

THE ECONOMIC IMPACT  
OF WINE AND GRAPES  
ON THE STATE OF TEXAS 2007

**An MKF Research LLC Report**

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 **MKF RESEARCH LLC**

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

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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ECONOMIC IMPACT OF  
TEXAS WINE AND GRAPES 2005

HIGHLIGHTS

FULL ECONOMIC IMPACT OF WINE AND  
GRAPES ON THE TEXAS ECONOMY

**\$ 997.3 Million<sup>1</sup>**

TEXAS WINE AND GRAPES	ECONOMIC IMPACT
Full-time Equivalent Jobs	8000
Wages Paid	\$234.6 million
Winery Revenue	\$91.5 million
Cases Produced	626,726
Retail Value of Texas Wine	\$179.2 million
Vineyard Revenue	\$10.6 million
Number of Wineries	113
Number of Commercial Growers	220
Grape-Bearing Acres	2900
Wine-Related Tourism Expenditures	\$221.7 million
Number of Wine-Related Tourists	868.9 thousand
Taxes Paid (State and Local)/Federal	\$39 million/\$30.2 million

<sup>1</sup> See **Table 1** below. Based on year-end 2005 data.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## EXECUTIVE SUMMARY

Table 1<sup>2</sup>

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

<b>Revenue (\$):</b>	
Winery Sales – Distributors	\$62,675,000
Winery Sales – Direct	28,824,000
Distributor Revenue	18,803,000
Restaurants Revenue	33,845,000
Retail Revenue	35,098,000
Wine Grape Sales	10,625,000
Tourism	221,698,400
Winery Suppliers	5,048,000
Vineyard Suppliers	4,310,000
Trucking	667,000
Wine Research/Education/Consulting	2,785,000
Charitable Contributions	915,000
Tax Revenues - Federal	30,156,268
Tax Revenues - State & Local	39,022,000
Indirect (IMPLAN)	147,992,112
Induced (IMPLAN)	120,257,850
<b>Total Revenue</b>	<b><u>762,721,630</u></b>
<b>Wages (\$, annual):</b>	
Wineries	\$12,723,600
Distributors	5,609,100
Restaurants	24,004,629
Retail	13,532,419
Wine Grapes	3,964,495
Tourism	84,345,170
Winery Suppliers	785,000
Vineyard Suppliers	245,760
Trucking	101,000
Wine Research/Education/Consulting	1,875,000
Indirect (IMPLAN)	48,225,558
Induced (IMPLAN)	39,194,324
<b>Total Wages</b>	<b><u>\$ 234,606,055</u></b>
<b>Total Impact</b>	<b><u>\$997,327,685</u></b>

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<sup>2</sup> Based on year-end 2005 data

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## EXECUTIVE SUMMARY

### EXECUTIVE SUMMARY

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The story of the Texas wine industry is growth. Since 2000, the number of wineries in the state of Texas has grown from 40 to 113, continuing to expand with an aggressive pace. Nearly ninety percent of the growth is from small wineries – wineries producing less than 5000 gallons per year. Thus, the number of wineries has grown faster than the growth in production volume. Wine production in Texas has grown 30% to almost 1,500 thousand gallons, 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 produced approximately \$977.3 million of total economic value to the state of Texas in 2005, as shown in **Table 1** above.
- As the number of Texas wineries increase, so does the number of tourists visiting them: 868,000 tourists in 2005.
- Texas-produced wine, grapes and related industries paid approximately \$30.2 million in federal taxes and \$39.0 million in state and local taxes in Texas, including nearly \$5 million in federal excise taxes on wine.

Wine, grapes and related industries account for 8000 jobs in Texas, with an associated payroll of more than \$234 million.

**Table 2**  
**Total Texas Employment: Wine, Grape and Related Industries, 2005**

Wineries	460
Distributors	105
Restaurants	1,513
Retail	430
Vineyard	217
Tourism	2,992
Winery Supplies	19
Vineyard Materials	6
Trucking	4
Research/Education/Consulting	28
Indirect (IMPLAN)	1,076
Induced (IMPLAN)	1,150
<b>Total</b>	<b>8,000</b>

Sources: MKF Research LLC, IMPLAN, Schiffler & Associates, Ltd. (Tourism) and the National Restaurant Association (Restaurants)

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## EXECUTIVE SUMMARY

Growing grapes and making wine is a long-term commitment to a community, both financially and physically. New vineyard plantings require at least three years 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.

