

2019 San Diego County Economic Impact of Wineries



**SAN DIEGO COUNTY
VINTNERS ASSOCIATION**

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All conclusions, errors and omissions are the sole responsibility of the author. We thank SDCVA for their support.

Executive Summary

Over the last few years, wineries in San Diego County have noticeably expanded their presence in the regional economy, fostering job growth, tax revenue, and property improvements throughout the county. An in-depth economic data analysis can highlight the important economic opportunities and policy choices presented by this unique agricultural sector. Using survey data, economic modeling software, and public datasets, we conducted an economic analysis of the San Diego County wine industry, building upon our prior research in this sector.

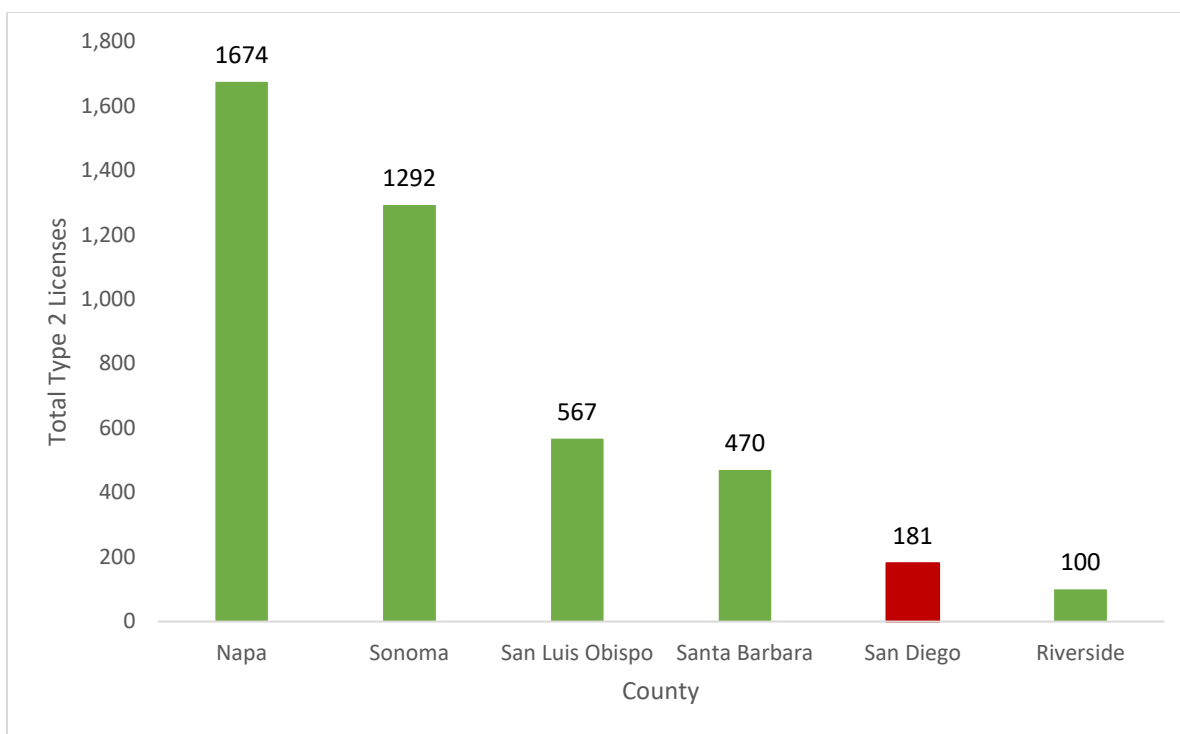
Overall, we found that:

- The economic impact of San Diego County wineries was \$58.6 million in 2018.
- In 2018, San Diego County wineries generated \$41,059,126 million in gross sales, a 57.1% increase over 2017 sales (\$26.1 million) and a 71.9% increase from 2016 sales (\$23.8 million).
- San Diego County has maintained steady interest and growth in new wineries since 2012. The data reveals this is reflective of a confluence of existing wineries adding new satellite tastings rooms in the region, and new winery owners establishing their business operations.
- Today, there are 142 active and planned wineries in San Diego County.
- Overall, there were 611.7 San Diego-based wine industry jobs in 2018, a 9.7% increase over the 2017 total (557.2) and 17.8% higher than the 2016 total (519).
- In 2018, San Diego County growers harvested 3,284 tons of wine grapes with a production value of \$4,591,032. In all, 1,642 acres of wine grapes were harvested, an amount that is more than 50% higher than the acre tally from 2016 (930) and more than 1,000 acres from just ten years ago.
- Varietal diversity continues to expand in San Diego County – our survey found that more than 62 varieties are grown in the region, a higher tally than found in prior survey years (45 in 2017 and 2016). As seen in prior surveys, the top five varieties grown, cultivated and/or sold in the region in 2018 were Cabernet Sauvignon, Syrah, Merlot, Sangiovese and Zinfandel.
- The steady rise in average industry wages in San Diego County hit a new record in Quarter 1 2019, with \$48,724 as the opening average wage for 2019. It is our view that the significant rise in average wages since 2016 is a combination of both rising wages for a growing number of new industry jobs, as well as more boutique winery owners, who previously operated without paying themselves a wage, now paying themselves a wage.
- More than six out of ten (64%) wineries stated that Millennials are a growing portion of their clientele. Most survey participants indicated that Millennials also comprised 20-30% of their sales in 2018.

