

SAN DIEGO COUNTY LABOR MARKET ANALYSIS

SPECIALTY FOODS AND BREWS

NOVEMBER 2016



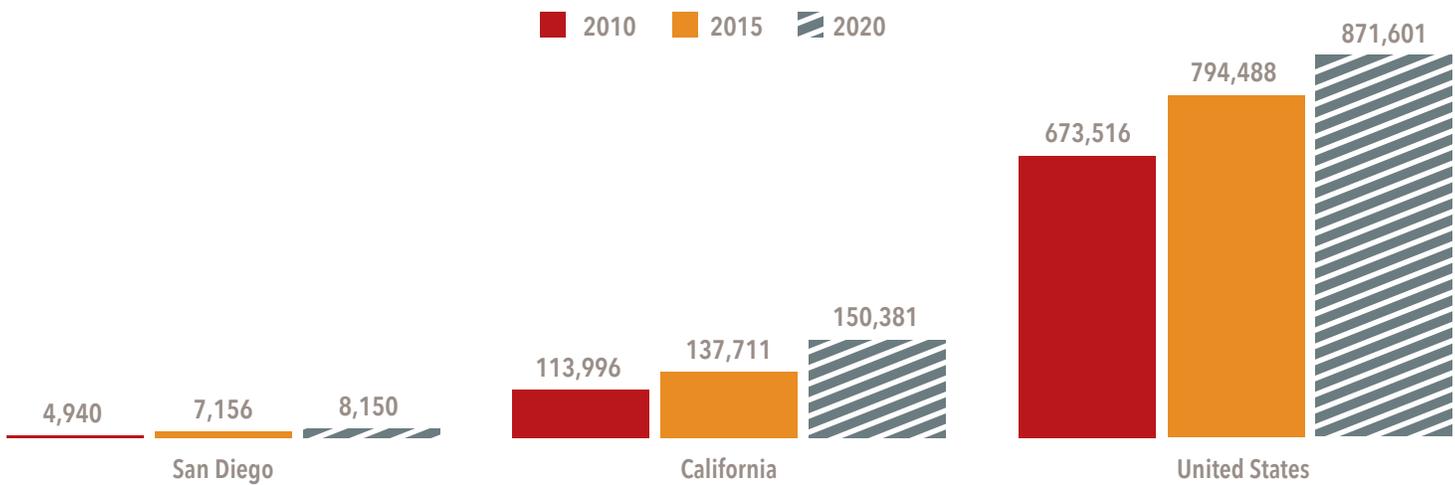
San Diego's Specialty Foods & Brews sector encompasses the region's strong brewery, beverage and food culture. As one of the San Diego Workforce Partnership's Priority Sectors, this study serves to inform the workforce development system on how to best prepare the future workforce for these two subsectors. The full report analyzes workforce needs and opportunities in the industry, including hiring challenges and skills in demand from Specialty Foods & Brews employers.

SPECIALTY FOODS

In San Diego's specialty foods industry, restaurants saw food preparation and serving jobs increase by 23% in 2015. San Diego's job growth rate (44% from 2009–2016) has also far exceeded the growth rate for the state (21.7%) and the nation (22%).

Food establishment size	Growth expectations
1–10 employees	Low growth
11–49 employees	Low to slow growth
50–99 employees	Growing
100+ employees	Growing

Job Openings at Specialty Foods Establishments



SPECIALTY BREWS

San Diego's brewing industry accounts for almost 30% of all craft breweries in California. Known as the Craft Beer Capital of the U.S., San Diego had 128 total operating breweries as of June 2016. Most breweries are growing and expanding and expect to hire additional workers to meet their needs.

Brewery size	Growth expectations
1–10 employees	Low growth
11–49 employees	Growing
50–99 employees	Growing
100+ employees	Steady growth

Brewing Industry: 2016 Average Earnings



San Diego's brewing industry has the highest percentage growth in job openings compared to other comparable regions like Portland and Seattle, as well as the highest average earnings for 2016. Areas of concentrated brewing activity in San Diego include Mira Mesa/Miramar, central San Diego city, the Hops Highway (Highway 78 between Oceanside and Julian), and the City of Vista.

EMPLOYER-DESIRED KNOWLEDGE, SKILLS AND ABILITIES

According to employer interviews and job postings data, the following knowledge, skills and abilities (KSAs) are most commonly associated in the Specialty Foods and Brews sector.

Soft skills

- Communication
- Great personality and attitude
- Customer service
- Teamwork
- Critical thinking and problem solving
- Creative and inventive
- Passion
- Reliability and dependability
- Common sense

Technical skills

- Brewing certificates: Cicerone, UCSD Extension, SDSU
- Professional/commercial brewing experience
- Lab experience
- Chemistry
- Culinary skills
- Food Handling and ServSafe certificates
- Operate heavy equipment and machinery
- Quality control

TOP CHALLENGES IDENTIFIED BY EMPLOYERS

Specialty brews employers generally identified their top challenges to be:

- Insufficient cash flow
- Access to capital
- Employee retention or turnover

Finding qualified workers was a major challenge cited by employers in the specialty food industry. Soft skills and prior experience are often more important for these employers than certifications or degrees. Challenges for specialty foods employers include:

- Lack of qualified candidates
- Access to capital
- Minimum wage concerns
- Employee retention
- Regulatory compliance
- Lack of exposure in a sometimes niche market

EMPLOYER HIRING PRACTICES

All employers reported sourcing workers through a variety of methods.

Specialty brews:

- Local brewing certificate programs: Cicerone, UCSD Extension, or San Diego State University
- Brewingwork.com
- Internal promotion

Specialty foods:

- Career Technical Education (CTE) programs
- San Diego Art Institute
- Recruiting agencies and head hunters

Both:

- Word of mouth
- Customers or visitors
- Referrals, industry contacts, social networks head hunters

15 occupations were identified by employers as some of the most commonly employed in the industry.

Specialty Foods:

1. Chef/cook
2. Server
3. Barista
4. Hostess
5. Baker

Specialty Brews:

1. Brewer
2. Assistant brewer
3. Beertender/tasting room staff
4. Bartender
5. Cellarman/cellar "rat"

Cross industries:

1. Sales
2. Marketing
3. Social media
4. Accountant
5. Administrative clerk

DID YOU KNOW?

San Diego is one of the nation's fastest-growing coffee cities. Ranked 6th best in the U.S. by SmartAsset, San Diego's specialty or craft coffee scene is making the region comparable to coffee hubs such as Portland and Seattle.

JOB SEEKER TIP

Network. Talk to people in the industry, to owners and employees. Many top executives got their start in the industry by getting to know their bartender, brewery owner or someone else in the industry.

RECOMMENDATIONS

- Create small business internship programs to allow job seekers to experience local small businesses for at least 1–3 months prior to seeking employment
- Provide facilities or other resources such as incubators where small food businesses can rent space in a commercial kitchen at an affordable cost
- Make it easier for small companies to get access to capital
- Provide assistance to small businesses to offset costs associated with training programs and certifications

TABLE OF CONTENTS

TABLE OF CONTENTS	1
INTRODUCTION	2
BREWING INDUSTRY	3
Industry Overview.....	3
Industry Trends & Challenges.....	6
Employer Interview Findings.....	8
SPECIALTY FOODS INDUSTRY	11
Industry Overview.....	11
Industry Trends & Challenges.....	13
Employer Interview Findings.....	14
OCCUPATIONAL OVERVIEW	17
Brewing Industry.....	17
Specialty Food Industry.....	19
Cross-Industry Careers.....	21
REGIONAL EDUCATION & TRAINING	21
Brewing Industry.....	21
Specialty Foods Industry.....	22
GAP ANALYSIS	24
Brewing Industry.....	24
Specialty Foods Industry.....	25
CONCLUSIONS AND RECOMMENDATIONS	26
APPENDIX A: OCCUPATIONAL PROFILES, SPECIALTY FOODS	29
Bakers.....	29
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop.....	30
Bussers.....	31
Chefs and Head Cooks.....	32
Dishwashers.....	33
Hosts and Hostesses.....	34
Kitchen Prep Workers.....	35
APPENDIX B: METHODOLOGY	36
APPENDIX C: EMPLOYER SURVEY	38

INTRODUCTION

San Diego has been overwhelmed by the explosive growth of the craft beer industry since 2010. According to Greg Koch, former CEO and Co-founder of Stone Brewing, “The region is considered an international craft beer mecca and the leading brewing region in the world for quality and innovation.”¹ San Diego is home to some of the best-known names in craft brewing, among them Karl Strauss, which is not only the oldest post-Prohibition craft brewery in the county,² but is also one of the best. Strauss was named best mid-sized brewery in the nation at the 2016 Great American Beer Festival, and San Diego breweries took home a total of 17 medals from the festival, a testament to the region’s high-quality brews.³ One needs only to visit the interactive map on the San Diego Brewers Guild website to get a sense of the incredible concentration of breweries and brewpubs in the region.⁴ Additionally, San Diego has a strong homebrew culture which has played a role in allowing the industry to thrive in the region. Many of the region’s strongest craft beer players got their start as homebrewers, including Ballast Point, AleSmith, Rough Draft and Benchmark Brewing.⁵

While the region’s craft beer industry is well-known, San Diego’s specialty food industry is a hidden gem. Its proximity to the Mexican border and reputation as a coastal town have filled the region with a variety of both cultural and local offerings. In addition, San Diego’s ethnic diversity, largely driven by various immigrant populations, has increased the demand for specialty foods. San Diego County has over 40 farmer’s markets⁶ and countless culinary entrepreneurs. Many well-known specialty food companies, such as Kashi, Suja Juice and Chuao Chocolatier, were started in San Diego and continue to produce here.⁷

This report provides an overview of San Diego County’s Specialty Foods and Brews industry — one of the region’s six priority sectors. The study highlights specialty food and brew jobs, and workforce needs and opportunities in the industry. Further, it is meant to educate policymakers, educators, jobseekers and the public on the opportunities for meaningful employment.

This study was commissioned by the San Diego Workforce Partnership, and will be used for industry specific strategies to develop San Diego’s workforce as it relates to the specialty food and brew industry. Data for this study was collected from online employment statistics and staffing patterns, and from employer interviews conducted by UCSD Extension. Interviews were conducted with 16 specialty food establishments and 15 breweries.

¹ Koch, Greg, “Stone Brewing just says no to ‘Big Beer’,” San Diego Union Tribune, February 13, 2016, <http://www.sandiegouniontribune.com/opinion/commentary/sdut-craft-beer-stone-2016feb13-htmlstory.html>.

² Dickerman, Sara, “Beyond San Diego’s Surf and Sun: Suds,” The New York Times, May 25, 2012, http://www.nytimes.com/2012/05/27/travel/san-diegos-thriving-craft-beer-scene.html?_r=1.

³ McVicket, Laura, “Karl Strauss Named Best Mid-Size Brewery in Nation,” NBC 7 Dan Diego, Oct. 11, 2016, <http://www.nbcsandiego.com/news/local/Karl-Strauss-Named-Best-Mid-Size-Brewery-in-Nation-396577531.html>.

⁴ San Diego Brewers Guild, <http://www.sandiegobrewersguild.org/maps?b=y&p=y>.

⁵ Luciani, Kristin, “Crafting the Perfect Brew,” UC San Diego News Center, Dec. 11, 2014, http://ucsdnews.ucsd.edu/feature/crafting_the_perfect_brew.

⁶ San Diego County, http://www.sandiegocounty.gov/content/dam/sdc/awm/docs/CFM%20A_Z_%2052716.pdf.

⁷ “Five Food and Beverage Items #MadeinSD enjoyed by people around the world,” San Diego Regional EDC, September 29, 2016, <http://www.sandiegobusiness.org/blog/mfg-day-2016/five-food-beverage-items-madeinsd-enjoyed-people-around-world>

BREWING INDUSTRY

Industry Overview

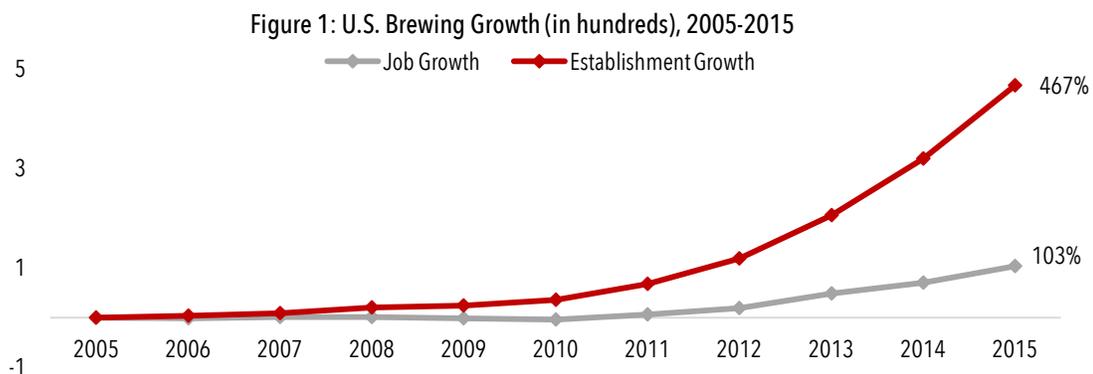
Defining the craft brew industry

According to the Brewers Association, craft brewers are small, independent and traditional.⁸ They offer limited production (usually only about 6 million barrels of beer a year, equivalent to approximately 3 percent of annual beer sales in the country), have no more than 25 percent of the brewery owned or controlled by a non-craft brewer and use traditional brewing ingredients for the majority of their production volume.⁹ While all of the breweries in San Diego County meet the criteria for size—the largest brewery in Southern California is Stone Brewing, at about 325 thousand barrels in 2015¹⁰—they do not all meet the ownership criteria, as some of the once-craft breweries have been purchased by larger beer conglomerates in recent years.