## CHALLENGES AND OPPORTUNITIES

### Trained Labor and Availability of Training

The sustained growth of the wine industry in Texas depends on having trained specialists in enology (the study of wine and wine making) and viticulture (the study of grape production) who are also familiar with the Texas grape growing environment and winemaking culture. Texas thus needs to continue to strengthen its education infrastructure on its own soil.

Senate Bill 1370, which funnels monies received from incremental excise and sales tax revenues on wine into research, will further support Texas' wine industry growth. Up to \$50,000 annually will be appropriated to the Texas Cooperative Extension (TCE) to fund viticultural projects. Additional funds will be made available to the Texas Agricultural Experiment Station, the Texas Wine Marketing Research Institute at Texas Tech University and the Department of Agriculture for research on enology or viticulture.

Currently in Texas, Grayson County College offers a two-year program and Texas Tech and TCE jointly offer Texas Viticulture short courses.

### Winegrape Supply

Although the majority of Texas wineries produce wine made from Texas grapes, larger production wineries supplement their Texas grapes with grapes or bulk wine brought in from other states. Of the approximately 2.0 million gallons of wine bottled in Texas, about 1.5, or roughly 75%, is produced from grapes grown in state. This practice partly reflects the somewhat limited grape supply in Texas, but also the availability of quality *Vinifera* at competitive prices in other states.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## EXECUTIVE SUMMARY

The relatively high cost of Texas Vinifera, largely a result of small-scale production and the expense of winegrape cultivation in Texas' particular climate, is also an issue for the Texas wine industry. The price of Vinifera grapes, from \$900 to \$1500 per ton, requires that the resulting wine be sold in the "mid-price" range of \$12-\$15. This price segment is also among the most competitive in the US wine market, should the wineries seek to sell much volume through the traditional three-tier system.

### **Climate and Disease**

Strong winds, high humidity, hail and hot summers all imperil winegrape cultivation in various parts of Texas. Humidity attracts fungus and pests, such as cotton root rot and black rot. In addition, Pierce's disease can be a problem in central and eastern Texas due to generally warm winters. Almost 99% of Texas' grape production is Vinifera varieties.

Research to aid growers in identifying the most suitable Vinifera varieties and cultivation techniques for the Texas environment is critical.

### **Health Benefits of Grapes**

Various research studies have indicated significant potential health benefits from the antioxidant compound resveratrol in grapes. Grapes and grape products are filled with antioxidant phenols that can enhance human health and nutrition in many ways. Research studies have shown that antioxidants are important to cardiovascular health, lowering the risk of some cancers, improving memory function, and healthy aging. Additional clinical studies are needed to fully articulate these benefits and are in part being supported by the private and public sectors.

The results of these current and future research studies that more clearly define the health benefits of grapes and grape products can help spur additional market demand that will produce greater profitability needed by these industries.

### **Growth of Tourism**

Tourism is a major industry in Texas and the growth in the number of winery tasting rooms and winery events is adding to its success.

About twenty percent of the income generated by wine produced in Texas is derived from tourism, primarily through sales to tasting room visitors. The backing of the state legislature has been instrumental in developing this direct market. Through the support of the state legislature, a constitutional amendment was passed in 2003 encouraging the development of wineries in "dry" areas of the

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## EXECUTIVE SUMMARY

state, where historically it was unlawful to sell alcoholic beverages of a particular type or alcohol level. This legislation led to a doubling in the number of wineries and significantly widened the geographical presence of the wineries. In addition, wineries are now able to direct ship to consumers within all areas of Texas.

Gaining the attention of consumers and retailers in America's crowded wine market<sup>3</sup> is quite challenging for a newly emerging wine region. Tourism enables wineries to introduce their products to a growing community, favorably disposed by the adventure of winery visiting. The continued growth of tourism in the state is thus vital to the health of the wine industry.

### **Improving Grape and Wine Quality**

With the help of research and expanded training, the quality of Texas' wine and grapes has been steadily improving. Building the market for growing Texas wine production in the crowded and fragmented wine market will require a relentless focus on quality and value.

