



# Economic Impact of **Wineries**

2017

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SAN DIEGO COUNTY  
VINTNERS ASSOCIATION

This study was underwritten, in part, by the San Diego County Vintners Association (SDCVA).  
All conclusions, errors and omissions are the sole responsibility of the author. We thank SDCVA for their support.

## Executive Summary

In the last few years, new wineries have opened across San Diego County, creating jobs, sales tax revenue, and other economic benefits. As the wine industry continues to grow, it is important to understand which factors are driving growth and which are hindering greater opportunity. To explore these questions, we, in partnership with the San Diego County Vintners Association, used survey data, California ABC licenses and business records to measure how San Diego County is participating in the business of wine.

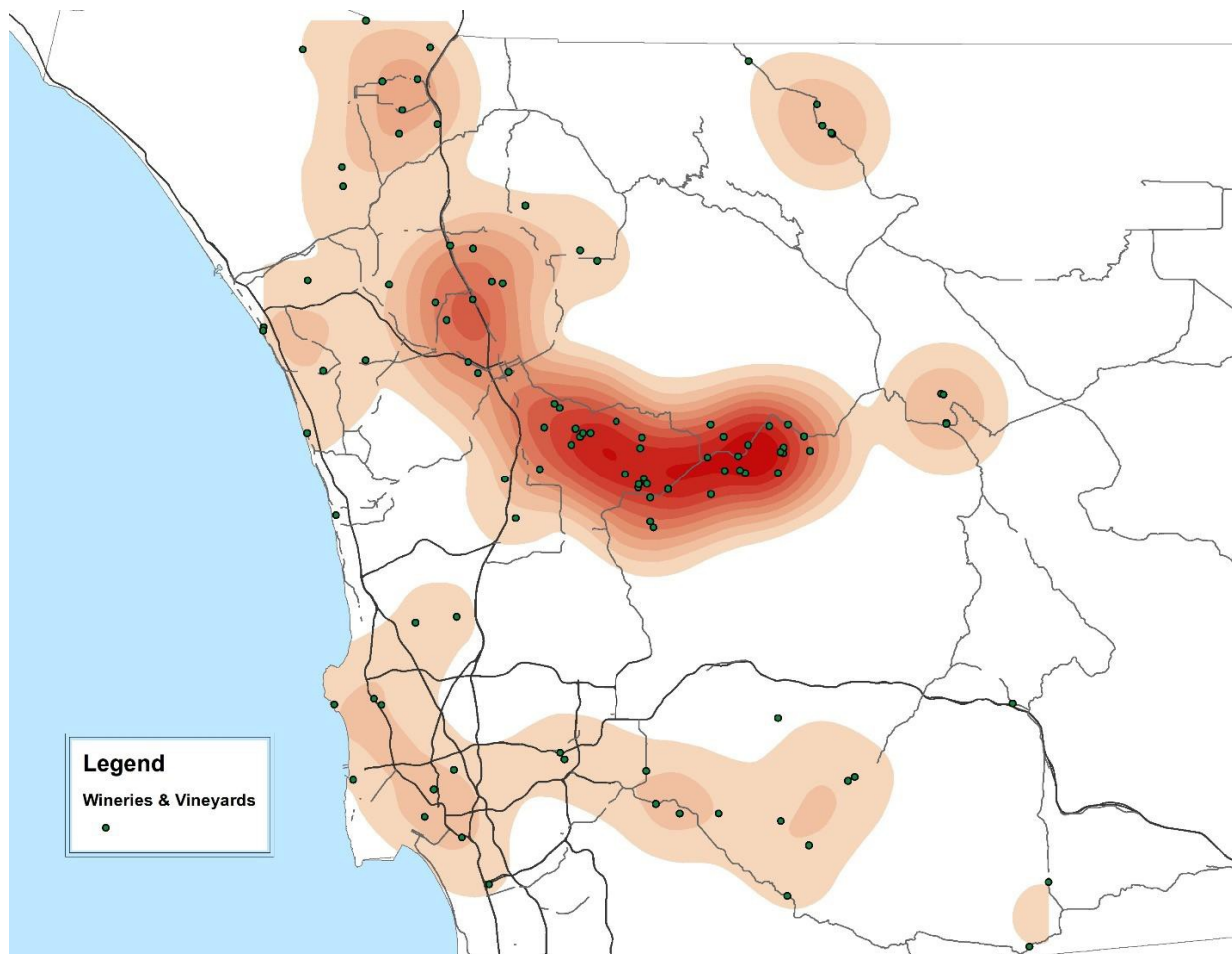
- Overall, we found that the San Diego wine industry generated a \$30.4 million regional economic impact in 2016. We also found that the industry supports a total of 697 jobs in San Diego County, a figure which includes all direct (519), indirect (84), and induced (94) jobs.
- San Diego County is home to approximately 116 active wineries, stretching from North County to the U.S.-Mexico border. Most are concentrated in the San Pasqual Valley and Ramona Valley, followed by the northern Escondido area and Fallbrook.
- Industry growth and investment is tied to local regulations. The proliferation of new wine growers in San Diego County appears to follow the 2010 passage of the county winery ordinance, which eliminated the need for most wineries to obtain a major use permit.
- San Diego County's wine grape harvest has significantly grown in size and value since 2010. Total acres of wine grapes harvested has more than doubled (111%) while the crop value has more than quadrupled (439%).
- Sales at wineries increased, on average, 88% from 2015 to 2016. This is a strong indicator of a vibrant, growing industry, and underscores that most wineries in the region are relatively new and small-scale.
- County wineries generated more than \$23,873,100 in gross sales last year. Our analysis also found that wine sales generated \$1.1 million in total sales taxes, as well as \$965,429 in property taxes.
- Wine tasting is a top activity for visitors to San Diego, and wine tourism is creating a positive impact. Survey respondents attributed 27% of their 2016 sales to tourism and direct sales to tourists. Also, when asked, more than 9 out of 10 (94%) winery owners stated that wine tourism and wineries are appreciated and publicly supported by residents; only 3% believed industry tourism was unwelcome and actively opposed.
- Among priority policy issues for wine growers, "permits/local regulation" was the clear top choice among survey respondents, followed by "labor costs" and groundwater/runoff rules. Real estate and water rates ranked the lowest on the scale.