The nature of the labor market information available on breweries is such that craft brewing data is not easily decipherable from overall brewery data. Thus, while employer interviews focus specifically on craft breweries, some of the labor market analysis in this report will consider the entire brewing industry in San Diego.¹¹

Economic impact

The U.S. brewing industry has experienced incredible growth in the last five years. After relatively stagnant job growth from 2001 to 2010 (Figure 1), with a slight downturn during the recession, jobs grew an incredible 112 percent from 2010 to 2015, for total growth of 103% over ten years. Brewing establishments followed a similar growth trajectory, increasing rapidly after the recession and reaching 467% growth from 2005 to 2015. There are now over 4,000 breweries across the nation, located in over 2,000 unique cities. There are so many, in fact, that 75 percent of adults over the age of 21 live within 10 miles of a brewery.¹²



⁸ "Lend Me Your Beers: San Diego Microbreweries (Infographic), So Diego Tours, <http://sodiegotours.com/san-diego-microbreweries-list-map/>.

⁹ "The Importance of Defining Small and Independent," Brewers Association, https://www.brewersassociation.org/communicating-craft/importance-defining-small-independent/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+brewersassociation%2FODag+%28Brewers+Association%29.

¹⁰ <http://www.stonebrewing.com/about/facts>.

¹¹ See Appendix B for a complete list of NAICS codes and a list of employers interviewed.

¹² Watson, Bart, "U.S. passes 4,000 breweries," Brewers Association, September 28, 2015, <https://www.brewersassociation.org/insights/4000-breweries/>.

California is the top state for overall job growth in the brewing industry and ranked first for number of craft breweries in the nation — 518 craft breweries in 2015.¹³ Operating breweries in California grew by more than 24 percent from 2012 (213 breweries) to 2014 (519 breweries),¹⁴ and as of September 2016, there are over 710 craft breweries in California.¹⁵ Additionally, craft breweries contributed \$7.3 billion to the state’s economy in 2015—up from \$6.5 in 2014—and supports over 51,000 jobs in California.¹⁶

The brewing industry in San Diego is robust, accounting for almost 30 percent of all craft breweries in California. Following the national trend, industry growth in San Diego slowed from 2000 to 2009 but boomed once the economy began to recover from the Great Recession. According to a regional report published by National University System Institute for Policy Research, 37 breweries were operational in 2011, followed by 58 in 2012 and 82 in 2013. In 2015, 114 San Diego-based breweries and brewpubs generated \$851 million in sales and employed 4,512 workers (Table 1).¹⁷ The region now has 128 total operating breweries (as of June 2016)¹⁸ and is considered the Craft Beer Capital of the U.S.

Table 1: San Diego County Brewing Industry Dynamics, 2001-2015¹⁹

	2011	2012	2013	2014	2015 Craft	2015 Total
Breweries & brewpubs	37	58	82	97	109	114
Total annual sales (in millions of dollars)				\$726.6	\$734.7	\$851.0
Industry jobs	1,630	1,820	2,279	3,752	4,005	4,512

A large subset of craft brewing activity can be found in North County, where the industry had a \$272.3 million economic impact in 2013. The craft beer industry in North County supports 1,700 jobs and businesses directly employ 850 workers. Areas of concentrated activity include Mira Mesa/Miramar, central San Diego city²⁰, the Hops Highway (the section of Highway 78 stretching from Oceanside to Julian) and the City of Vista, which has more breweries per capita than Portland, Oregon.²¹

¹³ California craft beer sales statistics, Brewers Association, 2015, <https://www.brewersassociation.org/statistics/by-state/?state=CA>.

¹⁴ California Craft Brewers Association, Craft Beer Statistics, <http://www.californiacraftbeer.com/ca-craft-beer/craft-beer-statistics/>.

¹⁵ California Craft Brewers Association, Craft Beer Statistics, <http://www.californiacraftbeer.com/ca-craft-beer/craft-beer-statistics/>.

¹⁶ California Craft Brewers Association, Craft beer statistics, <http://www.californiacraftbeer.com/ca-craft-beer/craft-beer-statistics/>.

¹⁷ “San Diego Craft Brewing Industry: 2016 Update”, National University System Institute for Policy Research, http://www.nusinstitute.org/assets/resources/pageResources/NUSIPR_2016_SD_Craft_Brewing_Update.pdf.

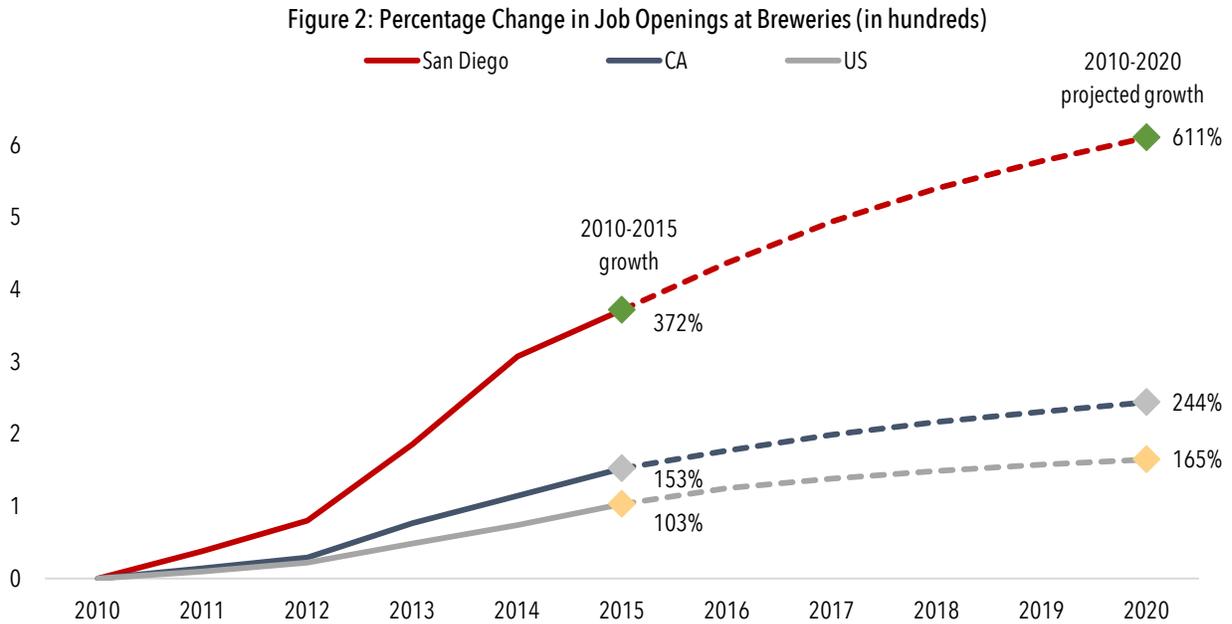
¹⁸ Rowe, Peter, “The unbearable whiteness of craft?” The San Diego Union Tribune, June 4, 2016, <http://www.sandiegouniontribune.com/entertainment/beer/sdut-craft-beer-white-male-2016jun04-story.html>.

¹⁹ “San Diego Craft Brewing Industry: 2016 Update”, National University System Institute for Policy Research, http://www.nusinstitute.org/assets/resources/pageResources/NUSIPR_2016_SD_Craft_Brewing_Update.pdf.

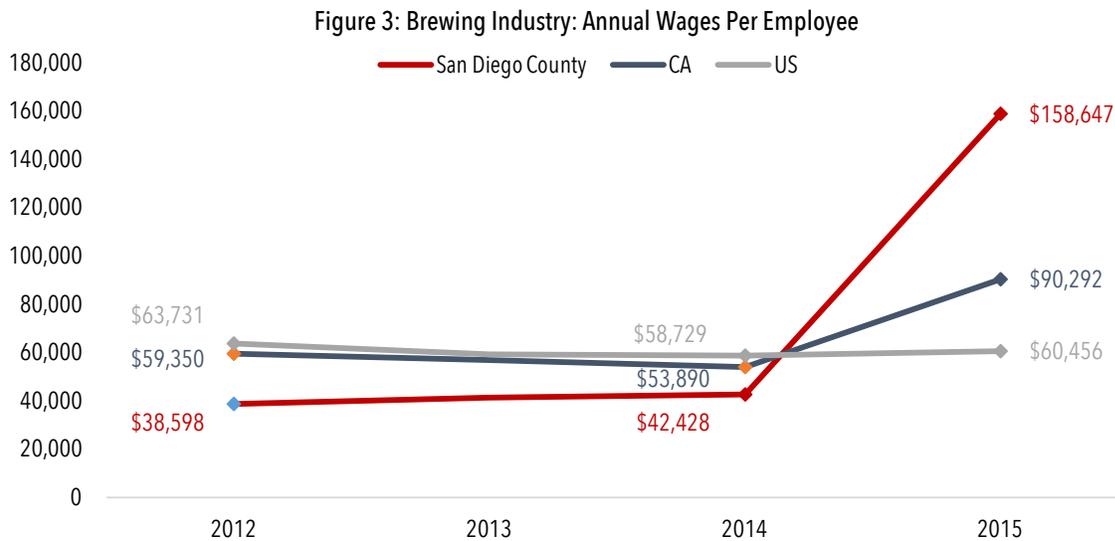
²⁰ Traded industry clusters in the San Diego region: 2016 data update, SANDAG, March 2016, http://www.sandag.org/uploads/publicationid/publicationid_2017_20489.pdf.

²¹ 2014 North County Craft Brew Report, National University System Institute for Policy Research, San Diego North Economic Development Council, http://sdnedc.org/wordpress/wp-content/uploads/2014/08/SDNEDC_Final_NC_Craft_Brew.pdf.

San Diego is outpacing both the state and the nation in brewery job growth (Figure 2).²² Brewing jobs in San Diego grew more than three times faster than the U.S. from 2010 to 2015, and the gap is projected to widen in the next five years.



Average annual wages in San Diego’s brewing industry saw a sudden increase in 2015, growing by over \$100,000 and moving into first place in the nation (Figure3).²³ Much of this can be attributed to higher than typical average wages reported in Q4 2015, and it is yet to be seen if the averages wages will remain this high. It is likely that the typical brewery worker is making something closer to the previous average (around \$40k) and some new outliers are skewing the data.



²² Emsi 2016.3

²³ Quarterly Census of Employment and Wages (QCEW), Bureau of Labor Statistics.

The region is well poised to continue these industry growth trends. H.G. Fenton Company, a property management company, has started opening Brewery Igniter facilities across the county. Brewery Igniter Mirimar opened in early 2016, CRAFT by Brewery Igniter is slated to open in North Park in late 2016 and a third facility is planned for North County. These facilities will each be shared by a few startup craft brewery tenants and help them minimize costs for capital, construction risks and other issues that many small breweries are forced to navigate. The facility will provide brewing equipment and tasting room facilities for tenants use and allows tenants flexible lease terms and other benefits.²⁴

Industry Trends & Challenges

- **Increasing popularity of craft beer:** Craft beer has gradually become mainstream and is beginning to show up in all types of food establishments. San Diego's Donut Bar, for example, recently began offering select craft brews at its downtown outlet.²⁵ Part of this growing popularity of craft beer is driven by the younger generation as the majority of craft beer drinkers are millennials, followed closely by Generation Xers. As increasing numbers of millennials reach legal drinking age, the demand for craft beer grows.²⁶
- **Beer consolidation:** While growth in the overall beer industry is slowing, craft beer is on the rise and Big Beer is taking notice. "Brewing companies had been snapping up craft producers, in whole or in part, to get a piece of the fastest-growing segment of the U.S. beer market."²⁷ Recognizing that the future of beer lies in craft, Big Beer players don't want to be left out and will move towards more mergers and "beer consolidations." As more and more breweries emerge, the market will become more crowded and saturated, and consolidation/mergers of brands will become inevitable. In 2015, there were 24 craft brewery mergers/acquisitions in the U.S., including two San Diego breweries:
 - San Diego's Ballast Point, which was started in 1992, was sold to alcoholic beverage conglomerate Constellation Brands Inc. for \$1 billion.
 - MillerCoors bought a controlling share of San Diego's Saint Archer Brewing Co. in September 2015

Despite this growing trend, many craft breweries have stressed that they will never sell out to Big Beer, and organizations such as True Craft are providing an alternative — purchasing small stakes of interested craft breweries — no more than 25 percent — which allows breweries the ability to expand without having to sell to multinational conglomerates or borrow from banks.²⁸

- **Greater innovation and experimentation:** Particularly for nontraditional sweet flavors and beer that doesn't taste like beer, this trend towards flavored beer is due in part to a desire to attract female consumers. Researchers found that women between the ages of 22 and 34 were

²⁴ <http://www.hgfenton.com/breweryigniter/>.