### **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.

### **Rising Demand for Wine among US Consumers**

Texas' wine and grape industries will benefit from America's steadily rising demand for wine – and for better wine. Wine is that most sought-after consumer good of this era: an affordable luxury.

The US wine market has grown by 13.7% since 2002 in volume and by more than 15% in dollars. This growing demand for wine derives from a variety of underlying trends among American consumers, including:

- **Demographics:** All generational segments are increasing their wine consumption, led by baby boomers. While wine has long been the favored alcoholic beverage among women, men are increasingly joining them in consuming wine. Wine consumption is also increasing across nearly all ethnic groups and regions.

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<sup>3</sup> The US Alcohol and Tobacco Tax and Trade Bureau (TTB) approved more than 200,000 separate wine labels in just the last three years. Few retailers stock more than 1400 SKUs of wine. Thus, gaining shelf space and retailer or restaurant attention in this crowded market is very competitive.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## EXECUTIVE SUMMARY

- Consumer values<sup>4</sup>: Americans are increasingly seeking opportunities to socialize in small groups and at meals, for which wine is particularly suitable. Americans are exploring new product experiences and particularly quality products, for which the diversity and quality of American wines are particularly suitable.
- Retail patterns: Retailers are responding to this growing interest in wine by expanding the variety, quality and settings of their offerings, although many challenges for wineries still remain in this area.
- Restaurant patterns: Offering quality and diverse wine has now become a major marketing and business generation tool for America's restaurant industry, which is itself America's largest employer.
- Health Effects: A variety of studies suggest that consuming wine in moderate amounts with food may positively affect the well being of healthy adults.

All of these factors will accelerate American demand for wine over the coming decade, expanding the market for the wines of all states including Texas.

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<sup>4</sup> See Wine Institute Consumer Research Study, 2005.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## GRAPE INDUSTRY IN TEXAS

### CHAPTER 1 – GRAPE INDUSTRY IN TEXAS

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Texas's winemaking has an old history, dating back to 1662 when Spanish missionaries established the first winery. Due to poor economic conditions, 17 years of Prohibition and viticultural diseases and pests, the Texas wine industry faltered in the first half of the twentieth century.

From 1880 to 1910, Thomas V. Munson of Denison, known commonly as the "father" of Texas viticulture, dedicated his life to classifying American grapes and cultivating disease resistant vines. He is considered to be one of the nation's most highly respected viticultural minds of his time. Through his work he is credited with saving the wine industry of Europe from phylloxera via cultivation of disease resistant rootstocks. While most of his plant breeding involved table grapes, some were considered usable for wine making.

Since the late 1960's, there has been a significant resurgence in Texas' wine industry with a tremendous increase in bearing acreage, wine production and the number of wineries.

In 2005, there were approximately 220 commercial growers operating in Texas with a combined acreage of 2,900 acres. While vineyard acreage in Texas has remained consistent over the past five years, yield and crop value have nearly doubled since 2002. This is largely due to improved viticultural techniques producing greater yields while improving the quality fruit.

**Table 1.1**  
**Texas Public Estimate for Grapes**  
**2001 – 2005**

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

**Source: USDA, NASS**

Texas vineyards produced an average of 2.93 tons per acre in 2005, with an average price-per-ton of \$1,250 and an average income-per-acre of \$3,664. Texas ranked 7<sup>th</sup> in the nation for grape production in 2005.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## GRAPE INDUSTRY IN TEXAS

**Table 1.2**  
**United States Grape Production, 2005**

<b>Rank</b>	<b>State</b>	<b>Bearing Acreage (All types of grapes)</b>	<b>Total Production (Tons)</b>
1	California	800,000	6,978,000
2	Washington	54,000	415,000
3	New York	31,000	178,000
4	Michigan	14,200	102,700
5	Pennsylvania	12,000	90,000
6	Oregon	11,800	27,000
<b>7</b>	<b>Texas</b>	<b>2,900</b>	<b>9,700</b>
8	Ohio	2,200	8,500
9	Virginia	2,000	5,600
10	North Carolina	1,300	3,900
11	Missouri	1,200	3,900
12	Georgia	1,100	3,500
	United States	934,850	7,828,700

**Source: NASS (includes non-wine grapes)**

## GROWING REGIONS

Wine production is highly sensitive to the climate, soil and terrain in which the grapes are grown. As such, appellations, or designated geographical areas, are established to designate the origin of the grapes from which the wine is produced. Eighty-five percent of wine from an American Viticultural Area must be made from grapes harvested within that specific geographical area. If the wine has a varietal distinction, seventy-five percent of that wine must be sourced from the designated grape variety.