## Industry Profile

San Diego's wine heritage reaches back to the 18th century, when Spanish missionary Father Junipero Serra planted wine grapes shortly after founding Mission San Diego de Alcalá in 1769. As succeeding growers have learned, the region has microclimates and terrain which are ideal for wine grape cultivation.

To determine the number of active wineries, we evaluated proprietary business records, industry directories and state winegrower license records. As of June 2017, San Diego County was home to approximately 116 active wineries, stretching from North County to the U.S.-Mexico border. A GIS density analysis reveals the greatest concentration of establishments in the San Pasqual Valley and Ramona Valley, followed by the northern Escondido area and Fallbrook.

Figure 1: Density Analysis of Wineries in San Diego County

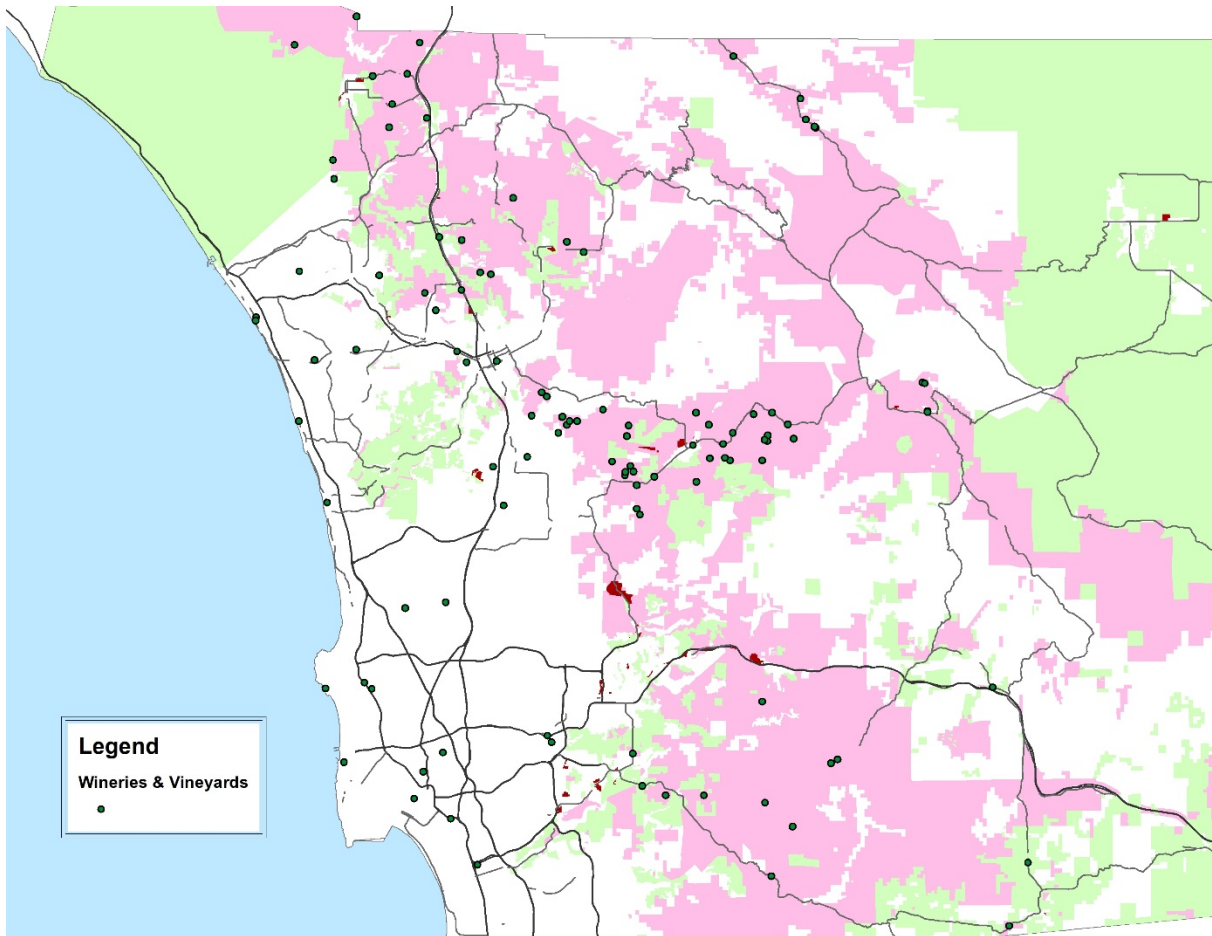


Wineries in San Diego County operate under distinctly different land use and business type restrictions, depending on location, production levels, and other criteria.

Prior to 2010, only two types of wineries were allowed in San Diego County, “wholesale limited” wineries and “packing and processing” wineries. Wholesale limited wineries had building size restrictions and were not allowed to have retail activities. Other wineries were required to have a county-approved major use permits in existing agricultural-zoned areas. Wineries spent \$230,000 to \$260,000 on the preliminary fees, permits, studies and property improvements required by county planning officials before receiving a final major use permit to sell wine. Major use permits are discretionary, and may or may not allow tasting rooms, special events and on-site retail sales.

