

# ECONOMIC OPPORTUNITY AND WORKFORCE DEVELOPMENT IN SONOMA COUNTY

FINAL REPORT

PREPARED FOR:  
Economic Development Board of Sonoma County

PREPARED BY:

*Collaborative*  
ECONOMICS

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## EXECUTIVE SUMMARY

- This report provides a profile of Sonoma County’s changing economic landscape and lays out a workforce development strategy to promote Sonoma County’s clusters of opportunity.
- The Sonoma County economy is very dynamic, “churning” rapidly since at least the 1990’s. The region’s dynamism has produced a net gain of 5,500 firms between 1990 and 2003.
- In the mid 1990’s, Information Technology, Agriculture and Tourism were identified as clusters of opportunity in the Sonoma County economy and strategies were implemented to support those clusters.
- After analyzing the current Sonoma County economy, the following industry specializations were identified as clusters of opportunity:
  - Sonoma Experience
  - Health/Wellness
  - Professional/Innovation Services

They are “clusters of opportunity” in that they perform well on an aggregate of key measures: job growth, wage increases, value added, employment concentration, and career potential. They also performed well compared to their counterparts in other selected regions in California. Tech manufacturing was not identified as a cluster of opportunity because its job growth was heavily impacted by the recent recession. Health and Wellness was also impacted during the recession, but to much lesser degree and remained strong in multiple other criteria, particularly with respect to career potential.

- The employers in Sonoma Experience offered a compelling vision for the region: Sonoma County as a world renowned destination for a full-circle food, wine and relaxation experience and a hub for innovative ideas to grow industries that comprise the agriculture experience.
- The vision put forth by employers in Health/Wellness was one of opportunities as well as challenges.
  - Opportunities consisted of increased economic growth, particularly in outpatient services and technological advancements. Another opportunity is a growing wellness industry that focuses heavily on prevention to decrease the demand for increasingly expensive medical services.
  - The challenges facing the cluster will rest upon its ability to maintain a primary care physician base, meet the needs of an aging and more diverse population, and access an adequate supply of well-trained workers.

- Professional/Innovation Services is a concentration of firms that typically help other firms bring innovation to their products and processes. Industries in this cluster include telecommunications and publishing as well as research, development and consulting in the areas of science and technology. The cluster also includes professional services in the areas of finance and insurance because these industries provide the capacity for firms and individuals to innovate.
  - Employers put forth a vision for Sonoma County where there is rapid, specialized growth in Professional/Innovation Services, with an adequate and talented labor pool upon which to draw.
  
- Changing economic realities in Sonoma County requires that workforce development focus on clusters of opportunity.
  - The first step in developing a comprehensive workforce development strategy is to form “Opportunity Teams” targeted on each cluster.
  - Once the “Opportunity Teams” have been established, they can begin to target career pathways for those clusters.
  - After potential career entry points and progressions have been mapped out, the Team should assess who in the County is preparing people for which occupations, identify and fill gaps and/or expand capacity to fill needs. This will enable the teams to build on the current work that is being done, as well as to devise innovative solutions to fill existing voids.
  
- Helping residents get into key occupations in the identified clusters of opportunity and moving them through career progression calls for a collaborative and systemic approach.
  - Expose students to careers at an earlier age (K-12) through career counseling, internships and mentoring
  - Educational systems have to be flexible to adapt to changing labor market needs
  - More training/mentoring opportunities for jobs at all levels like paraprofessionals and jobs in building and trades
  - Better infrastructure, particularly affordable housing and transportation
  - Increased collaboration between education and business and within/between sectors of the economy to focus on training, business development and job placement
  - Strong political will and public policy to invest in infrastructure, expand training/mentoring programs, and facilitate sector-wide collaborations to strengthen economy

## OVERVIEW

In the mid 1990's, Collaborative Economics worked with the Sonoma County Economic Development Board to develop an economic strategy for Sonoma County. Building on the Regional Financial Associates analysis, industry clusters were identified and cluster teams were created to develop action plans for Tourism, Agriculture, and Information Technology. The implementation of the action plans led to the establishment of an Engineering and Science degree at Sonoma State University, a single tourism effort and agriculture and wine marketing.

Since Sonoma County embarked on the effort to match economic opportunities with new strategies in the mid 1990's, much has changed in the region. Beyond the recession at the beginning of the decade, there has been much structural change in the economy. Now it is important for the region to understand how its industry clusters have evolved, what new economic opportunities are emerging, and how to respond to these changes in ways that preserve the region's prosperity.

This report provides a profile of Sonoma County's changing economic landscape and lays out a workforce development strategy to promote Sonoma County's clusters of opportunity. Specifically, the report answers the following questions:

- How is the Sonoma County economy changing? What types of firms make up the County economy and how have they changed over time?
- How has the County's industry clusters changed in the last ten years? Where has the County gained in competitive advantage, employment growth, and value added per employee?
- What are the implications of the changing economy on opportunities for the local workforce? How should Sonoma County refocus its workforce development strategy?

By answering these questions, this report provides corporate, government, and other community leaders the framework to act as "stewards" of Sonoma County's economic prosperity and to take the collaborative actions necessary to address challenges and capitalize on opportunities created by Sonoma's changing economy and ensure that residents have access to high quality job opportunities.

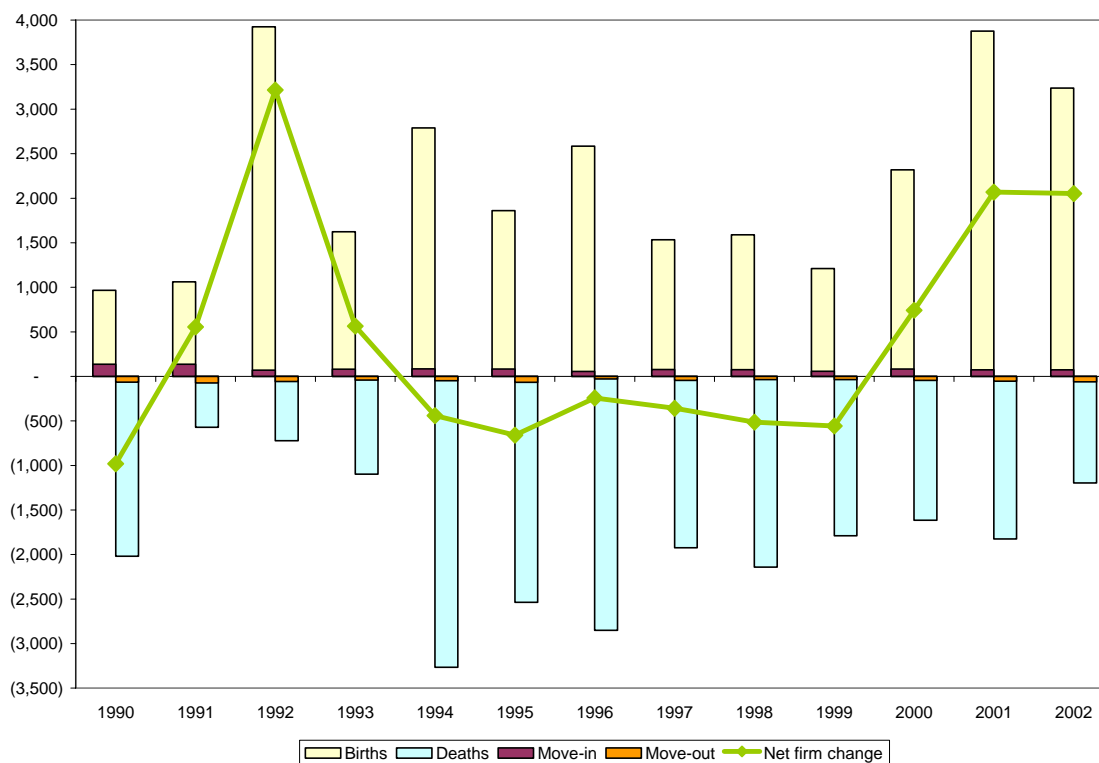
The methodology for this report blended quantitative and qualitative analysis at the macro and micro level to identify clusters that have demonstrated strong economic performance in the past decade, and that show promising opportunities for continued growth and career potential. The quantitative component entailed analyzing Sonoma County's business firms, industry employment, and occupations. To put the region's economic profile into context, key economic indicators were benchmarked against four similar regions; Monterey, Placer, Santa Barbara and Santa Cruz counties. With respect to qualitative information, four focus groups were conducted with employers in key clusters and with a group of business leaders from the Hispanic community, a rapidly growing segment of the County's population. Participants were asked to provide a vision for their cluster/community and requirements that need to be in place to achieve that vision.