²⁵ Weisberg, Lori, "Donut Bar to franchise – with craft beer," The San Diego Union-Tribune, February 2, 2016, <http://www.sandiegouniontribune.com/business/restaurants/sdut-donut-bar-franchises-expansion-craft-beer-2016feb02-story.html>.

²⁶ Herz, Julia, "Today's craft beer lovers: Millennials, women and Hispanics," Brewers Association, August 15, 2016, <https://www.brewersassociation.org/communicating-craft/understanding-todays-craft-beer-lovers-millennials-women-hispanics/>.

²⁷ Kaplan, Jennifer, "Constellation to Buy Ballast Point Brewing for \$1 Billion," Bloomberg, November 16, 2015, <http://www.bloomberg.com/news/articles/2015-11-16/constellation-to-acquire-ballast-point-brewery-for-1-billion>.

²⁸ Rowe, Peter, "Can True Craft save craft beer?" The San Diego Union Tribune, May 3, 2016, <http://www.sandiegouniontribune.com/entertainment/beer/sdut-true-craft-save-craft-2016may03-story.html>.

most likely to consume flavored beers.²⁹ In addition, millennials are a growing market and are contributing to the shift towards sweeter flavor profiles.

- **Do-it-yourself craft brewing:** Home brewing kits have become increasingly popular. Entrepreneurs have been taking advantage of this trend by launching a variety of kits on sites such as Kickstarter and IndieGoGo, and home brew specialty retail shops have started popping up in San Diego. Such kits could also usher in a new era of personalization in the craft industry.³⁰
- **Gender disparity:** Men still dominate the craft beer industry — only 4 percent of 1,700 active breweries surveyed in a 2014 study had a female head brewer or brewmaster, despite women accounting for 32 percent of craft beer consumption.³¹ However, there is a growing women's movement for greater participation in the craft beer scene. Organizations such as the Pink Boots Society provide support through workshops and scholarships to female beer industry professionals.³²
- **Drought effects:** Limited access to water, type of water³³, as well as a long drought can have negative impacts on an industry where water is the main ingredient. Escalating rates and conservation-related cutbacks can affect the cost and availability of water and beer. In the long run, water supply and land use may end up affecting the brewing industry's economic competitiveness in areas like San Diego.³⁴
- **Minimum wage effects:** Increasing the minimum wage can potentially harm businesses that employ a large number of minimum wage workers. Businesses may not be able to pay the higher wage and may be forced to lay off workers.
- **Costs:** Access to market, cost of raw materials and ingredients, and operation in a highly-regulated and taxed industry can be difficult.³⁵ Recent shortages in hops, such as citra, has contributed to a sudden slowdown in craft beer sales for some brewers across the nation.³⁶ The proliferation and continuing growth of small breweries has compounded this problem as a growing number of brewers compete for these hops, driving up demand. Breweries unable to fill their orders are forced to reject orders and lose out on millions of dollars in revenue.

²⁹ White, Martha C. "The hottest trend in craft brewing is beer that doesn't taste like beer," TIME, March 22, 2016, <http://time.com/money/4266936/craft-beer-trends-flavored-beer/>.

³⁰ Taylor, Kate, "The beer industry is going through 4 seismic changes that are impacting how America drinks," Business Insider, December 30, 2015, <http://www.businessinsider.com/4-beer-industry-trends-to-expect-in-2016-2015-12>.

³¹ Heil, Meredith, "The female brewers shattering craft beer's glass ceiling," 2016, <https://www.thrillist.com/drink/nation/female-brewers-changing-the-craft-beer-industry>.

³² Shugan, Adam, "Cheers! Craft beer sees women's movement," Florida Today, March 17, 2015,

http://www.floridatoday.com/story/entertainment/2015/03/17/cheers-craft-beer-sees-womens-movement/24859879/?utm_campaign=Contact+SNS+For+More+Referrer&utm_medium=twitter&utm_source=snsanalytics

³³ Different types of water can affect beer production (e.g., tap, distilled, rainwater). Even how hard or soft the water is can have an effect on the final product.

³⁴ "Economic Impact: The Craft Brewing Industry Contributed \$55.7 Billion to the U.S. Economy in 2014, more than 424,000 Jobs," Brewers Association, <https://www.brewersassociation.org/statistics/economic-impact-data/>.

³⁵ "The Importance of Defining Small and Independent," Brewers Association, https://www.brewersassociation.org/communicating-craft/importance-defining-small-independent/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+brewersassociation%2FODag+%28Brewers+Association%29.

³⁶ Mickle, Tripp, "Trouble brewing in the craft beer industry," The Wall Street Journal, September 27, 2016, <http://www.wsj.com/articles/trouble-brewing-in-the-craft-beer-industry-1474990945>.

Employer Interview Findings

For this study, 15 breweries were interviewed about their employment needs, difficulties and hiring practices. Employers were broken down by size: Very small (1-5 employees), small (5-10 employees), mid-size (11-49 employees), and large (50+ employees). The findings below characterize trends that were observed throughout the employer interviews.

Employer needs

1-5 employees

Very small breweries are typically in their early stages of business development. They have seen relatively low levels of growth, but this is typically because they are still getting started, not because they have encountered obstacles to expansion. However, insufficient cash flow and capital can be challenges for very small breweries and could lead to stunted growth.

The environment in very small breweries can be extremely fast-paced and high stress, and because of the minimal number of employees, staff must be willing to wear multiple hats. Workers may find themselves representing the brand's image while engaging large crowds at events like beer festivals, but might also need knowledge of code changes and other regulatory standards. Thus, very small breweries interviewed for this study often reported needing a mix of soft and technical skills in their employees. Other valuable traits emphasized by these breweries include creativity, a team-focused attitude and the ability to proactively solve problems. However, even if an applicant has these skill sets they are rarely hired for brew positions without professional brewing experience.

Finding these ideal employees can be challenging for very small breweries because jobseekers tend to gravitate towards larger, more established operations. While many applicants list home brewing as relevant experience, almost all employers pointed out that home brewing is not the same as having professional brewing experience. Unlike mid-size and larger breweries, very small breweries typically do not have formal in-house training or funding to provide training cost reimbursement for external programs. These factors make it all the more important for workers to have experience before being hired. Job seekers who have completed brewing certificate programs through entities like Cicerone, UC San Diego and San Diego State are highly regarded because it illustrates that these have the basic skills needed to work in the industry. Qualified industry professionals can also be attracted by the quick advancement opportunities that exist within these smaller breweries as they begin to grow. Even so, employee turnover is a challenge at very small breweries, which frequently see employees move on to the more established ones. To combat turnover, some breweries have policies in place to reimburse the costs associated with external training programs, with the condition that funded employees continue their employment at the brewery for a specified duration following completion of the program. However, this is only effective to the extent that very small breweries can afford it.

5-10 employees

Generally, these small companies are growing and anticipating greater hiring needs because of expansions. The need to recapitalize sometimes hinders growth at this point, as banks are not well-suited to provide small businesses with the type of funding needed to grow. Even once capital is secured, the breweries must pace growth carefully to ensure that the business will be able to weather a potential future downturn. They must also navigate intense sales competition in the region since the majority of San Diego breweries market to the same accounts. Balancing the number of sales and the volume of production is a challenge for some small breweries.

During this period of growth current employees typically advance to managerial/leadership positions, leaving entry-level positions vacant for new hires. Like the very small, small breweries still look for a mix of soft skills and technical skills in new hires. Employers value individuals who are passionate about beer, have a great personality and who have industry experience, particularly in commercial brewing. Degrees and technical skills are not required, but individuals who have completed certificate programs at UC San Diego Extension or San Diego State are highly regarded, especially since some of these breweries are still unable to cover costs associated with external training. Some small breweries require brewers to have a four-year degree in Chemistry, as well as lab experience, while others recognize the value of chemistry for newly-emerging products but do not require specific certifications or degrees. Expansion also leads to a greater need for support roles such as quality assurance professionals, and these types of jobs may have degree requirements. Additionally, some small breweries expect employees to possess basic computer skills such as the ability to navigate web browsers.

Small breweries do not experience as many hiring difficulties as the very small, mainly because of the explosive interest in the brewing industry. There are always more individuals seeking employment than there are positions available, and some breweries receive hundreds of resumes at a single job fair. Employers attribute this partially to the perception of the craft brew industry as a goldmine, and many job seekers wrongly assume that it is relatively easy to secure employment in the industry. Some employers point out that many of these employees leave the industry after realizing the amount of work and responsibility the industry entails. In an attempt to improve retention, some small breweries have attempted to mirror the types of employee benefits offered at larger breweries.

While there is a large pool of applicants, finding qualified applicants to fill positions is still a challenge. Certificate programs at SDSU and UC San Diego Extension have helped remedy the situation by producing more qualified candidates, but there is still a need for training programs that teach manufacturing in a general context. A broader focus on warehousing and manufacturing would increase job opportunities and equip individuals with transferable skill sets valuable to all industries.

11-49 employees

These mid-sized breweries are generally expanding and looking to hire more employees in a variety of areas including brewing and sales. Access to capital is the greatest challenge for these mid-size breweries, delaying expansion of facilities and purchase of new machinery, hindering company growth.

These breweries reported looking for a range of soft skills; employees that take initiative, have a strong work ethic and show genuine passion regularly receive promotions. Reliability, dependability, passion for the industry and common sense are all valued traits, and prior work experience in the brewing industry is desired. For brewing candidates, training in basic chemistry and brewing processes can be important as well.

Some mid-size employers experience hiring difficulties due to a lack of qualified candidates. Some breweries reported having to interview at least 100 applicants in order to find one strong candidate. While in-house training is more common than in smaller breweries, it is not universal. Participation in external training programs is encouraged, but not all breweries are able offer training cost-reimbursement, though some are considering or planning to do so.

Mid-size breweries struggle to find individuals with general knowledge regarding different beer styles, and who are able to speak intelligently about beer with customers. Further, candidates who graduate from brewing programs seek employment at larger brewing companies where they can utilize their scientific skillset. Mid-sized breweries sometimes do not have the technologies that align with the training provided at these programs. As a result, they generally employ individuals for whom their establishment was a second choice. Because of this, many workers leave after receiving training to work for larger breweries, sometimes after only a few months.

Turnover is particularly prevalent among younger workers, especially in entry-level positions such as dishwashers and bussers. Approximately 70 percent leave for other commitments, while others are fired due to skills deficiencies, a lack of common sense or a failure to take ownership of the job. For those who do stay with the mid-size companies, advancement is easier to accomplish in a shorter period of time (e.g., 12 months) than it would be at a larger brewery.

50+ employees

Overall, large breweries are experiencing steady growth in both profit and employee numbers, and are expanding and/or planning to expand, oftentimes outside of San Diego. One of the greatest challenges to growth is the rapid expansion of the overall brewing industry in San Diego. Almost two dozen new breweries have been added to San Diego County in the past year, driving competition for financial capital, workers and market share.

These large breweries report a need for both technical and support positions within their businesses, and some anticipate hiring up to several hundred additional employees in order to meet growth needs. These breweries typically receive thousands of resumes per opening and with a large pool of candidates, finding skilled people to fill openings is much easier than it is for smaller breweries. The difficulty, however, still lies in finding qualified and knowledgeable brewers, lab technicians and quality assurance professionals. On the other hand, support areas such as marketing and human resources generally have a wider pool of qualified candidates from which to select. Technological skills are highly valued, particularly as production technology becomes more and more sophisticated.

Employee retention can still be an issue for larger breweries, though at a lower rate than smaller breweries. Turnover rates are lower due to larger companies' abilities to offer better benefits and a great work culture. Specifically, they are able to invest more in onboarding and training initiatives that welcome employees into the company and support their professional growth. Compared to the industry average, positions in the home office and support departments have lower employee turnover rates than production-side positions such as dishwashers and brewpub workers.