Industry Overview

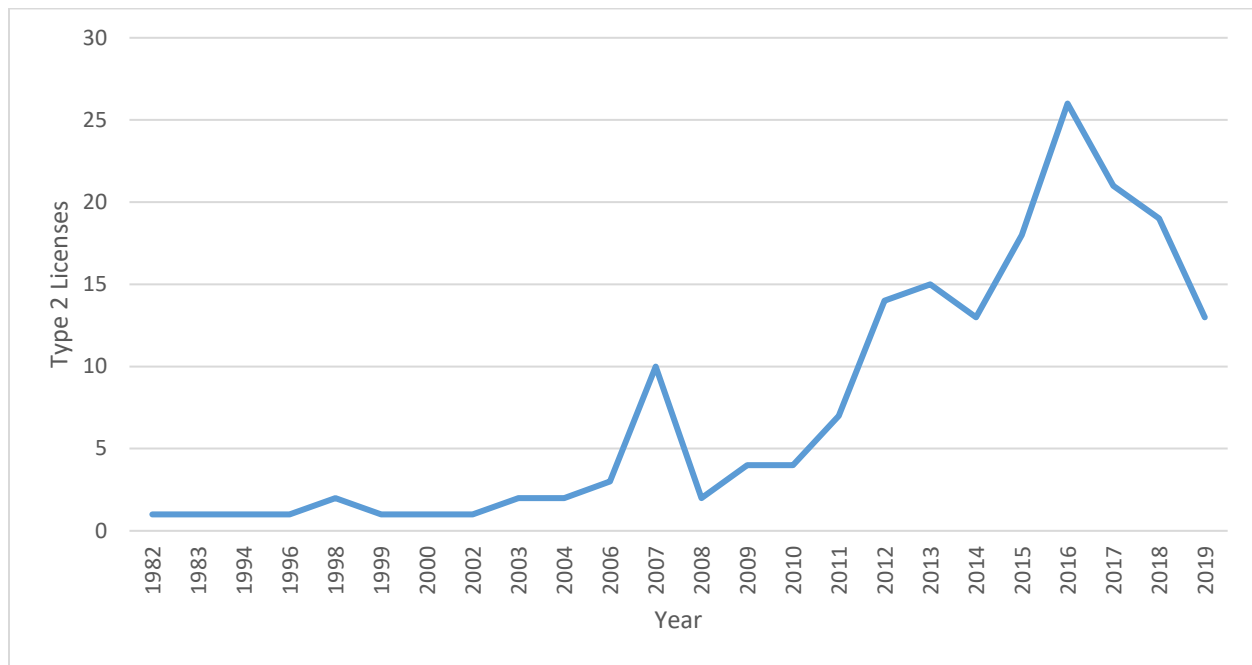
According to data from the California Department of Alcoholic Beverage Control (ABC), there are 181 active winegrower licenses in San Diego County, a marginal increase from the total from mid-year 2018 (174). As illustrated in Chart 1, San Diego winegrowers have maintained their relative position among benchmark counties in California, which have also experienced marginal changes in license tallies. We do not anticipate this overall industry measurement to change significantly in future years.

Chart 1: Total Active Type 2 Licenses, by County, September 2019



Taking a closer look at ABC winegrower license data, San Diego County has maintained steady interest and growth in new wineries since 2012 (Chart 2). Following a peak in new winegrower licenses in 2016 (26), additional licenses have been issued at record levels, with 19 new licenses in 2018 and 13 in 2019 as of October. The data reveals this is reflective of a confluence of existing wineries adding new satellite tastings rooms in the region, and new winery owners establishing their business operations.

Chart 2: First Year of Issuance, Type 2 ABC Winegrower Licenses, San Diego County, 1982-2019

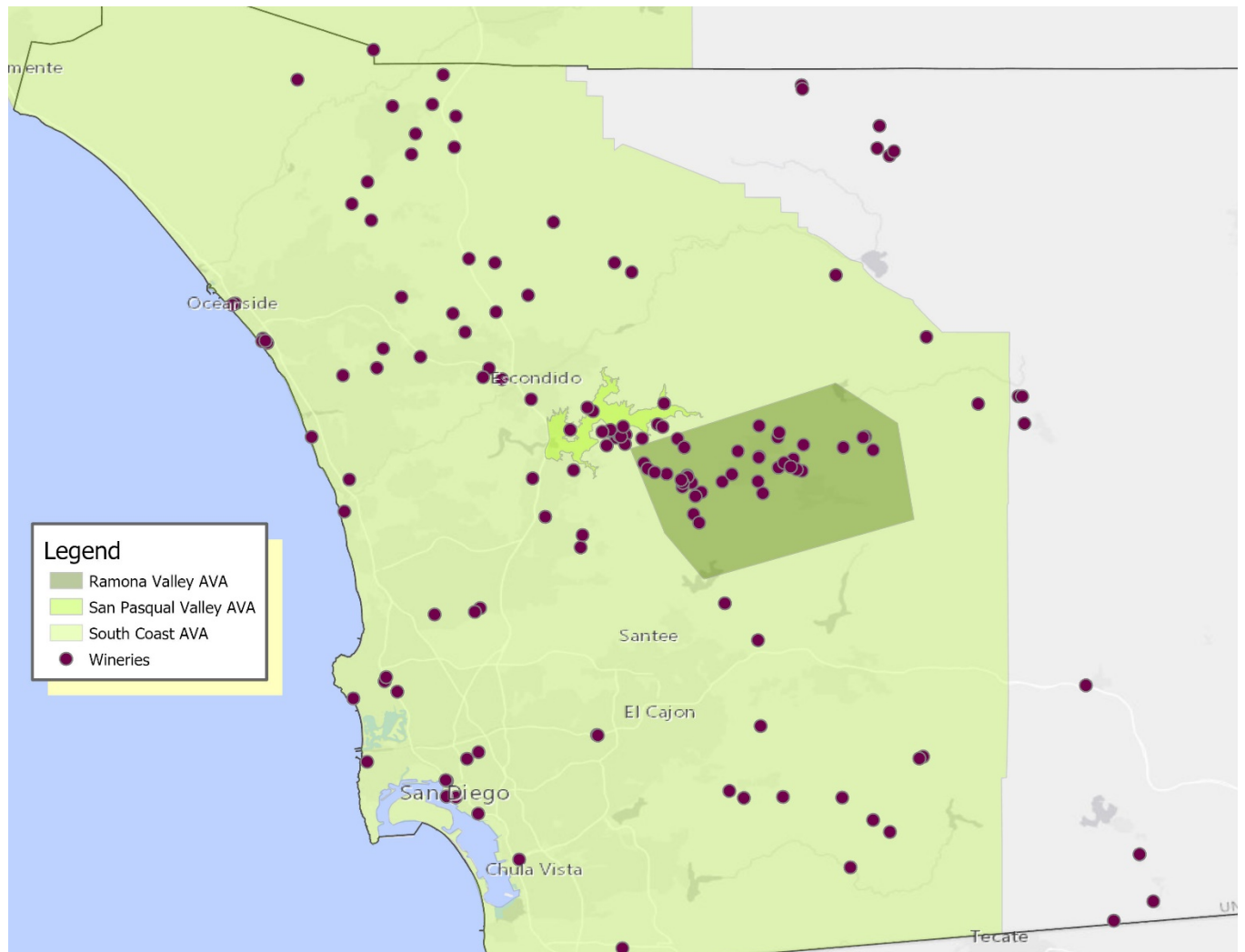


We next conducted an exhaustive review of Type 2 Licenses in the region, verifying that license holders were open for business or in the planning process. We removed duplicate licenses, inactive wineries, and non-wineries from our list. In total, we identified there are 142 active and planned wineries in San Diego County.¹ As revealed by Figure 1, local wineries are located throughout the region, and satellite tasting rooms reach many of the urban and coastal communities that dot the San Diego landscape.