Under the landmark county winery ordinance passed in 2010 and amended in 2016, there are now four tiers of winery establishments – wholesale limited winery, boutique winery, small winery and winery. Wholesale limited wineries, boutique wineries and small wineries, none of which require a major use permit, are all allowed in the purple unincorporated county areas identified in Figure 2. Wineries are permitted with a major use permit in areas marked green, and without a permit in industrial zones marked red. A clear majority of industry establishments are located in the purple areas.

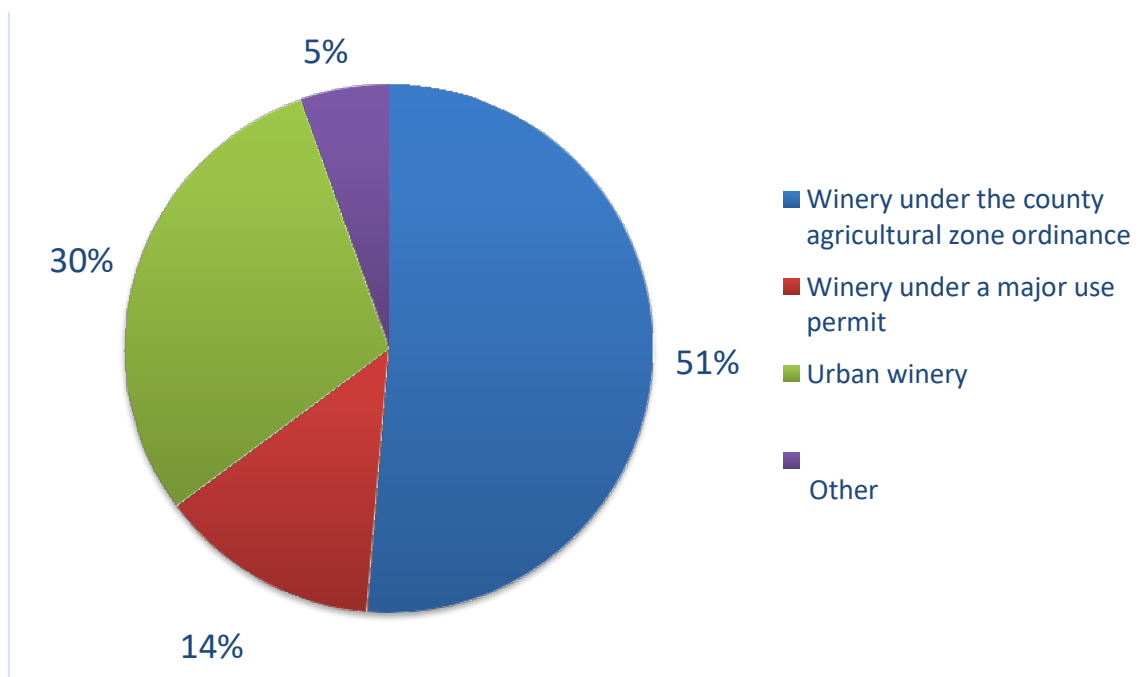
Figure 2: Land Use Analysis of Wineries in San Diego County



To explore the economic dynamics of the San Diego wine industry, we, in partnership with the San Diego County Vintners Association, distributed an 18-question survey electronically to San Diego County vineyard and winery owners from April to May 2017. Overall, we received 37 responses, generating a 32% response rate. This response rate is within the range of prior rates generated from our research into the Southern California craft beer industry.

When asked what type of winery they operate, a majority (51%) of survey respondents indicated they own wineries operating under the county's agricultural zone ordinance, followed by urban wineries (30%) and wineries under a major use permit (14%). The sample of survey respondents reasonably matches the share of each type of business classification in the industry region wide.