## THE CHANGING LANDSCAPE OF FIRMS IN THE REGION

This section examines the dynamism of the region’s economy by looking at changes at the firm level. Firm level information is provided by the National Establishment Time Series Database, the most comprehensive database available on firms—an essential building block of an economy. The database offers a new dimension to understanding how industries evolve over time through processes of firm formation, growth, transformation, migration and mortality. Analyzing firm changes provides a more complete understanding of structural shifts and opportunities within the Sonoma County economy.

*The Sonoma County economy is very dynamic, “churning” rapidly since at least the 1990’s.* The County’s dynamism has produced a net gain of 5,500 firms between 1990 and 2003. As shown in Figure I-1, the net gain in firms has been generally increasing since 1999 and has been largely driven by the birth of firms. Firm births have outpaced deaths during the 2000-2002 period for the first time since the early 1990s. The strong rate of business formation in Sonoma County reflects the entrepreneurial dynamism of the economy.

**Figure I-1: Addition of Firms to Sonoma County Economy, By Source**

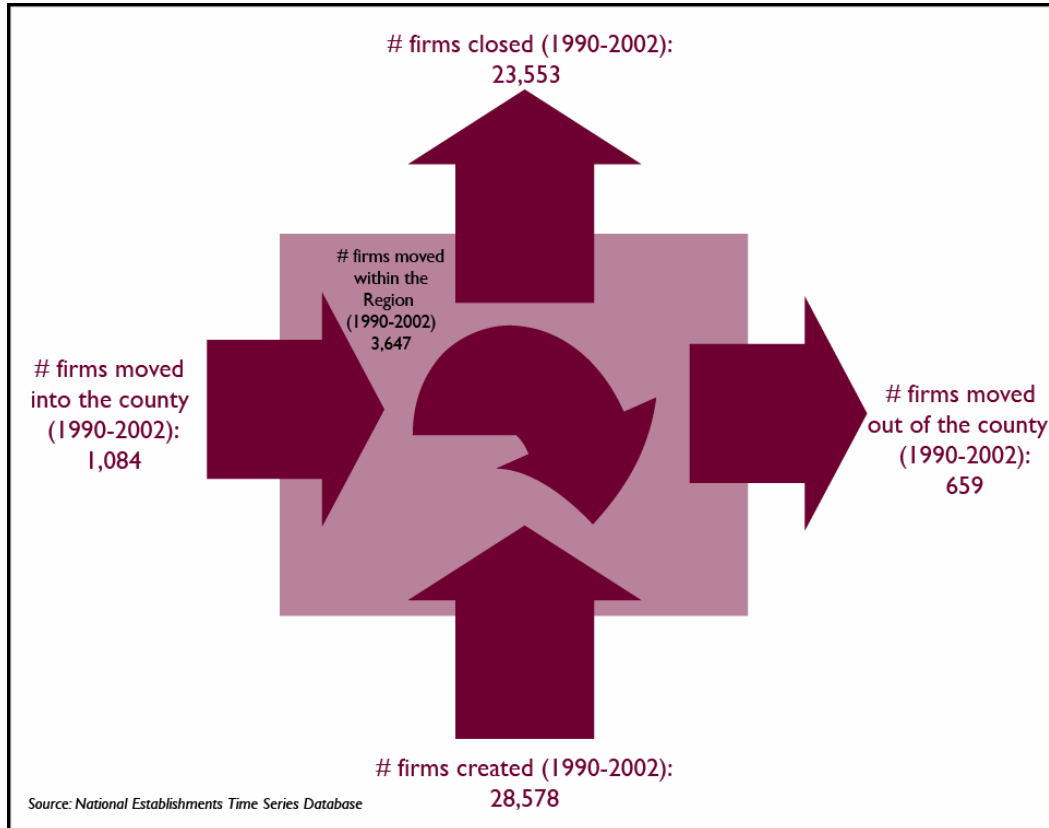


Source: National Establishments Time Series Database

Most of the dynamism of Sonoma County’s economy comes from the opening and closing of firms. From 1990 to 2002, more than 28,500 firms were created in the region while more than 23,500 firms were lost with only 1,084 firms moving in and 659 firms moving out of the County (Figure I-2). In fact,

movement of firms within the County (3,647) was much more prevalent than movement either in or out of the County.

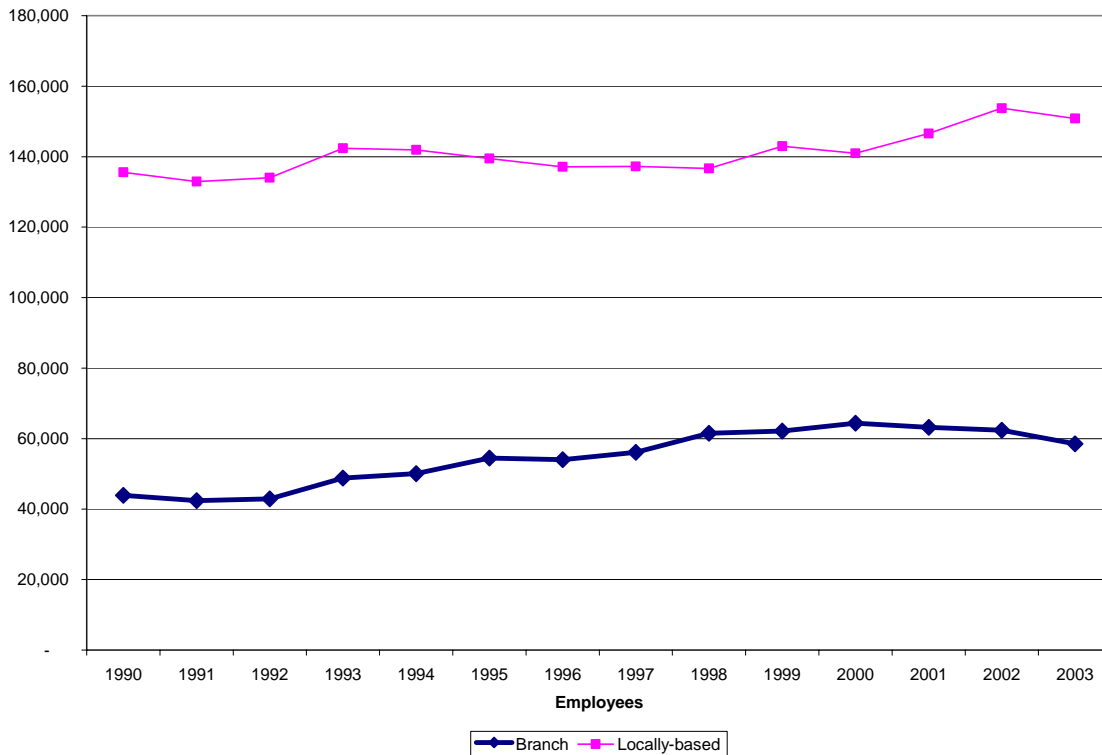
**Figure I-2: Business “Churn” in Sonoma County**



Because of the nature of churn in the region, the economy is almost entirely composed of locally-based firms, many of them created in just the past few years. In 2003, 92% of all Sonoma County firms were locally-based and of those firms, 89% were independent and 3% were headquarter firms. As of 2003, 40% of locally-based firms were five years old or younger, while 16% were between 6 and 10 years old and 44% were 11 years or older.

A majority of jobs in Sonoma County are in locally-based firms. As Figure I-3 illustrates, locally-based firms provided 72% of the jobs in 2003 compared to 28% for branch operations of firms headquartered outside the County. The average size of locally-based firms tends to be smaller than for firms based outside of the region. In 2003, the average size of locally-based firms was 6 employees compared to an average size of 23 employees for non-locally-based firms. Since 2000, the proportion of jobs in locally-based firms has grown 5%.

**Figure I-3: Sonoma County Employment, By Type of Firm**



Source: National Establishments Time Series Database

In sum, Sonoma County’s economy is very dynamic, churning rapidly in large part due to the births and deaths of firms. In recent years, firm births have been outpacing firm deaths, a sign of entrepreneurial dynamism. Most firms in the County are locally-based, less than 10 years old and tend to be small. Meeting the needs of new, smaller, locally-based firms has to be a priority for economic and workforce development.

