Terrain

Winescape

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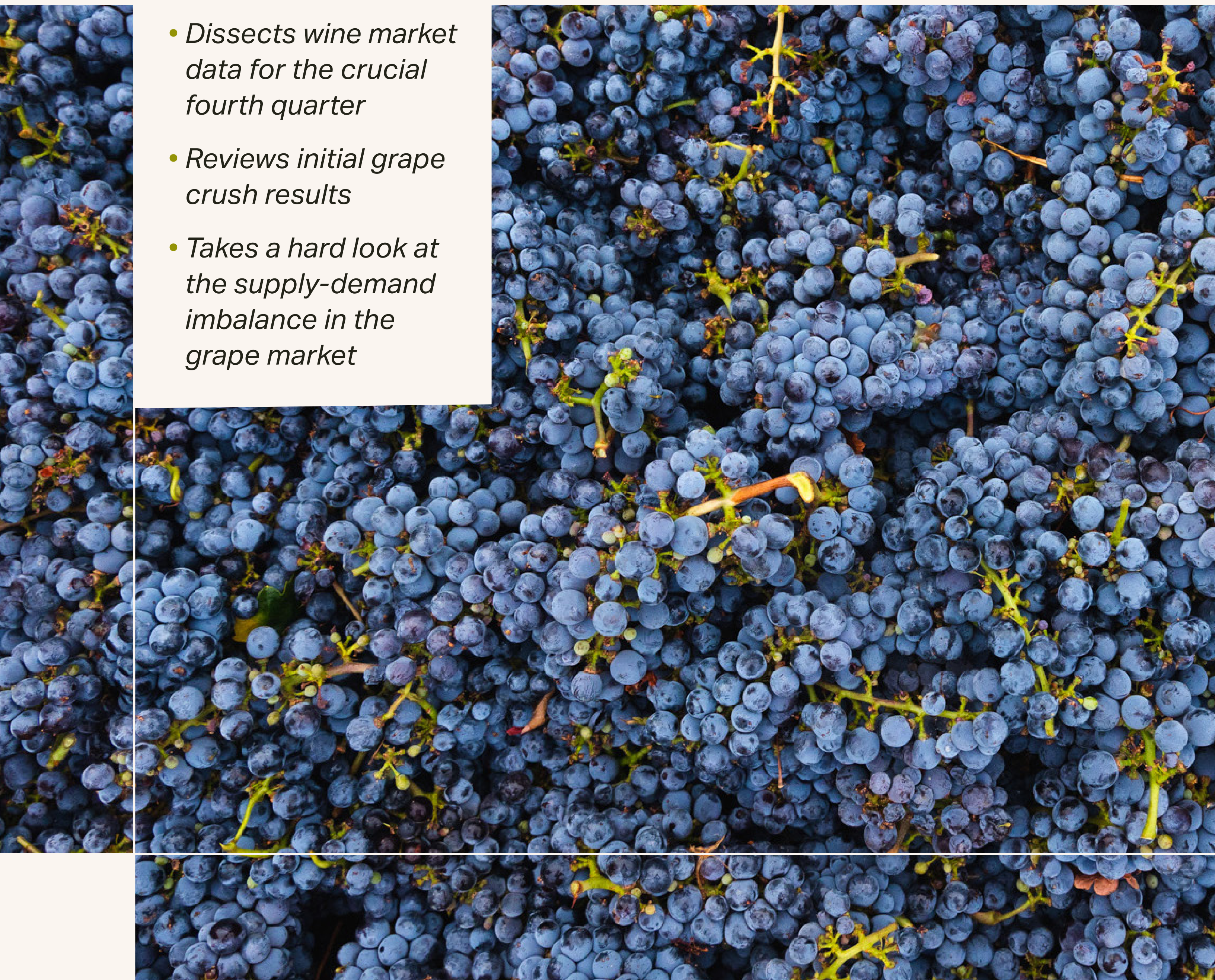
This issue:

- *Dissects wine market data for the crucial fourth quarter*
- *Reviews initial grape crush results*
- *Takes a hard look at the supply-demand imbalance in the grape market*



IN THIS ISSUE

Still-Weak Wine Sales and California's Grape Glut

Key datapoints for 2023 reveal the persistence of wine's post-pandemic funk, while a below-average crush underscores the gap between supply and demand.

As I discuss in this issue of "Winescape," there doesn't appear to be a quick fix in store for either the wine or grape market. Wineries and growers need to be realistic about the challenges the industry is facing in order to make informed decisions that maximize their odds of success.

There are many factors underpinning the wine market's recent slump, and they are difficult to disentangle, so there is considerable uncertainty regarding its future (**see Page 3**). Nonetheless, I don't see a compelling reason to expect a major shift in the trajectory of wine sales in 2024, though I do see some potential for improvement in direct-to-consumer sales and the luxury segment of the three-tier channel.

The new normal for wine should become clearer as pandemic-related distortions fade into the rearview mirror. I don't expect the market environment to look markedly different from that prevailing prior to the pandemic, though the secular headwinds that had been slowing growth may have hastened a bit.

The grape market is likely to remain soft in 2024. As our deep dive into the Grape Crush Report shows, the oversupply issue is not likely to be resolved quickly (**see Page 10**).

The crush was up in 2023 but below the long-term average for a fourth consecutive year. What was not crushed is an equally important part of the story. While this can't be measured precisely, a substantial quantity of fruit was left on the vine for lack of a buyer. Put simply, the industry is not capable of absorbing what looks to have been an average-size crop by pre-2020 standards — an indication that a structural gap exists between supply and demand.

The solution will almost certainly entail the removal of vineyards. But the severity of the gap varies across appellations and varieties, so individual circumstances must be considered carefully.

I remain optimistic about wine's future. I believe that it has the potential to become the alcoholic beverage of choice for the younger generations, though collective action on the part of the industry will be required to make this happen.

(Information about the data and sources behind the analysis in this report can be found in the Appendix on **Page 20**.)

ABOUT THE AUTHOR

Chris Bitter, Ph.D., is Terrain's senior wine and grape analyst, focusing on generating research and insights in the areas that impact the business of vineyards and wineries. With more than 20 years of experience as an economist and market analyst, Chris is a former faculty member of the University of Washington's Runstad Center for Real Estate Studies. In 2016, he left his academic position to launch Vintage Economics, a market research and consulting firm focused on the wine industry.

Chris earned his Ph.D. in economic geography with a minor in agricultural and resource economics from the University of Arizona. His research has been published in a variety of national and international publications, including the Journal of Wine Economics, and he has delivered presentations at wine industry conferences around the globe.

Still Waiting for Wine's New Normal

As pandemic-related distortions to the wine market and economy continue to fade into the rearview mirror in 2024, wine's new normal will become more apparent.

Wine Sales Dashboard: **Change in Sales Volume by Channel and Price Segment**

For more on the dashboard, see the Appendix on Page 20.

	Year-Over-Year Change	Trend
Retail: Value Segment	↓	—
Retail: Premium Segment	↘	—
Retail: Luxury Segment	↓	—
Direct-to-Consumer	↓	—
Export	↓	^

STATE OF THE MARKET

2023 was not the turnaround year for wine. Sales fell in volume terms across channels and price segments but held up better in dollars. The decline has been relatively steady over the past 12 months, with few signs of either improvement or deterioration.

A closer look at key datapoints for 2023 demonstrates the persistence of wine's post-pandemic funk:

- Retail sales — My analysis of NIQ data indicates that off-premise retail sales fell by 5% in volume and 2% in value versus 2022. There was no meaningful improvement in the trajectory of sales during the crucial fourth quarter.

- Depletions — Depletion trends were weaker and deteriorated in the second half of the year as distributors continued to work through excess inventory built up during the pandemic. For the year, depletions were down 7%, according to my analysis of SipSource data. Depletions to on-premise accounts weakened as the year progressed and are now declining at a similar rate to off-premise depletions.

- DtC — The direct-to-consumer (DtC) channel also struggled to gain traction in 2023. Wines Vines Analytics and Sovos ShipCompliant data indicate that shipment volume declined 7%. Value was flat, as a 7% rise in average bottle price offset the loss in volume. This is roughly consistent with figures from WineDirect/Enolytics, which include all DtC sales channels.

- Three-tier sales — All three price tiers I track recorded sales volume declines in 2023. The premium segment ($11 to $29.99) saw the smallest loss while the luxury price tier ($30 and over) posted the greatest decline. The value segment (under $11), which still accounts for the majority of sales volume, landed between these extremes. There are no clear-cut signs of a change in the sales trajectory for any price segment as we move into 2024. It is important to keep in mind that retail sales volumes for the premium and luxury tiers were still tracking well ahead of their pre-pandemic levels in 2023. Alternatively, the value tier has shrunk considerably since 2019.

