



# Economic Impact of Craft Breweries in Temecula, CA

2019



Photo: Aftershock Brewing Co.

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Photo: Relentless Brewing Co.

# Executive Summary

The craft brewing industry has continued to remain a growing industry in the United States, with revenue growth expected to increase into 2023. U.S. non-craft beer sales have declined over the past several years while U.S. craft beer sales continue to increase. In 2017, the craft beer industry contributed \$76.2B to the U.S. economy.

In 2017, the U.S. Congress passed legislation that included a two-year provision of the Craft Beverage Modernization and Tax Reform Act (CBMTRA), which lowered the Federal Excise Tax (FET) for breweries for a period of two years and was set to expire on December 31, 2019. In February 2019, the CBMTRA was reintroduced and, if approved, will make the current federal excise rate language permanent.

In 2018, California had over 900 craft breweries, ranking number one in the United States.

Temecula, California is home to ten craft breweries. It had an economic output of approximately \$35M in 2018. In comparison, the Temecula Valley Balloon and Wine Festival had an economic output of \$2.8M in 2018. Temecula craft brewers donated over \$80,000 to various local organizations in 2018.

Temecula craft brewers have a positive industry outlook over the next 12 months. Based on surveys conducted, a confidence diffusion index of 71.36 was recorded, indicating that the brewers are optimistic about the future growth and development of their operations.

The Temecula Valley Craft Brewers Guild was founded in 2017 and, therefore, has opportunities within the industry to increase its visibility. To increase visibility, OBRA recommends that the Temecula Valley Craft Brewers Guild create a website highlighting the brewers' award-winning beer, philanthropic donations, and an interactive map showing the craft brewery locations.



# About This Report

This report analyzes the economic impact of craft breweries in Temecula, CA and was produced by the Office of Business Research and Analysis (OBRA) at California State University San Marcos, which is a joint effort between the College of Business Administration, the Department of Economics, and the University Library. This report was published in conjunction with the Temecula Valley Craft Brewers Guild and the City of Temecula.

## Data

The data supporting this report was collected from several sources during the first quarter of 2019. A combination of survey data and secondary sources was used. Each data source has varying effective dates and every precaution has been taken to ensure relative comparability.

## IMPLAN

To measure and quantify the flow of dollars through the Temecula, CA economy, OBRA used leading economic impact software, called IMPLAN®. 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 incorporate regional trade-flow assumptions and economic multipliers into customizable models to view economic impacts.

## InDesign

InDesign was used to design the layout of the report. This software creates posters, brochures, newspapers, and ebooks through Adobe software. InDesign publishes content in conjunction with Adobe Digital Publishing Suite and exports to multiple platforms. Primary users of InDesign include graphic designers and production artists for publications, print media, and posters.

## ReferenceUSA

ReferenceUSA® is an Infogroup company that hosts an online database containing information about businesses and consumers throughout the nation. 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.

## Qualtrics

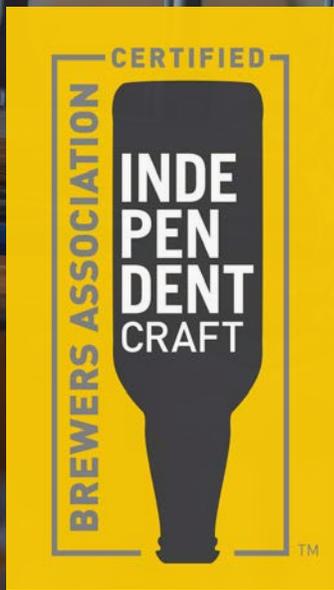
Qualtrics is a survey tool used to distribute surveys and track results. Qualtrics was used to collect and compile survey data from the breweries in Temecula, CA.

## Photographs

The photographs were taken by Jimmy Fu of Jimmy Fu-tography at local craft breweries in Temecula, including Stone Church Brewing, Aftershock Brewing Co., Black Market Brewing Co., Garage Brewing Co., Ironfire Brewing Company, Karl Strauss Brewing Company, Refuge Brewery, Relentless Brewing Co., Wiens Brewing Co., and Craft Brewing Company.

# The Craft Brewing Industry

Craft brewers, as defined by the national Brewers Association (BA), are those that produce 6 million barrels or less per year, are independently owned (25% or less ownership by a non-craft beverage alcohol industry entity), and have a TTB Brewer's Notice<sup>2</sup>. In 2017, the craft beer industry provided more than 500,000 jobs and contributed \$76.2B to the U.S. economy<sup>2</sup>.



To distinguish between craft and non-craft brewers, the Independent Craft Brewer Seal is used (pictured left). This seal is a national effort, spearheaded by the Brewers Association, to provide consumers with an easy way to identify independent craft brewers. As of June 2019, over 4,000 independent craft brewers in the United States have adopted the seal<sup>2</sup>.

