ECONOMIC IMPACT OF CRAFT BREWERIES IN SAN DIEGO COUNTY

2018

PHOTO: Taps at Coronado Brewing Company
EXECUTIVE SUMMARY

The Craft Beer industry continues to thrive in San Diego County. Nationally, total beer sales have declined, yet craft beer sales continue to grow.

Nationwide, Craft Beer retail dollar sales increased 8% to $26B during 2017. This sales figure represents 23% of the $111.4B national beer market.

The Independent Craft Brewers Seal, designed by the Brewers Association to help consumers identify independent craft brewers, has been adopted by over 3,300 independent craft breweries nationwide.

San Diego still ranks as the top county in the nation with a total of 148 craft brewery locations.

San Diego County craft brewers produced over 1.1 million barrels of beer during 2017, up from 900,000bbl during 2016.

San Diego County craft brewers produced an economic impact of about $1,100,000,000 in output during 2017, up from $870,000,000 in output during 2016. This number represents a greater total economic output than Balboa Park and its associated activities (i.e. museums, attractions, convention activities, the zoo, etc.) in San Diego.

San Diego County craft brewers generated about $802,000,000 in revenue for 2017, up from $638,000,000 during 2016. This number is greater than the amount of revenue generated by the San Diego Padres during 2017.

Recent decreases in federal beer excise taxes have freed dollars for craft brewers to reinvest in their businesses and in the community.

San Diego independent craft brewers’ philanthropic contributions totaled $4.9 million in 2017, supporting over 200 non-profit organizations in the county and over 500 non-profit organizations in California.
ABOUT THIS REPORT

This report was produced by the Office of Business Research & Analysis at California State University San Marcos, which is a joint effort between the College of Business Administration, department of Economics in the College of Humanities, Arts, Behavioral & Social Sciences, and the University Library. This report was published in conjunction with the San Diego Brewers Guild.

Data
The data supporting this report were collected from several sources during the first few months of 2018. Each data source has varying effective dates, and every precaution has been taken to ensure relative comparability.

IMPLAN®
To properly measure and quantify the flow of dollars through the San Diego economy, we used leading economic impact software. IMPLAN® is advanced input-output modeling software with regional data and economic multipliers built in. IMPLAN® extracts and measures data from local sources, rather than extrapolating regional data from national averages, to properly incorporate regional trade-flow assumptions and economic multipliers into customizable models to view economic impacts.

ReferenceUSA®
ReferenceUSA® is an Infogroup company that hosts an online database containing extensive information on businesses and consumers throughout the nation. The database allows users to find specified data, which can be narrowed down through a variety of filter options, about demographic and detailed firm information. Since its founding in 1992, ReferenceUSA® has collected up-to-date revenue and employment data from businesses through a combination of surveys and direct phone call verification. For those businesses unable to provide complete data, ReferenceUSA uses advanced economic modeling techniques to ascribe figures based on aggregated data from the U.S. Department of Commerce.

SimplyAnalytics®
SimplyAnalytics® is a web-based software that specializes in data visualization, mapping, and analytics. As a leading provider of analytics, data visualization, spatial analysis, and GIS software, SimplyAnalytics® caters to educational institutions, businesses, government agencies, and non-profit organizations in the United States. Demographic, business, and census-based data are gathered from a variety of data providers and can be displayed in multiple views including comparison tables, charts, interactive maps, and reports.

Photographs
We chose to photograph brewers who have been established in the county for many years, and whose beers are enjoyed by individuals around the world. All photographs were taken at Alesmith Brewing Company, Coronado Brewing Company, and Pizza Port Brewing Company.
THE CRAFT BEER INDUSTRY

Craft brewing in the United States has boomed over the past decade, finding momentum for growth in the industry’s ability to deliver distinctive products to consumers who seek unique beers and experiences. With the continued demand for innovation and variation by craft beer consumers, craft brewers use the regional workforce, and in many cases, locally-grown ingredients, to produce some of their best-selling beers in addition to seasonal, limited release, and special edition beers to further attract consumers. Consistently involved in the local community through various types of philanthropic events and outreach opportunities, craft brewers create a positive regional impact through their unique approaches to reaching and connecting with customers.

Disposable income levels directly affect the amount of craft beer that consumers purchase; according to IBISWorld, per-capita disposable income is expected to increase in 2018\(^1\). This increase indicates that consumers will have more money to spend at their discretion.