Chart 1: Type of Winery Operated

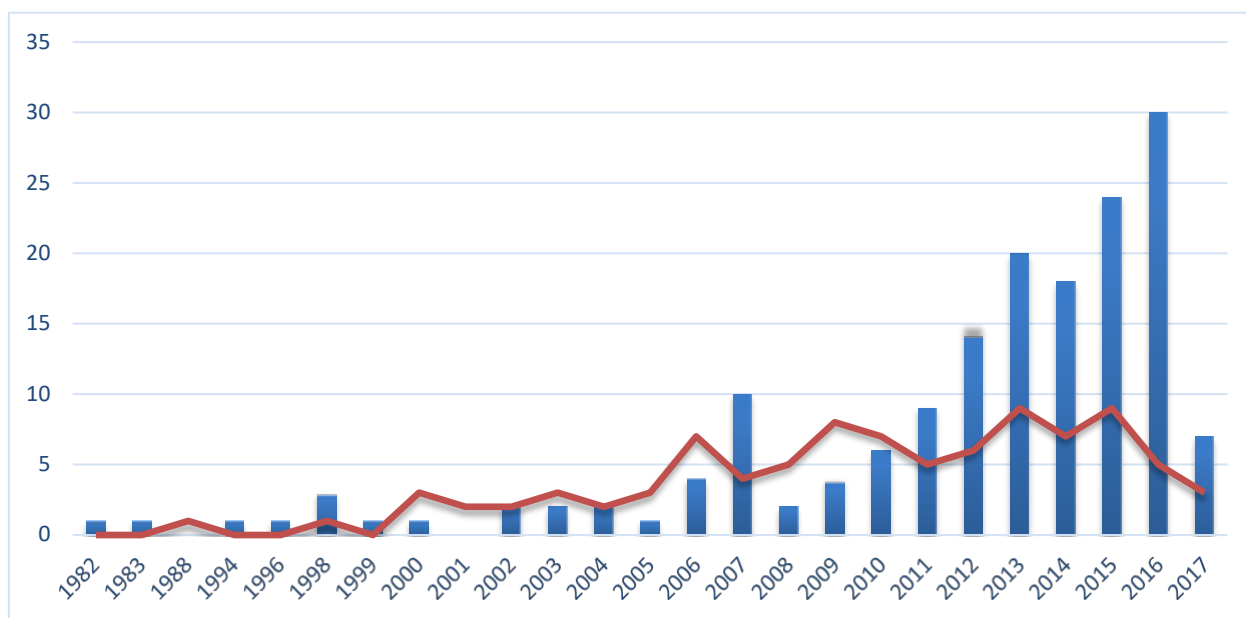


The State of California's Department of Alcoholic Beverage Control (ABC) issues a Type 2 winegrower license to wineries, authorizing wine tastings and sales for on- and off-premise wine consumption. The oldest active Type 2 license in the county was issued in 1982 (although there are wineries that have operated under earlier licenses, such as Bernardo Winery, since the 1880's). As illustrated in Chart 2, the recent proliferation of new Type 2 licenses in San Diego County appears to follow the 2010 passage of the tiered winery ordinance, which eliminated the need for most wineries to obtain a major use permit. Still, it is important to put the rise of wineries in the region into context; for example, the license data may be reflective of greater national trends and broader consumer demands that extend outside the region.

For comparison purposes, we overlaid first year-issued licenses from Riverside County across the same period of time (indicated in red). Riverside's Temecula Valley has a strong identity as a quality wine

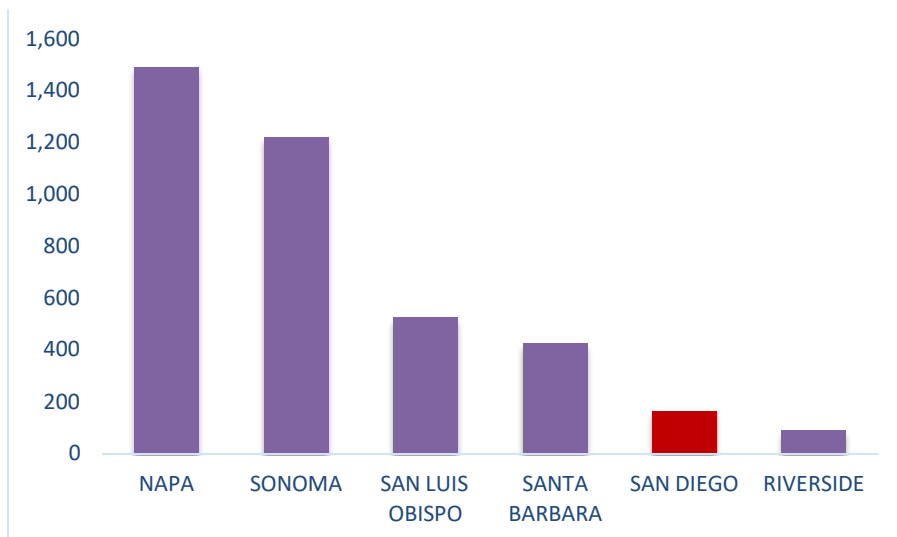
region and destination for tourists, including San Diego residents. Interestingly, new wineries in Riverside County peaked in 2013, and have since been on the decline. This suggests that the phenomenon of new wineries in San Diego County is unique, and driven principally by local factors, such as regulatory changes.

Chart 2: First Year of Issuance for Type 2 ABC Winegrower Licenses in San Diego County, 1982-2017



Comparing the total number of active Type 2 licenses by county statewide, San Diego is ranked fifth in California with 165 licenses, behind only Napa, Sonoma and the Central Coast (San Luis Obispo and Santa Barbara). Comparatively, Riverside County is ranked twelfth, with 93 licenses.

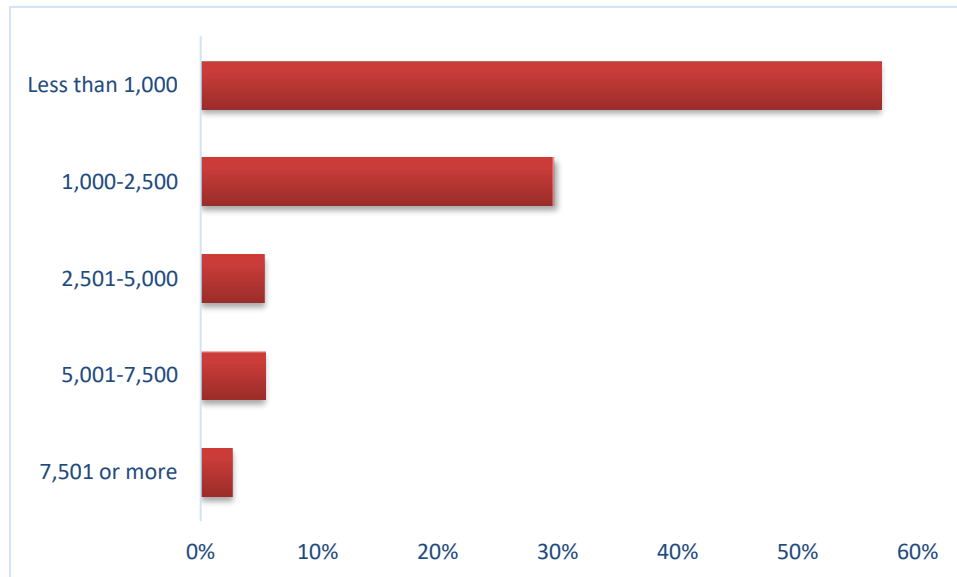
Chart 3: Total Active Type 2 Licenses, by County