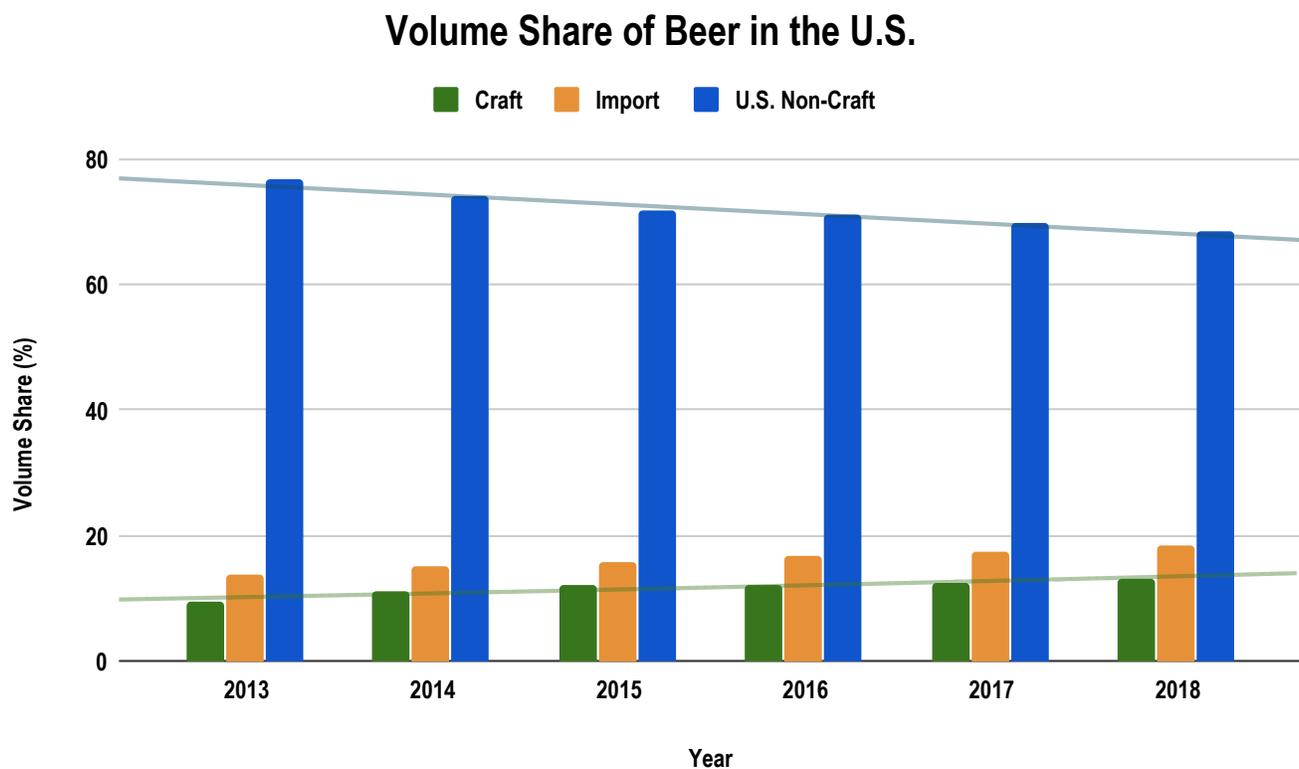
The craft brewing industry has continued to remain a growing industry in the United States<sup>1</sup>. The industry has experienced revenue growth over the five years to 2018, increasing at an annualized rate of 11.8% to reach an estimated \$6.8 billion<sup>1</sup>. As consumers demand a greater variety of beers, craft brewers have captured consumers that had traditionally purchased light and premium brand beers. The industry has also attracted these consumers by using quality ingredients, providing a high degree of expertise, and serving fresh craft beer<sup>1</sup>.

The craft brewing industry is comprised of many small-sized companies, but there has been increasing consolidation and expansion activity among some of the nation's largest brewers. Brewers such as Magic Hat Brewing Company, Ballast Point Brewing Company (Temecula location closed in 2019), and Lagunitas Brewing Company, once significant craft brewers, have been acquired by major beer companies and are no longer classified as craft brewers by the Brewers Association<sup>1</sup>.

The craft brewing industry is a maturing category. Therefore, revenue growth in the industry is plateauing<sup>1</sup>. As a result, between 2018 and 2023, the industry is expected to grow at an annualized rate of 1.5% to \$7.3 billion<sup>1</sup>.

U.S. non-craft beer sales volume has steadily decreased over the past several years, while U.S. craft beer sales volume has steadily increased. In 2018, U.S. craft beer sales volume was 13.2% of overall beer sales, representing a growth over 2017 of about 4.8%<sup>2</sup>. Figure 1 represents a graph showing growth in U.S. craft beer sales volume over the past several years compared to U.S. non-craft beer sales volume.

