



California State University
SAN MARCOS

ECONOMIC IMPACT OF CRAFT BREWERIES IN SAN DIEGO COUNTY



SANDIEGONORTH
Economic Development Council

Connect. Develop. Grow.

2017

PHOTO: Taps at Stone Brewing



**California State University San Marcos
College of Business Administration**
333 S. Twin Oaks Valley Road
San Marcos, CA 92096
www.csusm.edu/coba

San Diego Brewers Guild
P.O. Box 180696
Coronado, CA 92178
www.sdbeer.com

**San Diego North Economic
Development Council**
950 Boardwalk, Suite 303
San Marcos, CA 92078
www.sdnedc.org

Copyright © 2017 by CSUSM

Printed in the United States of America

Publisher: Ed Ashley, CSUSM
San Diego Brewers Guild: Jill Davidson,
President
San Diego North Economic
Development Council: Mike Cully, CEO

Economic Research: Tyler Robinson
Business Librarian: Ann Fiegen
SDBG Data: Paige McWey Acers
Photography: Christine Vaughan
Layout: Paige Pickler

For questions about this report, contact:

Ed Ashley
eashley@csusm.edu
+1 760.750.4266

A glass of dark beer with a thick head of foam sits on a wooden bar counter. The background is a blurred, dark interior, likely a brewery or bar.

EXECUTIVE SUMMARY

The Craft Beer industry continues to thrive in San Diego County. Craft beer continues to grow at the expense of big beer.

San Diego still ranks as the highest county in the nation with 150 craft breweries as of August 31, 2017.

Big beer has also opened what appear to be craft breweries. The craft beer industry responded with the Independent Craft Brewers Seal, which indicates a true craft brewery.

The economic impact of craft beer in 2016 produced about \$870,000,000 output. This number represents about twice the output of the San Diego Zoo, as a comparison.

Craft beer contributed over \$100,000,000 in taxes in 2016.

Projected philanthropy for craft beer in 2016 totaled \$4,500,000.



ABOUT THIS REPORT

This report was produced by the College of Business Administration (CoBA) at California State University San Marcos (CSUSM), in conjunction with the San Diego Brewers Guild (SDBG), and the San Diego North Economic Development Council (SDNEDC). Special thanks to Bart Watson, Chief Economist for the Brewers Association, for his review and support of our methodology.

Data

The data were collected from numerous sources over the summer of 2017. The effective dates vary from the respective data sources. Every effort has been made to clarify the applicable dates of the data when comparisons are made.

IMPLAN®


For the purposes of this report and its underlying economic multipliers, we used the IMPLAN® System. IMPLAN® is a general input-output model that is comprised of software and regional data sets. Models for specific regional economies can be created, and the data sources behind them are continually improved and updated. Rather than extrapolating regional data from national averages, IMPLAN® measures economic impacts from data on actual local economies.

Photographs

For this inaugural issue, we wanted to pay tribute to a few of the pioneers of craft beer in San Diego who have paved the path for the many who followed. In this issue, all photographs were taken at Karl Strauss Brewing Co., Port Brewing/The Lost Abbey, and Stone Brewing.

THE ECONOMIC IMPACT OF CRAFT BREWERIES IN SAN DIEGO COUNTY

San Diego is the top county in the country for Craft Breweries, having the largest number of breweries. This report describes the economic impact of Craft Breweries on San Diego County. California State University San Marcos, in conjunction with the San Diego Brewers Guild and the San Diego North Economic Development Council, analyzed the impact of the industry on the region.

A photograph of a man and a woman at a bar. The man, on the left, is wearing a black t-shirt with the text 'MAKE BEER NOT WAR' and is holding a small glass of beer to his face. The woman, on the right, is wearing a colorful, patterned sweater and has her back to the camera. They are standing at a bar counter with various items like a plate of food and a glass. In the background, there is a bar tap and a window looking out onto a street.

Stone Brewery

PHOTO: Cory David, bartender at Karl Strauss Brewing Co.