Texas has eight recognized American Viticultural Areas (AVA).

- Texas High Plains – Located west of Lubbock in the Panhandle at an elevation of 3000-4000 feet, the climate of this appellation is very dry. While the AVA encompasses over 8 million acres, there were approximately 3500 acres dedicated to grape growing in 2005.
- Escondido Valley – This appellation established in 1992 covers 50 square miles in Pecos County in far West Texas, located near Fort Stockton

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## GRAPE INDUSTRY IN TEXAS

- Texas Hill Country – Located west of Austin and San Antonio, this appellation, like Texas, is large. It is the second largest AVA in the United States, containing more than 9 million acres. Two smaller appellations, listed below, have been designated within the Texas Hill Country due to the unique microclimates they embody. Many wineries are located in this scenic area.
- Bell Mountain (within Texas Hill Country) – Designated in 1986, it is the first established AVA in Texas, covering five square acres about 15 miles north of Fredricksburg.
- Fredricksburg (within Texas Hill Country) – This viticultural area covers about 110 acres with approximately 60 under vine.
- Mesilla Valley – Located at the far western tip of the Texas border north and west of El Paso, this area is hot and dry with a long growing season and approximately 40 acres of cultivated grapes.
- Texas Davis Mountains – With about 50 acres planted with vines, this west Texas appellation is cool and wet at an elevation ranging from 4,500 to 8,300 feet.
- Texoma - Located in north-central Texas, this area contains approximately 3,650 square miles along the Texas-Oklahoma line.

## TEXAS VARIETALS

Texas mainly harvests European Vinifera varieties. Chardonnay, Cabernet Sauvignon, Merlot, Zinfandel, Colombard and Pinot Noir comprise over 70% of the planted acres in Texas. Over 99% of grapes grown in Texas are Vinifera and are processed for wine. The other one percent of grapes grown includes French-American hybrids, American varieties, Muscadine, rootstocks and native species.

## VITICULTURE PRACTICES

Given advancements in viticulture – the quality of the plantings, matching rootstock and clone type to location, and improved trellis systems – the vineyards of today are of a much higher quality than even ten years ago. Research on vine propagation and management has advanced significantly. Growers and winemakers are learning to work together to produce higher quality fruit, which is resulting in a larger variety of wines of competitive quality.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

## GRAPE INDUSTRY IN TEXAS

In-state resources, such as researchers, teachers, and consultants, are also providing a benefit to growers and producers through newer techniques of vineyard management specific to the region that will improve profitability and sustain growth. Specifically, viticulture classes are offered at Grayson County College in Denison, Texas which can lead to a one-year certificate or a two-year degree. Texas Cooperative Extension agents also provide education in several areas throughout the state annually. The Texas Wine and Grape Growers Association (TWGGA) holds educational programs through at its fall Harvest Festival and its February Grape Camp in Junction. The support and development of these programs is necessary to increase the supply of viticultural talent in Texas. Due to the nature of Texas weather and the presence of noted fungi and pests, the Texas Department of Agriculture reports that, at this time, organic Vinifera grape farming is not feasible in Texas.

## GRAPE PRICES

Prices for Vinifera grapes in Texas ranged from approximately \$900 - \$1500/ton in 2005 – fairly high prices on a national basis, reflecting the high cost of Vinifera cultivation in these soils and climates.