**FIGURE 1: VOLUME SHARE OF BEER IN THE U.S.**



SOURCE: CSUSM

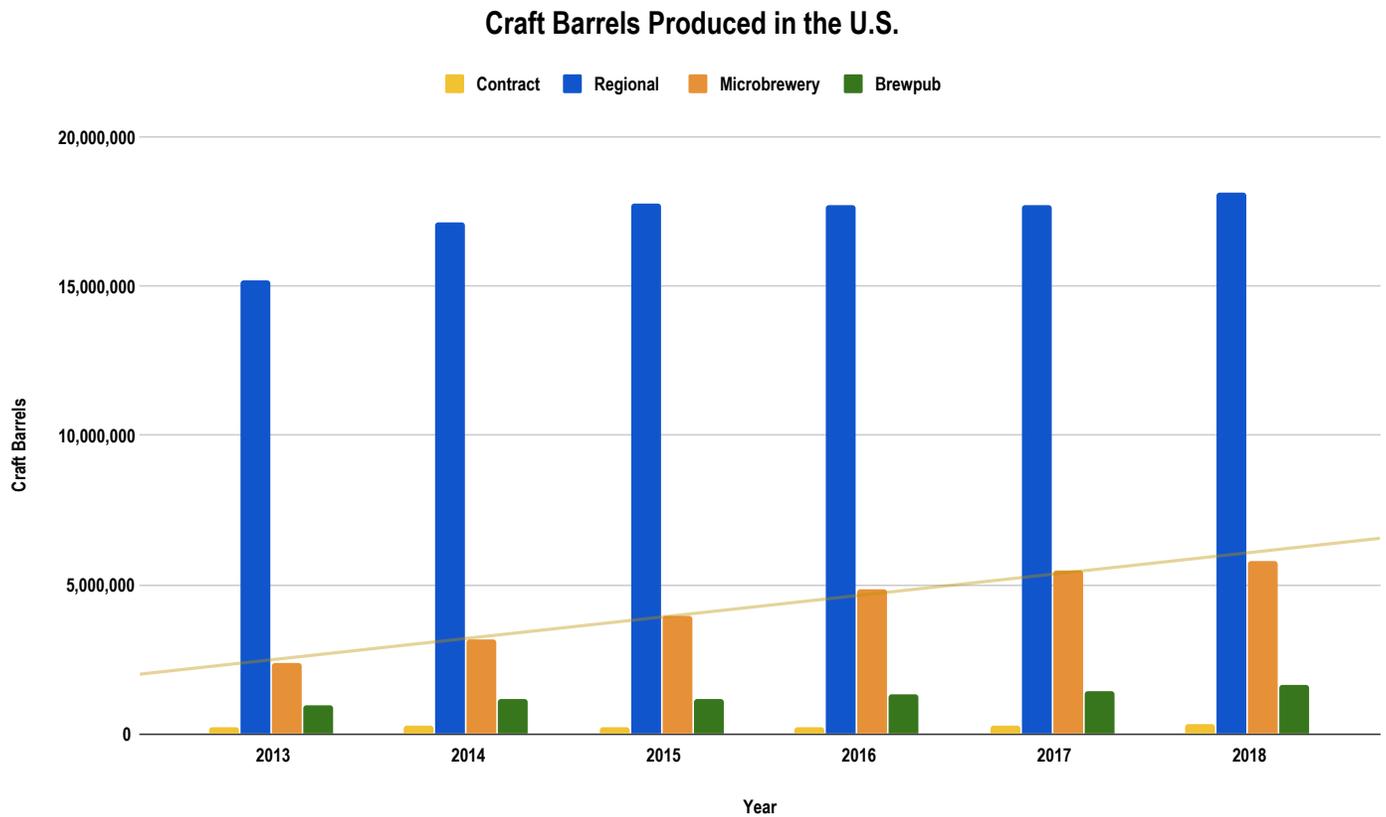


In 2018, there were 25.9 million barrels of craft beer produced in the U.S., which represents a growth rate over 2017 of about 4%<sup>2</sup>. See Figure 2 for a graph showing craft barrels produced in the U.S. since 2013 by contract brewers, regional brewers, microbreweries, and brewpubs. Microbreweries have experienced significant growth over the past several years, including a growth rate of about 47% over 2015<sup>2</sup>. In comparison, regional brewers have produced a steady amount of craft barrels over the past several years, with a growth rate of about 2% over 2015<sup>2</sup>.

Photo: Garage Brewing Co.



