

The Economic Impact of Grapes, Grape Juice and Wine on the New York Economy, 2008

Prepared for the New York Wine and Grape Foundation

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A STONEBRIDGE RESEARCH REPORT

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HIGHLIGHTS

FULL ECONOMIC IMPACT OF GRAPES, GRAPE JUICE AND WINE ON THE NEW YORK ECONOMY

\$3.76 BILLION FROM NEW YORK GRAPES, GRAPE JUICE, WINE AND GRAPE PRODUCTS

\$3.26 BILLION FROM SALES OF OTHER WINES

\$7.02 BILLION TOTAL

	NEW YORK GRAPES, GRAPE JUICE AND WINE	ALL OTHER WINE SOLD IN NEW YORK	TOTAL IMPACT
Number of Operating Wineries (2008) ¹	240	N/A	240
Number of Grape Farms ²	1,438	N/A	1,438
Grape Bearing Acres ²	37,000 acres	N/A	37,000 acres
Full-time Equivalent Jobs ³	17,000	22,000	39,000
Wages Paid ³	\$802 million	\$770 million	\$1.5 billion
Farm Gate Value of New York Wine ⁴	\$508 million	N/A	\$508 million
Sales of Other Wines in New York ⁴	N/A	\$1.9 billion	\$1.9 billion
Retail Value of New York Grapes ⁴	\$36.5 million	N/A	\$36.5 million
Grape Juice Product Revenues ⁵	\$32.7 million	N/A	\$32.7 million
Wine Related Tourism Expenditures ⁴	\$376.5 million	N/A	\$376.5 million
Number of Wine Related Tourists ²	4.98 million	N/A	4.98 million
Taxes Paid ³	\$230 million NY State and Local	\$225 million NY State and Local	\$455 million NY State and Local
Charitable Contributions ⁶	\$8.6 million	N/A	\$8.6 million

¹Source: National Agriculture Statistics Service "New York Winery Survey 2008"

²Source: National Agricultural Statistics Service

³Source: Stonebridge Research Group LLC and IMPLAN

⁴Source: Stonebridge Research Group LLC

⁵Source: New York State Department of Agriculture and Markets

⁶Our surveys indicate that winery charitable contributions average 1.7% of sales

Executive Summary

As detailed in **Tables 1 and 2** below, Stonebridge Research Group LLC found that, in 2008, the full economic impact of the grapes, grape juice and wine produced and sold in New York, and allied industries in New York State, totaled **\$3.76 billion**. This represents a 10.5% increase from 2004, the last time an economic impact study was conducted.

The impact on the New York state economy of its central role in the business of wine, for wine produced outside of the state but sold in the state through retail and food and drink establishments, totals **\$3.26 billion**, a 25% increase from 2004. Thus, the total economic impact of the grapes, grape juice and all wines sold in New York state (including wine produced elsewhere) is **\$7.15 billion**, up 19% from \$6.0 billion in 2004¹.

New York's grape, grape juice and wine sectors, considering both products produced and sold in the state and those produced elsewhere and sold in the state, directly, and indirectly through services and products they consume or generate, provide over **39,000** jobs in the state. These jobs generate total wages of over **\$1.5 billion**, a 8.3% increase from the 36,000 jobs and a 15.3% increase from \$1.3 billion in wages generated in 2004.

Furthermore, the total grape, grape juice and wine sectors and their related activities generate more than **\$455 million** in State and Local taxes, conservatively estimated.

New York Wine

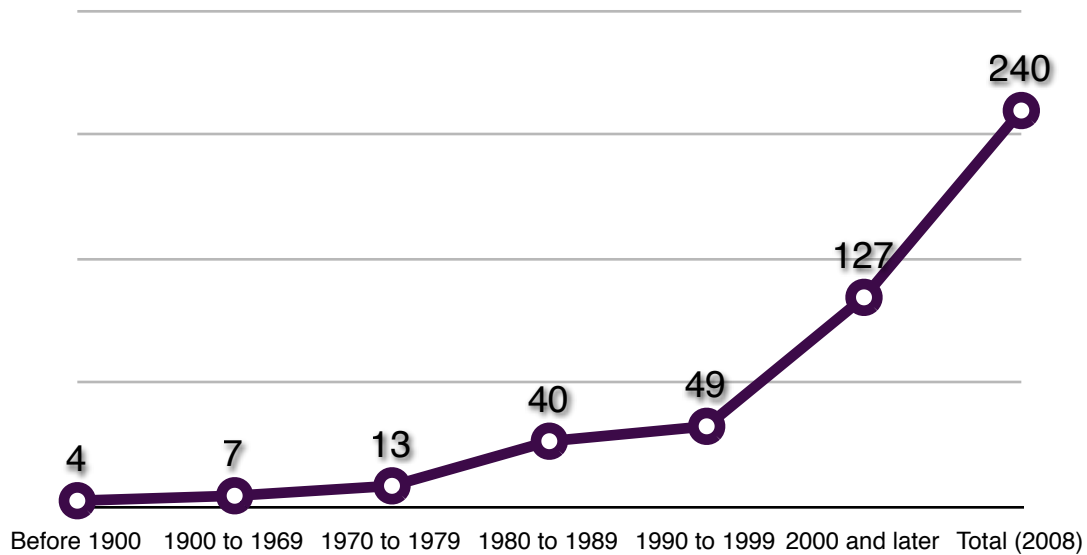
Table wine, sparkling wine, dessert wine, and specialty wine are all produced in the State of New York. Of the over 36 million gallons of wine produced in 2008, over 42% was specialty wine, 28% was dessert wine, 26% was table wine, and 4% was sparkling wine.²