Most San Diego wineries are small; the majority (57%) of survey respondents indicated they produced less than 1,000 cases of wine in 2016. One out of three (30%) produced from 1,000 cases to 2,500 cases, and 13% produced more than 2,501 cases last year. In comparison, only 8% of wineries in Temecula Valley produced less than 1,000 cases, 27% produced 1,000 to 4,999 cases, and 62% produced 5,000 to 49,000 cases.<sup>1</sup>

Chart 4: Cases of Wine Produced in 2016, San Diego County



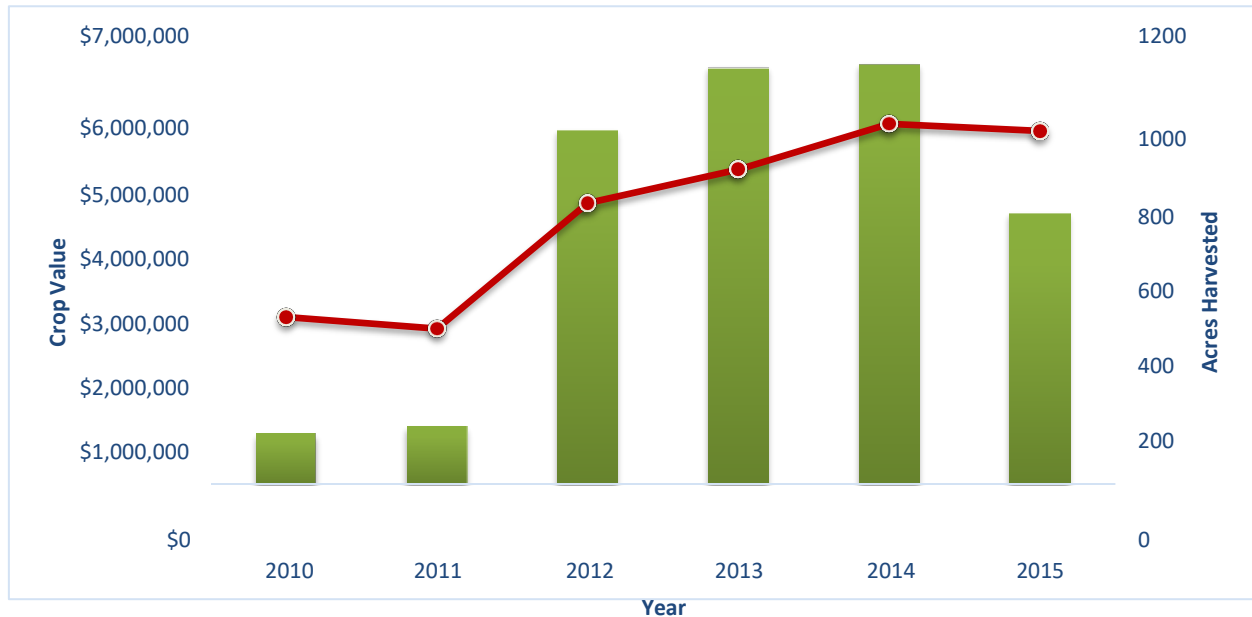
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<sup>1</sup> Valley News. Temecula Valley Wine Country Impact Report profiles vineyards and wineries as a pillar of the Temecula Valley tourism economy. October 5, 2016. <<http://myvalleynews.com/business/temecula-valley-wine-country-impact-report-profiles-vineyards-winerries-pillar-temecula-valley-tourism-economy/>>.

## Harvest

Data from the San Diego County Agriculture, Weights and Measures Departments reveals that the region's wine grape harvest has significantly grown in size and value since the 2010 passage of the tiered winery ordinance.<sup>2</sup> Total acres of wine grapes harvested has more than doubled (111%) since 2010, from 447 acres to 945 acres, while the crop value has more than quadrupled (439%), from \$785,000 to \$4.2 million.

Chart 5: Wine Grape Acres Harvested and Crop Value in San Diego County, 2010-2015



Survey respondents had clear opinions about their 2016 harvest yield and quality. When asked “how would you characterize your harvest yield?,” 72% of respondents replied average, 8% replied above average, and 19% below average. Responses on harvest quality, however, were considerably more positive – when asked to characterize harvest quality, 30% said excellent, 57% said good, and 13% said average. No responses were given for “below average” or “poor.”

It is important to note that there is a wealth of diversity in wine grapes that are grown, cultivated and sold in San Diego - survey respondents are utilizing more than 45 different varieties to produce wine, with an average of more than eight varieties per respondent. As illustrated in Table 1, medium and full-bodied varieties dominate the most popular varieties in the region, including Cabernet Sauvignon, Syrah, and Malbec.

<sup>2</sup> Data obtained from the 2011-2015 Crop Statistics Annual Reports.  
<[http://www.sandiegocounty.gov/content/sdc/awm/crop\\_statistics.html](http://www.sandiegocounty.gov/content/sdc/awm/crop_statistics.html)>.

Table 1: Top 10 Wine Grape Varietals Grown, Cultivated and/or Sold in 2016

Varietal	Percentage
Cabernet Sauvignon	59%
Syrah	59%
Sangiovese	46%
Merlot	38%
Cabernet Franc	32%
Zinfandel	32%
Viognier	30%
Malbec	27%
Petite Sirah	24%
Sauvignon Blanc	24%

### Workforce, Wages & Training

At the core of our prior economic investigations into the craft beer industry has been accurate workforce data. This is the foundation of our data research, and we have found it is a prerequisite for meaningful economic analysis, particularly with economic modeling software. As such, we took careful steps to determine an accurate industry headcount for this report.