**FIGURE 2: CRAFT BARRELS PRODUCED IN THE U.S.**



SOURCE: CSUSM

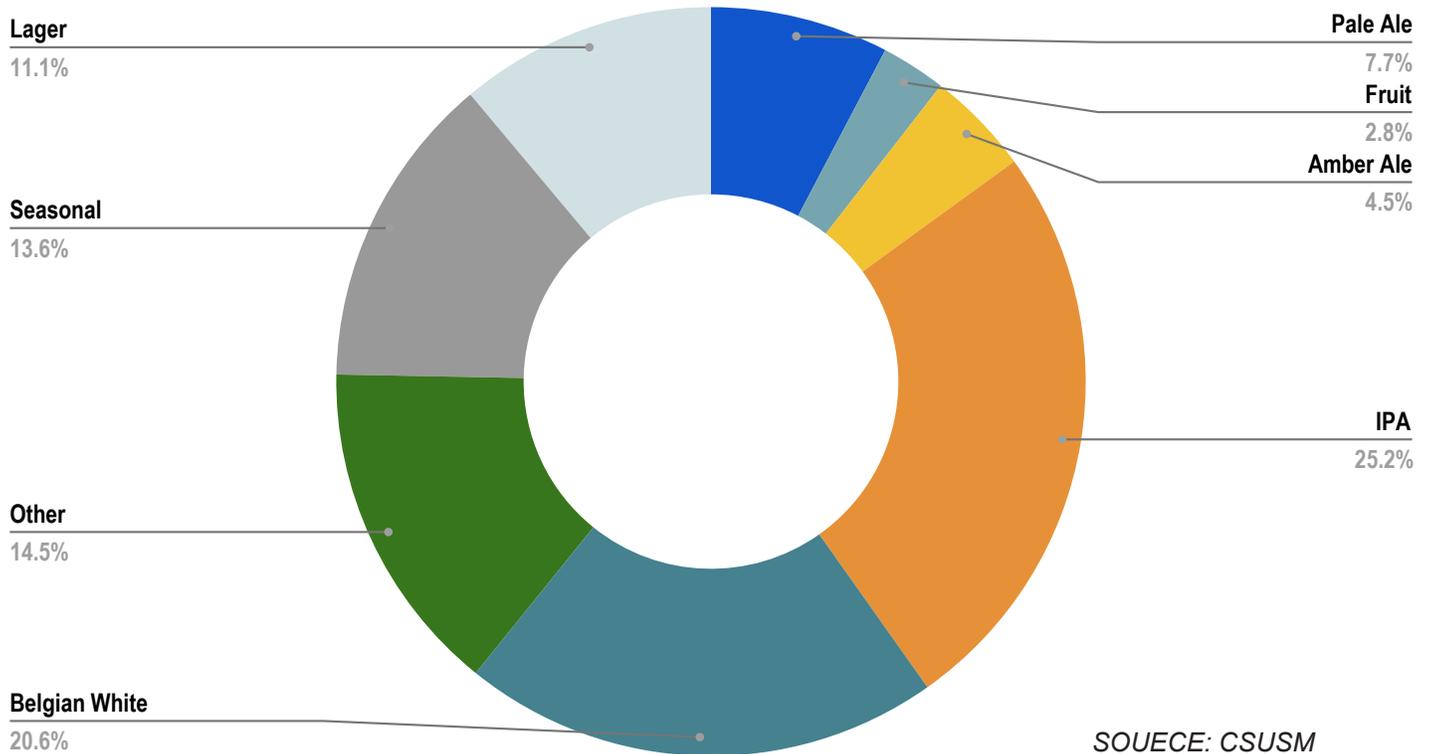


India Pale Ale (IPA) is the most popular beer among U.S. craft beer drinkers, representing 25.2% of industry revenue in 2018<sup>1</sup>. Belgian White is the second most popular beer, representing 20.6% of industry revenue. Together, IPA and Belgian White comprised nearly half of industry revenue (45.8%) in 2018. See Figure 3 for a graph showing a breakdown of industry product segmentation.

*Photo: Ironfire Brewing Company*

**FIGURE 3: 2018 INDUSTRY PRODUCT SEGMENTATION**

### 2018 Industry Product Segmentation



SOURCE: CSUSM

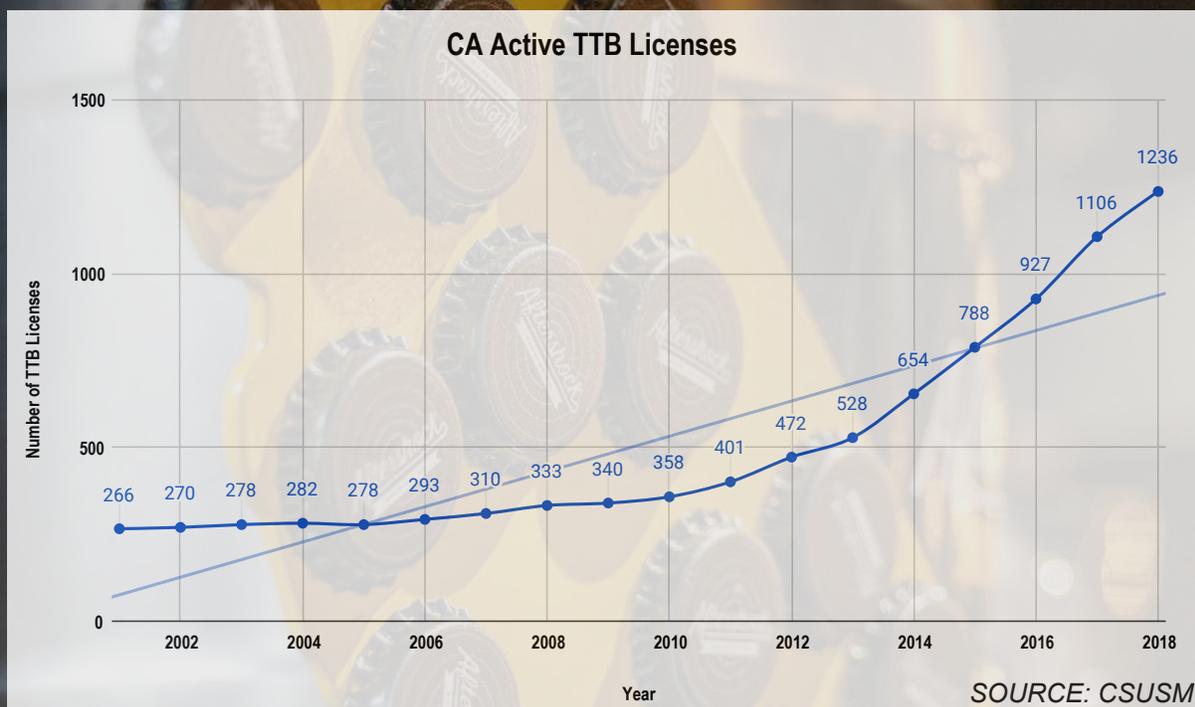
# Size and Growth

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 three types of ABC licenses discussed in this report are:

- Type 1: Beer Manufacturer (Larger Brewer)**
- Type 23: Small Beer Manufacturer**
- Type 75: On Sale General (Brewpub)**

Although the TTB count does not solely reflect active brewers in the marketplace, it is still a strong indicator as to the size and relative growth of the industry in terms of firms operating in the marketplace. According to the Brewers Association, there were over 7,000 active breweries in the United States in 2018<sup>2</sup>. TTB license growth has accelerated since 2011. In 2018, there were a total of 1,236 active California TTB licenses, which represents an 11.8% growth rate over 2017. The number of TTB licenses has more than tripled since 2011. Figure 4 shows the number of active California TTB licenses over the past several years.

**FIGURE 4: CA ACTIVE TTB LICENSES**



# Craft Beer Taxes

The Federal Excise Tax (FET) on alcoholic beverages is imposed at the manufacturer and importer level, based on the per unit production or importation of alcoholic beverages (e.g., distilled spirits, wine, and beer) for sale in the U.S. market. When converted to standard drink measures, liquor drinks are generally subjected to a federal excise tax of approximately 13 cents per 1.5 ounce shot, wine is taxed at 4 cents per 5 ounce glass, and beer is taxed at 5 cents per 12 ounce can or bottle.

At the end of 2017, the United States Congress passed legislation that included a two-year provision of the Craft Beverage Modernization and Tax Reform Act (CBMTRA), which lowered the Federal Excise Tax (FET) for breweries, wineries, and distilled spirits producers for a period of two years and was set to expire on December 31, 2019.

According to the Brewers Association, in February 2019, the CBMTRA was reintroduced to Congress and, if approved, would make the current federal excise rate language permanent<sup>2</sup>.

Since the enactment of CBMTRA, 99% of small brewers have realized a 50% reduction of their FET (from \$7/barrel to \$3.50/barrel). This enables brewers to increase investments, improve health care and benefit offerings, purchase new equipment, and hire additional workers. The CBMTRA increased 2018 industry job totals and has saved the industry nearly \$80 million annually<sup>2</sup>. If the CBMTRA becomes permanent, owners will continue to have a greater amount of capital to invest in their businesses and contribute to local and national economies.



# California

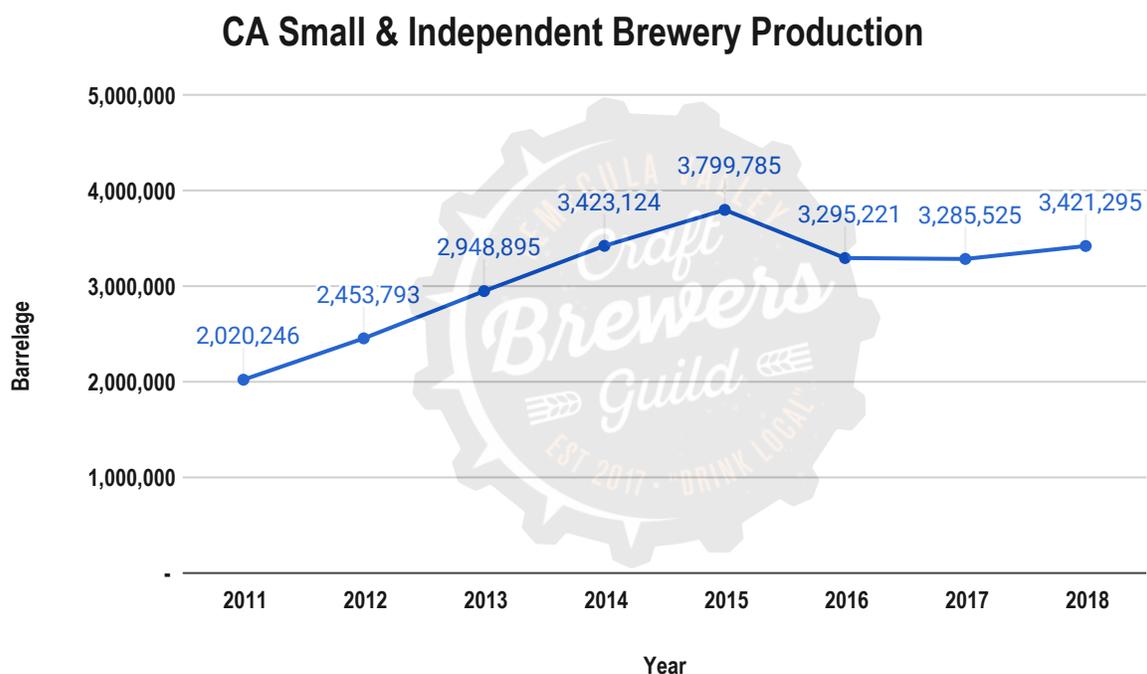
As of January 2019, there were more than 900 craft breweries operating in California, which ranks as the state with the highest number of craft breweries in the nation<sup>3</sup>. Craft brewers in California produced 3,421,296 barrels of beer in 2018, which ranks California as the second-highest state in the nation for beer production (Pennsylvania produced about 3.7M barrels in 2018)<sup>2</sup>. In 2017, California craft brewers employed about 54,000 people and contributed \$8.2B to the state's economy<sup>3</sup>.