- Exports — U.S. wine exports plunged in 2023. Export volume fell 25%, and value contracted 16%. The average value per liter increased 12%, primarily due to a shift in the composition of exports from bulk to packaged wines. The per-liter value of packaged wines increased just 2%. However, there was clear improvement in both the volume and value of exports during the second half of the year, driven mainly by a resurgence in the fourth quarter.

Three-Tier Channel

In the three-tier channel, white wines, led by Pinot Gris and Sauvignon Blanc, continue to gradually increase their market share. Sales of white wines are slipping, albeit at a slower rate than the red and rosé categories. Chardonnay sales are tracking in line with the market overall. Within the red category, blends continue to lose market share to varietal wines such as Cabernet Sauvignon and Pinot Noir.

Sparkling wine sales shrank at a slower rate than the market overall in 2023.

The shift toward white varietals has been most prevalent in the value and premium price tiers, as there has been little difference in the performance of reds and whites in the luxury segment. Red blends continue to perform better in the luxury price tier as well.

Sparkling wine sales shrank at a slower rate than the market overall in 2023, despite a deterioration in sales volume at the high end. The stronger performance of sparkling wines is mainly due to increasing sales of Prosecco, one of the few categories that recorded outright growth in 2023.

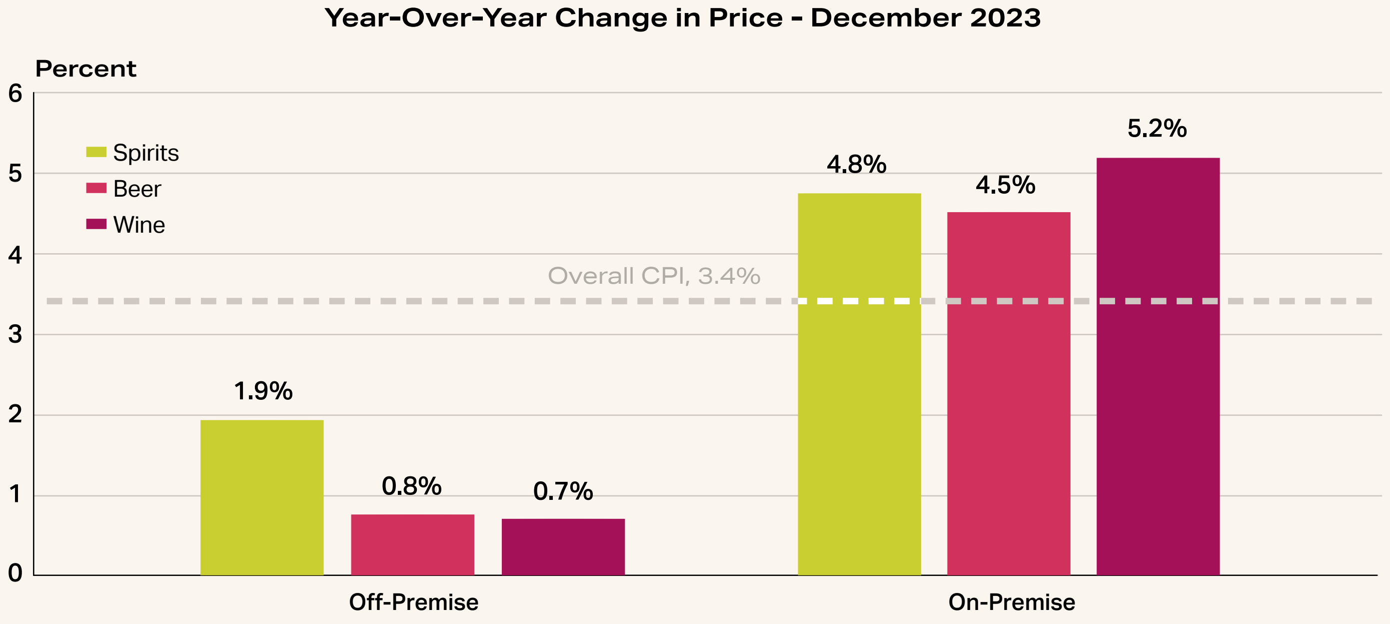
Price increases were hard to come by in the three-tier channel. Retail prices rose just 0.7% from December 2022 to December 2023, far short of the 3.4% rise in the overall Consumer Price Index and below the 1.9% increase that spirits garnered (see Chart 1). Conversely, on-premise wine prices surged 5.2% as restaurant owners sought to buttress margins through higher markups on wine.

Direct-to-Consumer Channel

In the DtC channel, shipment volumes declined in 2023 across the major West Coast regions except for Washington. Red varietals continued to dominate, and there was little distinction in volume trends across the red, white and sparkling categories: All were down in 2023.

A clear bifurcation in performance across price tiers and winery size classes was also evident.

Chart 1: **Off-Premise Wine Prices Fall in Real Terms**



Sources: BLS, Terrain

Small wineries (under 5,000 cases) saw stable shipment volumes and an increase in value while large wineries (more than 500,000 cases) experienced a sizable decline in case sales. Midsize wineries fell between these two extremes. This represents normalization to some extent, as large wineries accounted for an outsize share of DtC shipment gains during the pandemic. The upper price tiers ($50 and over) saw increased sales volumes while the lower price tiers (below $30) recorded double-digit losses, though this dynamic is partly attributable to price inflation.

Price taking appears to have been more prevalent in the DtC channel.

Price taking appears to have been more prevalent in the DtC channel. The overall average bottle price for wines shipped to consumers rose 7%. However, the increase was partly due to the shift in the mix of sales from large to small wineries. The average bottle price for wineries producing between 1,000 and 50,000 cases increased a modest 4%.

OUTLOOK

Declining wine sales are undoubtedly the product of a variety of factors. I like to group these into three categories:

- Economic
- Idiosyncratic
- Secular

Economic Factors
Economic growth was relatively robust in 2023 and exceeded expectations. Employment gains were strong, earnings grew in real terms, and inflation abated. Economic growth accelerated during the second half of the year and looks to be maintaining momentum in early 2024.

Still, consumer sentiment remained depressed in 2023 because of persistently high prices and worries about future financial conditions. Nonetheless, there has been some improvement in recent months. Consumer spending was strong overall in the year, but weak sentiment likely reduced willingness to spend on discretionary items like wine.

Nonetheless, consumers remain reasonably well positioned to withstand a slowdown.

The consensus view heading into early 2024 is that economic growth and consumer spending will soften as higher interest rates bite, but recession will be avoided. Headwinds for consumers include rising costs to service debt, the resumption of student loan payments following a three-year hiatus, and the continued drawdown of excess savings that were built up during the pandemic.

Nonetheless, consumers remain reasonably well positioned to withstand a slowdown. If the economy avoids recession and inflation continues to abate as expected, interest rates will likely begin to come down later in the year and consumer confidence and spending on discretionary items could firm up.

While the economy will look different in 2024, on net I do not expect changing economic conditions to have a material impact on the trajectory of the wine market. There are downside risks, including an escalation in geopolitical conflicts, which could potentially boost inflation and uncertainty. The looming U.S. presidential election is also a wild card, as no matter the outcome, a good portion of the consumer base is likely to be in a dour mood following the November election.

Idiosyncratic Factors
There are several idiosyncratic (unique to a specific period and shorter lived) factors that likely played a role in depressing wine sales in recent years. Their influence is likely to wane in 2024, which should be a positive for the wine market.

Most important are distortions related to the pandemic, including stockpiling of wine for later consumption, which reduced the need to buy in 2023. It is impossible to get a clear read on how prevalent this was, but assuming it was material and that most of these stocks have been exhausted by now, the retail luxury segment and DtC channels could see a boost in 2024.

Other idiosyncratic factors include inventory shortages stemming from the fire-impacted 2020 vintage that depressed sales in 2023 for some wineries (mainly estate) in the affected regions.

A shift in travel patterns by upper-income consumers to destinations abroad and a post-pandemic spike in costs to visit wine country also appear to have depressed tasting room visitor counts and DtC sales. These factors should exert less influence in 2024 as well, given some of the pent-up demand for overseas travel that the pandemic created was likely satisfied in 2022 and 2023.