San Diego County has three American Viticultural Areas (AVAs), or federally designated wine grape growing regions - San Pasqual Valley, Ramona Valley, and the South Coast. These AVAs are illustrated in distinct shades of green in Figure 1. It is interesting to note that San Pasqual Valley is one of California's oldest AVAs – it was established in 1981, the same year in which Napa Valley was established as an AVA. Today, California is home to 140 AVAs.

¹ This figure is different from the total Type 2 license count for San Diego County. Our Type 2 license tally includes duplicate licenses, wineries that are no longer operating, planned wineries, as well as cider and mead producers.

Figure 1: Wineries and Satellite Tasting Rooms in San Diego County, September 2019



2019 Survey

In order to assess the experience and perspective of regional winery owners, we partnered with the San Diego County Vintners Association to electronically distribute an 18-question survey to its members. We supplemented this partnership by distributing the survey directly to non-member winery owners, using contact information found via Internet research and business license records. Prospective respondents were contacted over multiple rounds of emails from August 13-29. Overall, we received 42 responses, generating a 34% response rate, which is the same response rate from the 2018 survey, and slightly higher than the 2017 response rate (32%).

To maintain quality control of our survey instrument, and ensure that survey responses are in aggregate reflective of the views and experiences of regional wineries, we weighted responses using SPSS statistical software. We used a multivariate weighting analysis, weighting responses by 1) winery type

(urban winery, major use permit, et al), 2) geographic location, and 3) the year in which the winery was established.

Sales & Economic Impact

Respondents were asked to indicate their total estimated gross sales revenue for 2018, and the year-over-year rate of change for 2017-2018 sales. We first compiled revenue responses and supplemented them with responses from prior surveys, and in limited cases sales data from ReferenceUSA, a proprietary business record database. Overall, we estimate that in 2018, county wineries generated \$41,059,126 in gross sales, a 57.1% increase over 2017 sales (\$26,134,100) and a 71.9% increase from 2016 sales (\$23,873,100).²

The year-over-year sales rate changes varied widely, with some respondents indicating flat sales between 2017 and 2018, and some indicating high double digit and triple digit increases. Most identified double-digit increases between 20-40%. We conservatively place the average year-over-year increase for the industry countywide at 32%, an increase from 2016-2017 (26%).

To calculate the 2018 economic impact of wineries in San Diego County, we processed survey workforce and sales data through IMPLAN, a best-in-class regional input/output economic modeling software program. Input/output models are an econometric technique used to evaluate economic relationships within a geographic area. Overall, we found that the San Diego County wine industry generated a \$58.6 million regional economic impact in 2018. We also found that the industry supports a total of 928.72 jobs in the region, a figure which includes all direct (611.7), indirect (149.55) and induced (167.47) jobs³.

Table 1: Economic Dynamics of San Diego County Wineries, 2018

Impact Type	Employment	Wages	Economic Impact	Sales
Direct Effect	611.7	\$27,384,200	\$32,356,633	\$41,059,126
Indirect Effect	149.55	\$6,777,197	\$10,520,649	\$17,768,378
Induced Effect	167.47	\$8,379,492	\$15,738,777	\$25,331,462
Total Effect	928.72	\$42,540,889	\$58,616,060	\$84,158,966

Harvest

For our harvest analysis, we first pulled twelve years of crop data from the San Diego County Agriculture, Weights and Measures Department, and found that wine grape growing is reaching new levels of record growth. In 2018, San Diego County growers harvested 3,284 tons of wine grapes with a production value of \$4,591,032. In all, 1,642 acres of wine grapes were harvested, an amount that is more than 50% higher than the acre tally from 2016 (930) and more than 1,000 acres from just ten years ago (489 acres in 2009). San Diego County produced a record amount of wine grapes in 2012, when

² It should be noted that our 2018 industry sales estimate includes some previously underreported sales data.

³ "Indirect jobs" refer to those jobs that result from businesses procuring goods and services from other businesses in the geographic area. "Induced jobs" refer to those jobs that result from workers spending their wages on goods and services within a geographic area, and those spent dollars circulating through the economy.

4,813 tons of wine grapes were harvested from only 752 acres. The 2018 harvest included newly planted grapes and a more diverse varieties than in prior years. We project that, with stronger rainfall totals, future years are likely to surpass the 2012 wine grape harvest record in the region.

Table 2: San Diego County Wine Grape Harvest, 2016-2018

Year	Acres Harvested	Tons Produced	Production Value	Value/Ton
2016	930	2,515	\$ 3,005,000	\$ 1,195
2017	1,210	2,783	\$ 3,854,455	\$ 1,385
2018	1,642	3,284	\$ 4,591,032	\$ 1,398

To give some meaningful comparative context to this crop data, we compared two key San Diego County wine grape harvest metrics, tons per harvested acre and value per ton, to those metric levels from other benchmark wine grape growing regions in the state. As illustrated in Table 3, San Diego County's mostly small, boutique winery community is unique and underscored in the harvest data; crop values and production levels are lower than other wine regions in the state. Other relevant factors to consider include relative temperature and rainfall levels; the number and size of wineries; acreage; varieties; bulk grape production; and market demand.

