



Texas Wine Marketing Research Institute

College of Human Sciences • Texas Tech University

THE ECONOMIC IMPACT OF WINE AND GRAPES ON THE STATE OF TEXAS 2008

Produced by
MKF Research LLC

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Texas Wine Marketing Research Institute

and

Texas Wine and Grape Growers Association

 **MKF RESEARCH LLC**

A joint venture of
Global Wine Partners US LLC
Frank, Rimerman + Co. LLP CPAs

**ECONOMIC IMPACT OF
TEXAS WINE AND WINE GRAPES 2007**

**FULL ECONOMIC IMPACT OF WINE AND
GRAPES ON THE TEXAS ECONOMY**

\$1.35 Billion¹

TEXAS WINE AND GRAPES	ECONOMIC IMPACT
Full-time Equivalent Jobs	8,971
Wages Paid	\$298 million
Winery Revenue	\$55 million
Cases Produced	1 million
Retail Value of Texas Wine	\$98.5 million
Vineyard Revenue	\$4.8 million
Number of Wineries	162
Number of Commercial Growers	280
Grape-Bearing Acres	2,900
Wine-Related Tourism Expenditures	\$296.6 million
Number of Wine-Related Tourists	958,000 thousand
Taxes Paid: State and Local / Federal	\$63.3 million/\$78.9 million

¹ See **Table 1** below. Based on 2007 data.

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

Table 1²

Total Economic Impact (Sum of Total Spending) of Wine and Grapes in Texas

Revenue (\$):	
Winery Sales – Distributors	\$ 30,778,000
Winery Sales – Direct	24,611,000
Distributor Revenue	9,233,000
Restaurants Revenue	16,620,000
Retail Revenue	17,236,000
Wine Grape Sales	4,751,000
Tourism	296,581,400
Winery Suppliers	5,779,000
Vineyard Suppliers	2,543,000
Trucking	2,427,000
Wine Research/Education/Consulting	2,920,000
Charitable Contributions	976,000
Tax Revenues - Federal	78,870,000
Tax Revenues - State & Local	63,336,000
Indirect (IMPLAN)	279,018,000
Induced (IMPLAN)	213,837,000
Total Revenue	\$ <u>1,049,516,000</u>
Wages (\$, annual):	
Wineries	\$ 14,057,000
Distributors	6,632,000
Restaurants	12,078,000
Retail	5,695,000
Wine Grapes	3,175,000
Tourism	102,421,000
Winery Suppliers	1,092,000
Vineyard Suppliers	549,000
Trucking	451,000
Wine Research/Education/Consulting	2,013,000
Indirect (IMPLAN)	85,052,000
Induced (IMPLAN)	64,881,000
Total Wages	\$ <u>298,096,000</u>
Total Impact	\$ <u>1,347,612,000</u>

² Based on 2007 data

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

EXECUTIVE SUMMARY

IMPACT OF TEXAS WINE ON THE TEXAS ECONOMY

The Texas wine industry has experienced increased growth in the number of wineries and increased demand of Texas wine that is outpacing available winegrapes from within Texas. The number of bonded wineries in the state of Texas has grown from 113 in 2005 to 162 in 2007, and continuing to expand at an assertive pace with almost all of the growth coming from the addition of small wineries – wineries producing less than 5000 gallons per year. Wine production in Texas has grown almost 16% over 2005 to 2.4 million gallons bottled in 2007, ranking Texas as fifth in the nation in wine production.

The wine and grape industry in Texas has contributed greatly to the economic strength of the state. Texas' wine, grape and related industries have increased the total economic value to the state of Texas from approximately \$997 million in 2005 to \$1.35 billion in 2007. As the number of Texas wineries increase, so does the number of tourists visiting them (from 868,000 tourists in 2005 to 958,000 tourists in 2007).

Wine, grapes and related industries account for nearly 9,000 jobs in Texas, with an associated payroll in excess of \$298 million.