INDUSTRY OVERVIEW

Breweries that produce no more than 6,000,000 barrels or 189,000,000 gallons (1 barrel = 31 U.S. gallons) of beer per year are candidates to be Craft Breweries. Further, the brewery must be independent to be considered *craft*. An independent craft brewer may not be owned more than 25% by a non-craft brewer. Lastly, the majority of the alcohol in a craft beer must be derived from traditional ingredients (e.g., malted barley) and thus, flavored malt beverages do not count as craft beer. Breweries that produce more than 6,000,000 barrels per year are considered “big beer” by the craft beer industry. Thus, big beer may not own more than 25% of an independent craft brewery in order for the latter to be considered a true craft brewery. In San Diego County, there are 150 craft breweries as of August 31, 2017. This count represents a 50% growth over the same period in 2016. San Diego County has the largest number of craft breweries.

THE CRAFT BEER INDUSTRY



Big beer has taken notice of the growth and impact of craft beer. Overall beer consumption has been declining in recent years; yet, craft beer production has increased. Consequently, craft beer grows at the expense of big beer. In the past couple of years, big beer has opened brewpubs that strategically market themselves as craft breweries but do not meet the criteria described above. To combat this confusion among consumers, the Brewers Association (the national association for craft brewers) established the Independent Craft Brewers Seal¹. In order to qualify for the seal, a craft brewer must have a valid TTB Brewers Notice (described later), meet the above definition of craft brewer, and sign a licensing agreement. Consumers seeking craft beer should look for this seal. According to the Brewers Association, the majority of Americans live within ten miles of a craft brewer.

According to IBISWorld, the craft brewery industry is still in a growth stage; although regulation is heavy, competition is still high².

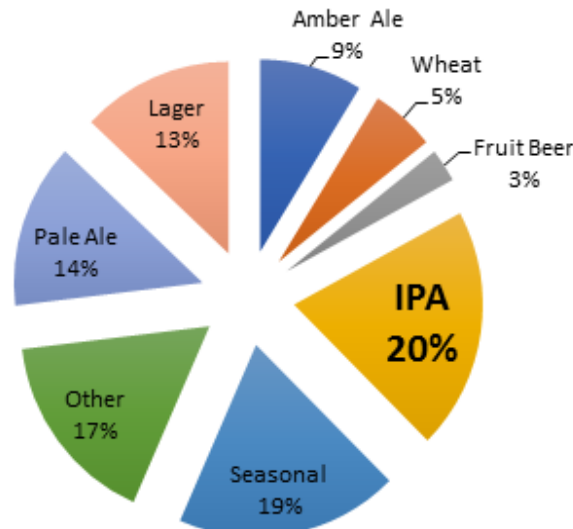
In the U.S., Stone Brewing’s brewery tour hosted over 55,000 visitors in 2016, which makes it one of the larger attractions in North County (along with LEGOLAND® and The San Diego Zoo Safari Park).

IBISWorld also indicates for craft beer, low globalization overall, but that may be changing. For example, in June of 2016, Stone Brewing opened its brewpub in Berlin, Germany. Nationally within the U.S., there were 5,301 craft brewers at the end of 2016³.