Large breweries necessarily have a higher number of average openings than smaller breweries, and there are more opportunities for advancement or lateral movement across career ladders. For

Brewery Hiring Practices

All breweries reported sourcing workers through a variety of methods:

- Internal promotion
- Local brewing certificate programs
- Referrals
- Social networks
- Online job sites
- Industry contacts
- Word of mouth
- Customers/visitors
- Brewingwork.com

While they used a variety of outreach methods for sourcing employees, the breweries interviewed relied heavily on word of mouth and referrals from industry contacts. In addition to more general recruitment practices, breweries tap into an industry-specific website (brewingwork.com) and recruit specifically from local brewing certificate programs. Even with these tools, employers would like to know how to access a larger audience of qualified applicants.

example, a bartender can eventually work to become a VP of Marketing, line cooks can progress to regional chefs, and HR assistants to department managers.

Trends/Summary

Breweries of all sizes tend to experience similar workforce challenges at different scales. Customer service and other soft skills are at a premium, and a limited pool of qualified applicants within a rapidly expanding market leads to intense hiring competition. Limited resources in smaller breweries can make it difficult to attract workers, but there is appeal to the amplified amount of responsibility carried by each worker in a small establishment, and opportunities for rapid career advancement can also be attractive. This type of ground-floor experience is particularly valuable in a highly entrepreneurial industry where many employees hope to run their own brewery one day.

Employers look for a combination of passion and education when hiring. Brewing certificates, home brew experience and involvement in the Brewers' Guild show employers that candidates have the initiative to learn about the technical side of brewing. Other employers feel that while certificates like Cicerone are valuable due to its focus on the brewing process and chemistry, employees striving to be brewers should not necessarily be confined by the program and should express their own creativity in the craft.

The cycle of workers through larger breweries sheds light on the seemingly perpetual growth in San Diego's craft beer market: Once they have gained experience in small breweries, many workers transition to larger and more established ones. Meanwhile, those who have been trained at the larger breweries often leave to pursue dreams of owning their own breweries, and the cycle continues.

SPECIALTY FOODS INDUSTRY

Industry Overview

Defining the specialty foods industry

According to the Specialty Foods Association, specialty foods are premium foods of the highest grade, style or quality in their category. SANDAG's Traded Industry Clusters primarily include manufacturing in their specialty foods definition.³⁸ For the purposes of this study, specialty foods is defined as food and beverage companies and/or manufacturers that are located in and unique to San Diego County. Specialty food establishments represented in this report may include local artisanal foods, bakeries, coffee shops and cafes, dessert shops and food trucks.³⁹

Changing demographics and consumer preferences are leading to a shift towards greater wellness and experiential lifestyles, which is reflected in what consumers eat and drink. This is particularly evident in San Diego where the majority of employers are small businesses—local mom and pop eateries, specialty food stores and other niche food shops make up an integral part of the region's food industry. Many restaurants and stores are by-products of the cultural diversity of the region's population, and San Diegans have come to associate neighborhoods with their main ethnic foods:

³⁸ Traded industry clusters in the San Diego region: 2016 data update, SANDAG, March 2016, http://www.sandag.org/uploads/publicationid/publicationid_2017_20489.pdf.

³⁹ See Appendix B for a complete list of NAICS codes and a list of employers interviewed.

Italian in downtown's Little Italy, Asian food in the Convoy neighborhood, and Filipino cuisine in National City to name a few. San Diego's proximity to Mexico has also infused the area with an abundance of authentic Mexican fare. Just as craft beer represents a higher-quality beverage choice over big beer, San Diego's focus on specialty foods is a lifestyle statement for consumers. Demand for healthier food options and organic ingredients is growing, and with them the farm-to-table dining trend, as people are increasingly concerned about the origins of the food they consume. Even specialty or craft coffee is experiencing a surge in neighborhoods such as North Park and East Village, making San Diego one of the nation's fastest-growing coffee cities—sixth best in the U.S.,⁴⁰ and comparable to coffee meccas such as Portland or Seattle.⁴¹

Economic impact

The U.S. food industry, including retail grocery and food service, contributed \$1.74 trillion to the economy this year.⁴² Within the industry, restaurants contributed \$783 billion in sales (4 percent of the U.S. GDP) and employed 14.4 million people.⁴³ High-priced specialty foods are a growing subset of the food industry, churning out \$88.3 billion in 2013 — three times the overall growth of the food and beverage market (5.2 percent).⁴⁴

In California, restaurants are a driving force in the state's economy, providing jobs for thousands of people. In 2015, there were over 69,000 food and drink locations in the state. Restaurants were projected to contribute \$79.1 billion in sales and almost 1.7 million in restaurant and food service jobs in 2016, with an additional 172,200 jobs projected to be added by 2026.⁴⁵

San Diego's restaurant industry saw food preparation and serving jobs increase by 23 percent in 2015, yet the average annual salary in the industry was only \$26,460 in 2015, which is less than the self-sustainable wage needed for a family with a single earner to survive on.⁴⁶ However, the food industry's job growth rate in San Diego (45 percent from 2010-2015) has far surpassed the growth rate for the state (21 percent) and the nation (18 percent) (Figure 4)⁴⁷.

⁴⁰ Bravo, Kristina, "San Diego named 6th best city for coffee fanatics," KPBS, April 26, 2016, http://www.kpbs.org/news/2016/apr/26/san-diego-named-6th-best-city-coffee-fanatics/?utm_campaign=todays-news-analysis&utm_medium=email&utm_source=newsletter&utm_term=headline/.

⁴¹ Morlan, Kinsee, "San Diego's coffee scene is having a moment," Voice of San Diego, February 9, 2016, <http://www.voiceofsandiego.org/topics/food/san-diegos-coffee-scene-is-having-a-moment/>.

⁴² "Technomic provides total food industry channel coverage," CBS8, <http://www.cbs8.com/story/32770696/technomic-provides-total-food-industry-channel-coverage>.

⁴³ California restaurant industry at a glance, 2015, http://www.restaurant.org/Downloads/PDFs/State-Statistics/2016/CA_Restaurants2016.

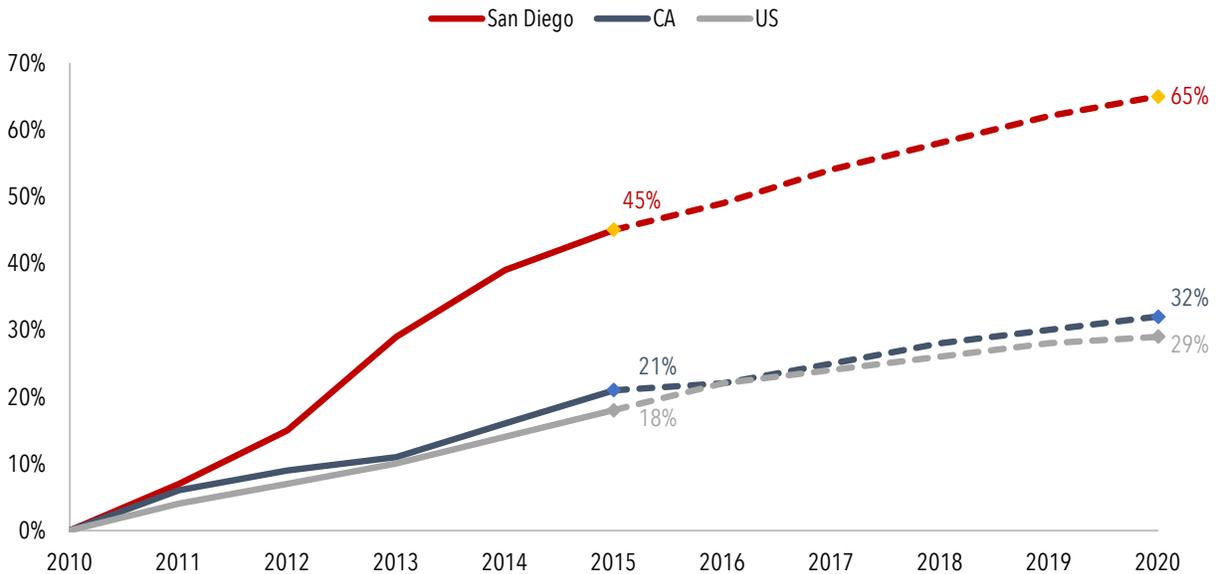
⁴⁴ Harvey, Katherine P., "More shoppers buying high-priced specialty foods," April 8, 2014, <http://www.sandiegouniontribune.com/business/restaurants/sdut-specialty-foods-boom-belies-economic-perception-2014apr08-story.html>.

⁴⁵ California restaurant industry at a glance, 2015, http://www.restaurant.org/Downloads/PDFs/State-Statistics/2016/CA_Restaurants2016.

⁴⁶ McSwain, Dan, "Wages grow faster in San Diego than nation," The San Diego Union-Tribune, July 29, 2016, <http://www.sandiegouniontribune.com/business/economy/sdut-san-diego-wage-growth-tops-national-average-2016jul29-story.html>.

⁴⁷ Emsi 2016.3

Figure 4: Percent Change in Job Openings in Specialty Foods Establishments, 2010 - 2020



Industry Trends & Challenges

- Robotics:** There is a gradual shift to incorporating robotics in the food industry as one way of minimizing labor costs and freeing up workers for higher value work. This is already evident through fully-automated distribution centers, ordering kiosks in fast food restaurants, phone apps that automate the ordering process for places such as Starbucks and robots that help make pizza and hamburgers⁴⁸. Most jobs that may potentially be displaced by such technology are low-skilled, low wage jobs. However, while such automated services have started and will likely continue for a number of years, it is too soon to tell whether robotics will affect the workforce in a meaningful way.
- Tip-Wage:** There is growing discussion at the national level around idea of implementing a “tip-wage” in the restaurant industry. In this model, the custom of “tipping” would be eliminated and replaced with a higher base wage for employees. This is an effort to balance out the often uneven pay among restaurant staff, as well as a means to cope with rising minimum wage costs. Only a small handful of U.S. restaurants have currently adopted the no-tipping model and the discussion may be left to each state to debate and decide individually.
- Adding surcharges:** Due to regulatory pressures, some restaurants are moving toward the addition of a “livable wage” surcharge to meals, where companies add an additional fee between 1 and 3.5 percent onto customer bills.⁴⁹ This could be a result of a variety of factors including rising minimum wage costs, as well as difficulty hiring and retaining experienced employees.
- Fast casual:** Fast casual establishments present tasty and healthful options for consumers and include establishments like Panera Bread and Chipotle Mexican Grill. They are now the biggest competitors for quick dining establishments both in San Diego and the nation, cutting into

⁴⁸ Chea, Terence, “Hungry startup uses robots to grab slice of pizza,” The San Diego Union-Tribune, September 13, 2016, <http://www.sandiegouniontribune.com/sdut-hungry-startup-uses-robots-to-grab-slice-of-pizza-2016sep13-story.html>.

⁴⁹ Weller, Chris, “Restaurants have started using ‘living wage’ surcharges to raise servers’ incomes,” Business Insider, August 17, 2016, <http://www.businessinsider.com/restaurants-add-living-wage-surcharge-customer-bills-2016-8>.

sales of casual dining operators.⁵⁰ While overall U.S. restaurant visits in 2015 nearly reached pre-recession levels (up 700 million visits from 2010) overall growth is still slow at a 1 percent growth rate. By contrast, the fast casual segment of the food industry showed a 5 percent growth rate over the same time period.⁵¹

- **Drought effects:** Drought issues have the potential to affect the price of water, thereby affecting the food industry and food prices. In California where the state is a major producer of the fruit, vegetable, tree nut and dairy sectors, ongoing drought effects could create ripple effects, disrupting the prices of affected products and leading to higher bills for consumers.⁵²
- **Workforce challenges:** Finding that first job to get a foot in the door is the greatest difficulty for entry-level workers, particularly the young, unskilled or uneducated. There is a trend towards emphasizing greater work experience, which puts these populations at a disadvantage.

Employer Interview Findings

For this study 16 specialty food establishments and were interviewed about their employer needs, difficulties and hiring practices. Employers were broken down by size: Very small (1-5 employees), small (5-10 employees), mid-size (11-49 employees), and large (50+ employees). The findings below characterize trends that were observed throughout the employer interviews.

Employer needs

1-5 employees

Similar to the brewing industry, many of these very small companies are still in the early stages of development and are very much in start-up mode. Because of this, very small companies tend to be less certain about career pathways or opportunities for employee advancement and are instead focused on the day-to-day operations of maintaining and growing their business. Additionally, they find it difficult to anticipate employment projections. A majority of these companies employ just a few full-time employees in addition to any contractors, interns and part-time workers. Because of their size, small companies need workers who can wear multiple hats and perform tasks outside of their job description.

Some employers place less emphasis on training and education but expect employees to already possess the skill sets needed to perform well in their job. They are frequently looking for employees who can grow with the company, who can perform not only the basic tasks for the position, but also go beyond what they are told to do and apply their skill sets to help the company expand. Soft skills and prior experience are often more important than certifications and degrees for very small businesses. Regardless of education, everyone in the business needs to start from the bottom, and workers who possess the soft skills needed can go a long way.