**Table 1.3 – Texas Price by Varietal, 2002 and 2005**

	<b>2002</b>	<b>2005</b>	<b>% Chg.</b>
Merlot	1,010	1,480	46.5
Sangiovese	*	1,390	
Cabernet			
Sauvignon	1,110	1,360	22.5
Zinfandel	*	1,350	
Syrah	*	1,190	
Black			
Spanish	*	1,060	
Ruby			
Cabernet	*	980	
Chardonnay	1,130	1,450	28.3
Muscat			
Canelli	*	1,120	
Sauvignon			
Blanc	700	990	41.4
Riesling	*	980	
Chenin Blanc	600	860	43.3
All Other	830	1,220	47.0
<b>Total</b>	<b>910</b>	<b>1,250</b>	<b>37.4</b>

\* In 2002, these varieties were listed in the "All other variety total".

**Source: United States Department of Agriculture**

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## GRAPE INDUSTRY IN TEXAS

The combination of climate and quality management practices may reduce Vinifera yields to 3.0 tons per acre or less, supported by careful pruning and trellis investment and management.

### **VINEYARD EMPLOYMENT**

Grape production uses seasonal labor for harvests and vineyard development and full-time positions for maintenance of currently-bearing acres and development of new vineyards yet to bear fruit, as well business management staff for finance, sales and other functions. As the state's vineyard acreage increases, the need for skilled vineyard workers becomes a challenge for vineyard management.

Vineyards in Texas employed a total of 6,166 persons in 2005 with wages totaling \$234.6 million.

### **VINEYARD DEVELOPMENT**

Vineyard development is the process of converting land into a developed vineyard. The land must be prepared to plant vines. Once the vine is planted it must be trellised and trained. From the time a vine is planted in the ground it can take between two and four years before the vine bears fruit. During this time, pre-productive (non-fruit bearing) vines must be tended and cared for in accordance with sound viticultural practices to ensure healthy productive (fruit bearing) vines. In 2005, the number of non-bearing acres of grapes was 400 or just over ten percent of total acreage.

The vineyard development process is very capital and labor intensive. Development costs for Vinifera average \$10,000 to \$30,000 per acre, depending on the specific location of the vineyard and planting layout, not including land acquisition costs. The most important determinant of the cost of planting a vineyard is the vine spacing. Grape growing regions use various vine spacing patterns based upon environmental site attributes, desired grape flavors, and development cost considerations.

The majority of vineyard development in Texas is done by the vineyard owners and employees, with the assistance in some cases of vineyard development consultants.

### **GRAPE SUPPLY AND DEMAND**

About a quarter of the wine produced in Texas is 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 long gestation period for winegrapes and the quality requirements of some wineries. However, the decision

## ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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### GRAPE INDUSTRY IN TEXAS

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.

# ECONOMIC IMPACT OF TEXAS WINE AND WINE GRAPES 2005

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## WINEMAKING INDUSTRY IN TEXAS

### CHAPTER 2 - WINEMAKING INDUSTRY IN TEXAS

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#### WINE PRODUCTION

In 2005, there were 113 wineries in Texas. Sainte Genevieve is the largest with a production of approximately 540,000 cases, nearly five times greater than the next largest producer Llano Estacado which produced almost 91,000 cases in 2005. St. Genevieve produces over 60% of Texas' total annual production. Total production in Texas was approximately 2.076 million gallons, about 873,000 cases.

**Table 2.1**  
**Size Distribution of Texas Wineries**

Gallons Produced	Number of Wineries
< 5,000	87
5,000 – 10,000	7
10,000 - 50,000	14
> 50,000	5

Source: Texas Wine Marketing Research Institute

Over 3/4ths of Texas wineries are small producers, producing less than 5,000 gallons, or approximately 2,100 cases. While nearly ninety percent of the wines produced from these wineries are varietal wines, the largest producing wineries market nearly as much non-varietal wines as they do varietal wines. However, the non-varietal wines are most often comprised of blended *Vinifera* grapes.

MKF Research LLC estimates that Texas wineries' revenues from wine sales total \$91.5 million taking into account both direct sales and the wineries' share of revenue for wine sold through the three-tier system.

In 2005, 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 recent years.

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## WINEMAKING INDUSTRY IN TEXAS

**Table 2.2**  
**Trend of Growth in Texas Wineries**

2005	113
2004	70
2003	54
2002	46
2001	40
2000	40

Source: Texas Wine Marketing Research Institute

### WINERY EMPLOYMENT

Wineries employ full and part-time workers as labor for bottling, storage, maintenance, and winemaking needs as well as hospitality, finance, sales and marketing functions. Some wineries also employ seasonal labor. 460 people are directly employed by wineries in Texas, with wages totaling \$12.7 million.