## IDENTIFYING CLUSTERS OF OPPORTUNITY

This section will examine clusters of firms, which represent industry specializations in Sonoma County. With strong prospects, these specializations are “clusters of opportunity.” Clusters of opportunity are sectors of the economy identified by growth reflected in one or more of the following indicators:

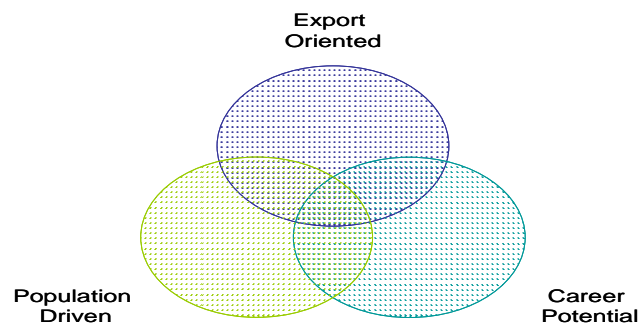
- **Job growth:** Job gains or losses are a basic measure of economic health.
- **Wage growth:** Growth of average annual pay in inflation-adjusted terms is an indicator of job quality. Average pay includes salary and wages, bonuses, and stock options. High average pay reflects in part the wealth-generating impact of outward-oriented industries (industries that sell to customers outside of the region). High average pay also reflects employers’ competition for skilled workers.

- *Value added* is a proxy for productivity and reflects how much economic value firms create. Increased value added is a prerequisite for increased wages. Innovation, process improvement and industry/product mix are all factors that drive value added. Value added is the sum of compensation paid to labor within a sector and profits accrued by firms.
- *Employment concentration* is a calculation that compares the percentage of employment in a region to the percentage of employment in its statewide counterpart. A ratio greater than one signifies that employment is more concentrated in the region than it is statewide – an indication of outward orientation and a source of comparative advantage.
- *Career potential* is based on the occupational distribution of jobs. Industries with a wide and growing distribution of entry-, mid-, and higher-level occupations offer opportunities for career mobility.

A cluster of opportunity elaborates on the concept of an industry cluster – traditionally seen as export-oriented, geographically-concentrated, and interdependent industry sectors characterized by competing firms and buyer-supplier relationships, as well as shared labor pools and other specialized infrastructure – by linking it to the challenges of workforce development.

The definition of a “cluster of opportunity” focuses not only on export-oriented sectors, but also in population-driven sectors—as well as sectors that offer occupations with “career potential.” Clusters of opportunity are a combination of related sectors that share one or more of the attributes in the figure below.

**Figure I-4: Cluster of Opportunity**



## SONOMA COUNTY'S CLUSTERS OF OPPORTUNITY

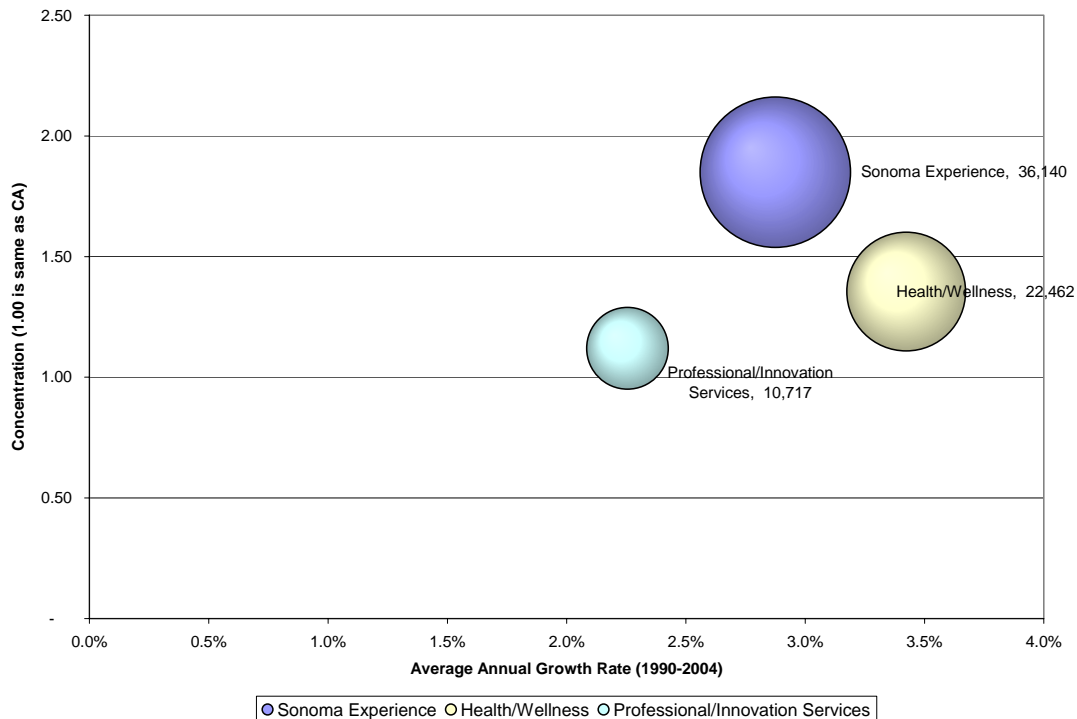
This section will describe Sonoma County's clusters of opportunity, highlighting career potential within these clusters for the purposes of guiding decision-making in workforce development. In the 1990's, Information Technology, Agriculture and Tourism were identified as clusters of opportunity in the Sonoma County economy and workforce development strategies were implemented to support those clusters. Since then, the economy has undergone significant transition and the demographics of the population are rapidly changing. Because of these fundamental changes, it is time to reassess how the clusters have evolved and the implications this has for potential career opportunities.

After analyzing the entire Sonoma County economy, the following industry specializations were identified as clusters of opportunity:

- Sonoma Experience
- Health/Wellness
- Professional/Innovation Services

As Figure I-5 reveals, each of these clusters has exhibited solid economic performance between 1990 and 2004. They are "clusters of opportunity" in that they perform well on an aggregate of key measures: job growth, wage increases, value added, employment concentration, and career potential. They also performed well compared to their counterparts in other selected regions in California.

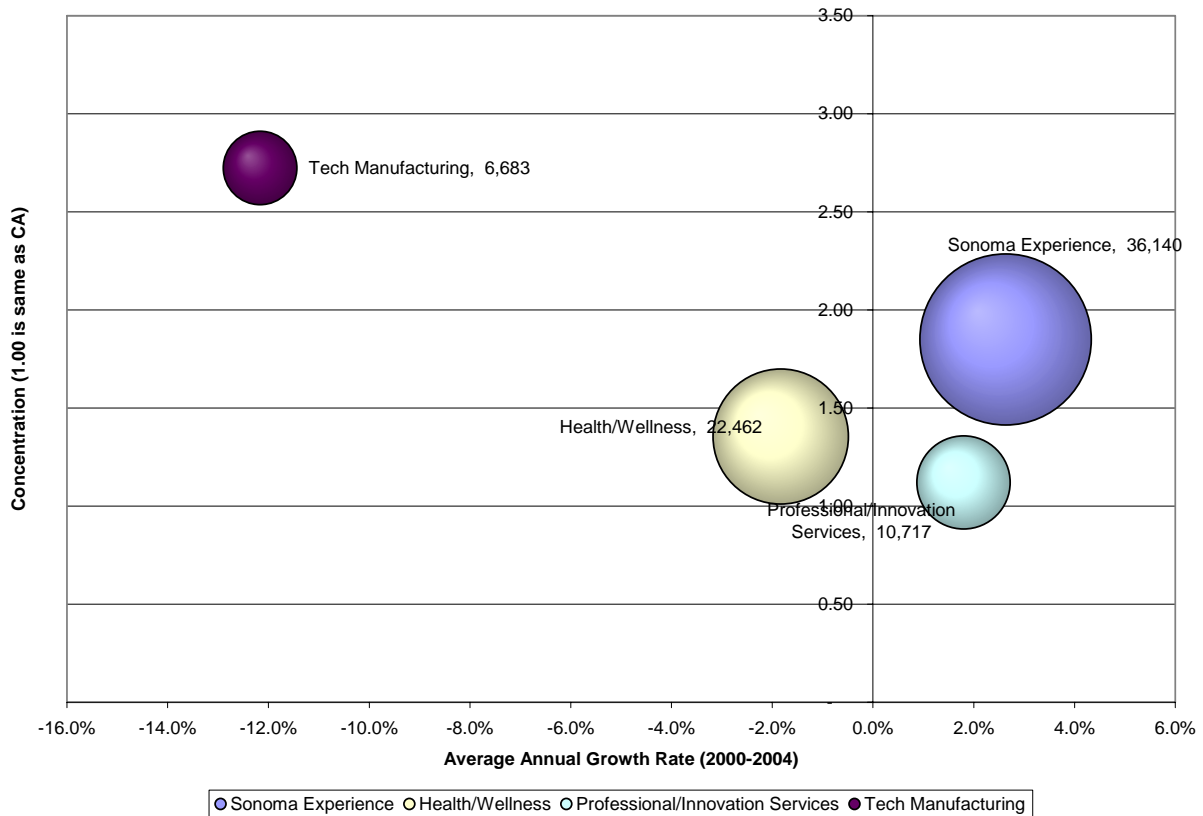
**Figure I-5: Sonoma County's Clusters of Opportunity**