Table 3: 2018 Tons of Wine Grapes Harvested per Harvested Acre, and Value of Harvest Wine Grapes per Ton Harvested, by County, 2018

County	Tons/Harvested Acre	Value/Ton
Napa	4.3	\$ 5,627
Riverside	3.8	\$ 1,623
Santa Barbara	3.7	\$ 2,052
San Luis Obispo	4.1	\$ 1,559
Sonoma	4.6	\$ 2,818
Santa Clara	3.7	\$ 1,705
SAN DIEGO	2.0	\$ 1,398

We were also interested in learning how wine grape planting in the San Diego region compared to the rest of California. The California Department of Food and Agriculture partners with the U.S. Department of Agriculture to survey wine grape growers in California annually, requesting, among other data points, the number of acres of newly planted wine grapes. While the survey data is only a sample of the overall population, we see a shared trend of newly planted wine grapes reaching a peak in 2013, with additional plantings down sharply in more recent years (Table 4).⁴

⁴ California Grape Acreage Report: 2018 Crop. California Department of Food and Agriculture in cooperation with USDA's National Agricultural Statistics Service. April 19, 2019. Table 10.

Table 4: Wine Grape Acreage Standing by County, By Year Planted, San Diego County vs All Other California Counties

Year	2010 and Earlier	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
San Diego County	434	31	33	41	28	24	30	13	7	641
All Other CA Counties	400,848	8,451	14,138	14,472	13,632	8,964	7,478	6,192	4,498	478,673

Looking closer at the regional wine grape harvest, we see in the survey responses a noticeable shift in both harvest yield and quality, from exceptionally high satisfaction levels in 2017 to more measured, average levels in 2018 (Chart 3 and Chart 4). While more research is required, we believe this shift is largely due to a “significant summer heat spike” in 2018, which was reported by growers in San Diego County, as well as those in Temecula and Paso Robles.⁵ According to the Wine Institute, in San Diego County “a heat event in early July damaged several vineyards in the area and presented challenges for growers in certain locations. The harvest began about three weeks later than in the last few years, and yields were lower than normal due to the heat spike.”⁶

<https://www.nass.usda.gov/Statistics_by_State/California/Publications/Specialty_and_Other_Releases/Grapes/Acreage/2019/201904gabt00.pdf>.

⁵ Source: California Wine 2018 Harvest Report. Wine Institute.

<https://www.wineinstitute.org/files/WineInstitute_HarvestReport2018.pdf>.

⁶ Ibid.

