

**ECONOMIC IMPACT OF  
WINE AND VINEYARDS  
IN NAPA COUNTY**

**AN MKF RESEARCH REPORT**

prepared for

**Jack L. Davies Napa Valley Agricultural Land  
Preservation Fund**

and

**Napa Valley Vintners**

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## ECONOMIC IMPACT OF WINE AND VINEYARDS IN NAPA COUNTY

FULL ECONOMIC IMPACT OF WINE ON THE NAPA COUNTY  
ECONOMY

**\$ 9.5 Billion**

<b>NAPA COUNTY WINE &amp; GRAPES</b>	<b>ECONOMIC IMPACT</b>
Number of Brick and Mortar Wineries	391
Number of Grape Growers	704
Full-time Equivalent Jobs	40,000
Wages Paid	\$1.4 billion
Cases of Napa Valley Appellation Wine Produced* (9L equivalents)	8.5 million
Wine Related Tourism Expenditures	\$534 million
Number of Wine Related Visitors	3 million <sup>1</sup>
Taxes Paid	\$836 million

<sup>1</sup> The county estimates that wine related visitors account for more than 80% of the 4 million total visitors to Napa county.

## **EXECUTIVE SUMMARY**

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Napa is one of California's smaller counties – with a population of barely 129,000, an area of 500,000 acres and only about 0.4% of California's labor force and personal income. Yet it has earned a worldwide reputation for quality.

Fine wine and fine wine grapes are overwhelmingly the source of Napa's prosperity and prominence. Napa's unique terroir and climate and its high standards of viticulture and winemaking ensure premium pricing for its grapes and wine.

Napa produces only 4% of California's wine by volume – but, as the largest producer of high-end wines in the state, Napa delivers more almost 27%<sup>2</sup> of the sales value of the state's wine. With its premium grapes and top quality wines, Napa claims almost 21% of the total economic impact of wine in California.

The stable growth of the wine and grape sector enabled Napa to escape the worst effects of the Bay Area's 2001-2003 economic recession. Wine and grapes enable Napa to provide employment and services to its citizens while protecting the rural environment that continues to draw visitors and investors to the wine country.

In assessing the economic impact of wine and vineyards in Napa County, MKF Research found:

- The full economic impact of the wine and vineyard sector in Napa county totals \$9.5 billion, as described in the following table<sup>3</sup>.
- The wine and vineyard sector is easily Napa's largest employer. Napa's wine and vineyard sector directly, and indirectly through the services and products they consume or generate, provides nearly 40,000 jobs in Napa, nearly half of the county's total employment.
- These jobs generate wages of nearly \$1.4 billion.
- Sales revenues of Napa appellation wines exceed \$2.3 billion. Wine made in the county with grapes from other regions adds many millions in revenue to that figure<sup>4</sup>.

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<sup>2</sup> Because of information limitations, this calculation applies only to Napa appellation wines – wines produced from grapes grown in Napa. A significant amount of wine is made in the county from grapes grown outside the county. Thus, Napa's wineries actually produces an even larger share of California's wine sales.

<sup>3</sup> The methodology used in this analysis is described in the Appendix to this report. The analysis was based on the *Economic Impact of California Wine 2004*, published by MKF Research for the Wine Institute and the California Association of Winegrape Growers. As with the state study, the base year for data is 2002.

<sup>4</sup> Based on FOB prices ex-winery.

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- The wine and vineyard sector and its related activities generate more than \$800 million in taxes<sup>5</sup> – conservatively estimated.
- Napa County has estimated that more than 80% of Napa’s tourists, or almost 3 million people, are attracted by Napa’s wineries and wine culture.

Winegrapes produce 98% of Napa’s agricultural revenue. In 2002, the Napa County estimated that total value of grapes produced in the county approached \$380 million, 98% of the \$388 million gross value of all agricultural production in Napa. Floral and nursery crops followed at a distant \$4.6 million. Napa also has a more than proportionate presence – as much as a third or more of the total statewide activity – in several of the allied industries, including wine laboratories, wine packaging and labeling and wine corks and closures.

Moreover, the wine and grape sector attracts a continuing flow of significant capital investment in the county. Wineries and grape growing are highly capital-intensive activities, requiring years to begin to generate positive cash flow to the investors. The sector is primarily financed from private sources, supplemented by some bank lending. The growth in the number of wineries from 284 in 2000 to 391 in 2004 and the 7600-acre expansion of vineyard acreage represent a multi-billion dollar inflow of long-term capital into the county.

Yet, unlike most development, investment in the wine and grape sector is unique in enhancing the region’s rural character while creating new prosperity and employment. As Napa’s Agricultural Commissioner has noted, no other agricultural activity has the potential to generate the return on investment of wine.

However, if not protected, the elegant yet rural environment that is Napa’s distinctive appeal risks gradual erosion by traffic and suburban sprawl due to housing and growth pressures.