Secular Factors
Secular headwinds for wine demand include shifting alcoholic beverage preferences and heightened competition with emerging categories such as ready-to-drink cocktails (and perhaps cannabis), demographic and generational shifts, and a burgeoning movement to moderate alcohol consumption. These headwinds will almost certainly continue to depress growth in wine sales in 2024 and beyond.

Secular headwinds will almost certainly continue to depress growth in wine sales in 2024 and beyond.

Secular trends tend to be more gradual but longer lasting. What could be the most consequential for wine in the near term is the moderation movement, which appears to be picking up steam.

Surveys continue to document declining interest in alcohol consumption as well as the desire by drinkers to consume less. Google searches for the term "dry January" increased 150% from the first week in 2022 to the same week in 2024.

The moderation trend is particularly prevalent among the younger generations.

2024's Most and Least Likely to Improve
Given the wide range of factors involved and uncertainty regarding both their past and future influence, the outlook for the wine market remains murky.

What could be the most consequential for wine in the near term is the moderation movement, which appears to be picking up steam.

I do not expect to see a major shift in the trajectory of overall wine sales by volume in 2024, though I do see the potential for some stabilization (a slower rate of decline) in demand later in the year, assuming the soft-landing economic scenario pans out.

I see the greatest potential for improvement in the DtC channel and luxury price tier of the retail channel, primarily because the idiosyncratic factors that have depressed sales were most prevalent in these market segments. However, they constitute a small portion of overall sales volume, so any improvement in overall sales is likely to be modest.

The premium price tier should also continue to perform better than the value segment in 2024, as secular trends continue to favor premiumization.

Wine shipments should continue to lag the retail market until elevated wholesale inventories come back into balance. The inventory-to-sales ratio for alcoholic beverage wholesalers has begun to come down but remains near a multidecade high (see Chart 2). Though these data are not specific to wine, I have not seen evidence to suggest that the wine category is more favorably positioned than beer or spirits.

Google searches for the term "dry January" increased

150%

from the first week in 2022 to the same week in 2024.

Chart 2: Wholesale Alcoholic Beverage Inventories Remain Elevated

Sources: U.S. Census Bureau, Terrain

At nearly 3.7 million tons, 2023's grape crush was the largest since 2019...

Competition with imports is likely to remain fierce in 2024 because of the global glut of wine and strong dollar. This will also weigh on U.S. wine exports. If the U.S. economy softens as expected and interest rates begin to fall later in the year, the dollar may also soften, which should help alleviate some of the pressure.

As pandemic-related distortions to the wine market and economy continue to fade into the rearview mirror in 2024, the new normal for wine will become more apparent.

I do not think it will look dramatically different from the market conditions that prevailed in the years immediately prior to the pandemic — a period marked by decelerating growth in sales volume and a bifurcation in performance between the value (declining) and premium and luxury (growing) segments of the market.

Thus, it is likely to continue to be a challenging market environment for the foreseeable future. Nonetheless, there will continue to be plenty of growth opportunities for savvy wineries that are committed to adapting to a rapidly evolving consumer and changing market landscape.

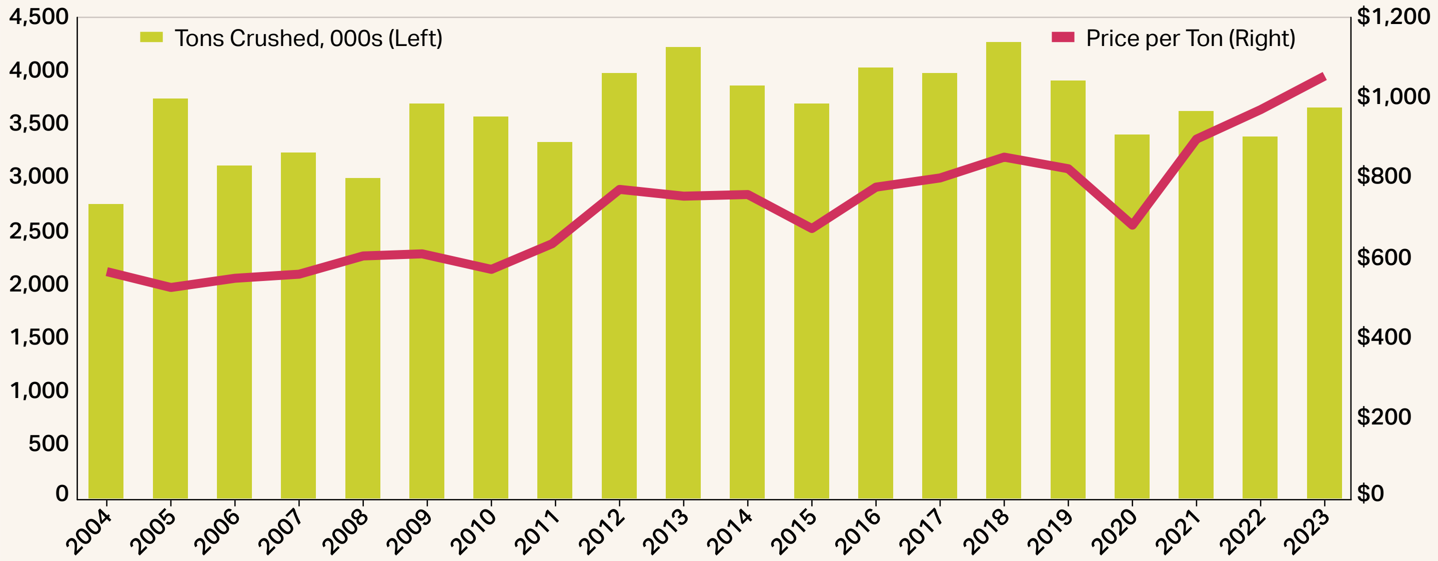
THE GRAPE MARKET

The California Department of Food and Agriculture's preliminary California Grape Crush Report has finally arrived, so we now have firmer numbers on the size of the crush and prices that growers received in 2023.

At nearly 3.7 million tons, it was the largest crush since 2019. But to put this into perspective, it was also smaller than any crush recorded from 2012 to 2019 (see Chart 3).

...But it was also smaller than any crush recorded from 2012 to 2019.

Chart 3: **The 2023 Grape Crush in Perspective**



Sources: California Department of Food and Agriculture, Terrain

It is important to keep in mind that the crush is not the crop. The 2023 crop was much larger, with a substantial quantity of fruit rejected or left on the vine for lack of a buyer. What was not crushed is also an important part of the story; unfortunately, this is not captured in the crush report. The consensus is that the crop likely exceeded 4 million tons, which is in line with the average from 2012 to 2019.

The crush report also indicates that California winegrape growers received an average price per ton of $1,056, a new record and a 9.2% increase versus 2022. However, the higher statewide price was mostly attributable to a shift in the mix of sales from the low-priced interior region to the higher-priced coastal region. The reality is that demand and prices generally softened as the 2023 growing season progressed because of declining case goods sales, the inability to take price, and apprehension regarding the future trajectory of wine sales. As always, the story is more nuanced: There were pockets of the market where demand and pricing were stronger, and white varieties were typically more favorably positioned than reds.

Demand More Than Met

One of the key takeaways from the crush report is that even a modest 3.7 million-ton crush was more than needed to satisfy demand in 2023, as evidenced by a surge in the quantity of bulk wine being actively marketed for sale. This is indicative of a structural gap between supply and demand. Grape acreage has simply not yet adjusted to the reality of lower wine shipment volumes.

There isn't likely to be a resurgence in demand this year unless there are indications that the crop is going to be small.

Demand continues to be sluggish in early 2024, and buying activity has been limited. Wine sales did not improve during the crucial fourth quarter, and bulk wine is both abundant and attractively priced. Wineries that have traditionally bought grapes and bulk wine have become sellers, and many expiring grape contracts have not been renewed.

Given the muted outlook for growth in wine sales, there isn't likely to be a resurgence in demand this year unless there are indications that the crop is going to be small. At this point, it is too early to say anything definitive, but water supplies do appear to be ample for the growing season ahead. Precipitation has been abundant, and reservoirs are full. Fears of a "snow drought" have also been allayed. The Sierra Nevada snowpack, which had been sitting at just 28% of normal at the beginning of the year, has rebounded to 86% as of mid-February because of recent storms.

Buyer's Market Likely to Continue

Thus, the odds are that it will continue to be a buyer's market in 2024. Growers with uncontracted fruit will have to compete with one another and bulk wine suppliers for buyers, which will likely result in downward pressure on prices. There will, of course, be exceptions to this broad generalization. For example, pricing is likely to hold firm for specific niche varieties in many appellations that are appealing to wineries as blenders or to include in wine club allocations.