Chart 3: Harvest Yield, San Diego County, 2016-2018

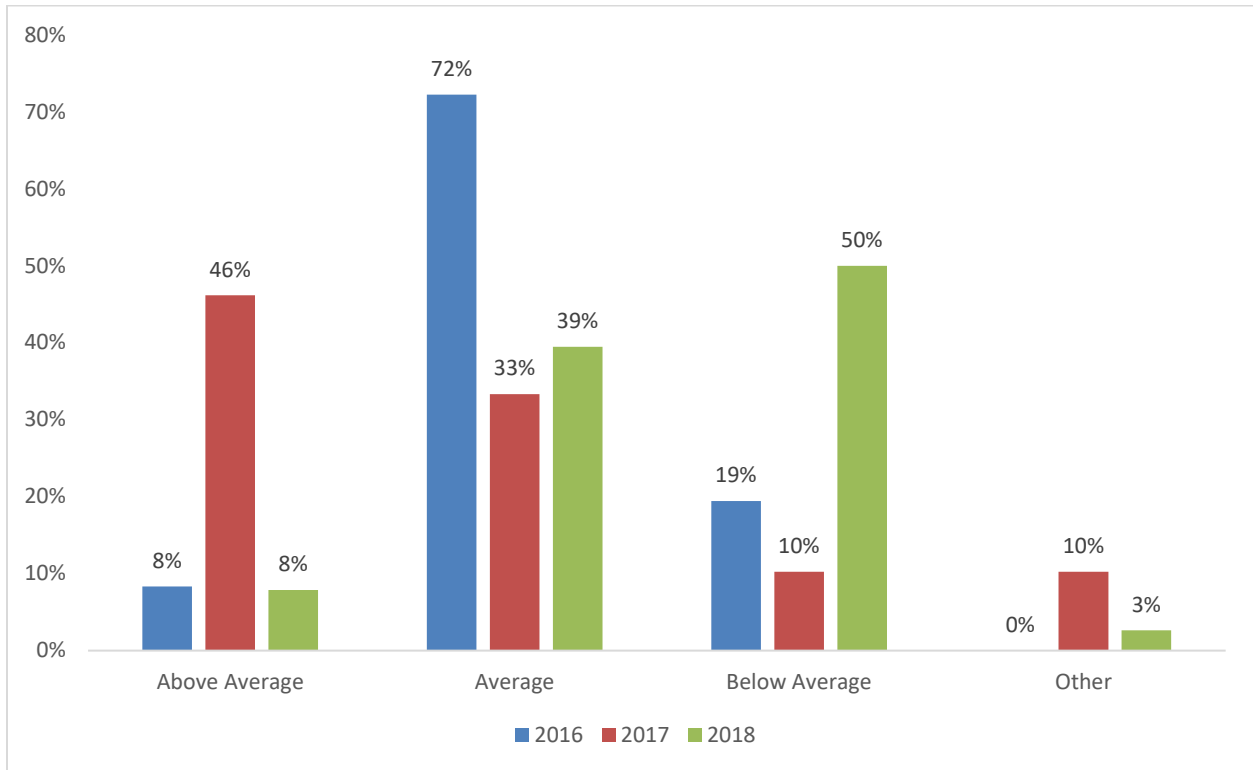
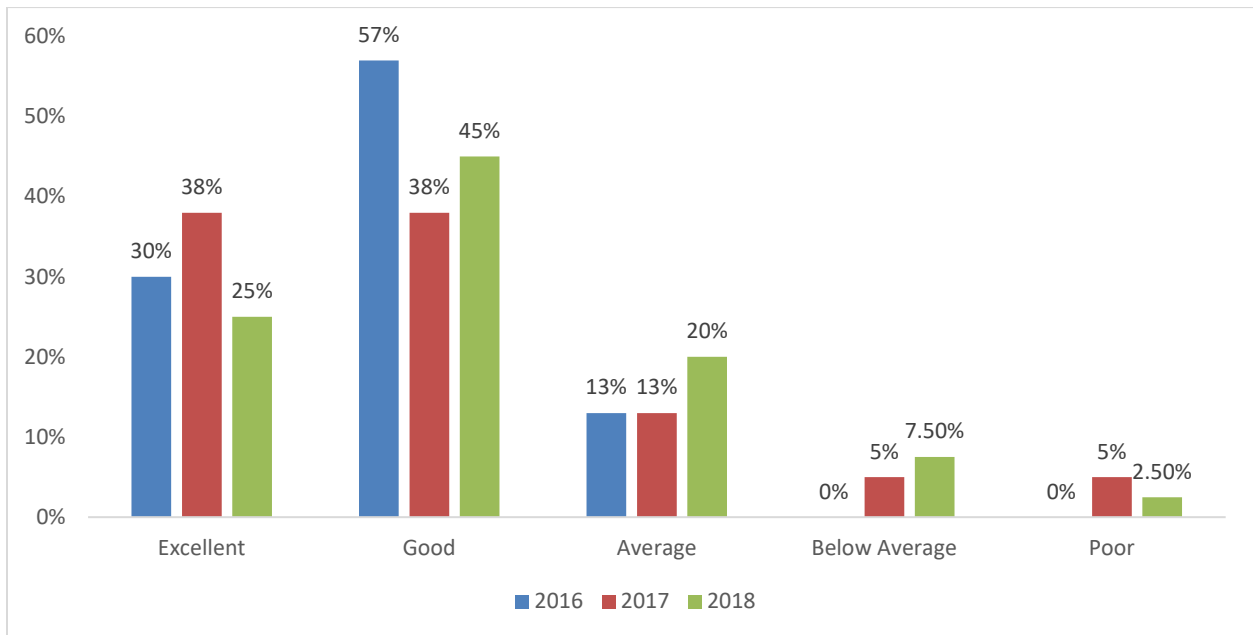
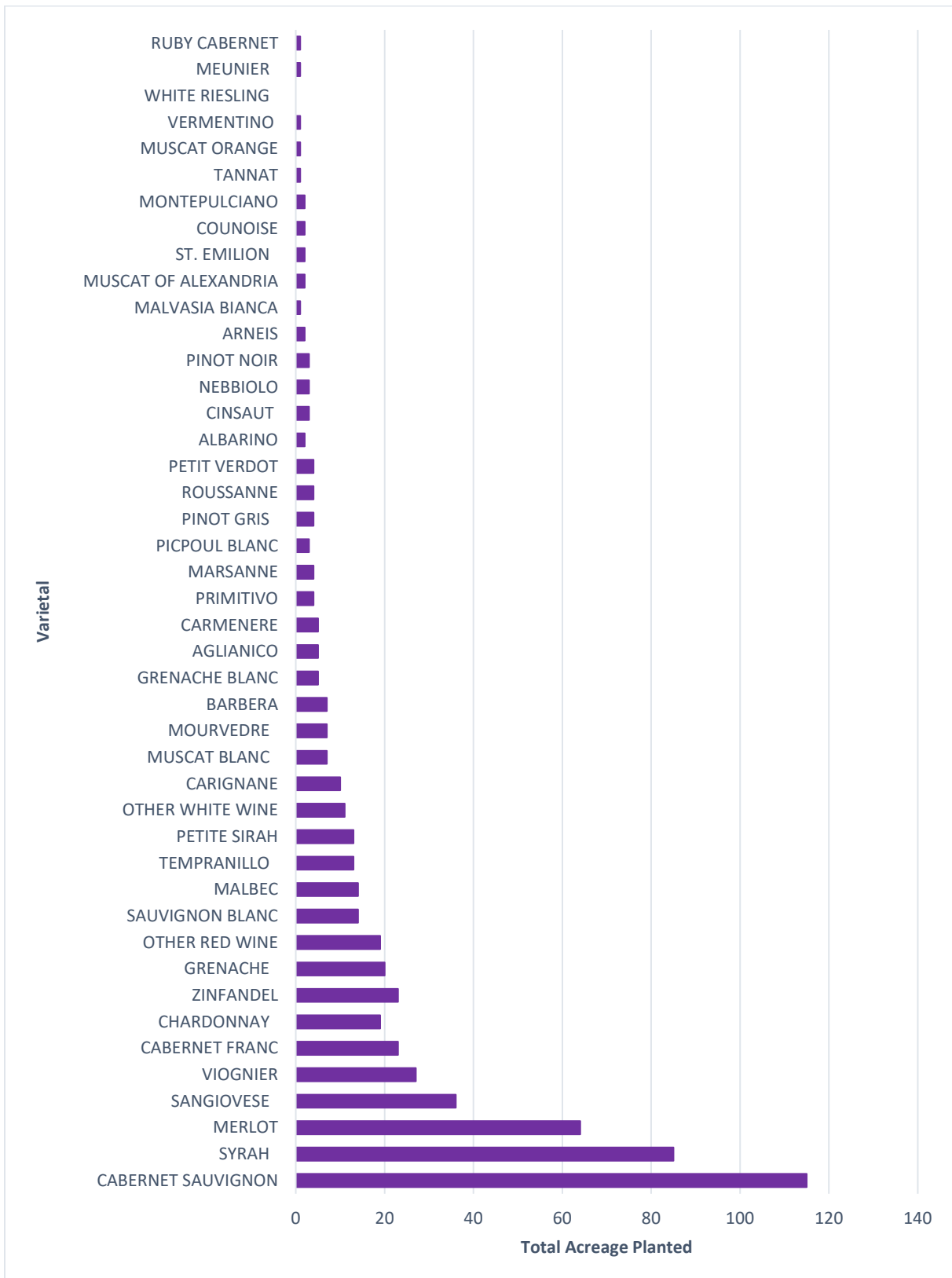


Chart 4: Harvest Quality, San Diego County, 2016-2018



Varietal diversity continues to expand in San Diego County – our survey found that more than 62 varietals are grown in the region, a higher tally than found in prior survey years (45 in 2017 and 2016). As seen in prior surveys, the top five varietals grown, cultivated and/or sold in the region in 2018 were Cabernet Sauvignon, Syrah, Merlot, Sangiovese and Zinfandel. For 2018, we supplemented our survey data with varietal data from the 2018 California Grape Acreage Report, which identifies wine grape varietal planted acre by county. As illustrated in Chart 5, San Diego County is home to a large number of varietals that are grown on a small scale.