The number of wineries has increased dramatically in the past twenty years, as demonstrated in **Figure 1**, below. In 2008, there were 240 wineries in New York, employing over 2,500 employees, an 8.7% increase in employment from 2004.

¹ Source: Economic Impact of New York Grape, Grape Juice and Wine 2005 (MKF Research)

² Source: New York Winery Survey 2008 (National Agricultural Statistics Survey)

Figure 1: Number of Wineries, by Year Established



Source: National Agriculture Statistics Service "New York Winery Survey 2008"

New York is the third largest grape producer in the United States after California and Washington. There are currently 37,000 vineyard bearing acres in New York state, on over 1,400 farms, employing nearly 600 vineyard workers. 172,000 tons of grapes were produced in 2008, for a total market value of \$36.5 million. In 2004, there were just 31,000 grape bearing acres on 1,300 farms. These vineyards produced 142,000 tons of grapes with a total market value of \$30 million. Thus, grape production has increased by 21% increase in volume, and 22% increase in value since 2004.

Over 4.98 million wine related tourists provided over \$376.5 million in wine related tourism expenditures in 2008. Tourism impacts several different industries, from wineries to hotels and restaurants, and is an important facet of the local economy. Winery tourism contributes over 6,000 jobs to the state, for a total of over \$95 million in wages paid. Moreover, tourism is up since 2004, when there were 4.14 million wine related tourists, generating \$312 million in wine related tourism expenditures, around 5,000 jobs, and \$79.2 million in wages. The number of tourists has therefore increased by 20.2% increase, with a parallel 20.6% increase in wine related tourism expenditures, a 20% increase in tourism related jobs, and a 19.9% increase in tourism related wages.

Grape Juice and Grape Juice Products

Grape juice product revenues saw a 21% increase in 2008 to \$32.7 million from \$27 million in 2004. Juice processing facilities increased their employment to 98 from 81 in 2004, a 20% increase, and wages were up nearly 21% from \$3 million to \$3.6 million.

Grape juice firms have reinvigorated their marketing to adapt to changing consumer tastes and demands, including an emphasis on authenticity and health benefits of grape juice.

New York as a Center for Wine

New York is the leading wine market in the U.S. but has been one of the most challenging wine markets since late 2008 as the recession deepened its impact.

On-Premise Wine Sales

New York's leading role in the U.S. wine industry is drawn in part from the major role its restaurants play in the U.S. food and hospitality industry. For example, New York has the largest number of on-premise eating and drinking establishments in the U.S.³ and fully one third of the top grossing 100 independent restaurants⁴ in the US are based in New York.

Americans began changing their restaurant behavior in third quarter 2008, either shifting to entertaining at home, switching to less expensive venues or ordering less expensive items on-premise. Restaurant traffic began picking up in July 2009, helped by value-oriented menu redesigns, but consumer spending is still very restrained. Total restaurant sales in the state are estimated to increase by 1.5% from 2008 to 2009, but the mix in spending has changed. A Harris poll found that 65% of Americans are still planning to spend less in restaurants.

Consumer behavior has particularly affected beverage alcohol sales, with wine suffering the most. Corporate entertaining, for which the most expensive wines tend to be sold, has largely evaporated. Most wine selling on-premise is wine-by-the-glass. Even half bottles are not selling. Thus, restaurants are reporting that traffic is improving, but profitability, particularly at full service restaurants, is down because of the collapse in wine sales. This trend is expected to continue through the next year, with forecast on-premise wine sales down more than 6%.