A return to outright growth in California wine shipments does not look probable at this point, so the solution to the problem lies in removing excess acreage.

The grape market is likely to remain soft for some time unless there is an upside surprise in wine sales.

The realization that acreage needs to be pulled has begun to take hold with growers, particularly those in the interior. But this will take time, as there are few if any viable alternative uses in most areas at this point. Some vines have already been pulled, but unless the rate accelerates, it may not even be enough to offset the new bearing acreage coming on line this year. Thus, the grape market is likely to remain soft for some time unless there is an upside surprise in wine sales.

This situation has caused consternation among growers with uncontracted fruit and wineries that have more acreage than needed to supply their brands. Removing vines is obviously a painful decision. Other options include waiting it out and doing as little farming as possible until a contract is landed, or replanting to new varieties in the hopes that demand will materialize by the time the fruit begins to bear. These decisions must be approached thoughtfully and on a case-by-case basis, as there are many considerations involved.

Waiting it out is not likely to be a good course of action for interior growers.

Waiting it out is not likely to be a good course of action for interior growers. Even under an optimistic scenario for the wine market overall, the under-$11 segment of the market is likely to continue to contract, and competition with imported bulk wine will be stiff. Given this, it may be wise to pull underperforming vineyards and older vineyards in marginal areas that are in need of replanting now.

The calculus is less clear-cut on the coast and more specific to appellations and varieties. There is more potential for a resumption of growth in the premium and luxury price tiers of the wine market, though it is still likely to be modest. Thus, demand for grapes in areas producing for these segments of the market could improve over time. But bearing acreage will continue to increase over the next three to four years if no acreage is pulled. Removing uncontracted vineyards that are not economically viable may be warranted in coastal areas as well.

Grape Crush Adds More Bite Than Balance

The 2023 grape crush was below average by historical standards. Combined with other factors, it reveals a structural supply-demand imbalance that growers must confront.

The 2023 grape crush came in below the long-term average for a fourth consecutive year. Yet the quantity of listed bulk wine appears to be near record levels and inflation-adjusted grape prices have fallen in all districts except for Napa over the past five years. These facts indicate that the grape market is structurally oversupplied, as I explain in more detail in this section of the report.

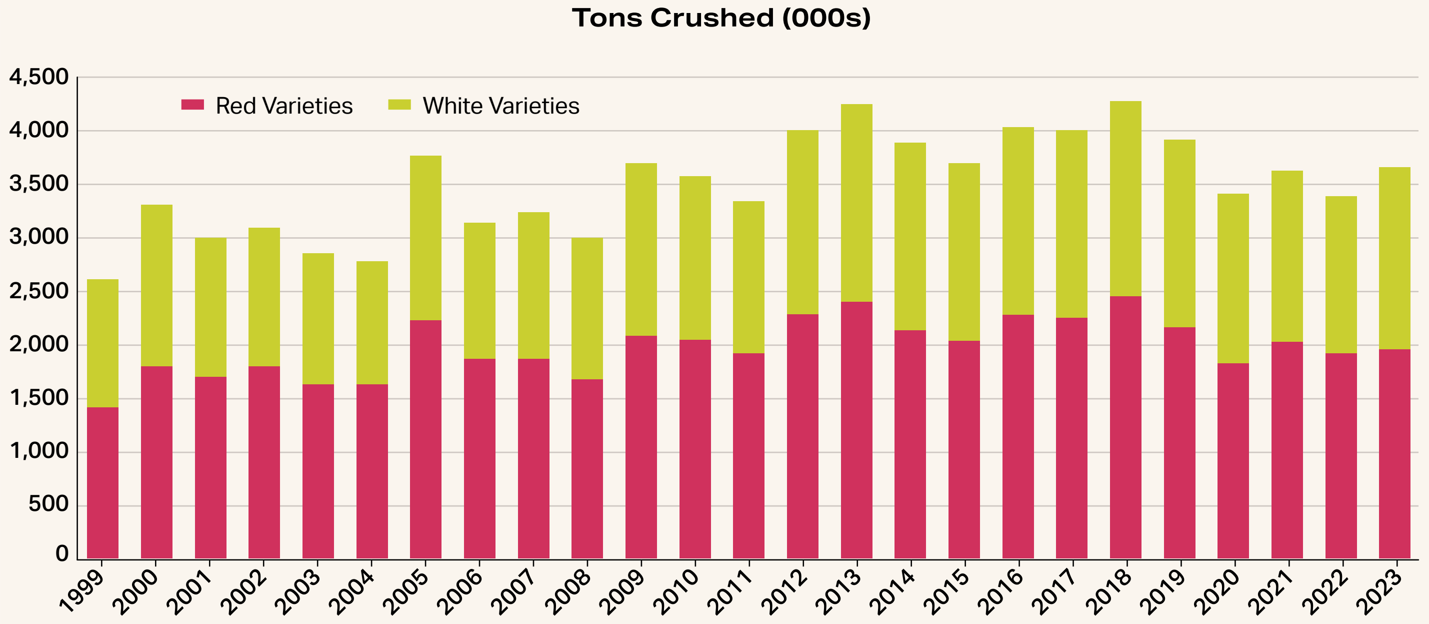
2023 GRAPE CRUSH: BY THE NUMBERS

The California Department of Food and Agriculture's preliminary California Grape Crush Report recorded the 2023 crush at just under 3.7 million tons, an 8% increase versus 2022 and the largest total since 2019. Nonetheless, it was still a below-average crush by historical standards. Indeed, fewer tons were crushed in 2023 than in any year from 2012 to 2019 (see Chart 1).

White varieties generally saw a larger increase in 2023 than reds. The white crush was up 15% versus 2022, an increase of 227,000 tons, and matched the trailing 10-year average. It was the largest Chardonnay crush since 2018, and Pinot Gris was also up substantially. The Sauvignon Blanc crush reached a record 163,000 tons.

With an increase of 45,000 tons, the red crush was up only modestly in percentage terms versus 2022 and nearly 10% smaller than the 10-year average. This was largely because of a steep decline in Zinfandel, which saw its smallest crush in more than 25 years. The Merlot crush

Chart 1: **The Crush Was Larger but Still Below the 10-Year Average**



Sources: California Department of Food and Agriculture, Terrain

was also down in 2023 and 25% below the 10-year average. Conversely, Cabernet Sauvignon and Pinot Noir both saw more tons crushed than in any year since 2018.

The North Coast recorded the most substantial increase in tonnage in 2023. Its crush was up by 110,000 tons, a 24% improvement. It was the largest North Coast crush since 2018 and 20% above the five-year average. The Central Coast was up by nearly the same percentage versus 2022, but its crush was only modestly above the five-year average.

The interior crush was essentially flat versus 2022 and down relative to both the five- and 10-year averages, mostly because of a small Southern Interior crush. The Southern Interior crush has been declining steadily, and the 2023 total was the lowest since 2006. Conversely, 10% more Northern Interior grapes were crushed in 2023, and the total was slightly above historical averages.

It is important to note that the crush is not the crop. The 2023 crop was much larger than 3.7 million tons, but a substantial quantity of fruit was rejected because of disease or a failure to meet brix requirements, and additional grapes were left on the vine because they had no buyer.