Craft is a word with strong implications to consumers regarding quality, process, and overall reputation; consumers are more inclined to pay higher prices for goods that have higher perceived value, and craft-labeled products fall into this category. The appeal of producing authentic craft products is obvious to businesses that strive to draw in more consumers and increase sales.
Craft brewers, as defined by the national Brewers Association (BA), are those that produce fewer than 6 million barrels (bbl) per year, are independently owned (25% or less ownership by a non-craft beverage alcohol industry entity), and whose beer is produced from traditional and innovative brewing ingredients (flavored malt beverages are not included)².

As more craft brewery brands are created or acquired by non-craft entities, uninformed consumers find difficulty in distinguishing between craft and non-craft brewers. The Independent Craft Brewer Seal (pictured left) is a national effort, spearheaded by the Brewers Association, to provide consumers with an easy way to identify independent craft brewers. As of May 2018, over 3,300 independent craft brewers in the United States have adopted the seal³.

Craft brewers in San Diego have seen increasing amounts of influence from large corporate conglomerates, such as AB InBev or Constellation Brands (referred to as ‘big beer’), who have acquired successful and well-known brewers in the county. Noteworthy acquisitions within the county have included Saint Archer Brewing Company by MillerCoors in 2015 and Ballast Point Brewing Company by Constellation Brands in 2015; Oregon-based 10 Barrel Brewing Company, acquired by AB InBev in November of 2014, opened a production brewery location in downtown San Diego during May of 2017. Under the Brewers Association nationally-recognized definition of a craft brewer, Saint Archer Brewing Company, Ballast Point Brewing Company, and 10 Barrel Brewing Company are not considered craft brewers. Although jobs remain local, not all of the revenue generated by these brewery operations remains in San Diego County. Instead, some of this revenue is exported and used in economies elsewhere.
During 2017, overall U.S. beer sales volume decreased by 1.2%. The volume share of craft beer at the end of 2017 was 12.7%, representing share growth over 2016 of about 0.4%. The volume share of import beer at the end of 2017 was 17.5%, representing growth over 2016 of about 0.5%. The chart above shows how craft beer has been continually growing in market share despite decreases in overall U.S. beer sales volume.
There are many classifications of craft brewers. Contract brewers use their own brewing equipment to brew beer for other companies in exchange for payment. Regional brewers are those that produce between 15,000 and 6,000,000 bbl of beer. Microbreweries are those that produce fewer than 15,000 bbl and sell 75% of this production off-site. Brewpubs are restaurant-breweries that sell 25% or more of their beer on site. The chart below represents the breakdown of craft barrels produced in the U.S. over the past several years.

Microbrewery production grew by nearly 17% in 2017, with brewpub production growth measured at 15% and contract brewers growing at 11%. Regional brewers observed a decrease in production during 2017 of around 1%. It is noteworthy that many brewers in San Diego County fall within the microbrewery and brewpub categories.

In 2017, there were 24.9 million barrels of craft beer produced in the U.S. (indicated by blue on the left), which is almost flat over 2016, with 1.63% growth. It is important to note that acquisitions of craft brewers in recent years by big beer have skewed some growth numbers.
SIZE AND GROWTH

The U.S. Department of Treasury’s Alcohol and Tobacco Tax and Trade Bureau (TTB) grants states the authority to oversee alcohol and beverage control. The California Department of Alcoholic Beverage Control (ABC) regulates manufacturers and purveyors of alcohol via licensing within California. The 3 types of ABC licenses discussed in this report are:

- Type 1: Beer Manufacturer (large brewer)
- Type 23: Small Beer Manufacturer (<60,000 bbl)
- Type 75: On Sale General - Brewpub (>100-5,000 bbl)

Although the TTB count does not solely reflect active brewers in the marketplace, it is still a good indicator as to the size and relative growth of the industry in terms of firms operating in the marketplace. According to the Brewers Association (BA), there are over 6,600 active breweries in the United States in 2018. The BA expects the total number of breweries to increase to over 7,000 by 2019. TTB license growth has rapidly accelerated since 2011. In 2017, there were a total of 1,106 active California TTB licenses, which represents a 19.3% growth rate from 2016. The number of TTB licenses has almost tripled since 2011. The chart below displays the number of active CA TTB licenses over the past several years.
CALIFORNIA