These workers are difficult to find, since many candidates are recent college graduates without work experience, start-up experience or an understanding of how small companies work. Many youth lack

⁵⁰ 2016 Actionable Economics event, presentation by Chris Duggan, California Restaurant Association, August 24, 2016.

⁵¹ Weisberg, Lori, "Restaurants growing in SoCal, but not in U.S.," The San Diego Union-Tribune, February 24, 2016, <http://www.sandiegouniontribune.com/business/restaurants/sdut-restaurants-growing-southern-california-down-2016feb24-story.html>.

⁵² California drought: Farm and food impacts, United States Department of Agriculture, Economic Research Service, February, 3, 2016, <http://www.ers.usda.gov/topics/in-the-news/california-drought-farm-and-food-impacts.aspx>.

professionalism and effective communication skills, or do not know how to utilize the skill sets they do have. Once they have hired successfully, very small business experience retention concerns, particularly with younger workers or interns. Some companies experience a great deal of turnover because they cannot offer employees enough hours to work. Even with qualified workers in the workforce, many of these companies struggle to hire employees and sustain their business simultaneously.

Another hindrance for very small companies is a lack of exposure to individuals in this niche market. Interviewees confirmed that more social network marketing as well as niche advertising and digital marketing can help such companies expand and hire more workers in San Diego.

5-10 employees

Few of the small businesses interviewed are looking to hire and are simply trying to maintain the business as opposed to growing it. Many small employers identified company size as their biggest challenge since it limits the amount of production possible, makes it difficult to turn a profit and contributes to employee turnover. Access to capital is also problematic, as well as learning to develop and continue a solid business. Industry starters should know the basics of setting up restaurant machinery and potential pitfalls of restaurant management, but there are few resources out there to help small businesses survive.

These small companies are generally made up of part-time workers and students, and employers again emphasized the value of soft skills: great personality, common sense, critical thinking, reliability and time management among them. Career advancement opportunities are generally low at these companies since many lack the funds and positions to go around, but employers do recognize the need to increase wages in order to retain employees. Because of the lack of career positions at these companies, a majority of employees work part-time with other commitments. This can prompt high turnover rates for some employers since many workers will leave to work at larger businesses with greater opportunities and will only stay long enough to gain experience. One employer reported providing employees with a leave of absence — a retention tool that allows the company to maintain the same workers. If a company is able to retain an employee longer, additional responsibilities and hours are allocated to these employees which lead to pay increases.

11-49 employees

These mid-size companies are beginning to expand and have growing need for baristas, sales, marketing and other operations positions. Due to the expansion, these companies generally have more room for career advancement compared with smaller companies. Regulatory compliance presents a common challenge at this stage. There is often a disconnect between County and City guidelines, so it can be time consuming to make sure all regulations are being followed. Increases in worker's comp insurance also has detrimental effects for some businesses struggling to keep up with rising costs.

Employers reported looking for workers who view the industry as a career rather than a temporary job, but they are difficult to find. Many employees are in career or life transitions, and are not willing to commit to the industry long-term. The resulting turnover is problematic—coffee employers, for example, can take up to a year to train baristas, and this investment of time and effort is lost when the employee moves on. There are still ways to combat turnover, and while many of these mid-size companies do not currently offer benefits or training cost reimbursements, many are looking to do so in order to increase retention.

When making hiring decisions, educational background and experience are considered, but depending on the position soft skills such as attitude and personality are even more important to employers. The ability to work as a team is crucial for some employers and skilled/experienced job applicants can be turned down due to a misfit with company culture. Technical skill sets are not always required since many employers provide on-the-job/in-house training, though relevant previous experience can be helpful in accelerating the learning and onboarding process.

Employers have been frustrated with false expectations of some college and culinary school graduates—they frequently believe they can earn a \$60,000 salary immediately upon graduation, when in reality they may need to start at the bottom like everyone else. For some employers, it can also be challenging to find workers who are effective communicators, particularly among the younger workforce.

Sales and higher-level senior positions are particularly difficult for some of these employers to fill. Few younger workers are interested in sales positions due to the frequency of travel and volatile salary associated with commission-based positions. Limited opportunities in San Diego’s food industry also contribute to the difficulty of filling senior-level positions. Thus, some employers have been recruiting workers from outside San Diego in order to find workers with the appropriate skill sets.

50+ employees

Since these larger companies are generally stable or growing, so they are able to engage in more practices that improve employee retention. They frequently provide benefits, offer in-house training or provide cost-reimbursement for external related training and education. Some employers assign mentors as a way to promote job retention and ease the onboarding process; others focus on investing in and improving the current staff rather than hiring too many additional staff upon growth. Internal advancement is also more likely for larger companies than smaller ones, and these career paths provide goals for employees.

There are still turnover challenges in large companies, particularly in entry-level positions such as dishwashers and hostesses, as well as night shift positions. Many become tired of the repetitiveness of the job and choose to find employment elsewhere, while others are concurrently enrolled in school and leave upon graduation. Younger workers (18-25) also tend to turnover more frequently. Even though larger companies have a wider pool of applicants, they still have difficulty finding qualified workers. Many lack the skill sets needed to succeed in the culinary industry (e.g., kitchen staff without proper

Specialty Foods Hiring Practices

All specialty food employers reported sourcing for workers through a variety of methods:

- Word of mouth
- Professional/personal connections
- Career Technical Education programs
- Store visitors/customers
- Advertising vacancies
- Recruiting agencies
- Head hunters
- Referrals/recommendations
- Online job postings: Craigslist or Indeed

Nearly all employers interviewed sourced workers through word of mouth or referrals. Many also mentioned offering interviews to walk-ins asking for job opportunities. Unfortunately, some businesses have experienced difficulties with these methods, as a lot of potential job candidates were unreliable and did not attend scheduled interviews.

Many businesses utilized Craigslist to recruit employees, especially for lower-level positions. All employers using this platform constantly mentioned the time-consuming nature of going through hundreds of resumes to find a couple of somewhat qualified applicants. Even after meticulously examining applications, the majority did not possess the requisite skill sets. Interviews illustrated that many job applicants from Craigslist did not retain professionalism and were unprepared to attend interviews. Employers wanted to know how to gain access to platforms that exclusively deal

knife skills, servers without basic etiquette), while others are missing the right temperament or personality (e.g., having an air of entitlement).

Constantly changing laws are also challenging for businesses who often spend significant time and energy ensuring their company is in compliance.

Trends/Summary

Employee turnover is a struggle for specialty foods businesses of all sizes, particularly with part-time and younger workers. Employers frequently mentioned the lack of career advancement opportunities and the perception that long-term careers do not exist in this industry as major contributors to turnover.

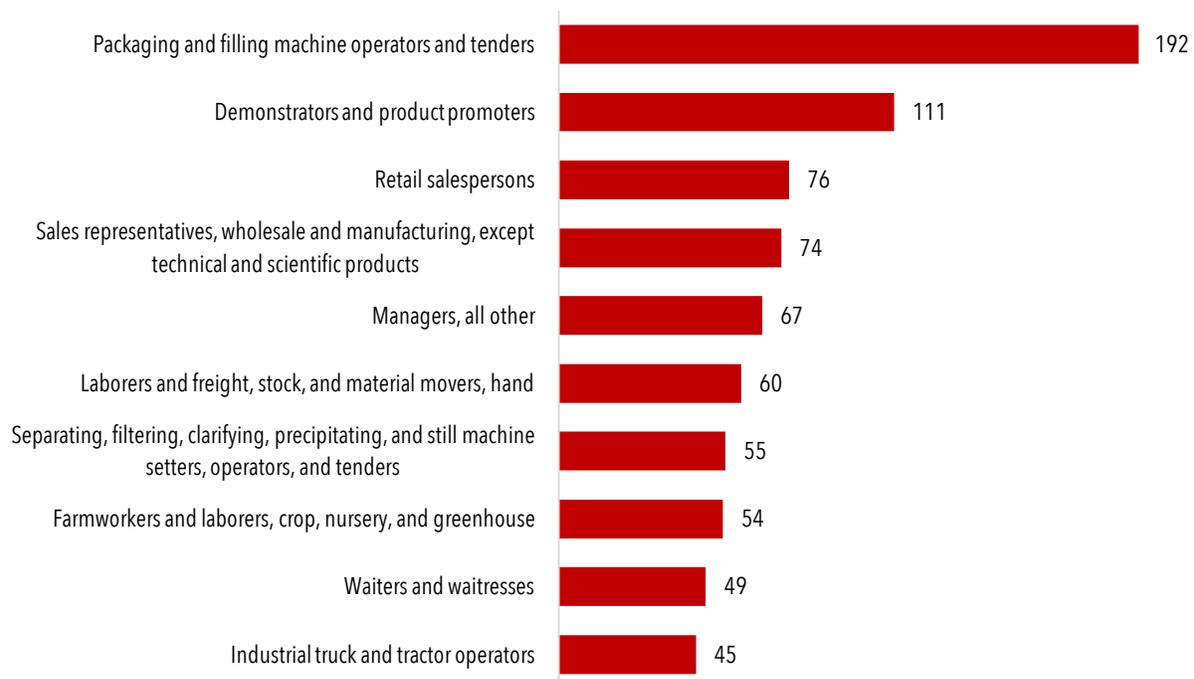
Additionally, nearly 90 percent of employers stressed the importance of fundamental soft skills in new hires. They repeat that professionalism, work ethic, personality and communication skills are difficult to teach, and they struggle to find new hires that already have these qualities.

OCCUPATIONAL OVERVIEW

Brewing Industry

The occupations most heavily represented in the brewing industry are those related to sales, product transport and production. Figure 5⁵³ shows the top ten occupations the San Diego brewing industry by number employed in 2016.

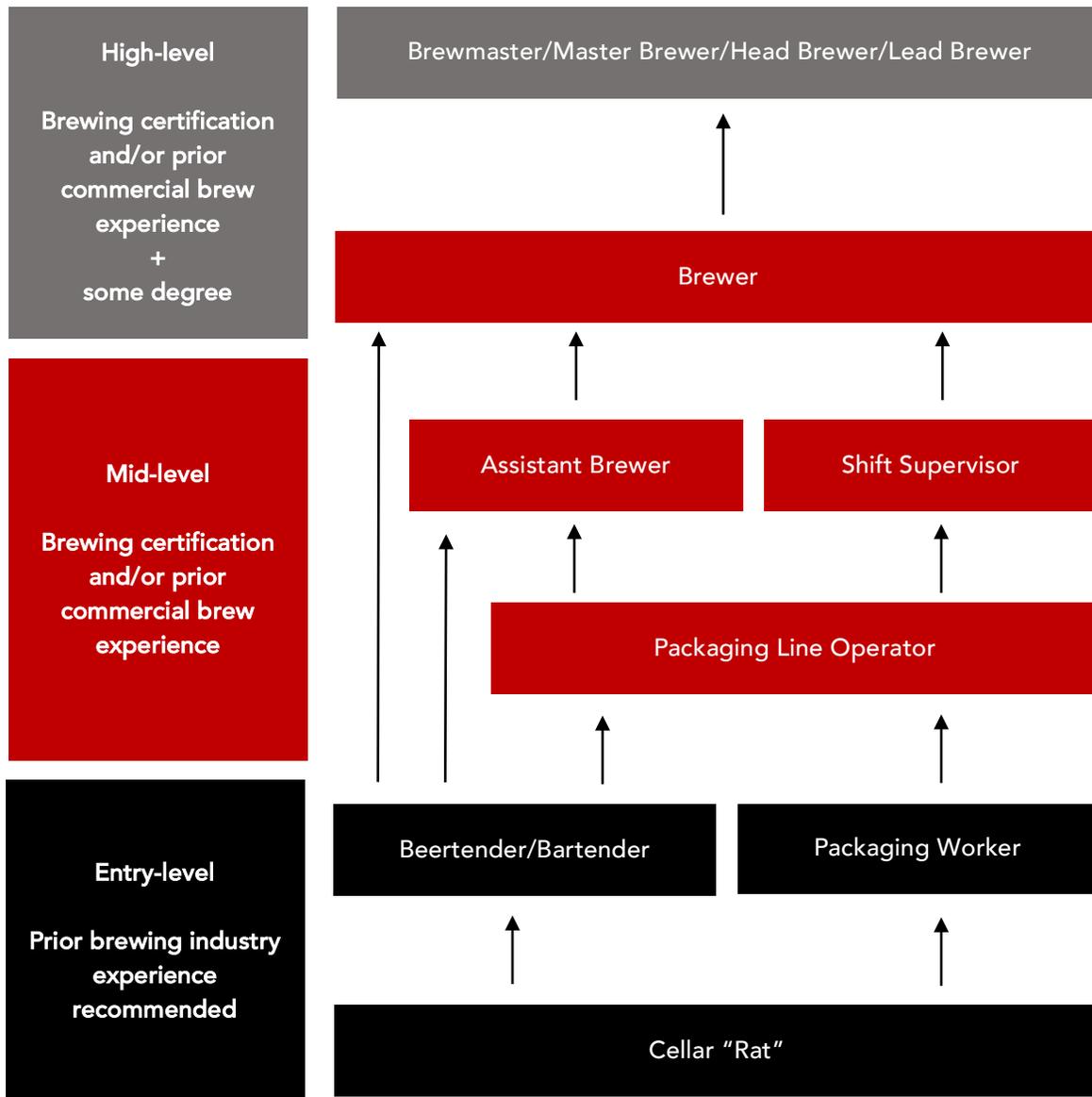
Figure 5: Top 10 Brewing Occupations by Number Employed, 2016



⁵³ Emsi 2016.3

While many of these are entry-level occupations, employers emphasize that they are an important step to becoming well-versed in all aspects of the brewing industry. They also point out that there are pathways for those who wish to progress to a higher level in the industry. Based on information from employer interviews, Figure 6 presents a career ladder typical of the Brewing industry.