Table 2
Total Texas Employment: Wine, Grape and Related Industries, 2007

Wineries	607
Distributors	117
Restaurants	775
Retail	267
Vineyard	217
Tourism	3,439
Winery Supplies	20
Vineyard Materials	12
Trucking	11
Research/Education/Consulting	37
Indirect (IMPLAN)	1,777
Induced (IMPLAN)	1,692
Total	8,971

Sources: MKF Research LLC, IMPLAN, Schiffler & Associates, Ltd. (Tourism), the National Restaurant Association (Restaurants) and The U.S. Department of Labor

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These 8,971 jobs compare with a total of 8,000 jobs in 2005, as reported in the previous report. This difference represents growth in the industry as well as continuing progress in collecting data, and more precise data, on suppliers to the industry. For example, we have collected further data on warehousing, trucking, label producers and associated ancillary industries. This has led us to reduce the number of employees attributed to wine in some sectors while adding employees in others. Considering the same industry categories included in the last report, wine industry related employment increased by 12% since 2005.

Growing grapes and making wine is a long-term commitment to a community, both financially and physically. New vineyard plantings require three to five years before yielding a full crop, with another one to three years of aging for wine to be ready for sale. Unlike many industries, once vineyards and wineries have been established they are effectively rooted and tied in place – a Texas vineyard cannot simply be relocated to another region or outsourced to another country. Wine and grapes are inextricably tied to the soil from which they are grown.

Moreover, wine grapes and their products and allied industries diversify local economies and create employment and new market opportunities in rural communities.

TAXES & TOTAL TAXES COLLECTED

Table 3
Estimated Tax Revenues

Tax Type	Total
Federal tax revenues	
Excise	\$ 7,141,000
Payroll	28,873,000
Income	24,980,000
Other (corporate profits, etc.)	17,876,000
Total federal tax revenues	<u>\$ 78,870,000</u>
State tax revenues	
Excise	\$ 3,883,000
Sales	23,536,000
Payroll	728,000
Property	23,867,000
Other (dividends, licenses, fines, fees, etc.)	11,322,000
Total state tax revenues	<u>\$ 63,336,000</u>
Total tax revenues	<u>\$ 142,206,000</u>

Source: IMPLAN, MKF Research LLC

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

The wine and winegrape industry generates significant tax dollars, benefiting federal, state and local governments. Tax dollars are raised through sales taxes, excise taxes, income taxes, estate and gift taxes, payroll taxes, property taxes and other business taxes and fees such as licenses. Texas' wine, grape and allied industries paid \$63 million in state and local taxes and \$79 million in federal taxes in 2007, including over \$7 million in federal excise taxes.

TOURISM

Tourism is a major element in Texas wine's overall economic impact. Surveys of Texas wineries conducted by the Texas Wine Marketing Research Institute estimate that more than 958,000 tourists visited Texas wineries in 2007, an increase of 10% from 2005, as compared to tourism for Texas as a whole which is up only 2% for the same time period. Supporting these visitors is a diverse labor force of approximately 3,439 employees with total wages of over \$102 million as compared to 2,992 employees with total wages of \$84 million in 2005. The continued increase of tourist visits can be attributed to the increase in the number of wineries in Texas, providing more destinations and opportunities for visitors to experience Texas wine country.

Given that much of their sales are direct-to-consumer, smaller wineries have focused meaningful effort on enticing consumers to come and visit their facilities. Wine tasting tours are being widely promoted with positive sales results. There has been an expansion of related-product offerings and events, private parties, and concerts held on winery properties and, thus, the winery's function has evolved past simple production. Some existing wineries have expanded their facilities to incorporate these additional revenue streams resulting in increased winery employment and support services, and increased rural economic development. The new wineries being designed and built in Texas incorporate this new blend of functions with traditional facilities to take full advantage of these profitable ancillary activities.