Respondents were asked to sort their total employee headcount for 2016 by their primary occupation, across seven major industry occupations. Using survey responses and a proprietary business database, we calculated the total industry workforce in the region<sup>3</sup>. Overall, we conservatively estimate that the San Diego County wine industry employed 519 workers in 2016. Most industry jobs are focused on vineyard and winery operations, however hospitality and tasting room jobs are expected to steadily rise with the increase in urban wineries and expansion of vineyards in agriculture-zoned areas.

Table 2: San Diego County Wine Industry Workforce, by Occupation

Industry Occupation	Total
Executive/administrative	35.58
Finance/HR/IT/purchasing	11.33
Vineyard operations	136.4
Winery operations	176.83
Hospitality/tasting room	128.83
Sales/marketing	17.7
Facilities/maintenance	12.33
<b>TOTAL OCCUPATIONS:</b>	<b>519</b>

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<sup>3</sup> In cases where we received no responses, we created estimates using business records from Reference USA, a leading commercial database, and statistically significant data patterns from survey responses.

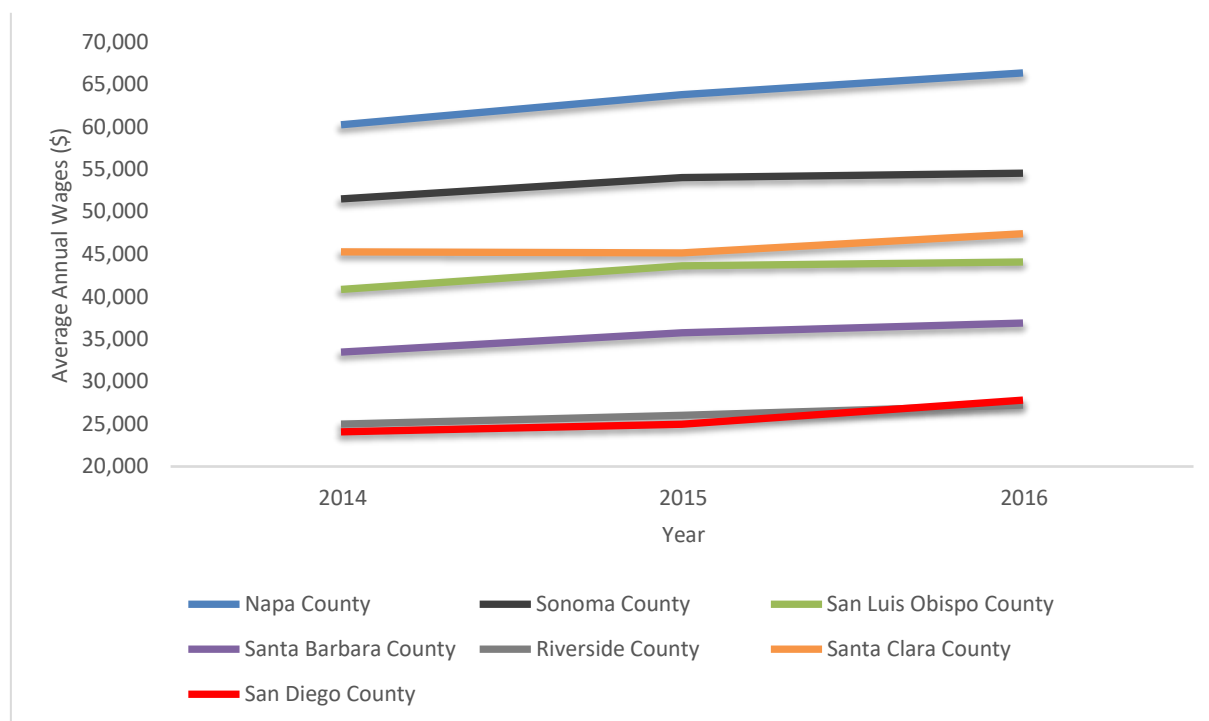
Overall, few wineries have full-time employees – most depend on part-time workers. These figures do not include seasonal workers, which were excluded from our analysis.