PHOTO: Taps at The Lost Abbey

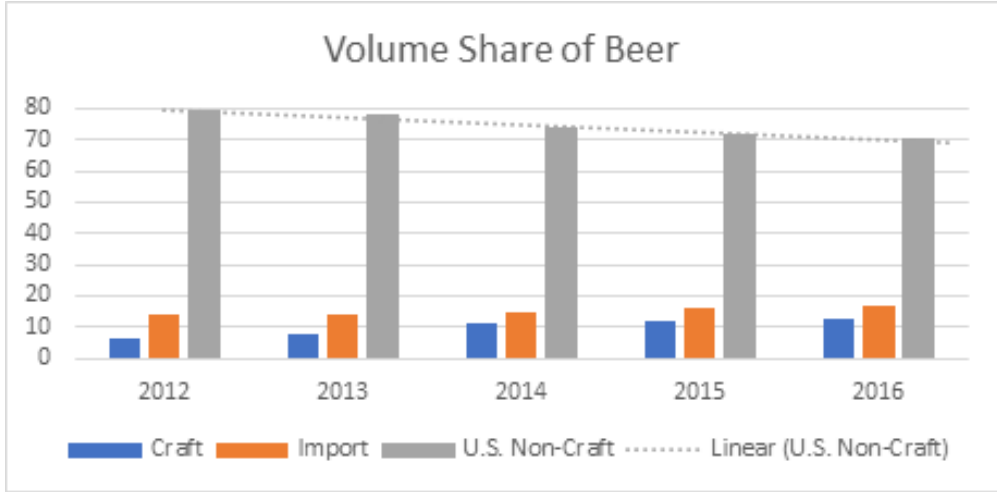
Craft Beer Styles by Sales



IPAs (India Pale Ales) make up the largest craft beer segment⁴; although brewed elsewhere, IPAs are considered characteristic of the West Coast beer style, with San Diego being the epicenter of IPAs, which exhibit characteristics of strong hops flavor (i.e., “hoppy”).

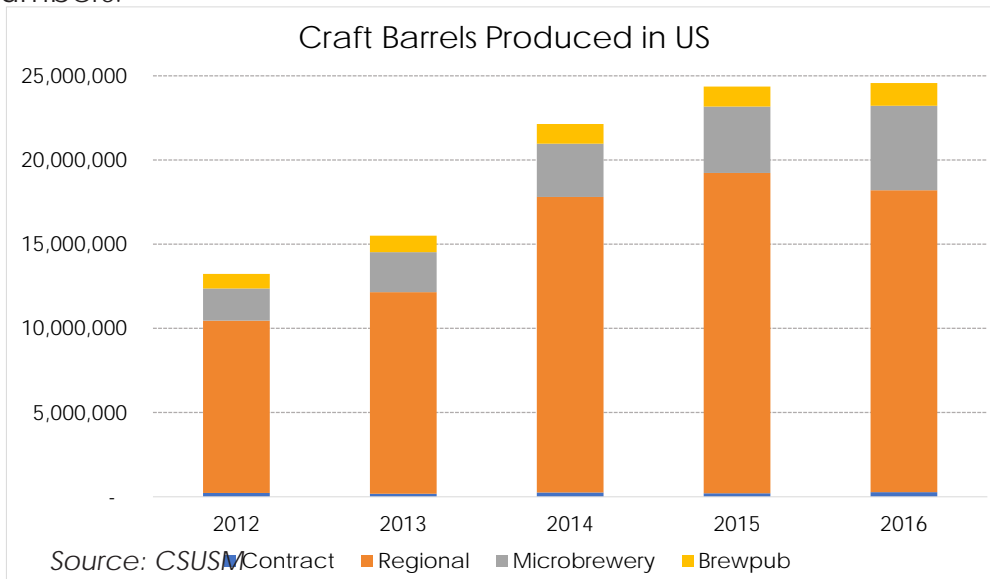
Source: CSUSM

The volume share of beer at the end of 2016 was 12.3%, representing growth over 2015 of about .1%⁵. In 2012, craft beer made up about 6.52% of total beer in the United States. In 2014, the Brewers Association Board declared a goal to reach 20% of total beer sales by 2020.



Source: CSUSM

In 2016, there were 24.5 million barrels of craft beer produced in the U.S.⁶, which is almost flat over 2015, with .0088% growth. It is important to note that acquisitions of craft brewers in recent years by big beer have skewed some of these numbers.



The industry earned \$2.2B profits in 2016 on \$23.5B in total revenue⁷. On average, the profit rate for craft beer is 9.4% of revenue in 2016, down from its peak of 10.9% in 2011⁸.



