q32 IF Q31 = 'Yes', OTHERWISE SKIP]

32. Can we share your contact information with Southwestern College? (n=87)

**85.1% Yes**

**14.9% No**

**Thank you for completing the survey. Since it sometimes becomes necessary for the project manager to call back and confirm responses to certain questions, I would like to verify your contact information.**

- A. First and Last Name of Respondent \_\_\_\_\_
- B. Position of Respondent \_\_\_\_\_
- C. Phone of Respondent \_\_\_\_\_
- D. Email of Respondent \_\_\_\_\_
- E. Name of Company \_\_\_\_\_
- F. Company Address (including City) \_\_\_\_\_

**Those are all the questions I have.  
Thank you very much for your time.**