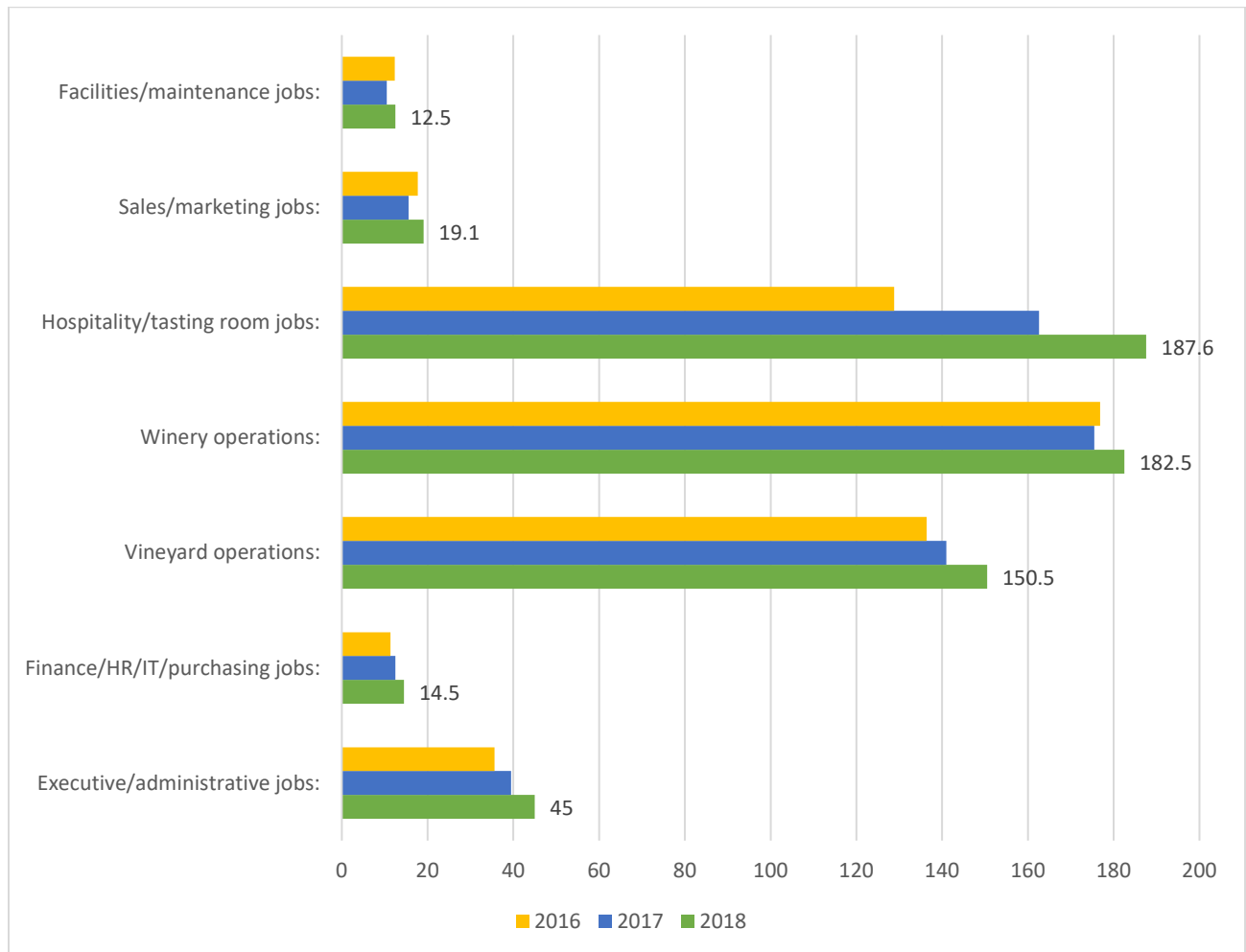
Chart 5: Wine Grape Varietal, by Planted Acreage, San Diego County, 2018



Workforce, Wages & Training

The regional winery workforce saw some notable shifts in 2018. For the first time, hospitality and tasting room jobs surpassed winery operations as the largest segment of the sector workforce, 187.6 jobs vs 182.5 jobs (Chart 6). This underscores the new satellite tasting rooms, urban wineries, and the expansion of wineries into larger, full-time operations with expanded hours open to the public. All other job occupations saw marginal growth from 2017. This suggests the 2016-17 shrinkage in certain occupational categories was indeed variance in survey participation, rather than an indication of a larger downward workforce trend.

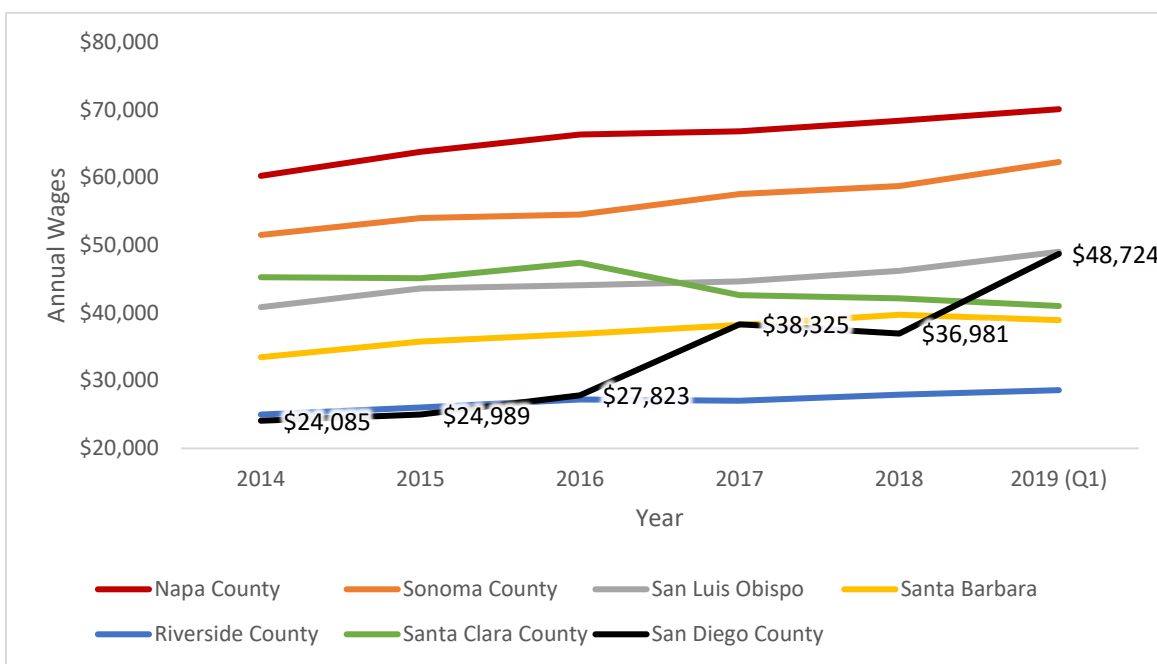
Chart 6: San Diego County Wine Industry Workforce, by Occupation, 2016-18