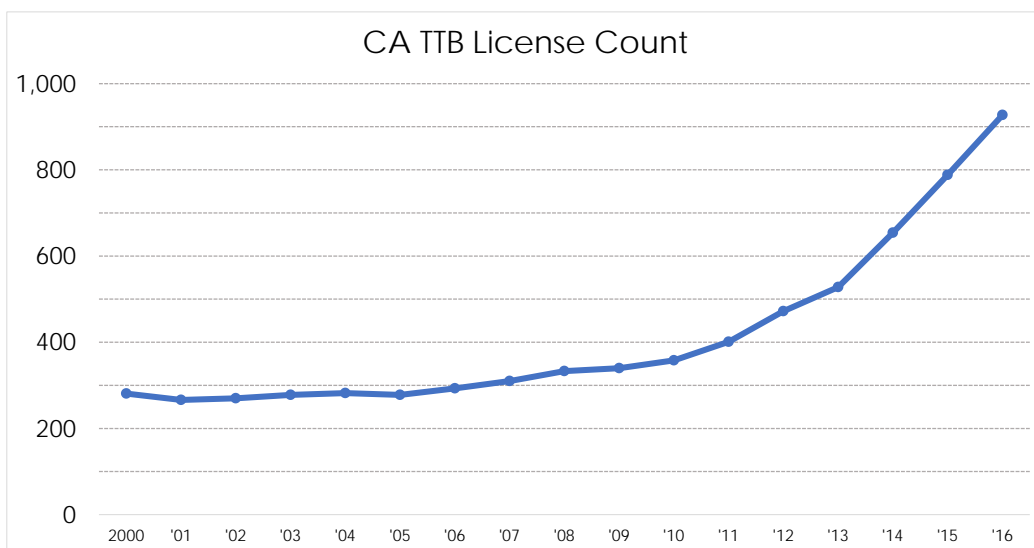
PHOTO: Thomas Kremer, Lead Brewer at The Lost Abbey

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 State of California Department of Alcoholic Beverage Control (ABC) regulates manufacturers and purveyors of alcohol via licensing within California. The 3 types of ABC licenses in this report are:

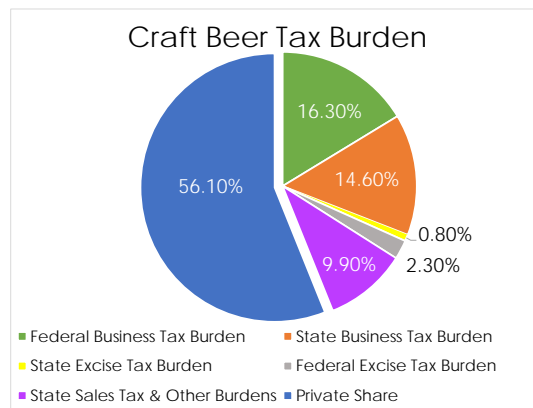
- Type 1: Beer Manufacturer (large brewer)
- Type 23: Small Beer Manufacturer (<60,000bbl)
- Type 75: On Sale General - Brewpub (>100-5,000<)

TTB license growth dramatically increased starting in 2011. In 2016, there were a total of 927 California TTB licenses, which was a 17.6% growth rate from 2015. The number of TTB licenses more than doubled between 2011 and 2016⁹.



Source: CSUSM

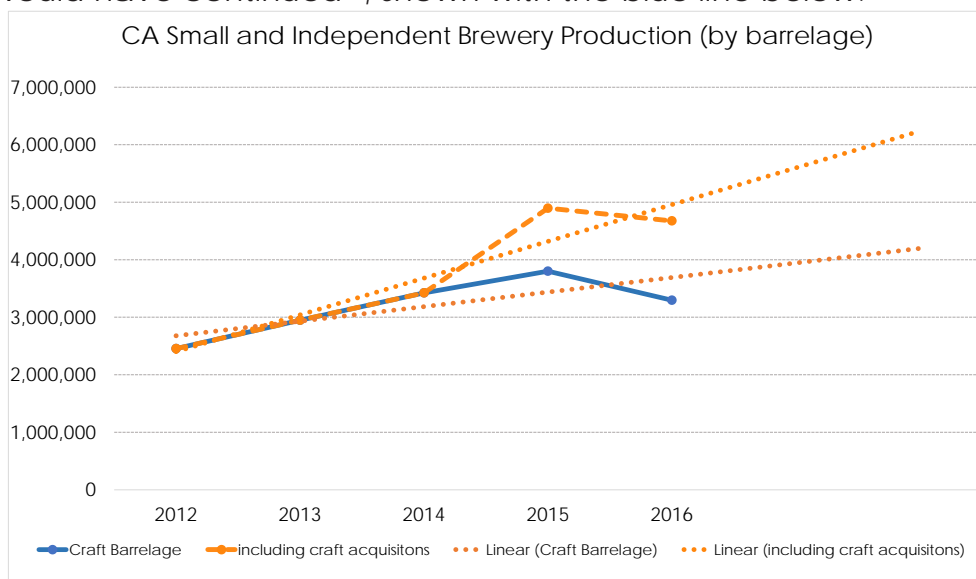
These licenses also regulate the amount of taxes to be collected from each sale. Effectively, 43.9% of the purchase price of an alcoholic beverage goes to some form of tax¹⁰. See breakdown at the right.