Source: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Tech manufacturing was not identified as a cluster of opportunity because its job growth was heavily impacted by the recent recession. As shown in Figure I-6, job growth fell by 12.1% between 2000 and 2004. Health/Wellness was also impacted during this time period, but to a much lesser degree and remained strong in multiple other criteria, particularly with respect to career potential. Health/Wellness is a population-driven cluster that provides gateway job opportunities and career progressions for the local workforce.

**Figure I-6: Sonoma's Clusters During a Period of Economic Contraction**

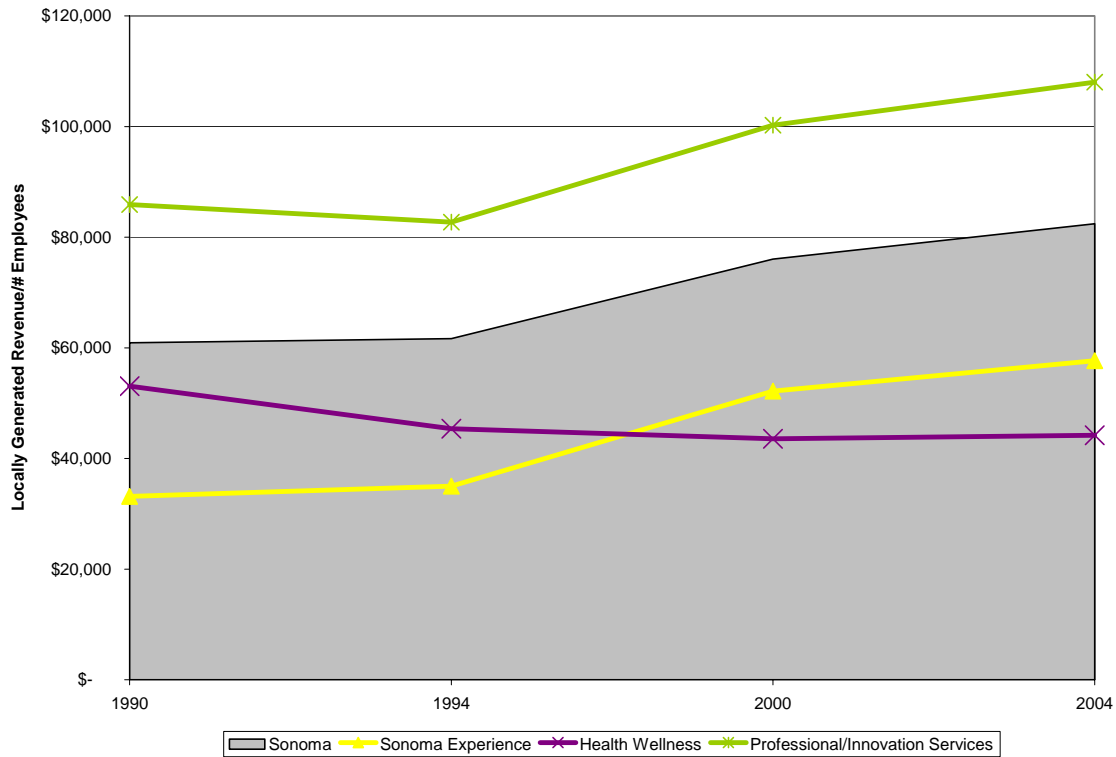


Source: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages

The three “clusters of opportunity” combined comprise 46% of the region’s employment base, and produce jobs and revenue in other sectors such as retail, construction, and the like. Employment in these clusters is more highly concentrated than the statewide average and each demonstrated average annual job growth above the regional average of 1.9% between 1990 and 2004.

The value added for the three clusters combined comprised 36% of Sonoma’s total value added in 2004. As shown in Figure I-7, Professional/Innovation Services and Sonoma Experience demonstrated an upward trend in value added per employee since 1994. Professional/Innovation Services had the highest value added per employee of all clusters in 2004 and was 1.3 times higher than the regional average and 1.8 times higher than the state average for the same employment grouping. The cluster’s value added per employee grew 26% between 1990 and 2004 compared to negative 5% for its statewide counterpart. During the same time period, Sonoma Experience’s value added per employee grew 74% at a rate 2 times faster than the regional and statewide average. Although the Health/Wellness cluster’s value added per employee decreased 17% since 1990, it is up slightly since 2000.

**Figure I-7: Value Added Per Employee**



Source: Economy.com

## SONOMA EXPERIENCE

Sonoma Experience is composed of the tourism and agriculture industries as well as subsets of the retail industry. These industries were grouped together because of the growing demand for experiences that combine a mix of regionally distinctive assets such as food, shopping, culture and history, making Sonoma County an ideal destination for visitors and migrants. Sonoma Experience includes farming, food and beverage manufacturing, distribution and retail as well as accommodations.

Sonoma Experience is a cluster of opportunity because it:

- was the least impacted in the economy by the recent recession in terms of average annual job growth,
- surpassed the region in inflation-adjusted average wage growth in recent years, growing twice as fast as the region between 2000 and 2004,
- has the highest domestic product in the economy, which grew the fastest since 1990. Value added per employee also grew the fastest in the economy during same time period,
- is the most concentrated of the three clusters and was the only cluster in the economy that increased in concentration despite the recession, and
- has possible career pathways, with most career growth opportunities for workers moving from entry-level to mid-level occupations.

## TRACK RECORD

Sonoma Experience represents the largest cluster in the Sonoma County economy. In 2004, the cluster had 36,140 employees and comprised 22% of the region's economic base, a 10% increase since 1990. The largest sub-sectors within this cluster include full-service restaurants, wineries, grocery stores, lodging and fruit/tree nut farming. Full-service restaurants is largest sub-sector comprising 20% of the cluster's employment with wineries following at 17% of the cluster's employment in 2004.

Between 1990 and 2004, Sonoma Experience's employment base grew at an average annual rate of 2.9%, which was 1.5 times higher than the regional average and 4 times higher than the same employment grouping statewide. During the period of economic contraction that took place earlier in the decade, its average annual growth rate fell to 2.6%, but it remained well above the regional average and it was the least affected by the recession of all clusters in the economy. Wholesale distribution of alcoholic beverages, floral and dairy (except dried or canned) goods as well as amusement and recreation activities had annual average job growth rates above the cluster average between 1990 and 2004.

Wages in Sonoma Experience grew at a lower rate than the regional average between 1990 and 2004, but has surpassed the region more recently since 2000. Average wages in this cluster grew by 17% between 1990 and 2004 and 4% between 2000 and 2004. During the same time periods Sonoma

Experience's statewide counterpart grew by 5% and 1%. The average wage in Sonoma Experience in 2004 was \$25,881 compared to \$37,908 for the region and \$23,087 for the statewide cluster. Merchant wholesalers of alcoholic beverages and non-canned or dried dairy products had the highest average wages in 2004 earning \$57,172 and \$68,391 respectively and exhibited average wage growths of 61% and 50% between 1990 and 2004.