There were over 900 craft breweries operating in California at the end of 2017, which ranks the state as having the highest number of craft breweries in the nation U.S. It is worth noting that 91.4% of California residents live within 10 miles of a craft brewery, showing the integration of craft brewing at a community level. Craft brewers produced a total of 3,285,525 barrels of beer in California, which ranks it second among states within the U.S. for beer production. This number represents a decrease of 10,000 bbl compared to 2016, as denoted by the solid blue line in the graph below. However, the total production for 2017 does not include production from breweries that were owned more than 25% by big beer companies during 2017 (i.e. not craft beer). The total barrelage is 4,734,438 for all craft brewers, including acquired craft brewers, represented by the dotted blue line in the graph below; the dotted orange line represents a linear trend line based on the given years of craft data, and the dotted green line represents a linear trend line when including acquisitions.

Denver, CO and Tampa, FL are also considered craft brewer hubs. Colorado produced 1,523,204 barrels while Florida produced 1,408,032 barrels, which placed them in 3rd and 4th places, respectively, for state craft beer barrelage in 2017. The total drinking age population for each state is 29,100,364 in California, 4,142,046 in Colorado and 16,166,293 in Florida. Converting barrelage figures to gallons and dividing the total amount produced by the drinking age population provides a production per-capita figure that represents the total amount of gallons produced per individual. Colorado craft breweries produced 11.4 gallons per drinking-age capita compared to California and Florida breweries, which produced 3.5 and 2.7, respectively.
CRAFT BEER TAXES

The Federal Excise Tax (FET) is an alcohol beverage tax that is enacted by the federal government onto breweries, wineries, and distilled spirit producers in the United States. High excise taxes bring about higher prices for consumers in the market for craft beer. The burden of the tax is passed on in the form of increased prices, and as a result, wholesalers increase the price of craft beer products in the market.

At the end of 2017, a two-year provision of the Craft Beverage Modernization and Tax Reform Act (CBMTRA) was passed by Congress. This provision lowers the Federal Excise Tax for distilled spirits producers, wineries, and breweries. The new Federal Excise Tax, which has been in effect since January 1st, 2018, has been lowered from $7 per barrel to $3.5 per barrel for the first 60,000 barrels produced for domestic breweries that annually produce fewer than 2 million barrels of beer\(^1\).

Small and independent craft breweries largely benefit from this tax break. As the provision lowers the tax burden on craft brewers, wholesale entities are able to pass along the savings, benefitting purveyors and consumers of craft beer. In addition, small and independent brewers benefit from the new Craft Beverage Modernization and Tax Reform Act as they now have the flexibility to transfer beers between bonded warehouses or facilities without any tax liability. This change is noteworthy when compared to the previous tax law, which stated that beer could only be transferred between commonly-owned breweries without tax payment. Craft brewers are experiencing increased profits as tax burdens decrease, and consequently have the opportunity to reinvest and grow their businesses by purchasing new capital equipment for brewing, giving back more to the community, and providing higher wages to employees.

SAN DIEGO COUNTY

As of May 1, 2018, there were 148 independent craft brewers operating in the county. Several of these 148 craft breweries have tasting rooms/pubs under the same brand/license, bringing the total number of operating craft brewery locations to 178\(^1\).
Craft brewers continue to expand their production and hire more employees to facilitate continued growth. As the county with the leading brewery count in the nation, San Diego County brewers are responsible for economic stimulation and jobs in the region. This report analyzes the economic impact of craft brewers in San Diego County, as well as select geographical regions within the county.

To measure economic impact on the county, data indicating industry change within an input/output model in IMPLAN® software is used, providing reproducible quantitative results displayed in three impact categories:

Direct impacts result from expenditures associated with constructing and operating a brewery.

Indirect impacts result from the suppliers of the breweries purchasing goods and services and hiring workers to meet demand – these secondary impacts would not occur but for the original brewery operations.

Induced impacts result from the employees of the breweries purchasing goods and services at household levels.

For purposes of this report, indirect and induced impacts from the IMPLAN® model were combined into “multiplier effects.” Total economic impact is composed of direct and multiplier effects. “Value Added” is a measure of the economic impact of craft beer activities on San Diego in the form of compensation of employees, taxes on production and imports (minus subsidies), and gross operating surplus. Output is the total annual value of all production activities generated by the craft beer industry in San Diego.
SAN DIEGO COUNTY
Within the county of San Diego, the total craft beer economic impacts for 2017 are below. San Diego County independent craft brewers produced over 1.1 million barrels in 2017, compared to 900,000 in 2016. This represents an increase of roughly 22% over 2016.