Figure 6: Brewing Industry Career Pathway



On the brewing industry’s production side, many workers start off as a beertender or tasting room worker, helping to conduct tours or tastings. They may also enter the industry as a cellar “rat” — cleaning, washing kegs, changing hoses. Beertenders and Bartenders generally make minimum wage, plus tips, and must have a great personality and soft skills in order to engage with customers and listen to customer demands. Because these roles make around \$30/hr including tips, it is often a

step backward where wages are concerned if they pursue brewing positions. Workers who graduate from these entry-level positions may move into brewing occupations, as assistant brewers or brewers, then navigate into the ranks of master brewer or head brewer. Brewers constantly work with chemicals and hot liquids so the environment can be intense. Some breweries require brewers to have a chemistry degree, plus lab experience, while others prefer just brewing certification and/or prior experience in commercial brewing. Master brewers and head brewers are responsible for managing day-to-day brewing operations and tasting room staff, as well as developing brewing strategies.

Depending on the company, the following occupations may also be available:

- Lab technicians
- Quality assurance professionals
- Restaurant team members
- Cocktail servers
- Dishwashers
- Warehouse and distribution positions
- Logistics specialists

Specialty Food Industry

Bakers are the most heavily represented occupation in the specialty foods industry, while other top occupations are spread amongst management, preparation and packaging occupations. Figure 7⁵⁴ shows the top ten occupations the San Diego specialty foods industry by number employed in 2016.

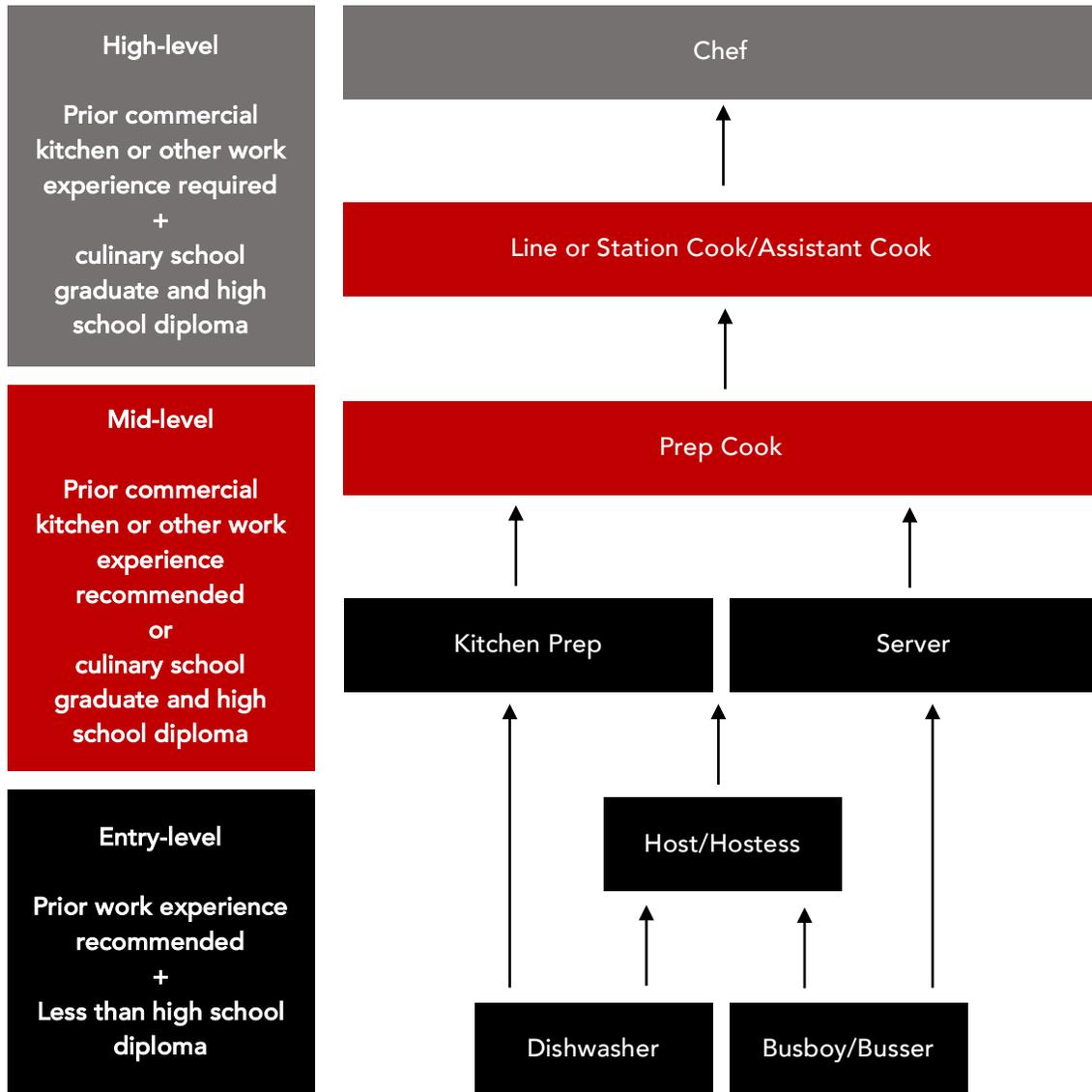
Figure 7: Top 10 Foods Occupations by Number Employed, 2016



Based on information from employer interviews, Figure 8 presents a career ladder typical of the Specialty Foods industry.

⁵⁴ Emsi 2016.3. All of the NAICS codes listed in Appendix B were included in this data, except for 311213 and 312120.

Figure 8: Specialty Foods Industry Career Pathway



Workers interested in becoming head chefs can start off in entry-level positions as dishwashers, bussers or hosts/hostesses depending on the establishment, and work their way up to being prep cooks, line cooks and chefs. Kitchen workers and cooks generally should be certified in Food Handling and ServSafe certifications. Having a background in catering or prep cooking is also valuable. Some employers prefer to hire culinary school enrollees or graduates since they feel it is easier to train and get these workers up to speed. Culinary school graduates also tend to be faster and more efficient with kitchen duties.

Depending on the business, workers with previous experience in commercial kitchens or with pastries is also highly-valued. Workers interested in becoming bakers, for example, can potentially start off as an entry-level cake filler or baking assistant, work their way up to being a froster, then a decorator and finally, lead decorator or baker. In coffeeshops, workers can start off as a barista and eventually

advance to store manager or other café management position, depending on the establishment. However, managers in many coffeeshops typically still work concurrently as baristas. Cashiers are also common entry-level occupations in bakeries, coffee shops and other cafes. In the specialty foods industry, advanced degrees are not usually required to move up the career ladder.

There are also advancement opportunities for part-time workers who wish to become full-time and/or move to a higher skills position. Students working weekends or after school in a fast food restaurant may be able to transition to a higher paying position in a restaurant that offers more hours.

Cross-Industry Careers

There are a number of support and operational positions that are common to both the food and brew industries, especially in the medium to large companies. Some that were mentioned by interviewed employers include:

- Sales positions
- Marketing specialist
- Marketing assistants
- Merchandising and buying
- Drivers/packers
- Social media personnel
- Account specialists
- Accountants
- Maintenance technicians
- Software engineers
- Administrative clerks

Sales positions need prior experience in a fast-paced environment and general knowledge of the brewing process or food niche where they wish to work. Direct sales experience is preferable over a relevant educational background (at least 2-5 years of distribution/sales experience required by some employers). Some companies are moving to require a marketing or communications degree for these positions, though it is not required. strong communication and persistence.

For small businesses, finding employees for these positions who understand small business is valuable. Financial and/or accounting background is valuable with substantive work experience in scheduling, procurement and negotiations. Additionally, many employers require a Bachelor's degree or some level of commensurate educational experience for positions in marketing, human resources and information technology departments.

REGIONAL EDUCATION & TRAINING

Brewing Industry

Beyond the in-house training offered by many breweries, there are two major industry education programs in San Diego, both founded in 2013.⁵⁵

⁵⁵ "San Diego Craft Brewing Industry: 2016 Update", National University System Institute for Policy Research, http://www.nusinstitute.org/assets/resources/pageResources/NUSIPR_2016_SD_Craft_Brewing_Update.pdf.

- San Diego State University (SDSU) College of Extended Studies offers a **Business of Craft Beer Professional Certificate**. The program focuses on the business side of the brewing industry, including some courses on basic brewing, but more on management, finance, marketing and business planning. SDSU offers Level I and Level II certificates, which require six and nine classes respectively.
- UC San Diego Extension offers a **Brewing Certificate**. This program focuses more on the production side of the brewing industry, and is geared toward entry-level brewing professionals. There are a few marketing, finance and management courses, but the bulk of the coursework covers brewing science, technology and processes. The final stage of this program is a 120-hour internship in a local brewery.

There are two other brewing certificate programs in California:

- Cal State Polytechnic University, Pomona (Cal Poly Pomona) Brewers Certificate
- University of California, Davis (UCD) Extension Professional Brewers Certificate Program

On a national level, there are two major certification programs that industry professionals can pursue to expand their knowledge of beer serving, tasting and food pairing.

- The Cicerone Certification Program⁵⁶ is widely respected, and offers four levels of certification for professionals in the beer industry. The certification exams are administered online, and the organization offers online and in-person classes to prepare. Some people may also opt to study from books or other study materials rather than participate in classes.
- The material in the Beer Judge Certification Program (BJCP)⁵⁷ requires in depth knowledge of judging techniques and the various ingredients in the brewing process. Both an online exam and a tasting exam are required for passing, and there are a number of classes and study resources to help people prepare.

These certifications are well-regarded by San Diego breweries; in a 2016 survey conducted by NUSIPR, the majority of participating breweries (57 percent) identified that employees have participated in the Cicerone program, while 39 percent identified employee participation in the UCSD Brewing Certificate program and 32 percent in the SDSU Professional Certificate program.⁵⁸

Specialty Foods Industry

San Diego's academic institutions offer an array of certificate and degree programs in culinary arts. Table 2 shows the programs associated with each school.

⁵⁶ <https://www.cicerone.org>.

⁵⁷ <http://bjcp.org>.

⁵⁸ "San Diego Craft Brewing Industry: 2016 Update", National University System Institute for Policy Research, http://www.nusinstitute.org/assets/resources/pageResources/NUSIPR_2016_SD_Craft_Brewing_Update.pdf.

Table 2: San Diego Educational Programs for Culinary Arts

Institution	Programs
Grossmont College	Certificate of Achievement <ul style="list-style-type: none"> • Baking and Pastry • Banquet Cook • Culinary Arts • Culinary Entrepreneurship • Line Cook • Prep Cook • Pastry Cook Associate Degree of Science <ul style="list-style-type: none"> • Baking and Pastry • Culinary Arts • Culinary Entrepreneurship
San Diego Continuing Education	Certificate <ul style="list-style-type: none"> • Culinary Arts • Professional Bakeshop
San Diego Culinary Institute	Advanced Professional Diploma <ul style="list-style-type: none"> • Cuisine • Pastry
San Diego Mesa College	Certificate of Achievement <ul style="list-style-type: none"> • Culinary Arts/Culinary Management in Hospitality Associate of Science Degree <ul style="list-style-type: none"> • Culinary Arts/Culinary Management in Hospitality
Southwestern College	Certificate of Proficiency <ul style="list-style-type: none"> • Culinary Arts: Cooking Essentials--Basic Certificate of Achievement <ul style="list-style-type: none"> • Culinary Arts: Cooking and Baking--Advanced Professional Baking and Pastry Associate of Science Degree <ul style="list-style-type: none"> • Culinary Arts: Cooking and Baking
The Art Institute of California - San Diego, a campus of Argosy University	Diploma <ul style="list-style-type: none"> • Art of Cooking • Baking and Pastry Associate of Science <ul style="list-style-type: none"> • Baking and Pastry • Culinary Arts Bachelor of Science <ul style="list-style-type: none"> • Culinary Management

Coffee Education

Those seeking specialized training in the coffee industry must look beyond traditional academic institutions. Located in Vista, Ca, Ivy League Barista Academy (ILBA) is a local option for those interested in coffee careers. They offer two- to five-day barista training, coffee roasting and business development classes. Nationally, the Specialty Coffee Association of America (SCAA) provides four educational pathways for coffee professionals: the Barista Pathway, Roaster Pathway, Coffee Buyer Pathway and Coffee Taster Pathway.⁵⁹ Classes are offered online, at SCAA events and at official SCAA campuses across the country. For San Diego residents interested in taking in-person classes, there are four SCAA campuses in California, three of which are in the Los Angeles area.