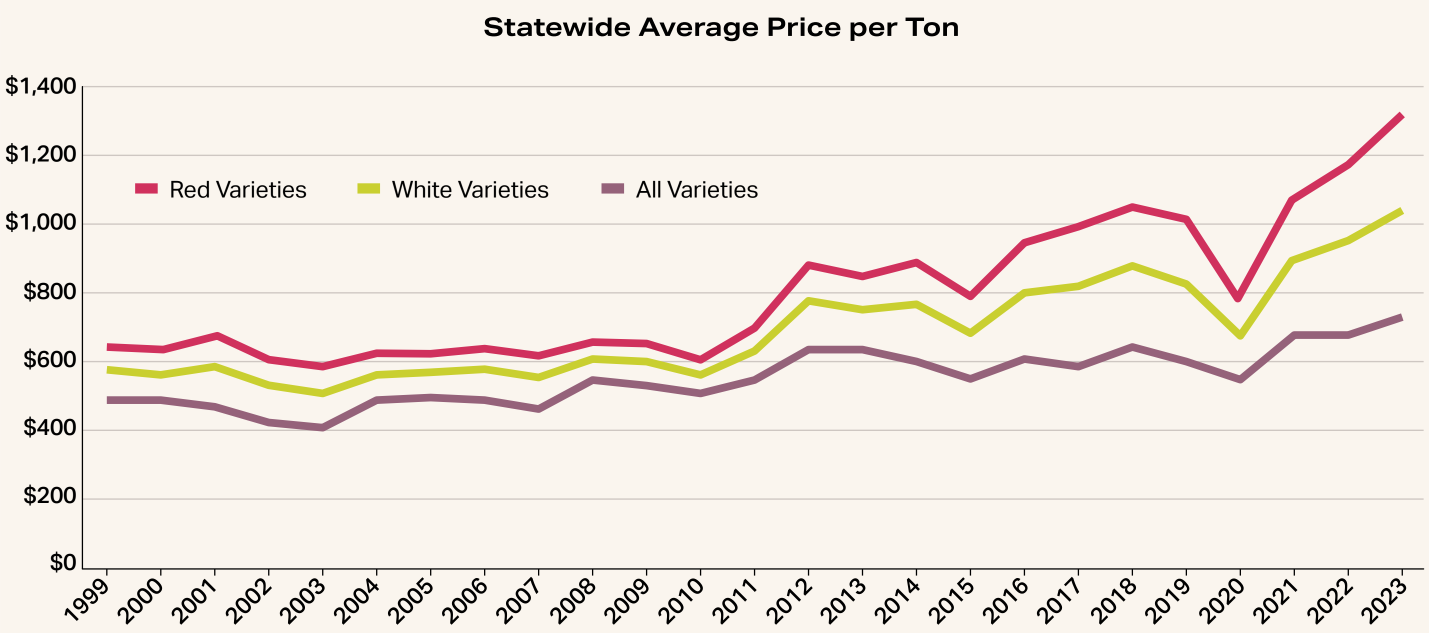
The statewide average price per ton was up substantially in 2023. However, this was mainly because of a shift in the mix of sales from the low-priced interior region to the higher-priced coastal region.

CAVEATS TO 2023'S HIGHER STATEWIDE AVERAGE PRICE

The statewide average price per ton was up substantially in 2023 (see Chart 2). However, this was mainly because of a shift in the mix of sales from the low-priced interior region to the higher-priced coastal region.

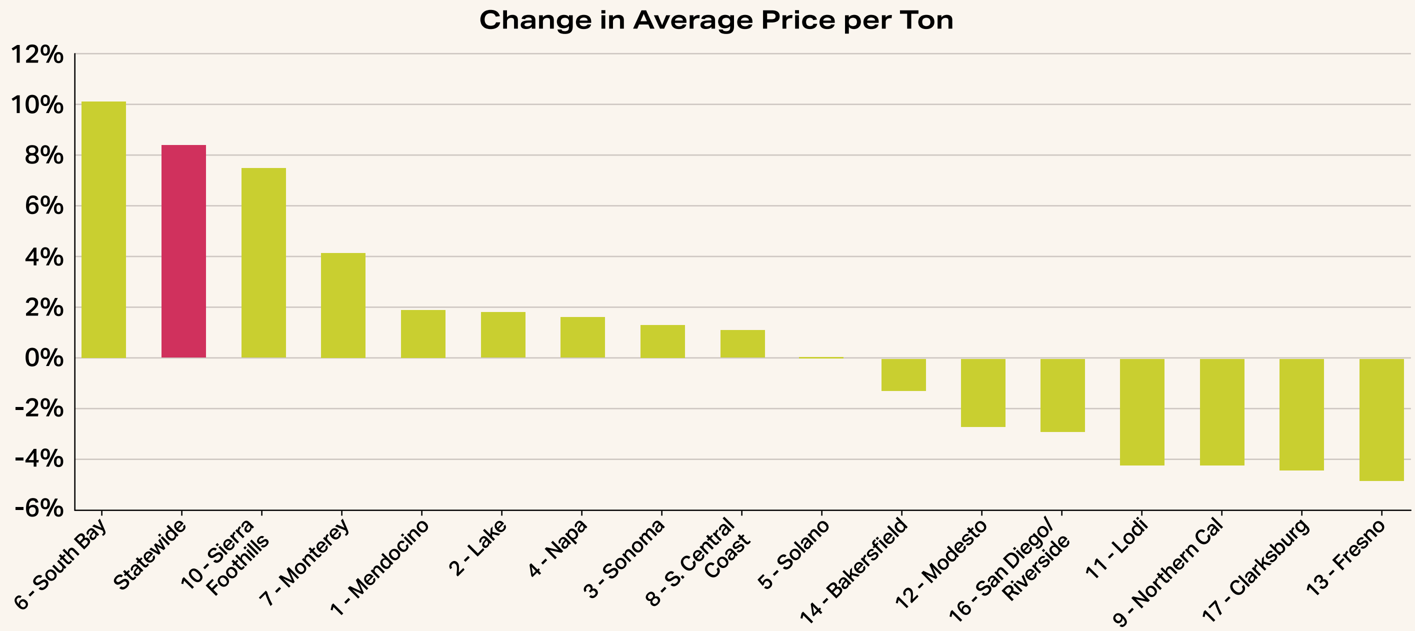
As the district-level figures in Chart 3 show, there was little growth in the prices that growers were paid in 2023. Prices were up in half of the 16 districts included,

Chart 2: **Statewide Average Price Was Up Sharply in 2023, but This Is Misleading**



Sources: California Department of Food and Agriculture, Terrain

Chart 3: **Most Districts Saw Little or No Price Appreciation in 2023**



Note: District 15 is excluded due to insufficient sales activity.
Sources: California Department of Food and Agriculture, Terrain

but only three saw increases of more than 2%. Note that District 15 was excluded because only 185 tons were sold in 2023.

Growers in the coastal districts saw more favorable pricing than those in the interior. Prices were up in seven of the eight coastal districts versus 2022, though only two saw gains exceeding 2%. Conversely, growers received lower prices in all five interior districts.

It is also important to note that while the crush report figures provide a reasonably accurate picture of the prices that growers received for grapes in a given year, they are a lagging indicator of "market" prices.

The crush report captures the prices paid for all transactions — grapes sold under contract and on the spot market. Because grape contracts tend to have multiyear terms, a good share of the prices captured in any given year were negotiated in prior years. Moreover, some grape contracts have escalation clauses tied to crush report prices. Prices were generally higher in 2022, which resulted in upward price adjustments on these types of contracts in 2023.

Spot market prices do reflect the state of the market at harvest, but they are heavily influenced by the size of the current crop and not necessarily indicative of where new contracts will be signed in the subsequent season. There was little activity on the spot market in 2023 because few wineries needed additional grapes at harvest time, so they had less weight than normal in the average price calculations.

These limitations should be kept in mind when using the crush report figures as a basis for contract negotiations. Anecdotal evidence suggests that pricing generally softened as the growing season progressed, though as always there were exceptions to the rule, and a substantial quantity of grapes effectively commanded a price of zero because there was no buyer.

Given this, it is important for growers to seek fresh guidance on pricing for their specific varieties and appellations, which may include viewing listings and consulting with other growers and brokers.

SIX TAKEAWAYS FROM THE PRELIMINARY GRAPE CRUSH REPORT

1. The California Grape Market Is Structurally Oversupplied

The California grape market choked on what was likely not much more than an average-size crop in 2023, as evidenced by the substantial quantity of fruit for which there was no buyer. The recent surge in bulk wine available for sale and limited activity on uncontracted grapes for the 2024 vintage make it clear that even 3.7 million tons was more than enough to satisfy demand.

Even 3.7 million tons was more than enough to satisfy demand.

This is an indication of a structural imbalance between supply and demand, which is further substantiated by depressed inflation-adjusted grape prices. The capacity to produce grapes under “normal” conditions exceeds what the state’s wineries need to satisfy demand for California wine. This situation has been masked by a series of small crops. In essence, acreage has not yet adjusted to the reduction in shipment volume that has occurred in recent years.