WINE PRODUCTION AND SALES

In 2007, there were 162 wineries in Texas, up 43% from 113 wineries in 2005. Ste. Genevieve is the largest with a production of approximately 530,000 cases, nearly five times greater than the next largest producer Llano Estacado which produced almost 92,000 cases in 2007. Ste. Genevieve produces 54% of Texas' total annual production. Total wine bottled in Texas was approximately 2.381 million gallons, about 1 million cases, an increase of almost 16% over 2005.

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

Table 4.1
Trend of Growth in Texas Wineries

2007	162
2005	113
2004	70
2003	54
2000	40

Source: Texas Wine Marketing Research Institute and TABC

Over 80% of Texas wineries are small producers, producing less than 5,000 gallons, or approximately 2,100 cases. Due to varying levels of crop failure in 2006 and 2007, about 72% of the wine produced in Texas in 2007 was made from grapes brought in from other states. The growth of wineries in the state has outpaced the growth of Vinifera grape production, especially given the variability in the yields of recent harvests and the quality requirements of some wineries. However, the decision to bring in grapes, especially in the case of Vinifera, also often reflects lower prices for comparable or higher quality grapes leading to some occasional weakness in the local grape market. Education and research programs at various state agencies are currently addressing the quality and supply of Texas Vinifera in the local grape market.

In 2007, Texas was the fifth largest wine producer in the United States. A marked increase in wine tourism has been a strong driver of this production increase. The number of new wineries producing in Texas has been increasing dramatically in the last three years.

Table 4.2
Top Ten States' Annual
Gallons Bottled in 2007

State	Production	Rank	Percentage of Total Production
California	493,752,148	1	86.30
New York	36,557,267	2	6.39
Washington	16,681,212	3	2.92
Oregon	4,552,997	4	0.80
Texas	2,381,469	5	0.42
Indiana	1,519,730	6	0.27
Pennsylvania	1,256,894	7	0.22
Michigan	1,231,931	8	0.22
North Carolina	1,206,303	9	0.21
Florida	1,205,186	10	0.21
All Others	11,813,212		2.06

Source: TTB

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

Approximately 80% of the wine volume produced in Texas is distributed through the three-tier distribution system. This is primarily driven by Texas's largest wineries, which sell a significant share of their wines through this channel. The vast majority of Texas wineries by number, however, sell direct to consumers through winery tasting rooms, allowing them to obtain higher margins on their product. These wineries generally have relatively small production.

The retail value of Texas wine in 2007 is estimated at \$98.5 million. Winery revenue totals \$55 million, including an estimated \$24.6 million (44%) in winery direct sales (sales by wineries direct to consumers). Winery direct sales include sales to consumers in the winery tasting rooms, wine clubs, winery mailing lists and e-commerce or Internet sales.

GRAPE PRODUCTION

In 2007, there were approximately 280 commercial growers operating in Texas with a combined acreage of 2,900 bearing acres. According to the Texas Wine and Grape Growers Association, there are an additional 200 acres recently planted to vines that are not yet bearing fruit, bringing the total of Texas acreage planted to vines to 3,100 acres. While vineyard acreage in Texas has remained consistent over the past seven years, yield and crop value have varied dramatically. This is largely due to occasionally unfavorable weather conditions such as late spring frost and mid season hail storms, harmful herbicide drift from neighboring fields and, to a lesser extent, vine loss due to Pierce's Disease. The variable nature of these conditions can be considered a normal ebb and flow of Texas agriculture.

Table 5.1
Texas Public Estimate for Grapes
2001 – 2007

YEAR	BEARING ACRES	UTILIZED PRODUCTION (TONS)	PRICE/TON	CROP VALUE ('000)
2007	2,900	4,100	\$1,160	\$4,751
2006	2,900	3,200	\$1,200	\$3,855
2005	2,900	8,500	\$1,250	\$10,625
2004	2,900	8,500	\$919	\$7,812
2003	2,900	5,800	\$900	\$5,220
2002	2,900	4,400	\$910	\$4,004
2001	2,900	9,300	\$900	\$8,370

Source: USDA, NASS

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Texas vineyards produced an average of only 1.69 tons per acre in 2007 as compared to 2.93 tons per acre in 2005. Texas winegrapes received an average price-per-ton of \$1,160, down from \$1,250 in 2005. Average income-per-acre in 2007 fell to \$1,640 from \$3,664 in 2005. Texas is ranked 7th in the nation for grape production in 2007.