GAP ANALYSIS

This section seeks to identify gaps that may exist between employer demand and the supply of trained workers in the region.

Brewing Industry

It is difficult to assess job demand in the brewing industry because traditional job classifications do not include categories specifically for brewing occupations. Brewers, for example may be captured under Food Batchmakers (SOC 51-3092), but data about annual openings for that subset is not readily available. Employer surveys and interviews are useful tools for gathering this information, but the instrument used for this report (Appendix C) did not capture specific quantitative data. However, most of the breweries that were planning to expand identified brewing assistants and sales professionals as the jobs they would be most likely to hire. It is also clear from interviews that breweries are eager to hire individuals that have industry experience or certifications.

Supply of trained brewery professionals can be gauged by program completions coming from San Diego's industry certificate programs. Since summer 2014, SDSU and UC San Diego have awarded a combined 294 certificates specific to the brewing industry (Table 3). Both programs are young, so there is not yet enough consistency to identify trends in program growth, but there are increases in the few semesters where there is complete year-over data for both programs. When looking at Fall and Spring—the two primary semesters for most universities—certificate completions increase from 42 to 53 from Fall 2014 to Fall 2015, and grow from 48 to 64 from Spring 2015 to Spring 2016. As these programs continue to expand and establish their reputations, there is great potential for them to fill the widespread demand for qualified professionals in the brewing industry.

⁵⁹ <http://scaaeducation.org>.

Table 3: Program Completions, SDSU Business of Craft Beer Professional Certificate & UC San Diego Brewing Certificate

Term		SDSU Level I certificate	SDSU Level II certificate	UC San Diego brewing certificate	Total
2014	Summer	26	-	-	26
	Fall	25	8	9	42
2015	Winter	-	-	2	2
	Spring	42	1	5	48
	Summer	8	13	9	30
	Fall	32	9	12	53
2016	Winter	-	-	8	8
	Spring	38	10	16	64
	Summer	-	-	5	5
	Fall (to date)	12	4	-	16
Total		183	45	66	294

Specialty Foods Industry

There are significant supply gaps when comparing the number of culinary job openings with educational program completions (Table 4).⁶⁰ Some of the most glaring mismatches are the three areas of demand where San Diego has produced zero graduates. Culinary Science, which deals with food product development, is especially important to the specialty foods industry where new and creative offerings set a company apart. In 2015 there were 1,236 openings for workers with degrees in culinary science, yet there were no new graduates with the skills to fill these openings. Pastry Arts is the only program type for which there is an oversupply, with 164 graduates over two years competing for 103 job openings in 2015.

Table 4: Supply/Demand Gaps for Culinary Occupations

CIP code	Program	Program completions (2014 & 2015)	Job openings (2015)	Oversupply/ undersupply
12.0500	Cooking and Related Culinary Arts, General	290	3,424	-3,134
12.0509	Culinary Science/Culinology	0	1,236	-1,236
12.0504	Restaurant, Culinary, and Catering Management/Manager	127	943	-816
12.0503	Culinary Arts/Chef Training	326	1,116	-790

⁶⁰ Emsi 2016.3

52.0905	Restaurant/Food Services Management	0	259	-259
12.0599	Culinary Arts and Related Services, Other	0	164	-164
12.0501	Baking and Pastry Arts/Baker/Pastry Chef	164	103	61
Total supply, demand and gap		907	7,245	-6,338

CONCLUSIONS AND RECOMMENDATIONS

These specialty industries are growing steadily in San Diego County, and projections suggest that they will continue to do so. Workforce development and education providers should pay close attention to the employment gaps in these industries and work together to create innovative programs that will train job seekers to fill these roles. These industries are highly entrepreneurial and are accessible to most people, and the opportunity to be on the cutting edge of a growing industry can be exciting to job seekers. However, those seeking a career in the industry are faced with low wages in many positions, even beyond entry-level, which can be unsustainable for household breadwinners. Addressing these challenges is crucial if these industries are going to continue to flourish.

Education Providers and Workforce Development

Further industry research

Because specialty foods and brews are nuanced industry sectors, current job and industry classification systems do a poor job of providing detailed information about their employment needs and opportunities. This report identified career ladders and general trends based on employer feedback, but further research should be conducted to gather data on wages and average openings for these occupations.

Career pathways

Low-wage, low-skill jobs are essential to the success of these industries. These types of roles can even be useful for student workers who need to develop workplace skills and gain experience, or for populations that are limited by language skills, lack of work experience or insufficient academic credentials to secure more lucrative employment. However, they are also characterized by high rates of employee turnover, viewed by workers as dead-end or transitional positions. There needs to be clear career pathways that can move these people toward a sustainable living wage and make it worthwhile for employees to remain in the industry. The workforce system can focus incumbent worker training programs on these industries, where employers are reimbursed for training costs to upskill current employees and move them to higher positions and wage levels.

New/stronger educational programs

The gap analysis in this report highlighted areas in the specialty foods industry where there are no skilled graduates to fill open positions. In many other cases, there were far fewer graduates that are required by the local economy. Much like they did to create the two brewing certificate programs in

San Diego, education providers should analyze these gaps more closely and work with employers to craft courses of study in areas like Culinary Science that will strengthen the pipeline of skilled workers for these occupations. They should also review current programs to ensure they are meeting employer needs. Training programs should teach current trends in the specialty food industry where individuals learn not only about traditional foods, but emerging and growing trends. These programs should incorporate work experience and internships, and encourage experimentation and failure. Workforce investment boards may be able to provide funds to support these endeavors.

Soft skills training for employers

Specialty foods and brewing are heavily focused on teamwork and customer interaction, and nearly all employers noted difficulties in finding workers with strong customer service and communication skills. They noted specifically that a large majority of kitchen problems stem from miscommunication. However, employers need to be made aware that these skills are teachable, and the common sentiment of, "I can teach technical skills, but soft skills are just there or they aren't" is not true and not acceptable. Workforce agencies can support employers by investing in programs that teach them how to train workers on soft skills, which are just as much a part of their jobs as technical skills.

Support for small businesses

Workforce systems can invest in strategies to support small businesses, but they may need support from government and private industry as well. According to employer interviews, a common challenge faced by growing businesses in these industries is gaining access to capital. Private banks and government agencies should investigate products and programs designed to help small businesses in these industries to access financial capital or streamline their businesses to conserve funds. As an example, increased coordination between City and County regulatory agencies can reduce the amount of time and human hours that need to be invested in compliance-related activities. Many smaller businesses struggle to find accurate and helpful information when it is needed and some have been forced to close because of this. On another front, workforce and private industry should continue to invest in startup incubators and shared facilities like Beer Igniter and Just Call Us Kitchen Rental, a commercial kitchen rental facility in Clairemont that can be rented 24/7⁶¹. These facilities can allow entrepreneurs to grow their businesses without a huge up-front investment in storefronts and machinery.

Jobseekers

Training, work experience, realistic expectations

While there is high demand for many specialty foods and brewing occupations, taking an interest in the industry and simply applying for a job is not going to be enough. Employers in the brewing industry mentioned having to sort through hundreds of resumes to find a single qualified applicant. Jobseekers would do well to note that home-brew experience does not qualify as work experience to the majority of brewing employers, and individuals who are truly committed to commercial brewing as a career path should seek certification through UC San Diego or San Diego State.

Employers also report that many jobseekers have unrealistic expectations of the brewing industry, and encourage workers to gain experience in entry-level positions to become acquainted with the industry. In the specialty foods industry as well, employers are looking for candidates who are interested in

⁶¹ <http://justcalluskitchenrental.com/>.

long-term careers. Job seekers who invest the time in training for their desired role will signal this commitment to employers. While training can help set candidates apart, employers in both industries emphasize that all workers need to be willing to start at the bottom and work hard to get to their dream position.

Soft skills and networking

Both industries rely heavily on personal recommendations and word-of-mouth to recruit workers. Talking to people in the industry, including brewery owners and employees, can give job seekers a powerful advantage. Many brewery owners and top executives got their start in the industry by getting to know their bartender, brewery owner or someone else in the industry. Getting to know people personally is also an effective way to showcase soft skills, something that employers emphasize as lacking in many job applicants.

APPENDIX A: OCCUPATIONAL PROFILES, SPECIALTY FOODS

Bakers

Standard Occupational Code: 51-3011

Other Job Title(s): Baker, Bakery Clerk, Bakery Manager, Cake Decorator, Dough Mixer, Machine Operator, Mixer, Pastry Chef, Processor, Scaler

Description: Mix and bake ingredients to produce breads, rolls, cookies, cakes, pies, pastries, or other baked goods.

Fast Facts		San Diego County		
Current Employment (2016)		3,288		
Projected Employment (2021)		3,610		
Growth Rate (2016-2021)		10%		
Average Annual Openings (2016-2021)		141		
Hourly Pay Range		\$9.24	\$11.10	\$14.57
Typical Educational Attainment		High school diploma or equivalent		
		Entry-level	Median	Experienced

Top Skills and Competencies

Knowledge	Skills	Abilities
<ul style="list-style-type: none"> Production and Customer and personal service Food production English language Mathematics 	<ul style="list-style-type: none"> Monitoring Active learning Active listening Coordination Critical thinking 	<ul style="list-style-type: none"> Near vision Oral comprehension Oral expression Problem sensitivity Speech recognition

Occupational Tasks

- Check products for quality and identify damaged or expired goods
- Set oven temperatures and place items into hot ovens for baking
- Combine measured ingredients in bowls of mixing, blending or cooking machinery
- Place dough in pans, molds or on sheets and bake in production ovens or on grills
- Set time and speed controls for mixing machines, blending machines, or steam kettles so that ingredients will be mixed or cooked according to instructions

Counter Attendants, Cafeteria, Food Concession, and Coffee Shop

Standard Occupational Code: 35-3022

Other Job Title(s): Barista, Cafe Attendant, Cafe Server, Cafe Worker, Cafeteria Server, Cafeteria Worker, Crew Member, Food Service Assistant, Food Service Worker, Line Server, Server

Description: Serve food to diners at counter or from a steam table.

Fast Facts	San Diego County		
Current Employment (2016)		6,082	
Projected Employment (2021)		6,561	
Growth Rate (2016-2021)		8%	
Average Annual Openings (2016-2021)		481	
Hourly Pay Range		\$9.18 Entry-level	\$10.38 Median
Typical Educational Attainment		No formal educational training	

Top Skills and Competencies

Knowledge	Skills	Abilities
<ul style="list-style-type: none"> Customer and personal service Sales and marketing 	<ul style="list-style-type: none"> Active listening Service orientation Social perceptiveness Speaking Critical thinking 	<ul style="list-style-type: none"> Oral comprehension Near vision Oral expression Speech recognition Speech clarity

Occupational Tasks

- Serve food, beverages, or desserts to customers in such settings as take-out counters of restaurants or lunchrooms, business or industrial establishments, hotel rooms, and cars
- Prepare bills for food, using cash registers, calculators, or adding machines, and accept payment or make change
- Cook food or prepare food items, such as sandwiches, salads, and ice cream dishes, using standard formulas or following directions
- Perform cleaning duties such as sweeping, mopping, and washing dishes, to keep equipment and facilities sanitary
- Balance receipts and payments in cash registers

Bussers

Standard Occupational Code: 35-9011 (Dining Room and Cafeteria Attendants and Bartender Helpers)
Other Job Title(s): Bar Back, Bus Boy, Bus Person, Busboy, Dietary Aid, Dietary Aide, Dining Room Attendant, Server, Server Assistant, Shift Manager

Description: Facilitate food service. Clean tables, remove dirty dishes, replace soiled table linens; set tables; replenish supply of clean linens, silverware, glassware, and dishes; supply service bar with food; and serve items such as water, condiments, and coffee to patrons.