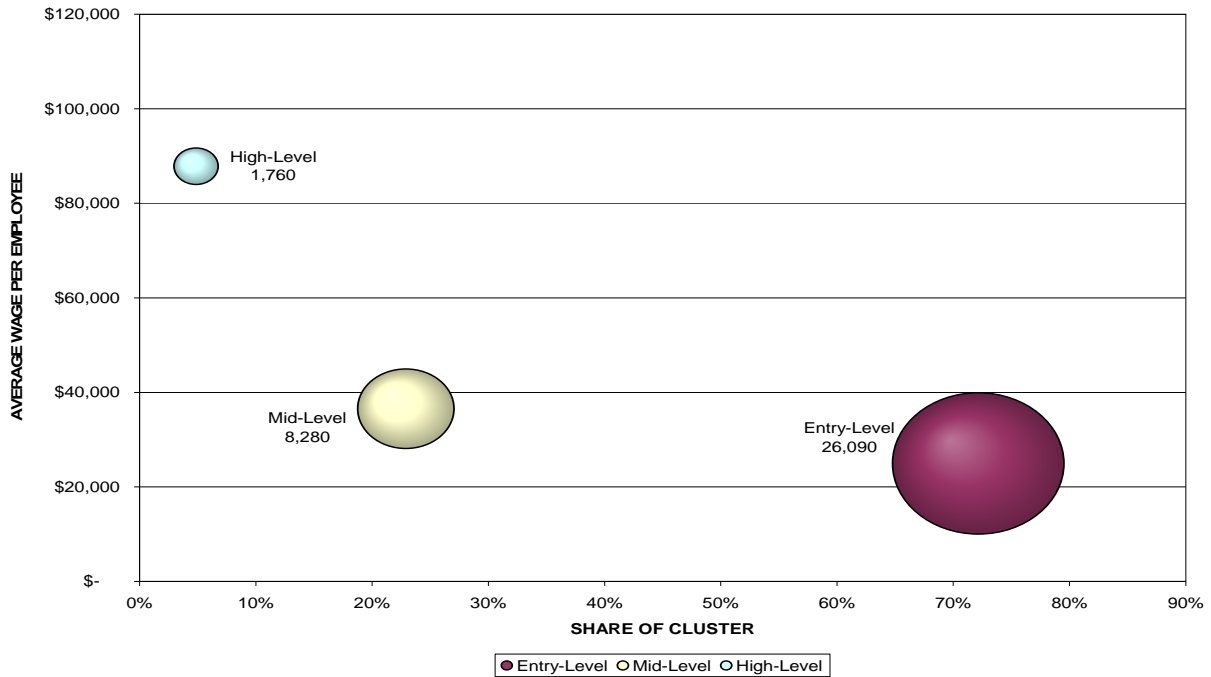
Sonoma Experience's value added was \$2.4 billion in 2004, a 132% increase since 1990 compared to a regional growth in value added of 80%. In 2004, it represented 18% of the region's value added. Value added per employee was \$57,676 in 2004, a 74% increase since 1990 and an 11% increase since 2000.

Of the three clusters of employment, Sonoma Experience has the highest employment concentration relative to the state employment grouping. In 2004, the cluster had an employment concentration that was 1.85 times more concentrated than the comparable statewide cluster and it was the only cluster that experienced an increase in its concentration despite the recession. The cluster's higher concentration relative to the state is an indication of its competitiveness and outward orientation. Sonoma County's wine industry is the most highly concentrated sub-sector in the region. The industry was 20.18 times more concentrated than its statewide counterpart in 2004.

## CAREER POTENTIAL

As Figure I-8 illustrates, 72% of occupations in Sonoma Experience are concentrated in the entry-level grouping or below the region's median average wage. Over a quarter of occupations are in mid- and high-level groupings, with an average wage of \$36,548 and \$87,844 respectively. Of those occupations, 5% are in the high-level category. The distribution of occupations in Sonoma Experience suggests that a high proportion of employment opportunities lie at the entry-level, and in terms of career progression, most job growth opportunities are for workers moving from entry-level to mid-level occupations.

**Figure I-8: Sonoma Experience’s Occupational Distribution (2004)**



Source: California Employment Development Department

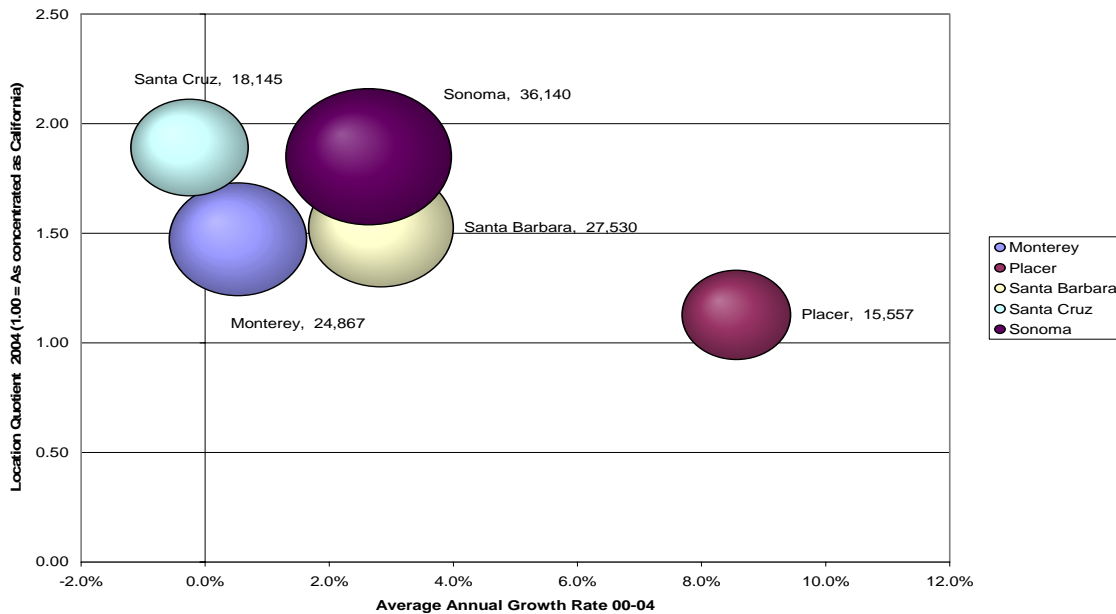
### REGIONAL COMPARISONS

As shown in Figure I-9, Sonoma Experience in Sonoma County has the largest employment base of the comparison regions. The County’s cluster had 2,083 firms in 2004, also the highest of the comparison regions.

Between 1990 and 2004, the cluster’s average annual job growth was second only to Placer County and was the third highest since 2000. The cluster was more concentrated than all comparison regions except for Santa Cruz County and was the only cluster to sustain an increase in concentration after the recession.

Importantly, Sonoma Experience in Sonoma County has the highest average wage of the comparison regions. The cluster’s average wage was \$920 above Monterey County, which had the second highest average wage, and \$5,803 higher than Placer County, which had the lowest average wage. Sonoma’s cluster also had the highest wage growth between 1990 and 2004.

**Figure I-9: Regional Comparison, Sonoma Experience**



Source: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages

## POTENTIAL FUTURE

The employers in Sonoma Experience offered a compelling vision for the region: Sonoma County as a world renowned destination for a full-circle food, wine and relaxation experience and a hub for innovative ideas to grow industries that comprise the agriculture experience. One participant suggested that Sonoma County become an incubator for the hospitality industry. The group also proposed a vision where there would be increased collaboration and communication between tourism, wine and agriculture.

According to participants, multiple requirements need to be implemented to make the vision a reality. A large number of participants encouraged linking education with the needs of business and highlighted the importance of training programs and mentoring. One member recommended coordinating educational programs at the local colleges with the agriculture, wine and tourism sectors to ensure that students' skills are competitive in these sectors. Others suggested implementing advanced food, wine and hospitality training centers.

## HEALTH SERVICES/ WELLNESS

Health/Wellness focuses on the delivery of comprehensive health care and preventative education to the local community, as well as to residents living outside of the region. Employment in this sector is comprised of medical and support staff in many settings, including hospitals, clinics, dental offices, sports centers, care facilities, homes, and on-line. Health/Wellness plays a major role in the national economy and is becoming an increasingly important source of employment.

The cluster is strong in numerous respects:

- Between 1990 and 2004, Health/Wellness had the highest average annual employment growth rate of the three clusters of opportunity and the second highest in the economy.
- The average wage in the health/wellness cluster was \$43,496 in 2004 and grew in inflation adjusted terms by 29% since 1990 and 4% since 2000. Its average wage is over \$5,000 greater than the region as well as its statewide counterpart.
- Value added per employee is a little more than half of the region's value added per employee and although it decreased 17% since 1990, it is up slightly since 2000.
- Compared to similar regions, Health/Wellness in Sonoma County has the highest employment concentration and highest average wage.
- Health/Wellness is the second largest cluster in the economy and provides gateway job opportunities as well as potential career progressions at all levels of the career ladder.