Source: CSUSM

CALIFORNIA

There were 623 craft breweries in the state of California at the end of 2016, which ranks it first in the U.S. In 2016, craft brewers produced 3,295,221 barrels of beer in California, which ranks it second among states for beer production. This production number is down from 2015. However, production numbers from craft breweries acquired by big beer were removed from the totals, since those brewers were no longer craft brewers. Had their production been included, the growth would have continued¹¹, shown with the blue line below.



Source: CSUSM

Asheville, NC and Portland, OR are also considered craft brewer hubs. As a comparison, North Carolina produced 1,269,402 barrels in 2016, and Oregon produced 1,149,150. In the U.S., they rank fifth and eighth, respectively. California has the largest population in the U.S., with a 2016 total of 39,250,017. Of that number, 71.2%, or 27,955,090 are of drinking age. Divide the total number of people aged 21+ by the number of TTB licenses in California, and there is one TTB-licensed establishment for every 30,156 people in the state. Divide the number of craft beer barrels produced by that same drinking-age population for the same period, and it results in 3.65 gallons of craft beer produced per capita in California compared to the national average of 3.2 gallons.



SAN DIEGO COUNTY

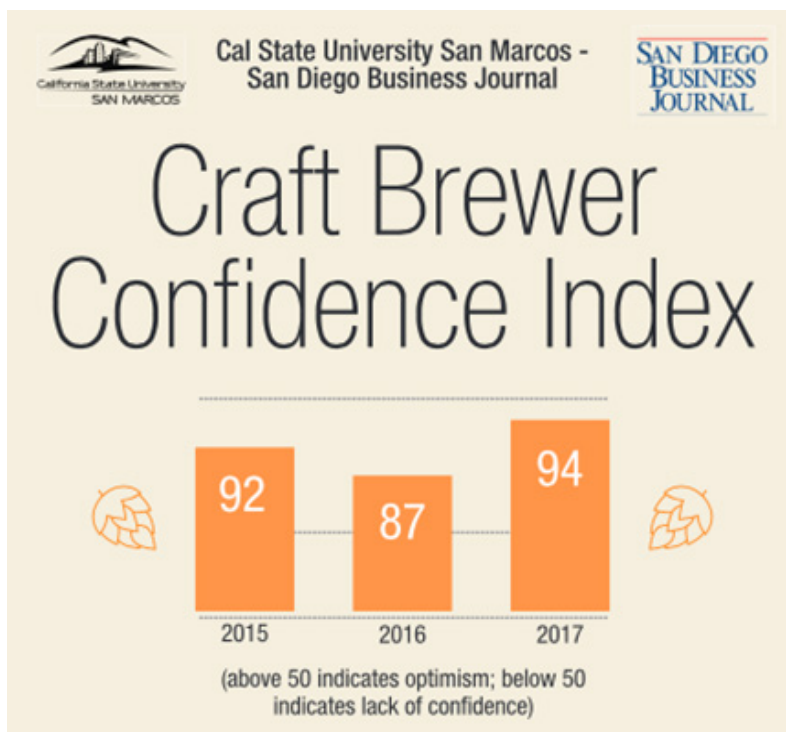
As of August 31, 2017, there were 150 San Diego Brewers Guild members. This number includes multiple locations of the same owner, (e.g., Karl Strauss Brewing Co. has 6 locations). The state licenses 205 craft breweries; thus, it is assumed the difference represents brewer locations that are not Guild members.