<table>
<thead>
<tr>
<th>Impact Type</th>
<th>Employment</th>
<th>Labor Income ($)</th>
<th>Value Added ($)</th>
<th>Output ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>4,571</td>
<td>64,025,389</td>
<td>326,528,561</td>
<td>806,682,287</td>
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<tr>
<td>Multiplier Effect</td>
<td>1,704</td>
<td>107,240,683</td>
<td>176,160,152</td>
<td>299,555,699</td>
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<tr>
<td>Total Effect</td>
<td>6,275</td>
<td>171,266,072</td>
<td>502,688,713</td>
<td>1,106,237,986</td>
</tr>
</tbody>
</table>

THE 78 CORRIDOR
According to its website, Innovate78 is the collaborative outcome of five cities - Carlsbad, Escondido, Oceanside, San Marcos, and Vista - coming together with a shared vision to boost economic prosperity along the 78 Corridor. Because of the number of craft breweries situated along the 78 freeway, it is also referred to as the “Hops Highway.” Further breaking down the craft beer impact from above to just those zip codes within the 78 Corridor, the impact of craft beer within that region is as follows:

<table>
<thead>
<tr>
<th>Impact Type</th>
<th>Employment</th>
<th>Labor Income ($)</th>
<th>Value Added ($)</th>
<th>Output ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>2,526</td>
<td>44,586,369</td>
<td>161,318,596</td>
<td>299,101,480</td>
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<td>Multiplier Effect</td>
<td>476</td>
<td>29,701,136</td>
<td>49,192,556</td>
<td>83,780,145</td>
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<tr>
<td>Total Effect</td>
<td>3,002</td>
<td>74,287,505</td>
<td>210,511,152</td>
<td>382,881,625</td>
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</table>
Over the spring of 2018, interviews, surveys, and research were conducted by a CSUSM Senior Experience team of students on behalf of the San Diego Brewers Guild (SDBG). Phone interviews and email surveys were conducted among active brewery members of the SDBG, with the goal to gather information concerning philanthropic donations by the industry in terms of a percentage of gross sales revenue. This information is used to evaluate the philanthropic impact of San Diego County independent craft brewers. Additionally, the Senior Experience team gathered information concerning specific charities and organizations that craft brewers chose to support.

By comparing the amount of money donated by San Diego craft breweries to the total number of barrels produced in the region, the team was able to calculate an average philanthropic donation multiplier of $4.45 per bbl. Using this multiplier, the team projected that 2017 craft brew production in San Diego County led to a total of $4.9 million in philanthropic donations to non-profits. This amount considers the value of donations based on retail and wholesale value. $4.9 million in total philanthropic donations translates to an average of 1.35% of gross craft brewer sales that go to local non-profits.
The results found by the team are represented in the infographic above. Based on an average multiplier of $4.45/bbl, calculated by comparing donations of breweries to their production, the team found that 2017 craft brew production in San Diego County led to a total of $4.2 million donated to non-profits. This translates to an average of 1.35% of gross craft brewer sales that go to local non-profits. Comparing this percentage to the donations administered by big beer, craft brew is responsible for higher donations and support of local non-profits. As an example, the team compared AB InBev revenue and donation data to find that the yearly average $29.25 million donated translates to 0.05% of sales revenue for the brewer. This is just one example of the substantial philanthropic impacts attributable to San Diego county craft brewers versus big beer. As previously mentioned in the report, Balast Point will be donating around 1.2% of Made in San Diego Golden Ale sales, which is only one brew among their many products. Due to data limitations, it is difficult to accurately measure the percentage of donations to gross sales; however, research and industry average trends indicate that the percentage would be much, much lower than the craft percentage of 1.35%. It is a positive fact that big beer gives back to the community, that much is undeniable; however, the relative degree of philanthropic support remains much higher among craft brewers than big beer.

**COMPARISONS**

Independent craft brewers in San Diego County produced an economic impact of about $1.1B in total output for 2017. This number represents a greater total economic output than Balboa Park and its associated activities (i.e. museums, attractions, convention activities, the zoo, etc.) in San Diego.  

2017 craft beer revenue in San Diego County totaled about $802M. In comparison, the San Diego Padres generated about $259M in revenue during 2017.  