See Figure 5 for a graph showing production totals in California over the past several years. It is important to note that the decrease in production numbers from 2015 was caused by some California breweries such as Ballast Point Brewing Company, Saint Archer Brewing Co., Lagunitas Brewing Company, and Golden Road Brewing being acquired by big beer and were, therefore, removed from craft brewery production totals.



Photo: Black Market Brewing Co.

FIGURE 5: CA SMALL & INDEPENDENT BREWERY PRODUCTION



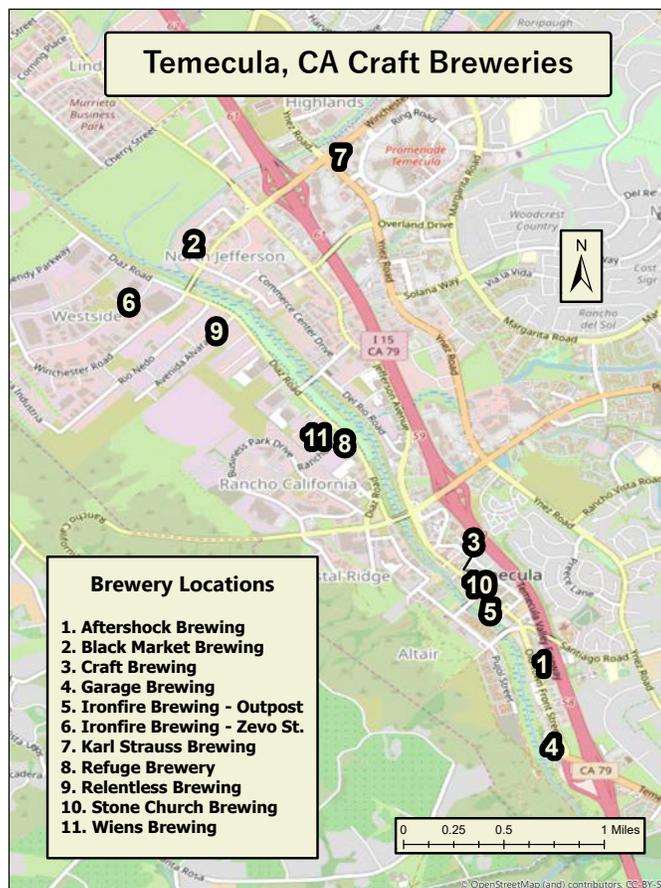
SOURCE: CSUSM

# Temecula, CA

As of May 2019, there were ten craft breweries in Temecula, CA. These breweries include Stone Church Brewing, Aftershock Brewing Co., Black Market Brewing Co., Garage Brewing Co., Ironfire Brewing Company (two locations), Karl Strauss Brewing Company, Refuge Brewery, Relentless Brewing Co., Wiens Brewing Company, and Craft Brewing Company. Temecula craft breweries produced about 33,000 barrels in 2018, representing a 55% growth over the 21,200 barrels produced in 2016. Figure 6 represents the brewery locations in Temecula.

Photo: Refuge Brewery

FIGURE 6: TEMECULA CRAFT BREWERY LOCATIONS



Created by: Allen Risley, GIS Specialist, IITS

SOURCE: CSUSM

# Economic Impact

Temecula is home to ten craft breweries that contribute to economic stimulation and job growth for a region with over 114,000 residents. Temecula craft brewers employed over 130 people in 2018.

To measure the economic impact on Temecula, CA, data indicating industry changes within an input and output model in IMPLAN® software was used, which provides 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 the household level.

For the purpose of this report, indirect and induced impacts from the IMPLAN® model were combined into a multiplier effect. A multiplier effect is a change in which an increase in spending produces an increase in income and consumption greater than the initial amount spent.

The total economic impact is composed of direct and multipliers effects. Value added measures the economic impact of craft beer total activities in Temecula in the form of employee salaries and compensations, taxes on production and imports (minus subsidies), and gross operating surplus. The output is the total annual value of all production activities generated by the craft beer industry in Temecula, CA.

# Temecula Craft Beer Economic Impact

Figure 7 represents the economic impact of craft breweries in Temecula. In 2018, Temecula's total economic output for craft beer was **\$34,564,865**.

**FIGURE 7: 2018 TEMECULA CRAFT BEER ECONOMIC IMPACT**

Temecula Craft Beer				
Impact Type	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
Direct Effect	131	4,358,056	12,534,950	27,117,578
Multiplier Effect	49	2,353,708	4,097,200	7,447,287
<b>Total Effect</b>	<b>180</b>	<b>6,711,764</b>	<b>16,632,150</b>	<b>34,564,865</b>

To calculate industry revenue, the Brewery Operations Benchmarking Survey (BOBS) from the Brewers Association (represented in Figure 8) was used. The total barrels produced per craft brewery in 2018 was used to determine revenue per barrel for both distribution sales and on-premise sales and, therefore, total industry revenue.