PHOTO: Taps at Karl Strauss Brewing Co.

CRAFT BREWER CONFIDENCE INDEX

California State University San Marcos, in partnership with the San Diego Business Journal, conducted surveys on business confidence in the Craft Beer industry over the period from fall 2015 through spring 2017. The researchers used a diffusion index, which according to the Bureau of Labor Statistics, is a measure of the dispersion of change. That is, if there were no change in the period, then the rating would be 50 on the 100-point scale. Anything 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 be up, and confidence in increased production and distribution is significant.

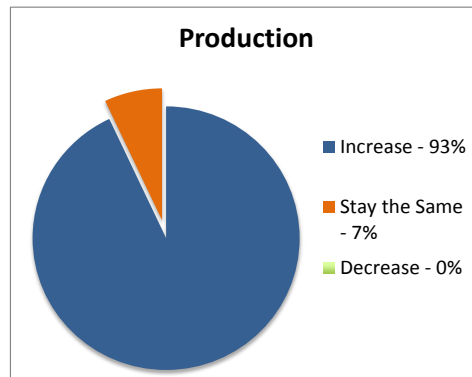
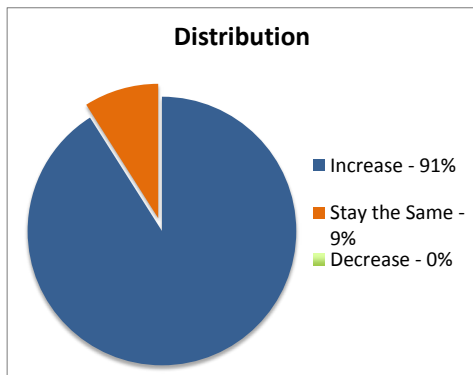
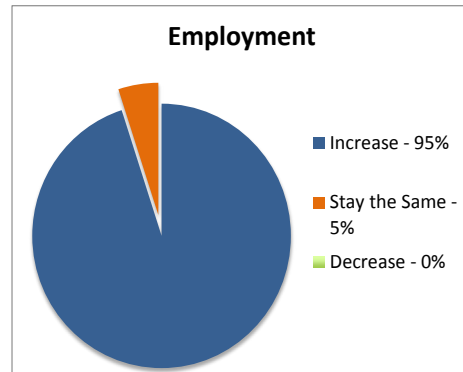
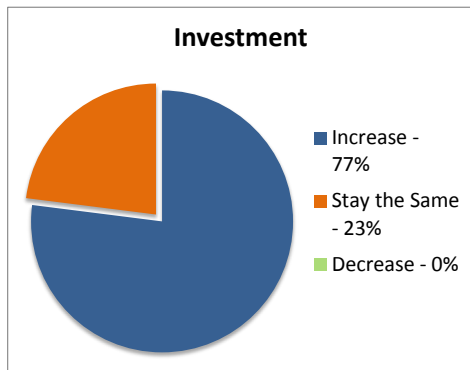
SOURCE: San Diego Business Journal and California State University San Marcos

For more information see: csusm.edu/coba/dashboard/sdbj/beer.html

CRAFT BREWER BUSINESS INDICATORS

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.

None of the respondents anticipated a decrease in these four categories, or in general growth. The stay-the-same selection for all four areas was in single digits, while responses for growth were overwhelming. Anecdotally, various articles have challenged whether craft beer has reached its peak. Clearly, craft beer in San Diego County remains vibrant.



Source: CSUSM



PHOTO: Hop pellets from The Lost Abbey



PHOTO: Taps at Stone Brewing

ECONOMIC IMPACT

Craft Brewers continue to grow and make an impact on the region. A few breweries (9 in 2 years) closed during the period. However, the handful of closures appears to be from business-related issues, rather than regional economic factors (e.g., undercapitalization).