## TRACK RECORD

Health/Wellness is the third largest employment cluster, comprising 14% of the region's employment base in 2004, a 24% increase from fourteen years earlier. The average annual employment growth rate for the cluster was 3.4% since 1990, 1.78 times higher than the region's growth rate and 1.62 times higher than the rate for its statewide counterpart. Health/Wellness was the fastest growing cluster of the three between 1990 and 2004, and the second highest in the economy during the same time period.

Health/Wellness was impacted by the recent recession the most of three identified clusters of opportunity. Between 2000 and 2004, the average annual growth rate fell 5.3 percentage points to negative 1.8%. Community care facilities for the elderly (-16%), and manufacturing of medical equipment and supplies manufacturing (-14%) were the most impacted by the recession. Together these sectors represented 24% of the cluster's workforce in 2000, yet their combined representation fell 10 percentage points by 2004. Certain types of independent practices, such as offices of physicians, mental health practitioners and physical/occupational/speech therapists, also contracted significantly during the recession. The sub-sectors that grew the fastest despite the economic downturn were certain types of out-patient care centers, ambulatory health care services, and services for elderly and the disabled.

The average wage in Health/Wellness was \$43,496 in 2004, growing in inflation adjusted terms by 29% since 1990 and 4% since 2000. The average wage for its statewide counterpart was \$5,048 lower and actually decreased since 1990. Inflation-adjusted total wages in the cluster represented 12% of the region's total wages in 1990 and its share increased 5 percentage points to 17% as of 2004.

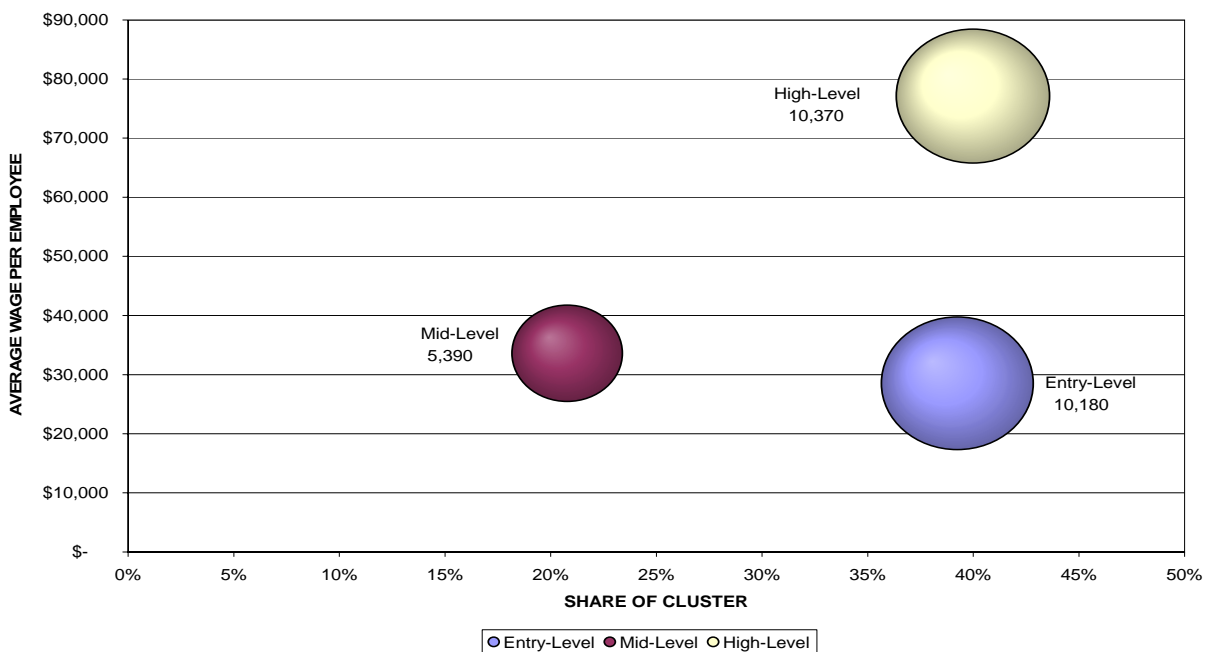
Health/Wellness' value added totaled over \$918 million in 2004, growing by 40% since 1990. In 2004, it represented 7% of the region's domestic product. Value added per employee is a little more than half of the region's value added per employee. Although value added decreased 17% since 1990, it is up slightly since 2000. This trend in value added per employee was mirrored at the statewide level.

Health/Wellness is 1.36 times more concentrated than the comparable statewide cluster, an indication of outward orientation and comparative advantage. The cluster's employment concentration grew by 21% between 1990 and 2000, which was the most rapid growth in concentration of the three identified clusters, but then fell by 14% after the recession.

### CAREER POTENTIAL

As shown in Figure I-10, over half of occupations are concentrated in mid- and high-level groupings, or above the region's median average wage. Of these occupations, 40% are concentrated in the high-level grouping, earning an average wage of \$77,133. Occupations in the entry-level grouping earn an average wage of \$28,535 and contain 39% of total occupations in the cluster. Health/Wellness provides gateway job opportunities as well as potential career progressions at all levels of the career ladder.

**Figure I-10: Health/Wellness Cluster's Occupational Distribution (2004)**



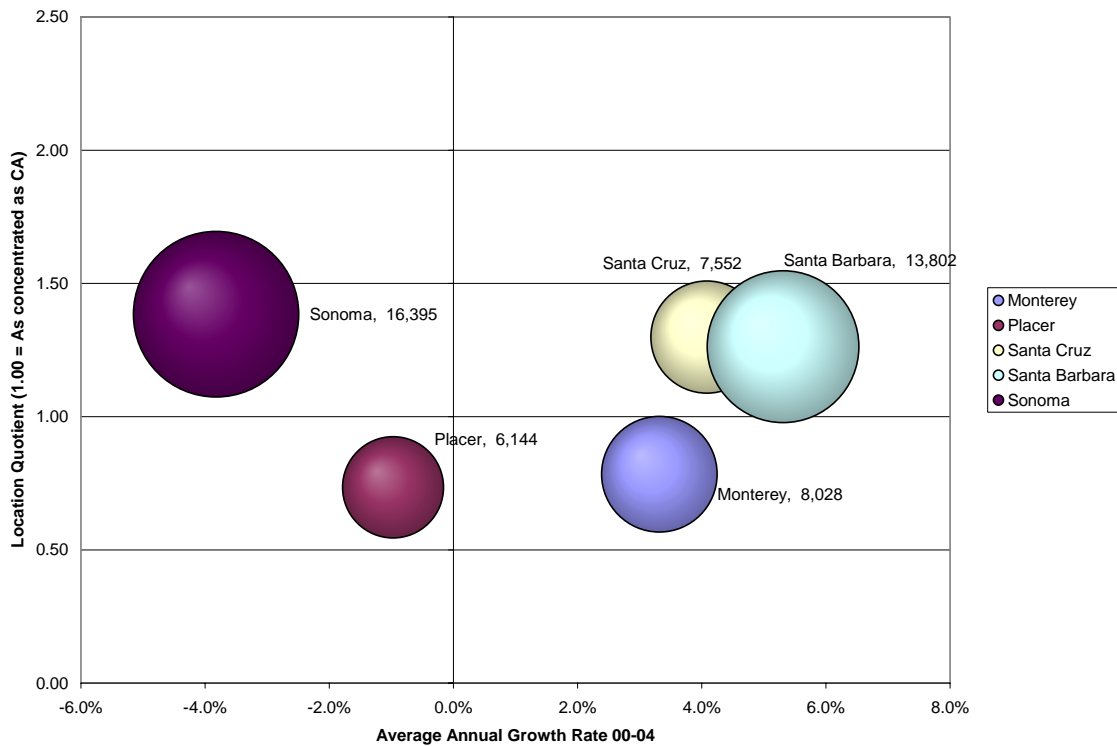
Source: California Employment Development Department

## REGIONAL COMPARISONS

As shown in Figure I-11, Health/Wellness in Sonoma County has the highest employment concentration relative to the state of all comparison regions. The cluster also has the largest employment base. Job growth in Sonoma's Health/Wellness was the most impacted of the comparison regions during the recession.

Total wages in Sonoma's cluster were over \$977 million in 2004. Importantly, the clusters total wages grew 107% between 1990 and 2004, ranking second in growth among the comparison regions. Between, 2000 and 2004, total wages actually decreased by 11%, followed only by Placer County, but the cluster's average wage remained the highest of all regions.