**FIGURE 8: BOBS DISTRIBUTION VS. ON-PREMISE SALES**

Percentage of Distribution vs. On-Premise Sales						
	Barrels Produced	Distribution Sales		On-Premise Sales		Weighted
		Rev/bbl	Percent (%)	Rev/bbl	Percent (%)	Rev/bbl
Breweries	>60,000	347.9	0.923	1,200	0.077	413.53
	30,001-60,000	294.69	0.897	1,200	0.103	387.94
	15,001-30,000	303.28	0.754	1,200	0.246	523.87
	10,001-15,000	317	0.818	1,200	0.182	477.71
	5,001-10,000	407	0.62	1,200	0.38	708.34
	2,501-5,000	432	0.603	1,200	0.397	736.90
	1,001-2,500	490	0.491	1,200	0.509	851.39
	1-1,000	743.56	0.218	1,200	0.782	1,100.50
	Brewpubs	>1,000	691.81	0.406	1,200	0.594
1-1,000		871.09	0.072	1,200	0.928	1,176.32

## Comparison

The Temecula Valley Balloon and Wine Festival is a well-known annual festival featuring wine tasting, hot air balloon flights, entertainment, arts and crafts, commercial exhibits, and food. It attracts visitors throughout Southern California, comprising Riverside County, San Diego County, Orange County, Los Angeles, and Palm Springs. It celebrated its 36th year in May/June of 2019.

The Temecula Valley Balloon and Wine Festival had an economic output of about \$2.8M in 2018. It is important to note that money spent on restaurants, hotels, and other activities associated with the Temecula Valley Balloon and Wine Festival were not included in its economic output calculation. Independent craft breweries in Temecula had an economic output of more than ten times that of the Temecula Valley Balloon and Wine Festival in 2018.

In comparison to Temecula's wine industry, Temecula craft breweries had approximately \$27M in revenue in 2018, while its wine industry had approximately \$65M in revenue in 2016<sup>4</sup>. The Temecula wine industry is more established than the craft brewing industry, as Temecula has more than 40 wineries and saw its first winery in 1974 (Callaway Vineyard)<sup>5</sup>, and has 10 craft breweries and saw its first microbrewery in 1994 (Blind Pig Brewing). Much like the wine industry has done, as the Temecula craft brewing industry continues to grow and mature, so will its impact on the region's economy.

## Philanthropy

A survey was conducted among the craft brewers in Temecula with the goal of gathering information regarding philanthropic donations to charities made by the brewers in 2018. Based on this data, craft brewers donated over \$80,000 to various local organizations in 2018.



# Looking Forward

## Craft Brewer Confidence Index

# 71.36

A confidence diffusion index was used to measure and evaluate the industry confidence level of craft brewers in Temecula. According to the Bureau of Labor Statistics, a confidence diffusion index is a measure of the dispersion of change<sup>6</sup>. On a 100-point scale, an index rating above 50 indicates a more optimistic industry outlook over the next 12 months. An index rating below 50 indicates a more pessimistic industry outlook over the next 12 months.

As of May 2019, Temecula craft brewers recorded a confidence index of **71.36**, indicating a positive outlook for the craft brewing industry in Temecula over the next 12 months.

# Craft Brewer Business Indicators

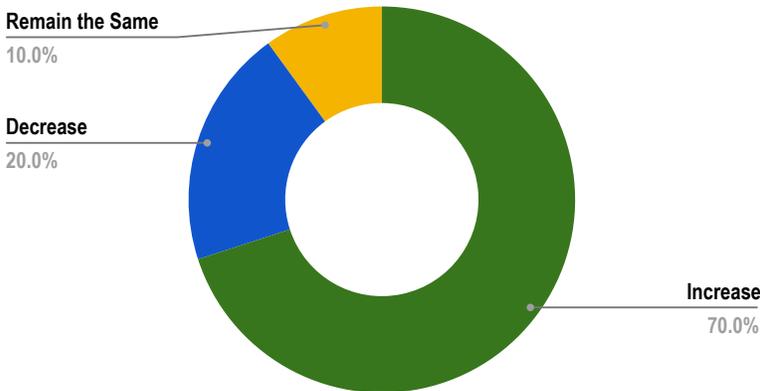
As shown in Figure 9, the craft brewer confidence index respondents were asked to indicate forward looking confidence over a 12 month period regarding employment, capital expenditures on brewing equipment, distribution, and barrelage production. These values indicate that craft brewers in Temecula are optimistic about the future growth and development of their operations. Specifically, confidence that employment, distribution, and barrelage production will increase over the next 12 months is significant.