This report analyzes congressional districts 49 through 53, which encompass San Diego County, in IMPLAN® to determine economic impact on the county. Total economic impact is comprised of direct, indirect, and induced economic effects.

For the purpose of this report, we combine indirect and induced impacts from the IMPLAN® model into "multiplier effects."

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.

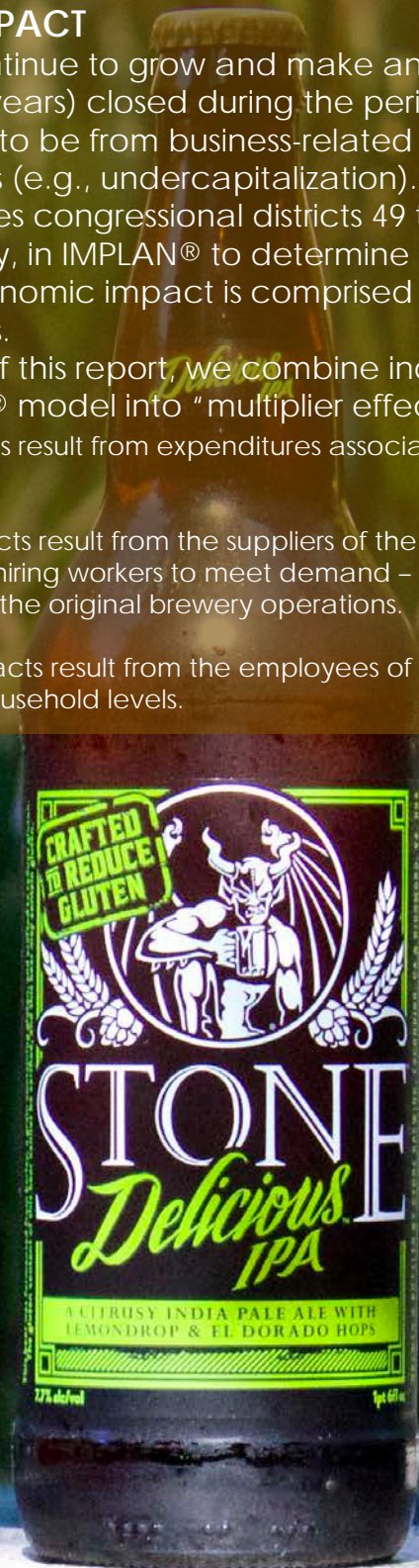


PHOTO: Craft beer from Stone Brewing



For the five congressional districts reviewed (i.e., San Diego County), the total craft beer economic impacts for 2016 are below. San Diego County craft brewers produced about 900,000 barrels in 2016.

SAN DIEGO COUNTY

Impact Type	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
Direct Effect	4,326	97,444,429	352,565,136	641,227,660
Multiplier Effect	1,339	81,580,521	132,721,251	228,401,934
Total Effect	5,665	179,024,951	485,286,388	869,629,595

The revenue that craft brewers make per barrel varies depending upon whether the barrels were for distribution or on-premise sales. The ratio of retail sales versus distribution depends upon the size of the brewery. The average prices and distribution ratios used are as follows:

Percentage of Distribution vs. On-Premises Sales						
	Barrels	Distribution Sales		On-Premises Sales		Weighted
	Produced	Rev/bbl	Percent	Rev/bbl	Percent	Rev/bbl
Breweries	>60,000	347.92	0.923	1200	0.077	413.53
	30,001-60,000	294.69	0.897	1200	0.103	387.94
	15,001-30,000	303.28	0.754	1200	0.246	523.87
	10,001-15,000	317	0.818	1200	0.182	477.71
	5,001-10,000	407	0.62	1200	0.38	708.34
	2,501-5,000	432	0.603	1200	0.397	736.90
	1,001-2,500	490	0.491	1200	0.509	851.39
	1-1,000	743.56	0.218	1200	0.782	1100.50
Brew Pubs	>1000	691.81	0.406	1200	0.594	993.67
	1-1000	871.09	0.072	1200	0.928	1176.32