Wine Retailing

Sales of wine have shifted off-premise as more consumers eat at home, but retailers have still felt the recession's impact.

Speciality wine stores are saying they can only move product with a 30% discount or a special appearance by a winery principal, which drives traffic into their stores. The stores

³ Adams Wine Handbook, 2008

⁴ Restaurants and Institutions Magazine, April 1, 2009 Issue.

are also reporting cutting inventory by about 20%, particularly at the higher end, while increasing stocks of more mid-priced products. Volume sales are up but the product mix shift toward lower priced products has reduced dollar sales by 20–30% and the stores are hurting, cutting costs where they can.

Restrictions on Wine Sales in New York

Nationally, wine sales in the grocery channel have held up somewhat better than wine sales in wine speciality and liquor stores, as consumers purchase wine along with meals for home consumption. However, New York State does not permit wine sales in the grocery channel. Although New York ranks third in total population and first in on-premise wine sale licenses, it ranks only tenth in off-premise wine sale licenses and 16th in per capita wine consumption.

New York State passed a law permitting the direct interstate shipment of wines in 2005, which modestly helped increased the sales and national distribution of New York wines. However, the burdensome regulations imposed by the New York State Liquor Authority have greatly impeded the ability of wineries to take advantage of the law.

These various restrictions on selling wine in the State have not only burdened producers and other members of the wine trade but have cost the State revenue, from the excise and sales taxes which might have been generated by these wines sales.

Further discouraging wine sales in the state, New York increased its taxes on wine made or sold in the state, effective May 1, 2009, from 18.9 cents a gallon to 30 cents a gallon, paid at the wholesale tier. This is equivalent to a tax increase of 45 cents a gallon at retail.

Research has found that demand for wine is highly sensitive to changes in price, with demand declining anywhere from 55% to 186% of the proportional increase in price. The tax increase consequently has the greatest impact on the low to moderately priced wines which comprise some 60% of wine sales by volume and the majority of New York's wine production. As noted in the Stonebridge Research study, the "Economic Impact of the Proposed Excise Tax Increase on New York State Economy", prepared in February 2009, this tax increase can be expected to lead to a significant decline in wine sales and related tax revenues in the state.

Prospects

New York's wine industry has continued to grow strongly despite the economic turmoil of the last two years. Creating jobs, generating taxes, supporting a shaken tourism sector and New York agriculture, the wine industry provides one of the few bright spots in New

York's struggling economy. Once again, the industry has demonstrated its unique capacity to bring long term stability and commitment to a regional economy.

However, New York's antiquated and economically counterproductive laws and regulations continue to impede industry growth and cost the state jobs, tax revenues and investment during a time of dire need. New York's regulatory environment imposes severe challenges on New York producers compared to its major competitors in California, Washington State and Oregon, whose states recognize their wine industries as key drivers of the local economy.

**Table 1:
2008 Total Economic Impact (Sum of Total Spending) of New York Grapes, Grape Juice and Wine**

	NEW YORK GRAPES, GRAPE JUICE AND WINE	ALL OTHER WINE SOLD IN NEW YORK	TOTAL IMPACT
Revenue			
Winery Sales	\$ 508,510,700		\$ 508,510,700
Retail and Restaurant Wine Sales (NY Wine)	\$ 60,047,400		\$ 60,047,400
Restaurant Revenues from all other wines sold in NY State		\$ 561,600,000	\$ 561,600,000
Retail Revenues from all other wines sold in NY State		\$ 960,216,000	\$ 960,216,000
Distributors Sales (NY Wine)	\$ 12,670,000		\$ 12,670,000
Distributors revenues from all other wines sold in NY State		\$ 380,463,000	\$ 380,463,000
Juice Processor Sales	\$ 32,700,000		\$ 32,700,000
Juice Retail Sales	\$ 40,024,000		\$ 40,024,000
Juice Broker Sales	\$ 1,500,000		\$ 1,500,000
Grapes Sales	\$ 36,500,000		\$ 36,500,000
Tourism	\$ 376,518,000		\$ 376,518,000
Tax Revenues – State & Local	\$ 230,558,052	\$ 224,907,945	\$ 455,465,997
Financing Revenues – Debt	\$ 43,605,000		\$ 43,605,000
Vineyard Development (excluding vines)	\$ 2,742,000		\$ 2,742,000
Wine Labels	\$ 9,526,600		\$ 9,526,600
Glass/Cases/Closures	\$ 16,950,000		\$ 16,950,000
Stainless Steel Tanks	\$ 600,000		\$ 600,000
Grapevines/Nurseries	\$ 4,529,500		\$ 4,529,500
Trucking	\$ 7,873,000		\$ 7,873,000
Charitable Contributions	\$ 8,644,700		\$ 8,644,700
Education/Research/Labs	\$ 2,360,000		\$ 2,360,000
Indirect (IMPLAN)	\$ 912,074,124	\$ 199,391,300	\$ 1,111,465,424
Induced (IMPLAN)	\$ 657,622,501	\$ 164,304,214	\$ 821,926,715
Total Revenue	\$ 2,965,555,577	\$ 2,490,882,459	\$ 5,456,438,036
Wages			
Winery Employees	\$ 169,331,375		\$ 169,331,375
Vineyard Employees	\$ 15,020,595		\$ 15,020,595