Table 5.2
United States Grape Production, 2007

Rank	State	Bearing Acreage (All types of grapes)	Utilized Production (Tons)
1	California	797,000	5,901,000
2	Washington	56,500	399,000
3	New York	34,000	180,000
4	Michigan	14,100	100,700
5	Oregon	13,000	38,000
6	Pennsylvania	12,100	84,000
7	Texas	2,900	4,100
8	Ohio	2,300	7,600
9	Virginia	2,300	4,750
10	North Carolina	1,400	3,200
11	Missouri	1,400	2,500
12	Georgia	1,100	2,900
	United States	939,250	6,727,750

Source: NASS (includes non-wine grapes)

In comparison to Texas grape production and its wine industry, wineries in the State of Washington rely heavily on in state grown winegrapes, which can contribute to lower costs. By increasing the amount of Texas acreage available for grape production, the Texas wine industry can rely less on wine produced outside the state, building more credibility and potentially reducing costs.

Grape prices in Washington have steadily increased over the years. Texas grape prices have also steadily increased and the average price per ton is currently higher than Washington, although overall total tonnage is significantly lower.

Washington has a history of rebounding after particularly difficult harvests. The Texas wine industry, having had its share of weather related issues, is experiencing similar cycles of weather having an impact on their grape production.

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

Over an eight year period beginning in the early 1980's, bearing acreage in Washington grew from 2,125 acres to 11,500 acres, an increase of 441%. If Texas is to gain traction and produce enough in state wine to meet demand, they will need to aggressively increase the available grape bearing acreage, assuming overall quality can be maintained.

COMMUNITY SUPPORT

Wineries and growers throughout the state of Texas have donated in excess of \$976,000 to charities in 2007, including gifts of wine, employee time and cash. This is an increase of \$61,000 (+6.7%) over 2005. The amount of charitable contributions is likely underestimated as many wineries do not track in-kind contributions, which are often substantial.

EDUCATION, CONSULTING AND WINE INDUSTRY RESEARCH

Approximately thirty-seven people are employed on a full time basis in Texas in wine related education, consulting and research, with a payroll of over \$2 million.

Table 6
Impact of Wine Related Education, Consulting and Research

Direct Employment:	37
Total Wages	\$2,013,000
Research Expenditures	\$2,920,000

Source: MKF Research LLC

At present, however, there isn't a four-year degree program in either viticulture or enology in Texas. Creating such a program would improve the state's ability to train wine professionals with knowledge specific to Texas wine production. The state government has enabled the Texas Agrilife Extension Service and Grayson County College to develop world-class education and research certificate program for viticulture and enology.

Senate Bill SB1370, which allocates monies received from incremental excise and sales tax revenues on wine into education and research programs, will further support Texas' wine industry growth. Additional funds have been made available to Texas A&M University, Texas Agrilife Extension, Texas Tech University, Texas Wine Marketing Research Institute, Grayson County College, Texas Agricultural Experiment Station and the Texas Department of Agriculture for non-certificate education and research programs on enology, viticulture and pest management.

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

As part of SB1370, the Wine Grape Investment Pilot Grant Program, managed through the Texas Department of Agriculture, is a one-time matching funds reimbursement program to encourage new investment in expanding the acreage in wine grape production to continue to spur the wine industry in Texas. For the purpose of the Wine Grape Investment Pilot Grant Program, an applicant is a person or business that agrees to grow at least 5 new or additional acres of wine grapes for commercial production purposes.

WINEMAKING EQUIPMENT, SUPPLIES AND SERVICES

The number of in-state suppliers or distributors of winemaking equipment, supplies and services is relatively small. Many different types of small businesses exist in Texas that supply the wine and winegrape industry as a portion of their overall business. They include bottle suppliers, farming chemical providers, trucking services, label producers, tank manufactures, warehousing, and a wine lab. As the Texas wine industry continues to grow, so do the number of ancillary businesses that supply the industry.