Table 3: Status of Workforce

Full-time employees	Part-time employees
37%	63%

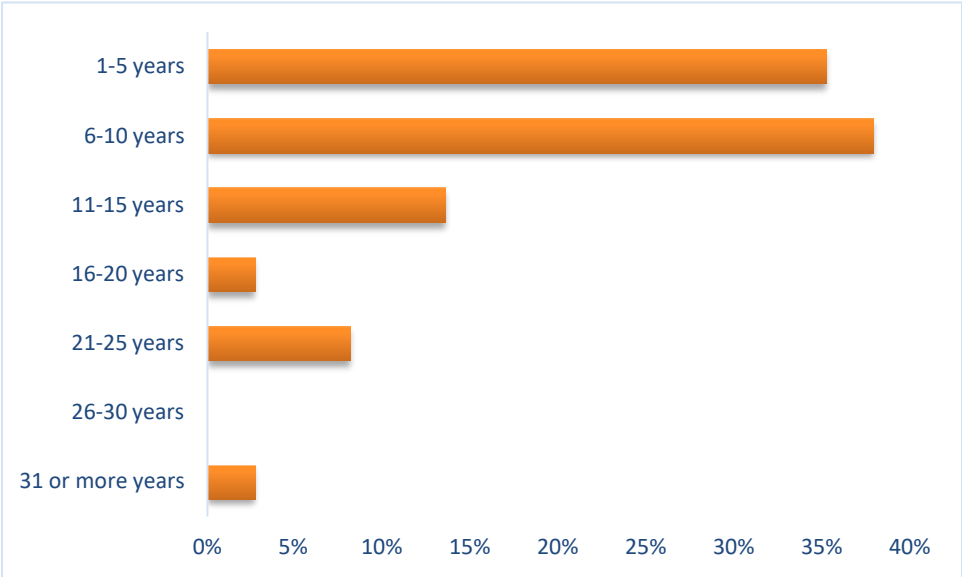
Like other California wine regions, industry worker wages have slowly risen over the last three years in San Diego County, though they remain the lowest among all major wine regions in the state. This is largely reflective of the fact that most local wineries are boutique, family-owned, and small. Of those that do hire outside help, it is mostly for part-time work in the tasting room. Wage levels are also reflective of the relative year established and scale of vineyard and winery operations – Northern California and the Central Coast have been home to large scale production wineries, exporting globally for decades, and require a greater array of skilled, experienced workers, which command higher salaries. Still, it is worthwhile to note that San Diego industry wages surpassed Riverside wages in 2016. This is likely due to the types of new jobs being created – San Diego is likely adding more skilled, higher paying jobs, such as in sales, finance and administrative positions, where Riverside is likely adding more hospitality and server positions, which pay lower wages.

Chart 6: Industry Wages, by County, 2014-2016



While most wineries were established in the last three years, most survey respondents indicated they have extensive time and experience in wine production. In all, 38% stated they have six to ten years of experience in producing wine, and 27% have eleven or more years of experience.

Chart 7: Years Producing Wine



With regard to formal training, most respondents (65% combined) indicated they have some level of professional industry education; a clear majority (54%) had at least attained or enrolled in an industry certificate program, focusing on oenology, viticulture, wine studies, or beverage service. One out of three (30%) have a bachelor’s degree in an industry-focused topic, and eight percent have a graduate degree.

Table 4: Industry Education Programs Enrolled or Completed by Respondents and/or Their Employees

Industry Education Level Attained	Percentage Yes
Certificate in oenology, viticulture, wine studies, sommelier training/beverage service	54%
Bachelors degree in oenology, viticulture, wine studies	30%
Graduate degree in oenology, viticulture, wine studies	8%
Other	22%

Long-term, workforce development is a priority for local vintners, as well as wine growers throughout the state. Rising labor costs (health care, minimum wage), changes to immigration policies, and a high cost of living in California makes recruiting and retaining talented industry professionals relatively challenging.

It is important to note that the region has some education programs available to proprietors, industry workers and entrepreneurs. For example, San Diego State University offers a Professional Certificate in the Business of Wine, a nine-course program which includes courses in vineyard management, importing and distribution, and marketing wine. CSU San Marcos offers a 14 week prep program for students interested in taking the Society for Wine Educator's Certified Specialist of Wine Exam.

With grant funding from the California Community Colleges Chancellor's Office, Cuyamaca College offers a new five-course viticulture apprenticeship program, which is intended to help local wineries fill a growing need for skilled industry labor. The Viticulture Technician Apprentice program, which is the first of its kind offered in Southern California, prepares students for work in viticulture, and teaches skills in areas such as vineyard maintenance, grape processing, wine chemistry, and winery maintenance. Students are also required to complete 3,000 hours in a paid apprenticeship position.

## **Sales & Economic Impact**

In order to understand the financial health of vintners and market demand for local wine, the survey included two key questions on proprietor sales in 2016 – the total estimated gross sales that year, and the year-over-year change rate in sales.

Based on survey responses, we found that sales at wineries increased, on average, 88% from 2015 to 2016. This is a strong indicator of a vibrant, growing industry, and underscores that most wineries in the region are relatively new and small-scale. Next, we calculated the gross sales for all establishments, including those that did not participate in the survey, using survey responses and data from a proprietary business database. Overall, we conservatively estimate that county wineries generated more than \$23,873,100 in gross sales last year.

A growing wine industry benefits other businesses in the region - San Diego vintners source from local businesses to produce wine. For example, wineries procure equipment (hosing, stoppers, carboy containers) from homebrewing supply stores throughout the region. White Labs, a prominent yeast manufacturer in the region's craft brewing industry, also sells winemaking yeast and offers oenological analysis. Wineries also obtain industry lab services and supplies from Vinemetrica, a company based in Carlsbad.

Wineries foster job creation, tax revenue and new economic activity. A "multiplier effect" is also created when industry dollars are recirculated in the regional economy, indirectly supporting more jobs and additional business activities. To determine the regional economic impact of the industry, we analyzed sales and workforce data using IMPLAN, a leading regional input/output model.

Input/output models are an econometric technique used to explore economic relationships within a designated geography.

Overall, we found that the San Diego wine industry generated a \$30.4 million regional economic impact in 2016. We also found that the industry supports a total of 697 jobs in San Diego County, a figure which includes all direct (519), indirect (84), and induced (94) jobs.

Table 5: Economic Dynamics of San Diego County Wineries, 2016

Impact Type	Employment	Wages (\$)	Economic Impact (\$)	Sales (\$)
Direct Effect	519	14,108,064	16,040,761	23,873,100
Indirect Effect	84	4,313,434	6,500,506	10,895,753
Induced Effect	94	4,447,488	7,931,256	13,126,810
Total Effect	697	22,868,985	30,472,524	47,895,663

Winery sales include wine, merchandise, and food (where permitted), all of which require sales tax collection. Our IMPLAN analysis also found that wine sales generated \$1.1 million in total sales taxes, as well as \$965,429 in property taxes.