Finally, wine and grapes are about *place*, they speak of the soil from which they grew. Napa’s wine is a world respected voice of Napa.

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<sup>5</sup> The tax number is generated by the IMPLAN model, as described in the Appendix. This model does not consider property taxes other than personal property taxes. Neither county nor state government sources could provide estimates of the property taxes paid by Napa’s vineyards or wineries. Thus, the tax estimate is understated by a significant amount.

# ECONOMIC IMPACT OF WINE AND VINEYARDS IN NAPA COUNTY

## **Total Economic Impact (Sum of Total Spending)**

<u>Revenue:</u>	<u>Napa County Economic Impact</u>
Winery Sales	\$2,325,672,000
Retail and Restaurant Wine Sales	1,143,300,000
Distributors Sales	486,050,574
Wine Grapes Sales	348,000,000
Tourism	533,600,000
Glass	161,798,000
Tax Revenues	836,287,471
Financing Revenues - Debt	250,923,048
Vineyard Development - Independent Owner - Overhead/Financing/Property Tax	117,652,896
Vineyard Development - Independent Owner - Materials (excluding vines)	73,693,566
Corks/Capsules/Screwtops	83,732,000
Boxes/Bags-in-a-Box	36,297,000
Wine Labels	48,540,084
Grapevines	9,355,524
Trucking	7,917,800
Charitable Contributions	62,629,020
Cooperage	39,150,000
Stainless Steel Tanks	9,178,174
Wine Labs	3,196,800
Grapevine Assessments	266,400
Winery Research	700,000
Wine Industry - Indirect (IMPLAN) - from Appendix 4.3	850,092,365
Wine Industry - Induced (IMPLAN) - from Appendix 4.3	667,742,855
Total Revenue	\$8,095,775,577
<u>Wages:</u>	
Winery Employees	\$319,321,802
Vineyard Employees	79,149,856
Tourism	168,800,000
Vineyard Development - Contracted Services	72,667,926
Vineyard Development - Labor	51,905,820
Glass	37,740,000
Distributors Employees	3,894,146
Labels	9,732,702
Grapevines/Nurseries	4,937,502
Retail/Liquor Stores - Wine Specific	5,539,566
Boxes/Bags-in-a-Box	5,478,072
Trucking	4,922,184
Cooperage	4,528,800
Stainless Steel Tanks	2,664,000
Corks/Capsules/Screwtops	1,966,032
Education	154,000
Wine Labs	415,140
Wine Industry - Indirect (IMPLAN) - from Appendix 4.4	353,276,365
Wine Industry - Induced (IMPLAN) - from Appendix 4.4	234,952,365
Total Wages	\$1,362,046,278
Total	\$9,457,821,855

## **APPENDIX**

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### **METHODOLOGY**

This analysis was drawn from the *Economic Impact of California Wine 2004*, published by MKF Research in June 2004 and sponsored by the Wine Institute and the California Association of Winegrape Growers.

Wherever possible, actual county level data were used for the analysis. Where not available, the data were estimated based on the county's share of wine sales or grape production, as best applicable.

Total economic impact, tax impact and total employment were derived from actual data plus the application of the IMPLAN model. The model was initially created by the U.S. Forest Service and the University of Minnesota, and is now managed by an independent firm, the Minnesota Implan Group, Inc ([www.implan.com](http://www.implan.com)).

This methodology is in active use by over 1,500 organizations, including more than 40 state governments (including several departments of the California State government), more than 25 federal agencies, including the Federal Reserve Board, the Bureau of Economic Analysis and the Agricultural Statistics Service and hundreds of educational institutions and non-profit and private entities. The IMPLAN model begins with the "direct" economic impact of employment and spending and then calculates the "indirect effects" – for example, new income to suppliers of all kinds, and finally the "induced effects" – the increased household spending resulting from this new business.

### **DATA – STILL UNDERESTIMATES IMPACT**

Economic data on wine and grapes are scarce. Although described in the CASS literature as a finished agricultural good, in economic statistics wine is buried among data on processed food and beverages – and summarized with manufactured goods. Thus, it becomes nearly impossible to assess the scale of the wine economy without original research, as we have done.

Agricultural product data have been well developed for decades under the guidance of the USDA. Winegrapes, of course, are agricultural products and thus there is reasonable data on winegrapes, especially in California with the support of CASS. However, wine and grapes are a fully integrated, complex economic sector with a vast array of allied industries. It is nearly impossible to appreciate the scale of this sector from published or publicly collected data. Thus, its economic impact tends to be overlooked and underestimated.

This study, for all of the original research conducted, still underestimates the scale of the wine and grape sector in Napa as many allied industries, such as farm equipment and professional services, were not included given time constraints and wine sales revenues

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were only counted for Napa appellation wine – that is wine produced from grapes grown in Napa. We are well aware that several wineries in the county produce wine with grapes either entirely or partially sourced from other counties. It was not possible to assess the full value of this production.