**Figure I-11: Regional Comparison, Health/Wellness**



Source: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages

## POTENTIAL FUTURE

The vision put forth by employers in Health/Wellness was one of opportunities as well as challenges. Opportunities consisted of increased economic growth, particularly in outpatient services and technological advancements. Another opportunity is a growing wellness industry that focuses heavily on prevention to decrease the demand for increasingly expensive medical services. The challenges facing the cluster will rest on its ability to maintain a primary care physician base, meet the needs of an aging and more diverse population, and access an adequate supply of well-trained workers.

Many of the requirements that need to be in place to achieve the vision have to do with better awareness of careers in health care and training opportunities for young students (K-12) and for students already in medical services programs. Participants stressed the importance of training a bilingual and bicultural workforce in prevention and direct care services, particularly in light of the rapidly changing demographics. Participants also suggested the need to make the business case for having a healthy community. One participant suggested that the Board of Supervisors sponsor an initiative/event with the theme of “healthy county” to spread the message that wellness and early education make good business sense.

## PROFESSIONAL/INNOVATION SERVICES

Professional/Innovation Services is a concentration of firms that typically help other firms bring innovation to their products and processes. Industries in this cluster include telecommunications and publishing as well as research, development and consulting in the areas of science and technology. The cluster also includes professional services in the areas of finance and insurance because these industries provide the capacity for firms and individuals to innovate.

The case for Professional/Innovation Services is strong on several counts:

- Annual job growth exceeded that of the region and its statewide counterpart between 1990 and 2004. Although job growth fell during the economic contraction it continued to exceed the region and the similar grouping statewide.
- Fastest average wage growth of the three clusters of opportunity since 1990.
- Highest value added per employee in the economy.
- Professional/Innovation Services is 1.12 times more concentrated than the statewide employment cluster and was not impacted during the recent recession.
- Ninety-seven percent of occupations earn above the region’s median average wage.

## TRACK RECORD

In 2004, Professional/Innovation Services employed 10,717 workers in 2004 and constituted 7% of the regional workforce. Direct insurance carriers (except life, medical and health) and commercial banking are the largest sub-sectors in this cluster, together comprising 27% of the cluster workforce in 2004. Between 1990 and 2004, the cluster had an average annual growth rate of 2.3%, which was higher than the regional average of 1.9% and 2.2% for its statewide counterpart. Although the annual average growth rate fell to 1.8% since 2000, it remained above the region and its statewide counterpart. Investment advice and investment banking had the highest average annual job growth between 1990 and 2004 of 16% and 7% respectively.

Inflation adjusted wages in Professional/Innovation Services grew faster than Sonoma Experience and Health/Wellness. The average wage in this cluster grew 33% between 1990 and 2004, three percentage points above the regional average and seventeen percentage points above the statewide cluster. The average cluster wage in 2004 was \$56,107, more than \$18,000 above the regional average and more than \$14,000 below the statewide cluster.

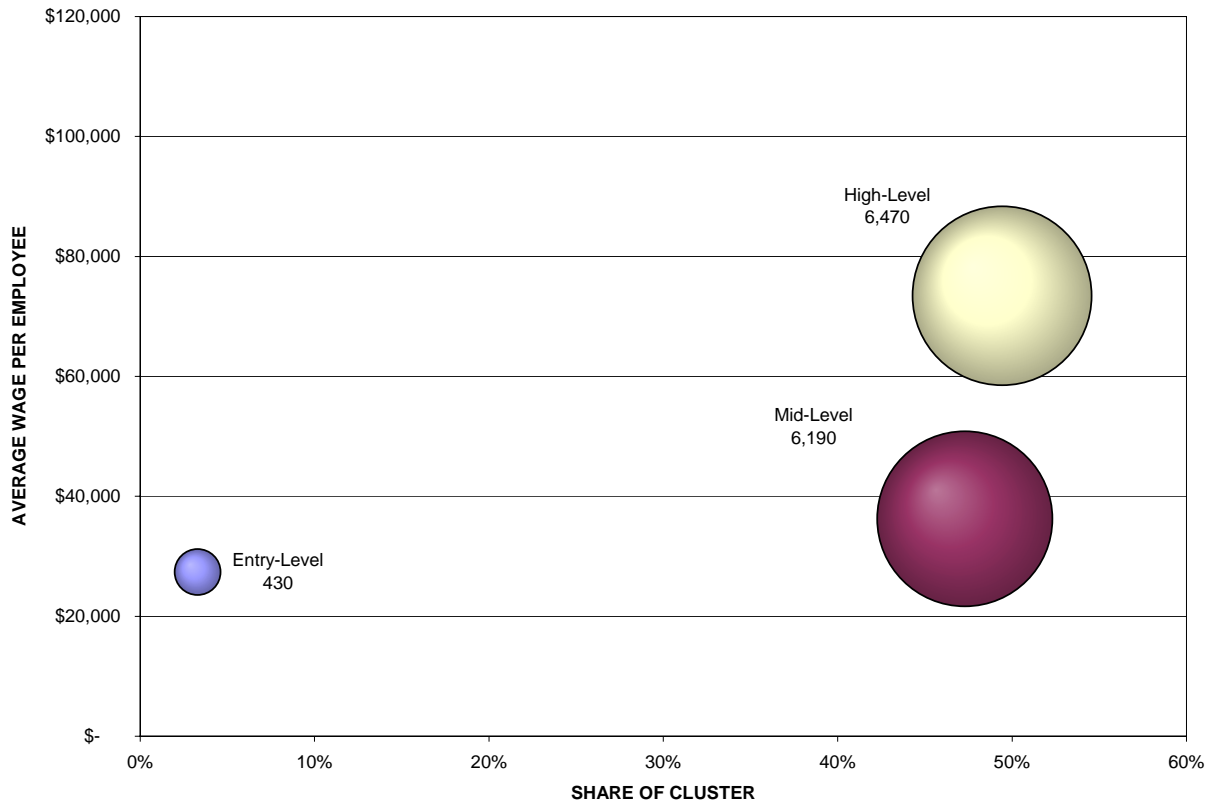
Professional/Innovation Services' value added in 2004 was \$1.4 billion, a 61% increase since 1990 and a 14% increase since the recession. Value added per employee in this cluster is higher than all other industry specializations in the region and it is 2 times higher than the statewide employment grouping. This cluster's high value added relative to other industries in the region and to the comparable statewide cluster suggests that it has a competitive advantage in efficiency, innovation and economic value.

In 2004, Professional/Innovation Services was 1.12 times more concentrated than the statewide employment cluster. The cluster's employment concentration was not impacted by the recent economic contraction. Direct insurance is the most concentrated sub-sector in the cluster and is 1.8 times more concentrated than the state average followed by investment advice, and telecommunications resellers.

## CAREER POTENTIAL

Ninety-seven percent of occupations earn above the region's median average wage, the cut-off between entry- and mid-level occupations. As shown in Figure I-12, 50% of occupations in Professional/Innovation Services are in the high-level grouping, earning an average wage of \$73,458 while 47% of occupations are in the mid-level grouping, earning an average wage of \$36,270. Only 3% of occupations are concentrated in the entry-level grouping. The large share of occupations concentrated in the mid-to high-level groupings is an indication that more career opportunities may exist for workers who have more training and preparation and that investing in skills upgrade may provide a pathway for workers to substantially improve their standard of living.