Overall, there were 611.7 San Diego wine industry jobs in 2018, a 9.7% increase over the 2017 total (557.2) and 17.8% higher than the 2016 total (519).

In order to compare average industry wages in San Diego County to benchmark regions in California, we obtained occupational employment and wage data from the US Department of Labor’s Bureau of Labor Statistics. As illustrated in Chart 7, the steady rise in average industry wages in San Diego County hit a new record in Quarter 1 2019, with \$48,724 as the opening average wage for 2019. This wage rate is higher than the average in three benchmark regions (Riverside, Santa Barbara, Santa Clara), and nearly matches the average industry wage in San Luis Obispo (\$49.036). It is our view that the significant rise in average wages since 2016 is a combination of both rising wages for a growing number of new industry jobs, as well as more boutique winery owners, who previously operated without paying themselves a wage, now paying themselves a wage. We believe that both factors are positive, encouraging signs for continued industry development and stability.

Chart 7: Average Annual Industry Wages, by County, 2014-2019 (Q1)



Public Policies & Priorities

As in prior surveys, we asked regional winery owners “Looking towards future growth for your business, please rank only the Top Five issues that are impediments to growth.” We provided thirteen issues which have been identified by industry participants and additional market research as major challenges

to wineries and to the region at large. We weighted responses based upon their ranking and the response sample, and developed a hierarchical index of responses. The higher the index score, the more of a priority the issue is to future sector growth.

For the first time in three years of surveys, “labor costs” moved from the #2 position to #1, followed by “talent/labor supply,” which in 2017 sat at the #6 position. In 2017, the top choice was “permits/local regulation,” which now is in 4th place. The evidence suggests that a greater industry emphasis should be placed upon resolving concerns about workforce compensation, recruitment and retention. Interestingly, the bottom two choices in our index, “land/space/available real estate” and “Non-San Diego market competition” are the same choices from 2017.

Table 5: Impediments to Industry Growth Index (Top Five)

Issue	Index Score	Sample
Labor costs	4.7	26
Talent/labor supply	6.1	23
State/federal regulation	7.0	20
Permits/local regulation	8.2	20
Marketing	9.7	17
Availability/price of inputs (viticulture supplies/equipment)	10.5	15
Water rates/supply	11.0	16
Distribution	11.8	14
Groundwater/runoff rules	12.8	13
Taxes	13.9	12
Access to capital	16.5	11
Land/space/available real estate	18.5	10
Non-San Diego market competition	32.3	6

The previous two surveys looked at the nexus between regional tourism and the wine industry in San Diego, and the state drought. We now turn our focus this year to two more germane issues in focus – regional wildfires, and the Millennial wine market.

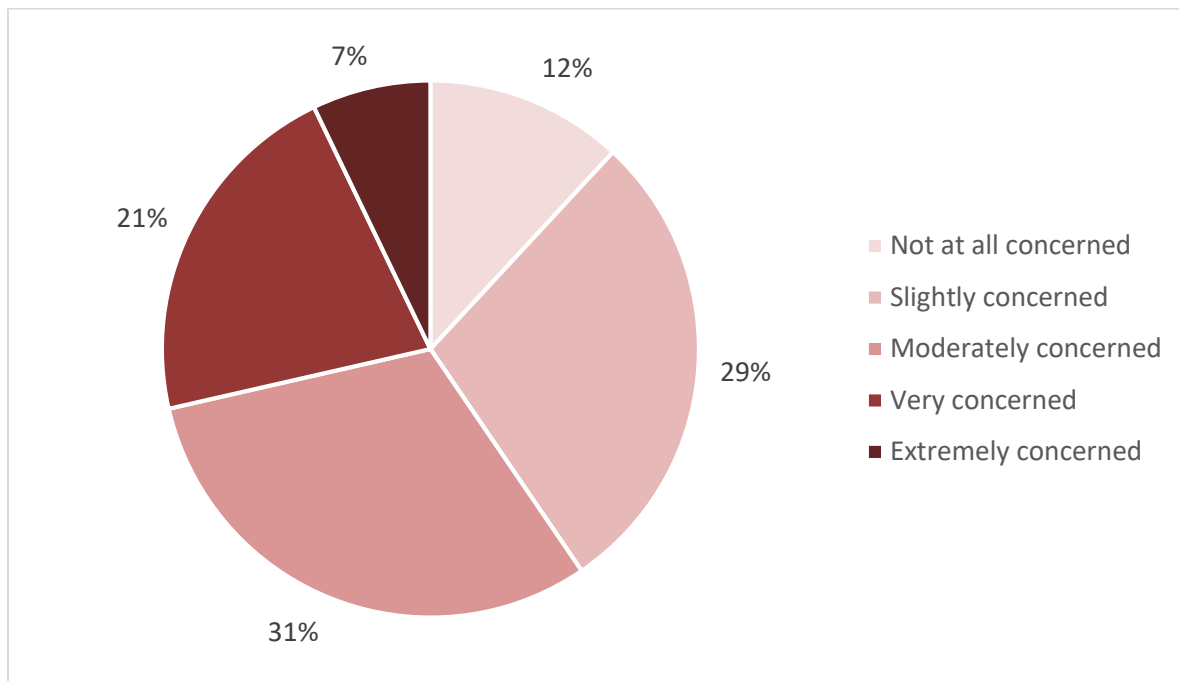
In 2017 and 2018, wildfire events destroyed thousands of structures and burned tens of thousands of acres in Sonoma, Napa and Mendocino counties. While the overwhelming majority of wine acreage and wineries were unaffected,⁷ there was an immediate drop in tasting room attendance and a languishing public perception that wineries were damaged and not open for business. In October 2018, oenologists