### Policy Priorities

Key to understanding the direction of the craft brewing industry is learning about the challenges and concerns of industry participants, and measuring those viewpoints in a quantitative way. As part of our survey, we asked respondents “looking towards future growth for your business, please rank only the top five issues that are impediments to growth.” We offered thirteen major policy categories to select from, based on prior surveys in other markets and interviews with industry participants. We tabulated the responses, and created a hierarchical index based on the number of responses and values awarded by respondents (See Table 6). The higher the score the more concerned the industry is with the issue.

Overall, “permits/local regulation” was the clear top choice among survey respondents, followed by “labor costs” and groundwater/runoff rules. Real estate and water rates ranked the lowest on the scale.

Table 6: Impediments to Industry Growth Index (Top Five)

Issue	Index Score	Sample
Permits/local regulation	1.84	24
Labor costs	1.68	22
Groundwater/runoff rules	1.51	14
Access to capital	1.43	17
Taxes	1.27	14
Marketing	1.24	15
State/federal regulation	1.24	17
Distribution	1.05	13
Talent/labor supply	0.97	13
Availability/price of inputs (viticulture supplies/equipment)	0.78	9
Non-San Diego market competition	0.59	7
Land/space/available real estate	0.54	8
Water rates/supply	0.32	6

A stable water supply is essential for viticulture and the future of wine growing. Water policy and rate changes due to drought conditions or future importation restrictions are on the radar of wine growers, but isn't an issue that drew high levels of concern. When asked "how concerned is your winery about the California drought, water policy, and the price and availability of water in the coming years," nearly 8 out of 10 (76%) responded "somewhat concerned," or "very concerned" (16%). Only 8% responded "not at all concerned."

Table 7: Views on the Future Impact of the State Drought and Water Policy

Response	Percentage
Not at all concerned	8%
Somewhat concerned	76%
Very concerned	16%



## Tourism

There is a nexus between local wine and the hospitality industry. Prior industry research has shown that the presence of wineries promotes agri-tourism, and increased demand for vacation rentals, hotels, restaurants and retail shops. Some businesses cater to winery visitors; for example, we identified more than half a dozen transportation companies offering local winery tours.

Visitors are seeking out wineries on their trips to San Diego County. The San Diego Tourism Authority's 2013 Visitor Survey Profile found that wine tasting ranked as a Top 15 activity (#15) among all visitors to region, following other leisurely activities as visiting theme parks, relaxing at the beach, and sightseeing.<sup>4</sup> Visitors also comprise a measureable share of revenue for local wineries; the survey found that, on average, respondents attributed 27% of their 2016 sales to tourism and direct sales to tourists.

When we asked respondents what draws visitors from outside the region to San Diego wineries, answers varied, and there was no clear consensus. Some stated that the wine quality and the small intimate environment at tasting rooms played a role. Others thought that visitors were curious in sampling local wine, but were drawn principally to San Diego by other major regional attractions (beaches, Sea World, Lego Land, et al). A number of respondents disagreed with the premise of the question, and felt that nothing is drawing tourists specifically to local wineries, and that more advertising, promotion and branding could be helpful in those efforts.

The public perception of wine tourism is important to the future of the region's wine industry – negative views and opinions can put political pressure on local elected officials to make land use and commercial operations more restrictive. When asked, more than 9 out of 10 (94%) wine owners stated that wine tourism and wineries are appreciated and publicly supported by residents; only 3% believed industry tourism was unwelcome and actively opposed. This strong, positive sentiment is in contrast to most other major wine regions in the United States, where the public reception is decidedly less warm. The 2016 Silicon Valley Bank Annual Wine Conditions Survey found that only a plurality (40%) of winery owners believed wine tourism was appreciated and publicly supported by locals; 33% stated it was welcome but publicly opposed; and 6% stated it was unwelcome and actively opposed. Napa, Sonoma and the Central Coast all had significantly higher rates of negative outlook than the overall averages.<sup>5</sup>

Table 8: Local Opinions on Wine Tourism and Wineries

Response	Percentage
Appreciated and publicly supported	94%
Welcome but publicly opposed	3%
Unwelcome and actively opposed	3%

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<sup>4</sup> CIC Research Inc. 2013 San Diego County Overnight Visitor Profile. Page 12. <<http://www.sdtmd.org/wp-content/uploads/2015/09/2-Exhibit-A-Scope-of-Work-Destination-Marketing-Plan.pdf>>.

<sup>5</sup> Silicon Valley Bank. State of the Wine Industry 2017. Figure 28. <[https://www.svb.com/uploadedFiles/Content/Trends\\_and\\_Insights/Reports/Wine\\_Report/2017-wine-report.pdf](https://www.svb.com/uploadedFiles/Content/Trends_and_Insights/Reports/Wine_Report/2017-wine-report.pdf)>.

### **About the Author**

Vince Vasquez is an independent economic data analyst based in Carlsbad, California. Professionally, he has worked as a public policy researcher for more than twelve years. He has authored more than forty policy papers on a range of economic and workforce issues, including craft brewing, small business districts, and the renewable energy sector. Mr. Vasquez has conducted hundreds of media interviews, including ABC News, and print, radio and television outlets. He has a Bachelor of Arts in Political Science from the University of California, San Diego, and a Masters in Public Administration. He has used GIS software professionally for more than seven years, and has completed training to use Tableau software.



## **SAN DIEGO COUNTY VINTNERS ASSOCIATION**

The San Diego County Vintners Association is a non-profit membership association dedicated to supporting the San Diego viticulture and winemaking community, educating the local wine enthusiast and embracing sustainable agricultural practices in the region.