	NEW YORK GRAPES, GRAPE JUICE AND WINE	ALL OTHER WINE SOLD IN NEW YORK	TOTAL IMPACT
Juice Processing Employees	\$ 3,629,600		\$ 3,629,600
Juice Retail Employees	\$ 3,947,500		\$ 3,947,500
Juice Broker Employees	\$ 725,000		\$ 725,000
Tourism	\$ 95,411,000		\$ 95,411,000
Vineyard Development – Labor	\$ 910,000		\$ 910,000
Glass/Cases/Closures	\$ 400,000		\$ 400,000
Distributors Employees	\$ 7,316,813	\$ 214,404,787	\$ 221,721,600
Labels	\$ 2,386,000		\$ 2,386,000
Grapevines/Nurseries	\$ 1,612,000		\$ 1,612,000
Retail/Liquor Stores – Wine Specific	\$ 4,697,767	\$ 137,658,833	\$ 142,356,600
Restaurant Wages – Wine Specific	\$ 6,691,879	\$ 196,092,321	\$ 202,784,200
Trucking	\$ 1,749,500		\$ 1,749,500
Stainless Steel Tanks	\$ 263,750		\$ 263,750
Education/Research/Labs	\$ 3,818,200		\$ 3,818,200
Indirect (IMPLAN)	\$ 298,040,417	\$ 121,249,135	\$ 419,289,552
Induced (IMPLAN)	\$ 186,380,261	\$ 101,246,728	\$ 287,626,989
Total Wages	\$ 802,331,657	\$ 770,651,804	\$ 1,572,983,461
Total \$	\$ 3,767,887,234	\$ 3,261,534,263	\$ 7,029,421,497

Source: Stonebridge Research Group LLC and IMPLAN

Table 2:
2008 Total Employment: New York Grapes, Grape Juice and Wine and Allied Industries

EMPLOYMENT	NEW YORK GRAPES, GRAPE JUICE AND WINE	ALL OTHER WINE SOLD IN NEW YORK	TOTAL IMPACT
Winery	2,575		2,575
Vineyard	700		700
Juice Processing	98		98
Tourism	6,070		6,070
Vineyard Development	38		38
Distributor	69	2,020	2,089
Glass/Cases/Closures	20		20
Labels	47		47
Stainless Steel Tanks	5		5
Grapevine Nurseries	56		56
Retail/Liquor	159	4,673	4,832
Restaurants	348	10,207	10,555
Trucking	45		45

EMPLOYMENT	NEW YORK GRAPES, GRAPE JUICE AND WINE	ALL OTHER WINE SOLD IN NEW YORK	TOTAL IMPACT
Education/Research/Labs	80		80
Indirect (IMPLAN)	3,738	2,410	6,148
Induced (IMPLAN)	3,120	2,818	5,938
Total	17,168	22,128	39,296

Source: Stonebridge Research Group LLC and IMPLAN

Methodology

To produce this assessment, Stonebridge Research Group LLC focused on the largest and most significant section of the industry involved in wine production and consumption, grape cultivation and allied industries – distribution, tourism, and equipment and suppliers. Other economic benefits, including tax revenues, financing, charitable contributions and other indirect and induced benefits generated by the grape and wine industry are also summarized.

Direct, Indirect and Induced Effects (IMPLAN)

Much like dropping a rock into a pond, the grape, grape juice and wine industry has ripple effects on New York's economy. Economic impact studies estimate the impact of an industry in a defined geographical area by identifying and measuring specific concrete economic "events." The events tracked in this report are jobs by industry code.

IMPLAN is the acronym for "IMpact analysis for PLANing." IMPLAN is a well established and widely used economic model that uses input-output analyses and tables for over 500 industries to estimate regional and industry-specific economic impacts of a specific industry.

Thus, the full economic impact of New York grapes, grape juice and wine, as shown in **Table 1**, combines the New York's wine industry's direct, indirect and induced economic effects as measured by the application of the IMPLAN model to the employment data presented in **Table 2** of this report.