### DISTRIBUTION CHANNELS

More than 80% of the wine volume produced in Texas is distributed through the three-tier distribution system. This is largely 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.

**Table 2.3**

<b>TEXAS WINE SALES THROUGH CHANNELS, 2005 (\$000)</b>	
Winery Revenue	91,499
Distributor	62,675
Direct	28,824
Distributor Income	18,803
Retailer Income	35,098
Restaurant Income	33,845
TOTAL Retail Value	\$179,245

Source: MKF Research LLC

The Texas legislature passed a law in 2005 in an effort to streamline long-standing distribution laws, some of which had been in place since the 1930s. Wineries are now permitted to ship product directly to consumers, both within the

## ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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### WINEMAKING INDUSTRY IN TEXAS

state and nationally, allowing wineries to retain a higher share of retail revenues and opening markets to wineries which may not have been attractive to distributors.

### **SHORTAGE OF TRAINED LABOR FORCE**

As the Texas wine industry continues to expand, it is experiencing a growing need for trained viticulturalists and winemakers with an understanding of the varieties grown in the region, growing conditions in the region and the styles of wine enjoyed by the local population. A continued shortage of these professionals will constrain the ability of the wine industry to continue its current pace of growth and efforts to improve product quality.

**CHAPTER 3 - ALLIED INDUSTRIES IN TEXAS**

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This chapter discusses the impact of the wine and grape industry on a variety of industries that either provide products or services to the industry or benefit directly from the presence of related facilities and services. These include: tourism, trucking, equipment and supplies, testing, education and research. It estimates employment, wages and revenues and provides additional economic data where available.

The scale of allied industries for wine and grape sectors is currently relatively small, with many supplies and equipment coming from out of state. As the number of vineyards and wineries expands, this network of local suppliers will also grow, as has been seen in other winemaking states.

**TOURISM**

**Table 3.1**  
**Tourism Impact of Texas Wine**

<b>Direct Employment</b>	<b>2,992</b>
<b>Total Wages</b>	<b>\$84,345,170</b>
<b>Total Revenues</b>	<b>\$221,698,400</b>

Source: MKF Research LLC

Tourism is a major element in Texas wine's overall economic impact. It is estimated that more than 868,000 tourists visited Texas wineries in 2005. Supporting these visitors is a diverse labor force of approximately 2,992 employees with total wages of over \$84 million.

The Southwest's largest wine festival is held in Grapevine each September. Coinciding with harvest and the crush, October has been designated Texas Wine month during with many wine trails and local festivals are held.

Given that much of their sales are direct-to-consumer, 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. 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.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## ALLIED INDUSTRIES IN TEXAS

### WINEMAKING EQUIPMENT, SUPPLIES AND SERVICES

**Table 3.2**  
**Texas Winemaking Suppliers for Texas Wine**

<b>Direct Employment</b>	<b>29 employees</b>
<b>Total Wages</b>	<b>\$1,132,000</b>
<b>Total Revenue</b>	<b>\$10,025,000</b>

Source: MKF Research LLC

The number of in-state suppliers or distributors of winemaking equipment, supplies and services is relatively small. To protect the confidentiality of included suppliers, we are consolidating the data for multiple suppliers. Many different types of small businesses exist in Texas that supplies the wine and winegrape industry as a portion of their overall business. They include bottle suppliers, farming chemical providers, trucking services, a wine label producer and a wine lab.

### EDUCATION, CONSULTING AND WINE INDUSTRY RESEARCH

**Table 3.3**  
**Impact of Wine Related Education, Consulting and Research**

<b>Direct Employment:</b>	<b>28</b>
<b>Total Wages</b>	<b>\$1,875,000</b>
<b>Research Expenditures</b>	<b>\$2,785,000</b>

Source: MKF Research LLC

Approximately twenty-eight people are employed on a full time basis in Texas in wine related education, consulting and research, with a payroll of nearly \$1.9 million.