**Table 7
Texas Winemaking Suppliers for Texas Wine**

Direct Employment	38 employees
Total Wages	\$1,559,000
Total Revenue	\$12,516,000

Source: MKF Research LLC

STRONG SUPPORT BY STATE AND REGIONAL ORGANIZATIONS

State and regional organization support is critical to the success of the renewed industry. Based on the recent legislative success, there appears to be strong momentum in favor of the wine and grape industry in Texas driven by the efforts of the Texas Wine and Grape Growers Association.

A CONSERVATIVE MEASURE OF VALUE

Statistics alone do not adequately measure the intangible value the wine industry brings in terms of overall enhanced quality of life, limitation of urban sprawl and greater visibility for the state of Texas worldwide.

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

Accordingly, the figures provided in this report should be viewed as a conservative baseline measure of the economic impact, as the true impact of the Texas wine industry, including intangible benefits is much greater. That measure of economic impact is now **\$1.35 billion** within the state of Texas, for an industry that is a unique partnership of nature, entrepreneurship, artistry and technology.

Texas wine and winegrape producers face sizable challenges to their continued growth and success. Working to support the Texas wine industry and to ensure its long-term success will protect the significant benefits the industry provides to the Texas economy.

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

METHODOLOGY

METHODOLOGY

DATA COLLECTION

Data for this study was collected from a variety of public sources supplemented by primary research with wineries, suppliers, growers and other economic entities and supported by a variety of studies undertaken by industry and professional organizations. For several data items the numbers provided are only partial, given the limited availability of information, and therefore are considered conservative.

DIRECT, INDIRECT AND INDUCED EFFECTS (IMPLAN)

All economic activities have “ripple” effects: employment of one person creates economic activity for others, whether the salesman who sells the employee a car or the restaurant where she eats lunch. Economic impact studies endeavor to measure those “ripples” as well as the direct activity, to help assess the impact of the potential gain or loss of an industry.

Economic impact studies estimate the impact of an industry in a defined geographic region by identifying and measuring specific concrete and economic events, such as the number of jobs, the wages, taxes and output generated by each job.

IMPLAN³ is the acronym for “**IM** impact analysis for **PLAN**ing.” IMPLAN is a well established and widely used economic model that uses input-output analyses and tables for over 500 industries to estimate these regional and industry-specific economic impacts of a specific industry.

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

Direct Effects are economic changes in industries *directly* associated with the product’s final demand. Thus, direct effects consider the direct employment and spending of wineries, vineyards, distributors and immediately allied industries.

Indirect effects are economic changes – income created through job creation in industries that supply goods and services to the directly affected industries noted above. For example, the purchases of electricity and gasoline by wineries and of cash registers purchased for a tasting room.

³ IMPLAN is the standard economic model for economic impact studies, developed by the University of Minnesota and the US Forestry Service in the 1980s and currently used by over 1500 organizations, including most federal, state and local organizations. For more information on IMPLAN, go to www.implan.com.

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METHODOLOGY

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, and other non-wine and grape related industries.

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ABOUT MKF RESEARCH LLC

APPENDIX I: ABOUT MKF RESEARCH LLC

MKF Research LLC is the leading research source on the US wine industry. We continue to strive to raise the bar on the quality of information and analysis available to the wine industry.

MKF Research LLC conducts original research on the business of wine and wine market trends, publishes a number of industry studies and provides business advisory services and custom business research for individual companies and investors. MKF Research LLC also conducts a number of industry seminars on its research work including the annual invitation-only MKF Research Executive Wine Summit as well as various smaller open workshops on key industry issues.