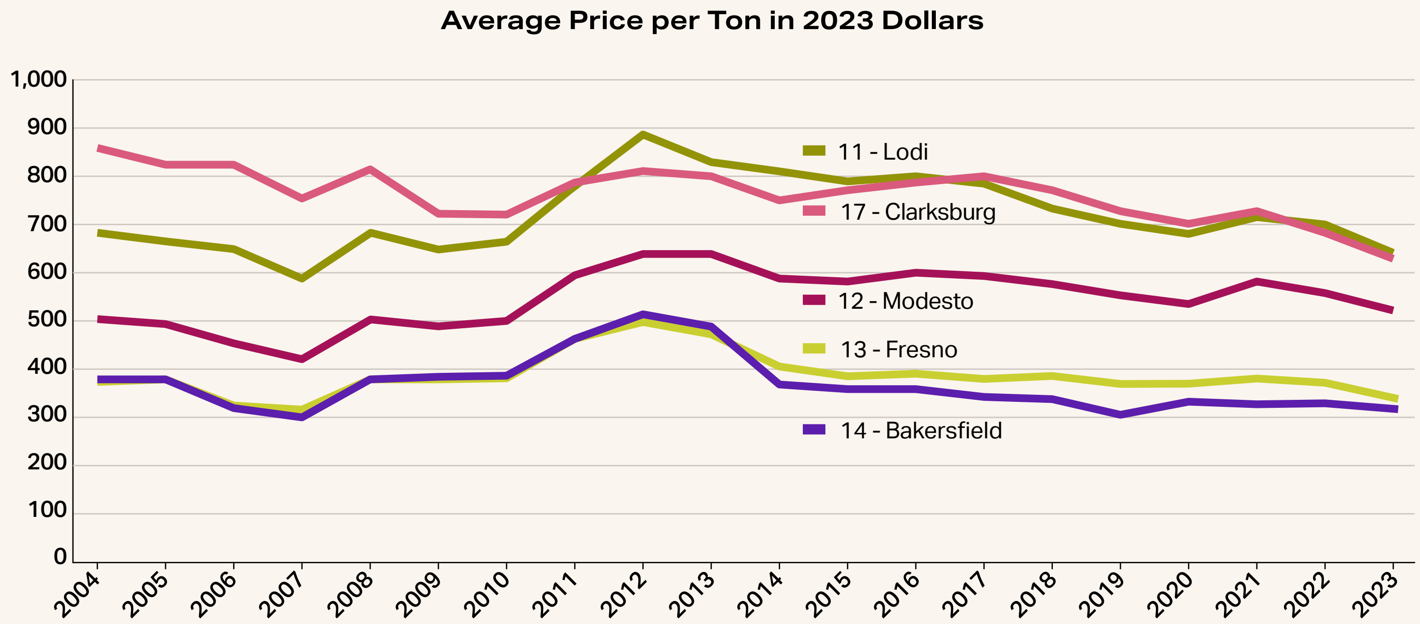
Acreage will almost certainly need to be removed. The question is not if, but what and where.

To restore the balance between supply and demand, either wine shipments must improve or acreage must be removed. Given the muted outlook for wine sales in the near to medium term, an increase in demand alone is not likely to solve the problem. Acreage will almost certainly need to be removed. The question is not if, but what and where.

2. Interior Grape Prices Have Fallen Substantially in Real Terms Over the Past Decade

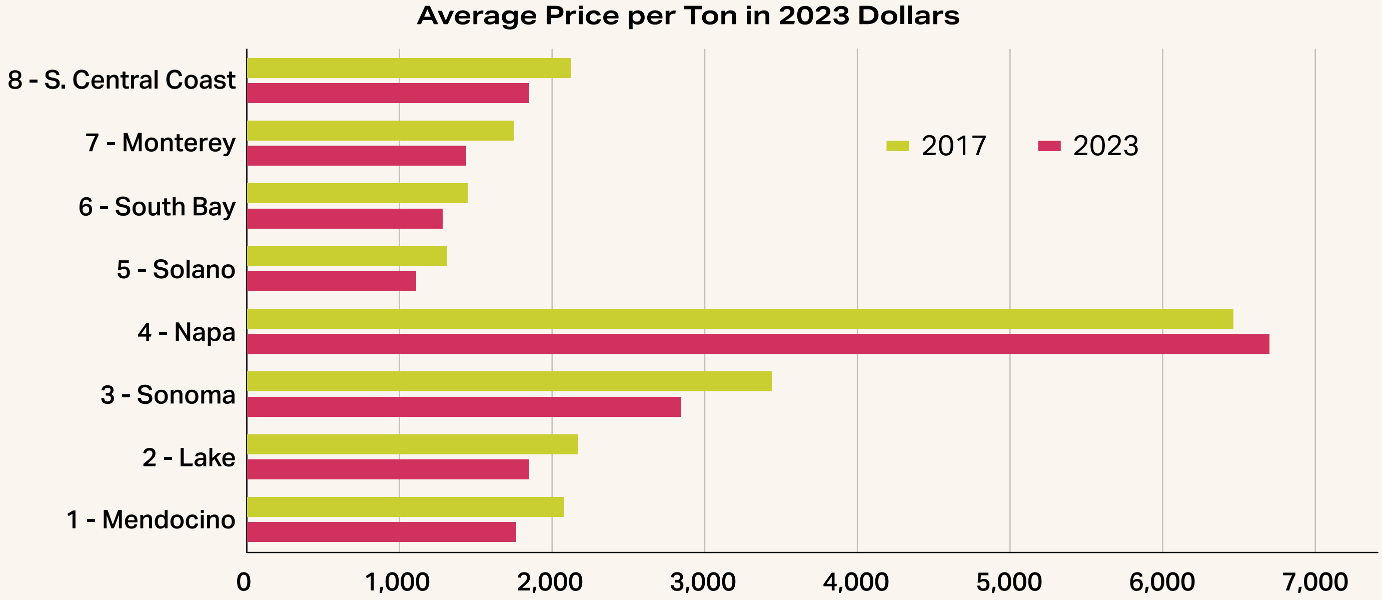
There is no clearer signal of oversupply than falling prices. Grape prices in the interior region have generally stagnated over the past 10 years in absolute terms but have fallen sharply in real terms because of inflation. Interior grape prices have seen no growth in real terms over the past 20 years (see Chart 4).

Chart 4: **Interior Grape Prices Have Been Declining in Real Terms**



Sources: California Department of Food and Agriculture, BLS, Terrain

Chart 5: **Coastal Grape Prices Have Declined in Real Terms Since 2017**



Sources: California Department of Food and Agriculture, BLS, Terrain

Prices briefly surged in the aftermath of the Great Recession as consumers traded down. But since 2012, interior grape prices have fallen steadily in real terms. In this period, supply has consistently outstripped demand as case goods sales in the lower price tiers of the wine market have contracted.

Since 2012, inflation-adjusted prices have declined by 18% to 35% across the five interior districts. At the same time, farming and planting costs have increased by at least the rate of inflation in recent years, depressing margins.

Given that prospects for a rebound in the value segment of the market appear to be dubious for the foreseeable future, interior grape prices will likely experience continued downward pressure until a substantial amount of acreage is removed and the supply-demand balance is restored.

3. Coastal Grape Prices Are Now Falling in Real Terms as Well

The coastal region has fared better than the interior over the past decade, as it has been more favorably positioned with respect to wine market trends, particularly the premiumization trend. Nonetheless, grape prices in most coastal districts peaked in real terms in 2017 and are now lower in every district except for Napa (see Chart 5).

This implies that a structural gap between supply and demand has also emerged in the coastal region, though the problem is not as acute as it is in the interior.

This implies that a structural gap between supply and demand has also emerged in the coastal region, though the problem is not as acute as it is in the interior. The imbalance is due to both heavier planting activity in some coastal districts as well as slumping case goods sales in the premium and luxury price tiers.

While prospects for a resumption of growth in the premium and luxury segments of the wine market look better, growth is likely to be more modest than it was prior to the pandemic. Thus, it could take considerable time for the overhang to be corrected by an improvement in demand alone. The coastal grape market is also likely to remain soft for some time in the absence of vineyard removals, though the most desirable varieties in favored appellations could continue to see modest growth.

4. A Massive 2023 Crop May Weigh on the North Coast Grape Market in 2024

At 577,000 tons, the 2023 North Coast crush was large by all accounts. It was the most generous since 2018 and the fourth largest in history. It came in 110,000 tons ahead of the 2022 total, an increase of 24%. It was 20% above the five-year average and 16% above the 10-year average.

All five North Coast districts posted crushes that were well above their respective 10-year averages, and Lake and Solano counties set records. The four leading North Coast varieties — Cabernet Sauvignon, Chardonnay, Pinot Noir and Sauvignon Blanc — accounted for 80% of the crush in 2023, and all exceeded 10-year averages by wide margins (see Chart 6).