Wine-related education is offered through various Texas organizations. The most extensive, formal training in Texas can be found at Grayson County College, which offers a one-year certificate program and two-year degree program in viticulture and enology. Introduced in 1974, the program is well established. Through the joint support of Texas Tech University and the Texas Cooperative Extension of Texas A&M University system, Texas Viticulture “shortcourses” are sponsored frequently throughout the year. The courses address the best practices of commercial wine grape growing in Texas. In addition, the Texas Wine Grape Grower’s Association offers the Southwest Wine Symposium, which facilitates the exchange of Texas wine growing knowledge.

## ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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### ALLIED INDUSTRIES IN TEXAS

At present, however, there isn't a four-year degree program in either viticulture or enology in Texas, which hinders the state's ability to train wine professionals with knowledge specific to Texas wine production. The state government encourages the current programs to jointly develop a world-class education and research program for viticulture and enology.

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## OTHER ECONOMIC BENEFITS

### CHAPTER 4 - OTHER ECONOMIC BENEFITS

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This chapter discusses other benefits derived from the grape and wine industry, including tax revenues, charitable contributions, and other indirect and induced economic benefits not specifically addressed elsewhere in this report. We have not attempted to estimate financing revenues for the industry, although bank and other institutional financing for the industry appear to be quite limited.

#### TAX REVENUES

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, and import duties. Texas' wine, grape and allied industries paid \$39 million in state and local taxes and \$30.1 million in federal taxes in 2005, including nearly \$5 million in state and federal excise taxes.

**Table 4.1**  
**Estimated Tax Revenues**

<b>Tax Type</b>	<b>Total</b>
Federal tax revenues	
Excise	\$3,095,000
Payroll	\$18,595,000
Income	\$1,704,000
Other	\$6,762,000
State tax revenues	
Sales	\$14,055,000
Payroll	\$417,000
Excise	\$1,872,000
Other	\$22,678,000
Total	\$69,178,000

Source: IMPLAN, MKF Research LLC

#### CHARITABLE CONTRIBUTIONS

The MKF Research LLC survey found wineries and growers throughout the state of Texas have donated in excess of \$915,000 to charities in 2005, including gifts of wine, employee time and cash. The amount of charitable contributions is likely underestimated as many wineries do not track in-kind contributions, which are often substantial.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## METHODOLOGY

### METHODOLOGY

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#### 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.

IMPLAN<sup>5</sup> 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.

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<sup>5</sup> 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](http://www.implan.com).

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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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.

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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ABOUT MKF RESEARCH LLC

## **APPENDIX I: ABOUT MKF RESEARCH LLC**

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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.

### **MKF RESEARCH LLC PUBLICATIONS**

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## ABOUT MKF RESEARCH

### ***MKF Research Monthly***

The ***MKF Research Monthly*** provides in-depth analysis of the critical business challenges facing the wine industry today. This targeted, concise report reflects the questions and concerns MKF Research LLC hears daily from its wine business clients and industry analysts.

### ***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:

- ***Impact of Wine, Grapes and Grape Products on the American Economy, 2007***
- ***Economic Impact of California Wine 2006***
- ***Economic Impact of Wine and Winegrapes in Michigan 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***

# ECONOMIC IMPACT OF TEXAS WINE AND GRAPES 2005

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## ABOUT MKF RESEARCH

- *Economic Impact of the Wine and Winegrape Industries in Santa Barbara County*

Visit our website at [www.mkfresearch.com](http://www.mkfresearch.com) to stay informed of our new research projects.

### **MKF RESEARCH LLC OWNERSHIP**

MKF Research LLC is jointly owned by Global Wine Partners US, LLC and Frank, Rimerman + Co. LLP, CPAs.

#### *Global Wine Partners US, LLC*

**Global Wine Partners**, The Global Wine Investment Bank, with offices in Napa, Paris and Sydney, is the only investment bank dedicated exclusively to the wine industry.

Specialists in wine industry mergers and acquisitions, valuation and corporate finance, the firm provides clients with a wide range of corporate advisory services related to wine industry mergers, acquisitions, joint ventures, strategic alliances, distribution arrangements, winery valuation services and fairness opinions related to M&A and financing. They also provide corporate finance services including wine industry debt and equity-raising and underwriting and investment management services with wine investment funds and trading in wine investments.

#### *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.