MKF RESEARCH LLC CUSTOM PROJECTS

The major part of MKF Research LLC's business is providing confidential custom consulting to wine industry enterprises, investors and suppliers. Recently, MKF Research LLC consulting projects have included:

- Feasibility, market studies and due diligence;
- Consumer and trade surveys and focus groups;
- Market analyses, marketing strategy development and market, brand and financial and operational benchmarking;
- Economic impact studies for a variety of wine and vineyard related businesses and public and private organizations in the industry; and
- Market and strategic studies of potential new import and export products.

MKF Research LLC conducts the leading research on Winery Direct Sales and Winery Direct consumers and the benchmarking of winery direct activities and has expanded its consumer and trade research capabilities to among the best in the industry.

In 2005 MKF Research LLC was the principal consultant on the Wine Institute's first consumer research in twenty years, a large scale survey of wine consumers conducted by Yankelovich Inc., whom MKF Research LLC introduced to the wine industry. The report produced by MKF Research LLC, *Wine Institute Market Research: Implications for California Wineries*, is available to members of the Wine Institute.

ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2007

ABOUT MKF RESEARCH

MKF RESEARCH LLC PUBLICATIONS

MKF Grape Trends (annual)

By combining the crush and acreage reports into one easy-to-use quick reference guide, MKF Research LLC's ***Grape Trends*** provides, in one source, all the information needed to make informed decisions about California's grape supply for production planning. Provided in electronic form, ***Grape Trends*** includes a complete summary of current, past (since 1997) and projected tons, prices, and bearing acres for all of California's major grape growing regions and counties for seven major varieties: *Chardonnay, Sauvignon Blanc, Cabernet Sauvignon, Merlot, Syrah, Zinfandel, and Pinot Noir.*

Economic Impact Reports

MKF Research LLC has completed the first study of the Impact of Wine, Grapes and Grape Products on the American Economy, for Wine America, the Wine Institute, Winegrape Growers of America and the National Grape and Wine Initiative, as well as wine and grape impact studies for Virginia, Tennessee and Missouri, to be completed in 2007.

Economic Impact Studies published by MKF Research LLC include the following, all available for purchase from MKF Research LLC:

- *Economic Impact of Washington Grapes and Wine 2007*
- *Economic Impact of Wine and Grapes on the Missouri Economy 2007*
- *Economic Impact of Wine and Winegrapes in Tennessee 2007*
- *Impact of Wine, Grapes and Grape Products on the American Economy, 2007*
- *Economic Impact of California Wine 2006*
- *Economic Impact of Wine and Winegrapes on the State of Texas 2005*
- *Economic Impact of Wine and Winegrapes in North Carolina 2005*
- *Economic Impact of Wine and Winegrapes in Illinois 2005*
- *Economic Impact of Michigan Grapes, Grape Juice and Wine 2005*
- *Economic Impact of New York Grapes, Grape Juice and Wine 2005*
- *Economic Impact of Pennsylvania Wine and Winegrapes 2005*
- *Economic Impact of Wine and Vineyards in Sonoma County 2005*
- *Economic Impact of Wine and Vineyards in Napa County 2005*
- *Economic Impact of California Wine 2004*
- *Economic Impact of the Washington State Wine and Winegrape Industries 2001*
- *Economic Impact of the Wine and Winegrape Industries in Santa Barbara County*

Visit our website at www.mkfresearch.com to stay informed of our new research projects.

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ABOUT MKF RESEARCH

MKF RESEARCH LLC OWNERSHIP

MKF Research LLC is owned by Frank, Rimerman + Co. LLP, CPAs.

Frank, Rimerman + Co. LLP, CPAs

Frank, Rimerman + Co. LLP, founded in 1949, is the largest, locally-owned provider of accounting and consulting services in California. With offices in San Jose, Palo Alto, San Francisco and St. Helena and over 170 professionals, Frank, Rimerman + Co. LLP offers strategic business and information consulting services, tax consulting and planning, audit and financial reporting, accounting services, litigation and valuation services.

Frank, Rimerman + Co. LLP continues to build its wine industry practice, based in St. Helena (formerly the CPA practice of Motto, Kryla and Fisher), committing the full resources of this major professional services firm to the industry.