⁷ North Coast Wildfire Impact Study Signals Strong Recovery in Early Findings. Sonoma State University, Wine Business Institute. January 26, 2018. <<https://sbe.sonoma.edu/news/north-coast-wildfire-impact-study-signals-strong-recovery-early-findings>>.

at the University of California – Davis began a new area of research, investigating the impact wildfires, smoke and smoke taint have on wine grapes and the wine industry at large.⁸

We asked survey respondents, “How concerned are you about the threat of future wildfire and their impact on your winery operations and business?” Overall, few are concerned about wildfires (Chart 8) – about 40% were “not at all concerned” or only “slightly concerned,” and 31% are “moderately concerned.” Slightly more than a quarter (29%) said they were “very concerned” or “extremely concerned” about wildfires. We will continue to monitor this issue, and include it for future surveys.

Chart 8: Wineries and Wildfire Concerns



The other topic which we were interested in exploring with respondents this year was Millennial customers. While Millennials have not emerged nationally as an ascendant wine customer market⁹, they have become the largest segment of the national workforce, and their earnings potential and discretionary income have increased. With more than an estimated 600,000 Millennials calling San

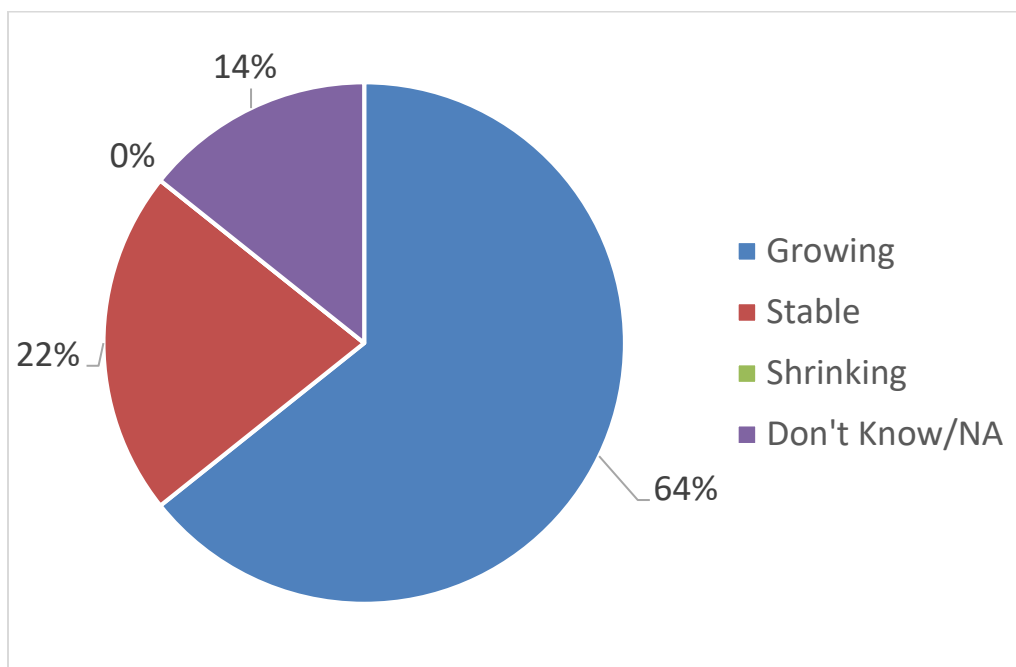
⁸ Listen: Wine Country Wildfires Leave Questions for Vintners. By Amy Quinton and Andy Fell. University of California – Davis. October 8, 2018. <<https://www.ucdavis.edu/food/news/wine-country-wildfires-leave-questions-for-vintners/>>.

⁹ State of the Wine Industry Report 2019. Silicon Valley Bank. <https://www.svb.com/globalassets/library/images/content/trends_and_insights/reports/wine_report/svb-2019-wine-report>.

Diego County home, and 35.7 million visitors to the San Diego region in 2018¹⁰, it is important to know how this demographic segment falls within the local wine sector.

We first asked whether Millennials were a growing, stable or shrinking part of the respondent's customer base. As indicated in Chart 9, more than six out of ten (64%) stated that Millennials are a growing portion of their clientele. None said it was a shrinking part of their customer base.

Chart 9: Responses to "Are Millennials (born 1981-1996) a growing, stable, or shrinking portion of your customer base?"



We next asked survey respondents "what percentage of 2018 sales would you attribute to Millennial customers?" Responses ranged from 2% to 50%, but most survey participants indicated that Millennials comprised 20-30% of sales in 2018. Lastly, we asked what, in the respondent's opinion, were some of their observations of the common interests and habits of Millennials and their wine tasting experience. There was a range of responses, but most respondents noted the emphasis of Millennials on wine education, music, events, and overall to have an experience. Also noteworthy was the importance of rideshare access, winery sustainability, and less on winery memberships.

¹⁰ San Diego Visitor Industry Summary. San Diego Tourism Authority. <<https://www.sandiego.org/-/media/files/research/visitor-industry/industryperformance--researchpage-annual-thru-2018.pdf?la=en>>.

About The Policycraft Institute

Established in 2019, the Policycraft Institute is an independent public policy research organization based in Carlsbad, California.

About the Author

Vince Vasquez is an independent economic data analyst and executive director of the Policycraft Institute. Professionally, he has worked as a public policy researcher for more than fourteen 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 Master's in Public Administration. He has used GIS software professionally for more than ten years.



The San Diego County Vintners Association (SDCVA) is a non-profit member association dedicated to supporting the San Diego viticulture and winemaking community, educating local wine enthusiasts and embracing sustainable agricultural practices in the county.



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