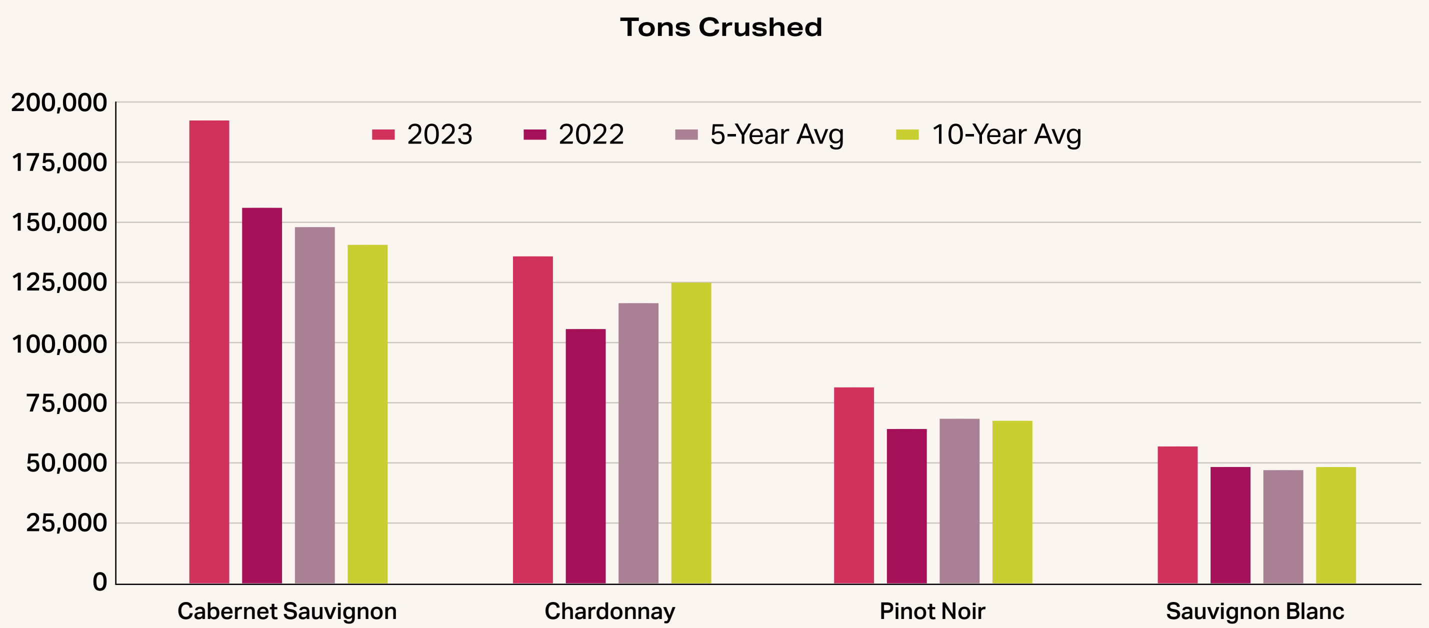
The Cabernet Sauvignon crush was the largest of all time and 37% above the 10-year average. Both Napa and Lake counties logged records. It was the second-largest crush ever of Pinot Noir and Sauvignon Blanc, and more Chardonnay was crushed than in any year since 2018.

The larger crop will provide relief to some estate wineries that have been short on inventory because of the fire-impacted 2020 vintage and subsequent short crops in 2021 and 2022. However, it may also depress grape purchasing activity in 2024.

Unless there is a short crop, there is likely to be some downward movement in North Coast grape prices in 2024.

The extra 110,000 tons crushed in 2023 is enough to make 6.5 million more cases of wine than in 2022.

Chart 6: **The Big Four North Coast Varieties All Crushed It in 2023**



Sources: California Department of Food and Agriculture, Terrain

Given the current downward trajectory of sales volumes in the premium and luxury segments of the market and an expected increase in bulk wine, there may be less demand for North Coast grapes in 2024.

Growers without contracts will have to compete with one another and bulk wine suppliers for buyers. Unless there is a short crop, there is likely to be some downward movement in North Coast grape prices in 2024. Cabernet Sauvignon may be particularly susceptible given the record 2023 crush.

5. Sauvignon Blanc Is at Risk of Becoming Overplanted

At 163,000 tons, the California Sauvignon Blanc crush set a record in 2023. It was 30,000 tons above the previous high-water mark established in 2021. The crush was 24% larger than the 2022 total and 38% above the 10-year average.

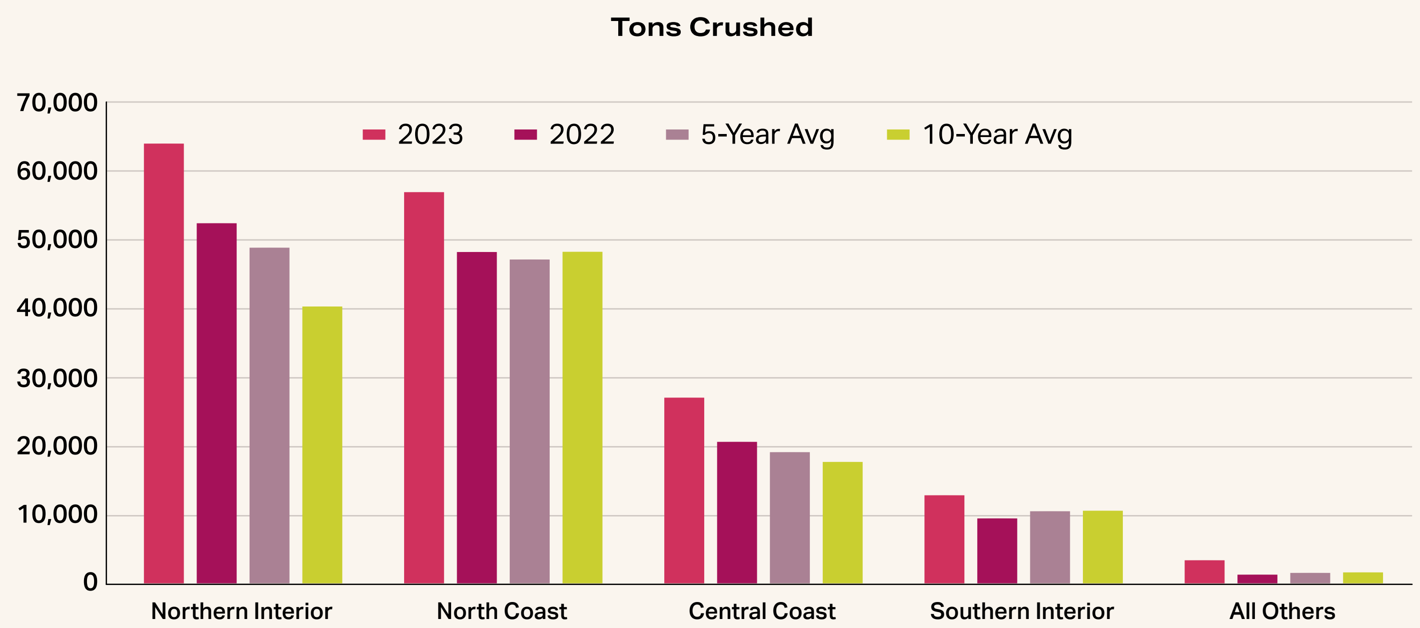
Large crops were the rule throughout the state, as the Sauvignon Blanc crush was well above historical averages in both the coastal and interior regions (see Chart 7). The North Coast, Central Coast and Northern Interior all recorded record crushes. The Northern Interior crush was particularly large, coming in nearly 60% above the 10-year average.

Sauvignon Blanc has been the darling of the wine market in recent years, but there is a risk that it is becoming overplanted.

While Sauvignon Blanc has been one of the best-performing varietals in the retail channel, sales have grown by only 2% over the past two years in volume terms, based on my review of NIQ data. Nonetheless, there has been a wave of new plantings across the state and bearing acreage will continue to grow for at least the next several years. Allied Grape Growers' Nursery Survey indicates that 1,600 acres were planted in 2023, which equates to 7% of bearing acreage in 2022, the highest such percentage for any major variety.

Thus, the market for Sauvignon Blanc may be approaching a tipping point. It is never good to be late to the party when it comes to wine grapes, so caution is advised in planting new acreage or replanting to this variety without a contract in hand.