NORTH SAN DIEGO COUNTY

For this report, North San Diego County is the geographic region bounded in the south by the 52 freeway, and bounded in the north by the county border. Of the whole county impacts, the following were specific to North County:

NORTH SAN DIEGO COUNTY

Impact Type	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
Direct Effect	3,426	52,470,069	189,842,744	333,482,034
Multiplier Effect	534	33,773,858	55,299,587	97,487,086
Total Effect	3,960	86,243,929	245,142,331	430,969,121

INNOVATE 78

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 Innovate 78 region, the impact of craft beer within that region is as follows:

INNOVATE 78

Impact Type	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
Direct Effect	2,468	37,245,448	134,758,304	241,071,121
Multiplier Effect	390	24,174,172	40,090,464	68,285,782
Total Effect	2,858	61,419,621	174,848,769	309,356,903



TAX

Tax rates vary depending upon the production level of the breweries. 2016 Tax contributions by craft breweries in San Diego County are as follows:

Brewery Locations	Barrels Produced	Taxes San Diego County (2016)
57	1 to 1,000	\$9,640,648
15	1,001 to 5,000	\$9,498,372
10	5,001 to 15,000	\$9,214,297
13	15,001 to 60,000	\$28,541,342
14	60,000+	\$53,518,492



COMPARISONS

2016 craft beer revenue in San Diego County totaled \$638,000,000. In comparison, the Comic-Con conference in San Diego generated about \$140,000,000 in revenue in 2016¹².

According to its financial statements, the San Diego Zoo generated \$299,472,000 in 2016 revenue. Craft Beer produced over twice that amount.

PHILANTHROPY

Using an average charity multiplier of \$4.67/ bbl for the Craft Beer industry, giving for 2016 was projected to be \$4,500,000. Tracking actuals of craft brewery philanthropy will be a focus for the 2018 report.

ABOUT THE PUBLISHERS

CALIFORNIA STATE UNIVERSITY SAN MARCOS (CSUSM)

Building on an innovative 27-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 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 offers its EngiBeer[™] 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, like the history of women in San Diego's craft brew industry.

SAN DIEGO BREWERS GUILD

The San Diego Brewers Guild is proud to be a source for breweries, tradespeople, restaurants and craft beer aficionados. Founded in 1997, the Guild is a nonprofit organization that seeks to promote San Diego breweries and create an open line of communication between brewers — connecting a strong and vibrant community. As the American craft beer movement becomes further ingrained in the mainstream marketplace, our local brewing scene will continue to play an important role in the developing conversation as well as the history of craft beer as a whole.

SAN DIEGO NORTH ECONOMIC DEVELOPMENT COUNCIL

San Diego North Economic Development Council (SDNEDC) is a nonprofit coalition of the public and private sectors working together with community partners to sustain and strategically grow the economic base of North San Diego County.

It brings community leaders, elected officials, Chambers of Commerce, EDCs, and businesses together to work collaboratively on improving the quality of life for the greater San Diego region. The SDNEDC provides forums for community engagement by providing opportunities to discuss and be actively involved in current economic development issues, trends and strategies. By spearheading strategic initiatives, policies, and programs, it seeks to strengthen the regional economy and improve quality of life.

A close-up photograph of a woman with long dark hair, smiling warmly. She is wearing a black polo shirt with a logo and a necklace. She is holding three glasses of beer with thick white foam. The background is a blurred bar with shelves of bottles and warm lighting.

SOURCES

- 1) Brewers Association
- 2) IBISWorld
- 3) IBISWorld
- 4) Brewers Association
- 5) Brewers Association
- 6) IBISWorld
- 7) Brewers Association
- 8) IBISWorld
- 9) Department of the Treasury
- 10) Beer Serves America Report
- 11) Brewers Association
- 12) Tourism in San Diego Market Analysis (CSUSM MBA Report) by Denisse A. Fernandez

PHOTO: Leah Bolosan, bartender at Stone Brewing



PHOTO: Craft beer at The Lost Abbey