The chart on the left represents the distribution of philanthropic organizations in San Diego County that are supported by craft brewers. Nearly half of the organizations are related to youth/education and environment/community. Additionally, 21% of nonprofits supported relate to medical/health. This percentage demonstrates how craft brewers in San Diego County support nonprofits that are important to community residents.
CRAFT BREWERS CONFIDENCE INDEX
Each semester between fall 2015 and spring 2018, a CSUSM Senior Experience team of students conducted surveys on behalf of the San Diego Business Journal. The Senior Experience program matches final-year College of Business Administration students with local businesses, overseen by a CSUSM faculty advisor, to present students with the opportunity to participate in a professional business engagement and apply their undergraduate knowledge in practical ways. The objective of the San Diego Business Journal’s semi-annual survey is to measure and evaluate the overall confidence level of craft brewers in the county. The researchers used a confidence diffusion index, which, according to the Bureau of Labor Statistics, is a measure of the dispersion of change. That is, if there were no changes in the period, then the rating would be 50 on the 100-point scale. An index rating above 50 indicates that the values being measured increased, and an index rating below 50 indicates that the measured values decreased.
Since the surveys began in 2015, the general craft beer industry confidence in San Diego County has been high. The forward-looking, twelve-month view to the left indicates strong confidence. Hiring and investment is anticipated to increase, and confidence in production and distribution volume growth is significant.

SOURCE: San Diego Business Journal and CSUSM
In the Craft Brewer Business Confidence Index, respondents were asked to indicate forward-looking confidence over the ensuing 12-month period regarding employment, investment, distribution, and production.

As shown, all respondents anticipated an increase in production, distribution, and capital expenditures during 2018. These values indicate that craft brewers in San Diego County are optimistic about the future growth and development of their operations. Anecdotally, various news articles have challenged whether craft beer has reached its peak. Clearly, craft brewers in San Diego County remain optimistic, despite these articles.
ABOUT THE PUBLISHERS

OFFICE OF BUSINESS RESEARCH AND ANALYSIS
Founded in 2018, the Office of Business Research and Analysis is a joint effort between the College of Business Administration, the Department of Economics in the College of Humanities, Arts, Behavioral & Social Sciences, and the University Library at California State University San Marcos (CSUSM) to research and report on policy issues, industry impacts, and local economic issues.

CALIFORNIA STATE UNIVERSITY SAN MARCOS (CSUSM)
Building on an innovative 29-year history, California State University San Marcos is a forward-focused institution, dedicated to preparing future leaders, building great communities and solving critical issues. Located on a 304-acre hillside overlooking the city of San Marcos, the University is just a short distance from some of Southern California’s best beaches and an hour from the US-Mexico border. CSUSM enrollment is over 17,000 (and growing), and the University is fully accredited by the Western Association of Schools and Colleges.

CSUSM enjoys a special relationship with Craft Beer. Stone Brewing is nearby and grew alongside the University. Numerous alumni have started breweries in the region. The University will be offering its EngiBeering™ program, which trains students to brew craft beer at scale, and to create and run a brewery. In addition, the University has a registered archive, called Brewchive™. The CSUSM Library has begun to collect and digitize historical documents and special pieces. While the collection will focus on the evolution of San Diego's New Brew Wave, circa 1987-present, the archive will also feature signature collections, such as the history of women in San Diego's craft brew industry.

SAN DIEGO BREWERS GUILD
Founded in 1997 by a group of brewers dedicated to the growth of craft beer, the San Diego Brewers Guild is a nonprofit 501(c)(6) organization comprised of allied brewery members, tradespeople, and various goods and services providers. Since its founding, the Guild’s mission is to promote awareness of local, independently brewed beer via education, events, and community involvement. San Diego (aka The ‘Capital of Craft™’) is home to more than 130 independent craft breweries and continuously garners attention for its medal-winning beer styles and positive international reputation. For more information about the San Diego Brewers Guild and its members, visit sdbeer.com.
SOURCES
1) IBISWorld
2) Brewers Association
3) Brewers Association
4) MadeInSD.com
5) Brewers Association
6) Brewers Association
7) Brewers Association
8) Department of the Treasury
9) California Craft Brewers Association
10) California Craft Brewers Association
11) Brewers Association
12) Brewers Association
13) Brewers Association
14) SimplyAnalytics
15) Brewers Association
16) San Diego Brewers Guild
17) Americans for the Arts
18) Forbes MLB Team Valuations

PHOTO: Coronado Brewing Company