Chart 7: **Sauvignon Blanc Tonnage Was Up in 2023 Across All Regions**



Sources: California Department of Food and Agriculture, Terrain

Table 1: **Winners Don't Typically Stay Winners for Long**

Price Appreciation Rank by Period: District 11 Lodi

Variety	2004-08	2009-13	2014-18	2019-23
Pinot Noir	1	8	3	7
Chardonnay	2	7	2	5
Cabernet Sauvignon	3	2	7	1
Zinfandel	4	1	9	6
Syrah	5	5	4	2
Petite Sirah	6	3	8	9
Merlot	7	4	5	3
Pinot Gris	8	9	6	4
Sauvignon Blanc	9	6	1	8

Price Appreciation Rank by Period: District 3 Sonoma County

Variety	2004-08	2009-13	2014-18	2019-23
Pinot Noir	1	6	4	8
Chardonnay	2	7	6	6
Pinot Gris	3	9	9	5
Zinfandel	4	3	1	3
Sauvignon Blanc	5	5	8	2
Malbec	6	8	5	1
Petite Sirah	7	4	3	7
Cabernet Sauvignon	8	1	2	9
Merlot	9	2	7	4

Sources: California Department of Food and Agriculture, Terrain

6. It Is Difficult to Predict the Winners — Diversification Can Be a Sound Strategy

Rates of appreciation vary widely across grape varieties over time because of the ever-shifting balance between supply and demand.

The wine market drives the demand side — and it can be fickle as the popularity of varietals tends to wax and wane over time. Abrupt shifts in demand can also occur, as was the case for Pinot Noir and Merlot following the release of the 2004 movie “Sideways.”

But changes in supply are equally important. Growers respond to shifts in demand and prices by planting varieties that are currently in favor and ripping out those that are not. Because of the substantial lag time between when planting decisions are made and when the vines reach maturity and begin to bear fruit, there is a tendency for overplanting to occur, even for varieties that remain in favor.

So, past winners in the grape market rarely stay winners for long. Table 1 demonstrates this for popular varieties in two districts: Lodi and Sonoma County.

The table breaks the past 20 years into four five-year periods and ranks the varieties by their rate of appreciation during each. This reveals that the varieties with the fastest-growing prices in one period frequently rank close to the bottom in the subsequent period.

This is obviously a small sample size and there is noise in the price signals between any two points in times. Nonetheless, I do believe the results can be applied to the grape market more generally.

Given the difficulty in predicting grape demand and prices four to five years out, the “what to plant” decision is a difficult one without a contract in hand. The foremost consideration in variety selection is a good match with the physical characteristics of the site. But diversification should be a consideration as well, particularly during today’s period of rapidly evolving consumer behavior and preferences. Simply put, a vineyard planted to multiple varieties is likely to generate a more stable cash flow over its economic life.

Simply put, a vineyard planted to multiple varieties is likely to generate a more stable cash flow over its economic life.

TRENDING TOPIC APPENDIX

Sources

All 2023 figures come from the preliminary version of the 2023 California Grape Crush Report. The figures for prior years are taken from the errata, or corrected, edition of the report when available and the final edition when no errata edition was published.

All price figures are taken from Table 10 in the Grape Crush Report unless otherwise noted. Table 10 excludes transactions between related parties. Inflation-adjusted prices are calculated based on the Bureau of Labor Statistics' Consumer Price Index for All Urban Consumers.

Heat Maps

Table 2: **Tons of Wine Grapes Crushed Indexed to the 10-Year Average (=100)**

District	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1 - Mendocino	94	87	118	107	124	103	84	71	94	108
2 - Lake	90	90	109	112	108	110	92	79	107	151
3 - Sonoma	116	83	103	94	125	104	67	94	91	111
4 - Napa	119	85	104	97	126	109	68	82	92	115
5 - Solano	108	83	98	83	111	94	103	115	107	128
6 - South Bay	98	79	107	100	120	96	85	95	89	92
7 - Monterey	123	76	103	108	115	92	72	110	79	97
8 - S. Central Coast	99	70	104	109	114	99	89	112	91	114
9 - Northern Cal	93	88	105	125	116	127	95	88	63	126
10 - Sierra Foothills	105	88	111	114	124	105	93	87	60	90
11 - Lodi	89	89	106	99	113	103	91	104	100	103
12 - Modesto	102	111	113	107	107	94	87	89	82	95
13 - Fresno	99	111	102	106	105	103	97	86	86	80
14 - Bakersfield	113	105	100	112	108	98	78	79	81	69
16 - San Diego/Riverside	92	79	92	133	85	141	81	103	99	100
17 - Clarksburg	86	83	104	97	115	110	105	127	82	123

Note: District 15 is excluded due to extreme variability in crush totals.
Sources: California Department of Food and Agriculture, BLS, Terrain

Table 3: **Average Price per Ton Indexed to 2013 Levels (=100)**

District	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1 - Mendocino	104	106	108	118	117	120	104	124	123	125
2 - Lake	108	113	119	124	122	128	99	124	130	133
3 - Sonoma	103	109	116	125	126	127	106	120	127	129
4 - Napa	109	119	129	143	152	156	124	165	182	185
5 - Solano	99	98	109	126	125	127	112	125	133	133
6 - South Bay	96	101	103	106	111	111	94	110	107	118
7 - Monterey	102	108	115	116	115	116	89	107	114	119
8 - S. Central Coast	107	110	114	123	118	121	115	122	132	133
9 - Northern Cal	98	117	126	118	118	127	121	132	138	132
10 - Sierra Foothills	94	104	105	111	117	122	122	117	119	128
11 - Lodi	99	98	100	99	96	93	92	102	105	101
12 - Modesto	95	94	97	99	98	97	94	107	110	107
13 - Fresno	88	83	86	86	90	87	89	96	101	96
14 - Bakersfield	77	74	76	74	75	69	76	78	86	85
16 - San Diego/Riverside	105	108	116	117	124	133	127	134	151	147
17 - Clarksburg	95	99	101	106	104	101	98	106	107	102

Note: District 15 is excluded due to insufficient sales activity.
Sources: California Department of Food and Agriculture, Terrain

Table 4: **Average Price per Ton Indexed to 2013 Levels (=100) in Inflation-Adjusted Dollars**

District	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1 - Mendocino	103	104	105	112	109	109	93	107	98	96
2 - Lake	106	111	116	118	113	117	89	107	104	101
3 - Sonoma	102	107	112	119	117	115	95	103	101	99
4 - Napa	107	117	125	136	141	142	112	142	145	141
5 - Solano	97	96	106	120	116	115	101	107	106	102
6 - South Bay	95	99	100	101	103	101	85	95	85	90
7 - Monterey	100	106	112	110	107	105	80	92	91	91
8 - S. Central Coast	105	108	111	117	109	110	104	105	105	102
9 - Northern Cal	96	115	122	112	110	116	109	113	110	101
10 - Sierra Foothills	93	102	102	105	109	111	110	101	94	98
11 - Lodi	98	96	97	95	89	85	83	87	84	77
12 - Modesto	93	92	94	94	91	88	85	92	87	82
13 - Fresno	87	82	84	82	83	79	80	82	80	73
14 - Bakersfield	76	73	74	70	69	63	69	67	68	65
16 - San Diego/Riverside	103	106	113	111	115	121	115	115	120	112
17 - Clarksburg	94	97	98	100	96	92	89	91	85	78

Note: District 15 is excluded due to insufficient sales activity.
Sources: California Department of Food and Agriculture, Terrain

Appendix

Data and Methods

INFORMATION SOURCES

There is no single, comprehensive source of information on the U.S. wine and grape markets. Rather, there are many different sources that capture specific slices of these markets. The analysis in this report represents a synthesis based on the review of multiple points of data and information.

These include statistical data from private data vendors, reports from industry service providers, U.S. government data, and internal data collected by American AgCredit's appraisal and underwriting teams. I assess the relevance and reliability of each source and weight it accordingly in the analysis.

The report also incorporates anecdotal information gleaned from conversations with market participants, including wineries, growers and various market intermediaries.

This approach enables "Winescape" to deliver a relevant and nuanced perspective on wine and grape market trends as well as an informed outlook.

THE WINE SALES DASHBOARD

The dashboard provides a directional view of trends in wine sales by volume, reflecting the fact that none of the market segments and sales channels are measured with precision.

The year-over-year change column is a directional indicator of the percentage change in wine sales for the most recent six-month period relative to the same period a year earlier. I focus on the six-month period because the quarterly data can be volatile.

Year-Over-Year Change	
↑	Substantial increase
↗	Modest increase
→	Little to no change
↘	Modest decline
↓	Substantial decline

The trend column provides an indication of whether the rate of change in sales volume has improved or deteriorated over the past 12 months. For example, if sales in the value segment are falling on a year-over-year basis, but at a slower rate than in the past, the trend is improving and an up arrow is assigned.

Trend			
	▲ Improving	▬ Stable	▼ Deteriorating

The retail price segments are defined as follows:

Retail Price Segments		
$$$	Value	Less than $11
$$$	Premium	$11 to $29.99
$$$	Luxury	$30 and up