The IMPLAN model and its structure are updated annually to reflect changes in the US economy, in wages, in productivity assumptions and in regional economic structures. Thus, readers should not try to directly compare the IMPLAN results from the first report with the results of this update.

The IMPLAN model and methodology classifies these effects into three categories, as defined below: Direct Effects, Indirect Effects, and Induced Effects.

Direct Effects

Direct effects are economic changes in industries **directly** associated with the product's final demand. Thus, direct effects in this case consider the direct employment and spending of wineries, vineyards, juice processors, distributors, and immediately allied industries, data which Stonebridge Research Group LLC collected through primary research.

Indirect Effects

Indirect effects are economic changes – income created through job creation – in industries that supply goods and services to the directly affected industries noted above. Examples of industry effects are purchases of electricity and gasoline by wineries, of janitorial services by wine bottle manufacturers, and cash registers purchased for use in a tasting room. These may also be defined as “secondary economic exchanges.”

Induced Effects

Induced effects are the effects of these new workers spending their new incomes, creating a still further flow of income in their communities and a flow of new jobs and services.

Examples are spending in grocery and retail stores, medical offices, insurance companies, internet providers, and other non-wine related industries by workers in industries allied to the wine industry – such as the spending by the janitor working under contract to the wine bottle manufacturer in New York. These tertiary exchanges induce more jobs and incomes throughout New York, based on the original economic flows from the wine industry.

Measuring the Full Economic Impact of the New York Grapes, Grape Juice and Wine

New York’s wine industry has a “multiplier” effect, extending across the county, state, and nation in a broad network of economic benefits. The revenue derived by the wine industry becomes income for other workers and firms, who spend more money on other goods and services.

About Stonebridge Research Group, LLC

Responding to a call from wine industry clients for more fact-based business advisory services, Stonebridge Research was founded in 2008 by Barbara Insel and a group of food and beverage investors. Stonebridge Research Group services fall into three primary areas: market and consumer intelligence, data driven business strategies and specialized business services, including litigation research, investment due diligence and economic analyses.

Stonebridge has conducted numerous economic impact studies in the past, including The Economic Impact of California Wine and Grapes 2009, The Economic Impact of Wine and Grapes in Napa County 2008, and The Economic Impact of Wine and Grapes in Lodi 2009. Moreover, the principals of Stonebridge have conducted additional economic impact studies, including Economic Impact of New York Grapes, Grape Juice and Wine 2005, Economic Impact of California Wine 2004, Economic Impact of North Carolina Wine and Grapes 2005, and The Impact of Wine, Grapes and Grape Products on the American Economy 2007, the first national assessment of the industry

Stonebridge Research has in addition conducted major studies for such clients as the French Trade Ministry, the Wine Institute, the California Association of Wine grape Growers, Napa Valley Vintners Association, the Office of Champagne, Wines from Spain, Family Winemakers and numerous individual producers, industry investors and suppliers.

About Barbara Insel

Barbara is a leading authority on the business of wine. Prior to founding Stonebridge, she was Managing Director at MKF Research LLC, where she built the organization from primarily a single product research publishing operation to a widely respected advisor on all phases of the wine business. She is a member of the Market Development Task Force of the Wine Institute, has served on the Planning Committee for the Unified Wine and Grape Symposium and the Steering Committee for the 40th Anniversary of the Napa Agricultural Preserve. In addition, she was a Board member of the Napa Valley Economic Development Corporation.

She has been a featured speaker at the Unified Wine and Grape Symposium, the Free the Grapes Symposium, Viticulture 2007 and meetings of Napa Valley Vintners, the Wine Institute, California Association of Winegrape Growers, the National Association for Business Economics, Family Winemakers of California and numerous regional, national and international organizations. She has been published in many industry publications

including Wine Business Monthly, Business Economics and Foreign Affairs as well as the forthcoming Encyclopedia of Wine. She is also frequently quoted in the regional and national press on the topic of the business of wine. Having taught for several years at the University of California, Davis Wine Marketing Course, Barbara is now a regular contributor to the Wine Business course at the Culinary Institute of America.

Prior to finding her permanent home in the wine industry, Barbara spent more than twenty years in international investment and finance and related research, having held senior positions at Salomon Brothers, Morgan Stanley Asset Management, Kleinwort Benson and the European Bank for Reconstruction and Development. Throughout her career, Barbara has been involved in wine-related investments and transactions from Latin America to Eastern Europe's wineries and vineyards.

Barbara's education includes a BA from Barnard College, and MA in Economics from Brown University and an MBA from Stanford's Graduate School of Business.