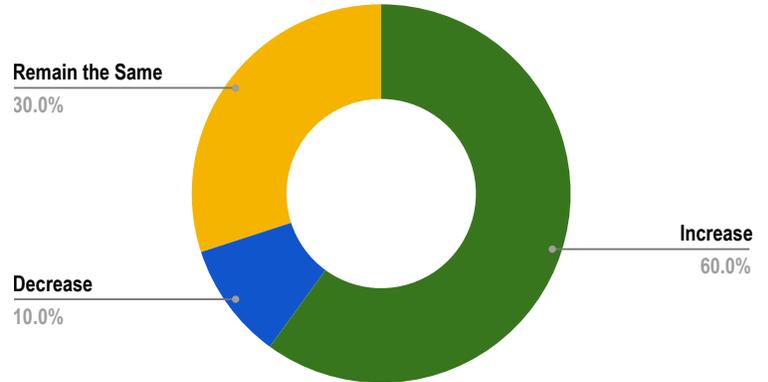
Photo: Stone Church Brewing

FIGURE 9: CRAFT BREWER BUSINESS INDICATORS

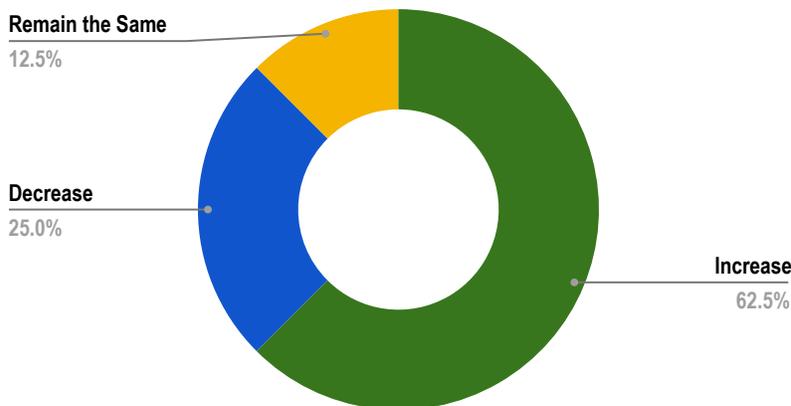
## Barrelage Production



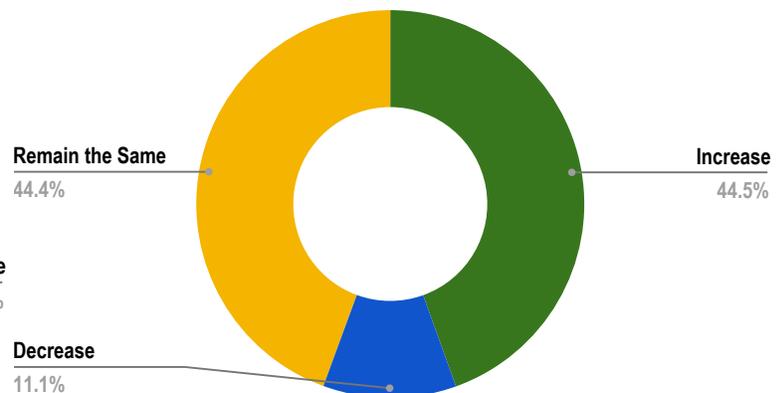
## Employment



## Distribution



## Capital Expenditures



SOURCE: CSUSM

# Conclusion

As the Temecula Valley Craft Brewers Guild is a newly established guild (founded in 2017), OBRA recommends that the Temecula Valley Brewers Guild create a website highlighting the brewers' award-winning beer, philanthropic donations, and an interactive map showing the craft brewery locations.

Nationally, the craft beer industry is expected to continue to grow throughout the next several years. If approved, the Craft Beverage Modernization and Tax Reform Act (CBMTRA) will allow craft brewers to continue to invest greater amounts in their businesses and employees and, therefore, continue to invest in local and national economies.

Temecula craft breweries contribute to California ranking number one as the state with the most craft breweries in the nation.

In 2018, Temecula craft brewers made a significant impact on the region's economy. The craft brewers donated over \$80,000 to various local organizations, employed over 130 people, and had an economic output of approximately \$35M.

With a positive industry outlook over the next 12 months, the Temecula craft brewing industry is likely to continue to see significant growth in the region. Cheers!



# About the Publishers

## Office of Business Research and Analysis

Founded in 2018, the Office of Business Research and Analysis (OBRA) is a joint partnership between California State University San Marcos' College of Business Administration (CoBA) and the Department of Economics. OBRA works directly with the local community in creating a suite of research services, including economic impact reports.

## California State University San Marcos

Building on an innovative 30-year history, California State University San Marcos (CSUSM) 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). 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<sup>™</sup> 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 Brewhive<sup>™</sup>.

## Temecula Valley Craft Brewers Guild

The Temecula Valley Craft Brewers Guild, in partnership with the City of Temecula, was created in 2017 in response to the craft beer industry emerging in Temecula. The Guild offers an opportunity for local craft brewers to get involved and help shape City zoning regulations that affect this industry. As this bustling sector started to grow, the City wanted to provide a forum where brewers and officials could come together, discuss, and positively shape the future of craft beer in Temecula.

Since inception, the Guild and the City have met on a regular basis and have created numerous marketing campaigns to promote the breweries including the Ale Trail Guide and Visit Temecula Valley's Craft Beer Month.

The Guild is extremely active in the community. The Temecula craft brewers donate and participate in various community events, including Temecula Valley Chamber of Commerce events, the Temecula Education Foundation's Taste of Temecula Valley, Temecula Valley Balloon and Wine Festival, and other local events. The Brewers Guild also meets on a regular basis with City of Temecula law enforcement to ensure positive, open communication. The Brewers Guild is going strong with ten craft breweries located in the City of Temecula, offering unique flavors and award-winning brews.



# Sources

- 1) IBISWorld
- 2) Brewers Association
- 3) California Craft Brewers Association
- 4) City of Temecula
- 5) Temeculawines.org
- 6) Bureau of Labor Statistics



*Photo: Craft Brewing Company*