Fast Facts	San Diego County		
Current Employment (2016)		7,747	
Projected Employment (2021)		8,368	
Growth Rate (2016-2021)		8%	
Average Annual Openings (2016-2021)		532	
Hourly Pay Range		\$9.13 Entry-level	\$9.47 Median
Typical Educational Attainment		No formal educational training	
			\$12.04 Experienced

Top Skills and Competencies

Knowledge	Skills	Abilities
<ul style="list-style-type: none"> Customer and personal service Food production 	<ul style="list-style-type: none"> Service orientation Coordination 	<ul style="list-style-type: none"> Trunk strength Manual dexterity Arm-hand steadiness Speech recognition Extent flexibility

Occupational Tasks

- Wipe tables or seats with dampened cloths or replace dirty tablecloths
- Set tables with clean linens, condiments, or other supplies
- Locate items requested by customers
- Scrape and stack dirty dishes and carry dishes and other tableware to kitchens for cleaning
- Perform serving, cleaning, or stocking duties in establishments, such as cafeterias or dining rooms, to facilitate customer service

Chefs and Head Cooks

Standard Occupational Code: 35-1011

Other Job Title(s): Banquet Chef; Certified Executive Chef (CEC); Chef; Chef, Instructor; Cook; Corporate Executive Chef; Executive Chef (Ex Chef); Executive Sous Chef; Head Cook; Line Cook

Description: Direct and may participate in the preparation, seasoning, and cooking of salads, soups, fish, meats, vegetables, desserts, or other foods. May plan and price menu items, order supplies, and keep records and accounts.

Fast Facts		San Diego County		
Current Employment (2016)		2,601		
Projected Employment (2021)		2,864		
Growth Rate (2016-2021)		10%		
Average Annual Openings (2016-2021)		94		
Hourly Pay Range		\$13.01	\$18.25	\$24.42
Typical Educational Attainment		High school diploma or equivalent		
		Entry-level	Median	Experienced

Top Skills and Competencies

Knowledge	Skills	Abilities
<ul style="list-style-type: none"> Food production Production and processing Customer and personal service Education and training Administration and management 	<ul style="list-style-type: none"> Monitoring Coordination Speaking Management of personnel resources Social perceptiveness 	<ul style="list-style-type: none"> Oral comprehension Oral expression Problem sensitivity Deductive reasoning Information ordering

Occupational Tasks

- Monitor sanitation practices to ensure that employees follow standards and regulations.
- Check the quality of raw or cooked food products to ensure that standards are met.
- Estimate amounts and costs of required supplies, such as food and ingredients.
- Instruct cooks or other workers in the preparation, cooking, garnishing, or presentation of food.
- Supervise or coordinate activities of cooks or workers engaged in food preparation.

Dishwashers

Standard Occupational Code: 35-9021

Other Job Title(s): Dietary Aide, Dish Machine Operator (DMO), Dish Room Worker, Dish Technician, Dish Washer, Dishwasher, Kitchen Helper, Kitchen Steward, Stewarding Supervisor, Utility Aide

Description: Clean dishes, kitchen, food preparation equipment, or utensils.

Fast Facts		San Diego County		
Current Employment (2016)		7,534		
Projected Employment (2021)		7,894		
Growth Rate (2016-2021)		5%		
Average Annual Openings (2016-2021)		409		
Hourly Pay Range		\$9.12 Entry-level	\$9.45 Median	\$10.85 Experienced
Typical Educational Attainment		No formal educational requirement		

Top Skills and Competencies

Knowledge	Skills	Abilities
<ul style="list-style-type: none"> All knowledge for this position can be acquired on the job 	<ul style="list-style-type: none"> Active listening 	<ul style="list-style-type: none"> Manual dexterity Arm-hand steadiness Multilimb coordination Near vision Control precision

Occupational Tasks

- Wash dishes, glassware, flatware, pots, or pans, using dishwashers or by hand.
- Maintain kitchen work areas, equipment, or utensils in clean and orderly condition.
- Place clean dishes, utensils, or cooking equipment in storage areas.
- Sort and remove trash, placing it in designated pickup areas.
- Sweep or scrub floors.

Hosts and Hostesses

Standard Occupational Code: 35-9031 (Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop)

Other Job Title(s): Dining Room Supervisor, Greeter, Hospitality Coordinator, Host, Host Coordinator, Hostess

Description: Welcome patrons, seat them at tables or in lounge, and help ensure quality of facilities and service.

Fast Facts	San Diego County		
Current Employment (2016)		5,031	
Projected Employment (2021)		5,525	
Growth Rate (2016-2021)		10%	
Average Annual Openings (2016-2021)		480	
Hourly Pay Range		\$9.16 Entry-level	\$9.49 Median
Typical Educational Attainment		No formal educational requirement	

Top Skills and Competencies

Knowledge	Skills	Abilities
<ul style="list-style-type: none"> Customer and personal service 	<ul style="list-style-type: none"> Active listening Speaking Service orientation Social perceptiveness Coordination 	<ul style="list-style-type: none"> Oral expression Oral comprehension Speech recognition Speech clarity Near vision

Occupational Tasks

- Greet guests and seat them at tables or in waiting areas.
- Provide guests with menus.
- Assign patrons to tables suitable for their needs and according to rotation so that servers receive an appropriate number of seatings.
- Speak with patrons to ensure satisfaction with food and service, to respond to complaints, or to make conversation.
- Answer telephone calls and respond to inquiries or transfer calls.

Kitchen Prep Workers

Standard Occupational Code: 35-2021 (Food Preparation Workers)

Other Job Title(s): Diet Aide, Dietary Aide, Dietary Assistant, Food Preparer, Food Service Aide, Food Service Worker, Nutrition Aide, Pantry Cook, Prep Cook (Preparation Cook), Slicer

Description: Perform a variety of food preparation duties other than cooking, such as preparing cold foods and shellfish, slicing meat, and brewing coffee or tea.

Fast Facts	San Diego County		
Current Employment (2016)		13,241	
Projected Employment (2021)		14,413	
Growth Rate (2016-2021)		9%	
Average Annual Openings (2016-2021)		625	
Hourly Pay Range		\$9.16 Entry-level	\$10.16 Median
Typical Educational Attainment		No formal educational requirement	

Top Skills and Competencies

Knowledge	Skills	Abilities
<ul style="list-style-type: none"> Food production 	<ul style="list-style-type: none"> Active listening Monitoring 	<ul style="list-style-type: none"> Information ordering Speech recognition Arm-hand steadiness Deductive reasoning Near vision

Occupational Tasks

- Clean and sanitize work areas, equipment, utensils, dishes, or silverware.
- Store food in designated containers and storage areas to prevent spoilage.
- Prepare a variety of foods, such as meats, vegetables, or desserts, according to customers' orders or supervisors' instructions, following approved procedures.
- Take and record temperature of food and food storage areas, such as refrigerators and freezers.
- Wash, peel, and cut various foods, such as fruits and vegetables, to prepare for cooking or serving.

APPENDIX B: METHODOLOGY

The San Diego Workforce Partnership (SDWP) contracted UC San Diego Extension to conduct interviews with employers in the Specialty Foods and Microbreweries sector in San Diego. As part of this information-gathering phase, UC San Diego Extension conducted interviews with senior-level informants familiar with current market conditions and challenges impacting these industries. The research team utilized stratified random sampling to conduct interviews with 16 specialty food establishments and 15 breweries in the county. Interviews discuss employers' hiring needs, identify specific skill requirements and deficiencies among the current workforce, and highlight career advancement opportunities.

The following employers were interviewed for this report:

Breweries	Specialty Foods Establishments
<ul style="list-style-type: none"> • Amplified Ale Works • Benchmark Brewing • Border X Brewing • Dos Desperados Brewery • Indian Joe Brewing • Karl Strauss • Mason Ale Works • Mikkeller San Diego • Prohibition Brewing Company • Rip Current Brewing • Rock Bottom La Jolla • Rough Draft Brewing Company • Stone Brewing Company • Wavelength Brewery Company • Anonymous (1) 	<ul style="list-style-type: none"> • Arctic Zero • Bread and Cie • Gelato Vero Caffè • Kip's Nut-Free Kitchen • Little Cakes Cupcake Kitchen • Paleo Treats, Inc. • Pastries and Presentations • The Patio Group on Goldfinch • Rickaroons LLC • Shakespeare Corner Shoppe • Specialty Produce • Wrench and Rodent Seabasstropub • Zumbar Coffee & Tea • Anonymous (3)

Employers interviewed were characterized by the following North American Industry Classification (NAICS) codes:

6-digit NAICS	Description
311213	Malt Manufacturing
311230	Breakfast Cereal Manufacturing
311340	Nonchocolate Confectionery Manufacturing
311352	Confectionery Manufacturing from Purchased Chocolate
311411	Frozen Fruit, Juice, and Vegetable Manufacturing
311412	Frozen Specialty Food Manufacturing
311513	Cheese Manufacturing
311520	Ice Cream and Frozen Dessert Manufacturing
311811	Retail Bakeries
311812	Commercial Bakeries
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing
311821	Cookie and Cracker Manufacturing

311830	Tortilla Manufacturing
311920	Coffee and Tea Manufacturing
312111	Soft Drink Manufacturing
312120	Breweries
722330	Mobile Food Services

APPENDIX C: EMPLOYER SURVEY

Office Use Only

Date: _____

Company Name: _____

Contact Name: _____ Title: _____

Phone: _____ Email: _____

Primary Production Facility: _____

Industry(ies):

Circle all from survey, star primary industry

- | | |
|---|--|
| 1. Baked goods stores | 13. Frozen specialty food manufacturing |
| 2. Breakfast cereal manufacturing | 14. Herbs and spices |
| 3. Breweries | 15. Ice cream and frozen dessert manufacturing |
| 4. Cheese manufacturing | 16. Malt manufacturing |
| 5. Coffee and tea manufacturing | 17. Mobile food services |
| 6. Commercial bakeries | 18. Nonchocolate confectionery manufacturing |
| 7. Confectionary manufacturing from purchased chocolate | 19. Retail bakeries |
| 8. Cookie and cracker manufacturing | 20. Soft drink manufacturing |
| 9. Distilleries | 21. Specialty food stores |
| 10. Fresh and frozen seafood processing | 22. Tortilla manufacturing |
| 11. Frozen cakes, pies and other pastries manufacturing | 23. Wineries |
| 12. Frozen fruit, juice, and vegetable manufacturing | |

How would you describe your business?

- | | |
|--|--|
| <input type="checkbox"/> Start-up (under 1 year) | <input type="checkbox"/> Experienced (5-10 years) |
| <input type="checkbox"/> New in the market (1-5 years) | <input type="checkbox"/> Very experienced (10 years or more) |

How many workers do you employ in your company?

- | | |
|------------------------------------|-------------------------------------|
| <input type="checkbox"/> 4 or less | <input type="checkbox"/> 11 to 49 |
| <input type="checkbox"/> 5 to 10 | <input type="checkbox"/> 50 or more |

Company Growth/Decline

1. Please describe the employment growth/decline over the past 5 years.
 - a. Are there any occupations in particular that are growing over others? Why are those occupations growing more than others?
2. Do you anticipate needing to hire employees in the next year? If yes, what are the types of workers to be hired (entry-level, technician, middle management, upper management)?
3. What employment projections do you anticipate in the next 5 years?
4. Where do you source your workers?
5. Are you experiencing hiring difficulties? Why or why not? Which occupations are you having the most difficulty finding qualified workers for? Why?
6. What occupations in other industries or companies would be successful or valuable in your industry/company? / What other jobs that you know of have similar work / What industries do your workers come from?
7. Please describe any hiring or retention concerns. (Does the company have a high turnover rate or concerns with employees nearing retirement age?)
8. Do you outsource manufacturing and food processing?

Skill Sets and Training

9. Are there emerging, changing, or growing skills that you value? Are you experiencing a deficiency of these skills among job applicants or current employees? If yes, what are they?
10. Are there any certifications, credentials, training or other programs that are valuable in your industry? If yes, what are they?
11. Do your employees undergo regular training to advance in their careers? Please describe the types of training. Are they internal or external training programs? Are you willing to pay for training or provide tuition reimbursement?
12. Would you be willing to hire youth from a Career Technical Education (CTE) program (previously ROP)? Students are now doing vocational training in the culinary arts, etc. What types of CTE programs do you think schools should invest in?
13. What are the types of training that are required for hiring different levels of workers?
14. Are you aware of hiring and training incentives offered by San Diego Workforce Partnership? San Diego Workforce Partnership currently offers programs to offset the cost of hiring and training new or existing employees by reimbursing employers. If yes, do you utilize these programs? (Why/Why not?)
15. Are you interested in providing training for new workers before you hire them? A training reimbursement program offered by the San Diego Workforce Partnership is called Customized Training. The idea is to train workers before you hire them, especially workers who do not have the basic skill sets upfront.

Work Environment

16. What is the work environment like at your company?
17. What are the career pathways or opportunities for advancement? For example, if someone starts as a cellarman or a beertender, what is the highest position to which they can grow in your company? What kinds of traits and expectations do you expect an employee to have in order to advance? What types of workers tend to turnover in your industry or at your company?

Challenges and Needs

18. What is the biggest issue hindering your growth (regulatory, zoning restrictions, etc.)?
19. What can workforce development agencies such as the San Diego Workforce Partnership do to prepare workers for the Specialty Foods and Microbreweries industry?

Compensation

20. What are the entry-level positions in your company and what is the starting compensation for non-tipped employees?
21. How do you determine what the market compensation rates are for positions within your company? Does your company offer benefit packages for employees?

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