**Figure I-12: Professional/Innovation Services Cluster’s Occupational Distribution (2004)**

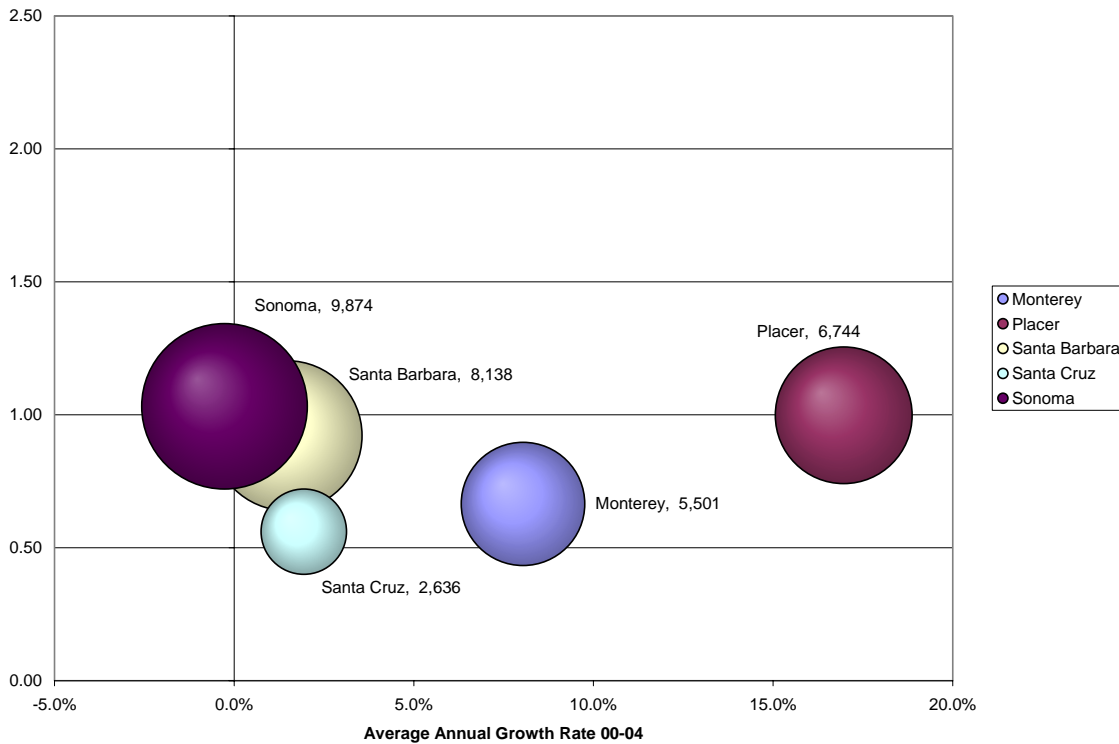


Source: California Employment Development Department

### REGIONAL COMPARISONS

As Figure I-13 shows, Professional/Innovation Services in Sonoma County is more concentrated relative to the state than all comparison regions, followed by Placer County. This suggests it has a comparative advantage in its ability to reach markets outside of the region. The cluster also had the largest employment base in 2004 as well as the most firms (899). Santa Barbara had the second highest number of firms. The cluster’s average annual job growth was the second lowest between 2000 and 2004, followed by Santa Barbara, and was the most impacted during the economic contraction. Professional/Innovation Services’ average wage ranked 4<sup>th</sup> among the comparison regions.

**Figure I-13: Regional Comparison, Professional/Innovation Services**



Source: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages

## POTENTIAL FUTURE

Employers put forth a vision for Sonoma County where there is rapid, specialized growth in Professional/Innovation Services, with an adequate and talented labor pool upon which to draw. The vision also included premiere regional educational systems that have well-established links to employers in the cluster. The sector is increasingly outward oriented and grows companies in emerging areas, such as nanotechnology and biotechnology. The group stressed the importance of an innovative and entrepreneurial habitat that supports growth in small companies.

The requirements that need to be in place to achieve the vision include attracting students to the fields of math, science and engineering by adapting high school curriculums and creating opportunities for mentoring throughout high school and higher education. Sonoma State University should move towards being a more comprehensive university that can adapt to changing needs in the workforce and that offers more graduate and undergraduate programs in interdisciplinary sciences. Similar to the Sonoma Experience focus group, a better infrastructure needs to be in place to enable the region to reach its full potential, including improved transportation systems and more affordable housing. The group also indicated there needs to be a stronger political will to invest in infrastructure to sustain and grow the region's innovative and entrepreneurial habitat.

## CLUSTER DRIVEN WORKFORCE DEVELOPMENT

Changing economic realities in Sonoma County requires that workforce development focuses on clusters of opportunity. Matching economic opportunities with workforce development strategies will ensure that Sonoma's workforce has the skills to meet the demand generated by a growing economy. If labor supply and demand are not in alignment, growing mismatches can lead to structural unemployment, which can be a serious long-term problem for Sonoma County, even more so than cyclical unemployment.

The changing demographics in Sonoma's population will determine the skills base of the workforce. Hispanics now comprises roughly 19.4% of the Sonoma County population and they are growing at a faster rate than the total population. Hispanic growth is occurring at a rate of about 8% per year, which exceeds total population growth of 4.2% or non-Hispanic growth of less than 2%.<sup>1</sup> The age distribution for Hispanics tends to be concentrated in the 0-14 and the 20-39 age groups, which means that this segment of the population will be assuming an increasingly important role in the region's workforce. For this report, a focus group was conducted with Hispanic business leaders that shed light on what needs to be done to position the community to meet the evolving workforce demands and to take full advantage of the career ladders that exist in the growing industries. The requirements the group suggested are detailed in the Appendix.

### **WORKFORCE STRATEGY:** Focusing On Career Progressions in Clusters of Opportunity

Sonoma County should pursue a 5-10 year workforce strategy to ensure that employers in Sonoma Experience, Health/Wellness and Professional/Innovation Services have access to a qualified talent pool. At the same time, such a strategy should focus on supporting workers as they enter and progress through a career in the cluster of opportunity. As we have seen, the structural changes caused by global competition, new technologies, and productivity growth have caused disruptions in the workforce and have required individuals to make difficult transitions both within industries and across industry sectors. Specifically, the strategy should identify career entry points and support career progressions to prevent growing mismatches and provide Sonoma County's residents opportunities to have meaningful careers and improve their standard of living.

1. *The first step in developing a comprehensive strategy is to form "Opportunity Teams" targeted for each cluster.* Participants in the Opportunity Teams should include employers of small as well as large firms, the Economic Development Board, the Workforce Investment Board, representatives from the region's educational system from K-12 to Sonoma State University, as well as key community organizations. This broader leadership commitment will provide the necessary expertise and resources to devise and implement systemic advancements in workforce development policies.

Each Team should be charged with helping to grow Sonoma County's clusters of opportunity and to develop workforce development strategies focused on each of the clusters. Workforce investment strategies should be designed to help residents achieve career mobility, whether they are starting at entry-level or mid-level occupations within growing industries. The strategies should promote shared prosperity, increased productivity, and growth with opportunity for all.

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<sup>1</sup> *Sonoma County, CA- Hispanic Market Snapshot*, La Verdad Marketing & Media, 2004/05, pg. 7.

2. *Opportunity Teams should first map career pathways for the clusters.* Below are charts that show a distribution of employment and average wages for selected occupations in the clusters. This information is an important starting point for understanding the potential career pathways that exist in the clusters of opportunity. Each team should begin with these charts and identify the career progressions that exist (or could be developed).

<b>SONOMA EXPERIENCE</b>		
<b>Occupational Title</b>	<b>Employment</b>	<b>Average Wage</b>
<b>Entry-Level</b>		
Waiters and Waitresses	3,320	\$17,355
Maids and Housekeeping Cleaners	530	\$19,782
Food Preparation and Serving-Related Occupations	10,380	\$20,432
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	1,140	\$22,016
Building and Grounds Cleaning and Maintenance Occupations	1,540	\$23,085
Farming, Fishing, and Forestry Occupations	1,450	\$23,264
Retail Salespersons	1,310	\$23,278
Landscaping and Groundskeeping Workers	420	\$24,460
Transportation and Material Moving Occupations	2,760	\$26,087
Personal Care and Service Occupations	1,950	\$29,561
Office and Administrative Support Occupations	3,710	\$31,678
<b>Mid-Level</b>		
Arts, Design, Entertainment, Sports, and Media Occupations	520	\$33,112
Driver/Sales Workers	390	\$33,325
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and	440	\$34,070
Sales and Related Occupations	5,920	\$34,305
Bookkeeping, Accounting, and Auditing Clerks	520	\$36,593
Installation, Maintenance, and Repair Occupations	750	\$38,571
First-Line Supervisors/Managers of Retail Sales Workers	570	\$40,263
First-Line Supervisors/Managers of Food Preparation and Serving Workers	500	\$44,406
Executive Secretaries and Administrative Assistants	270	\$44,943
Business and Financial Operations Occupations	560	\$49,250
<b>High-Level</b>		
Computer and Mathematical Occupations	110	\$53,713
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Prod.	1,220	\$57,835
Accountants and Auditors	140	\$63,859
Industrial Production Managers	160	\$68,568
Management Occupations	1,630	\$90,541
General and Operations Managers	630	\$101,012
Sales Managers	160	\$112,495

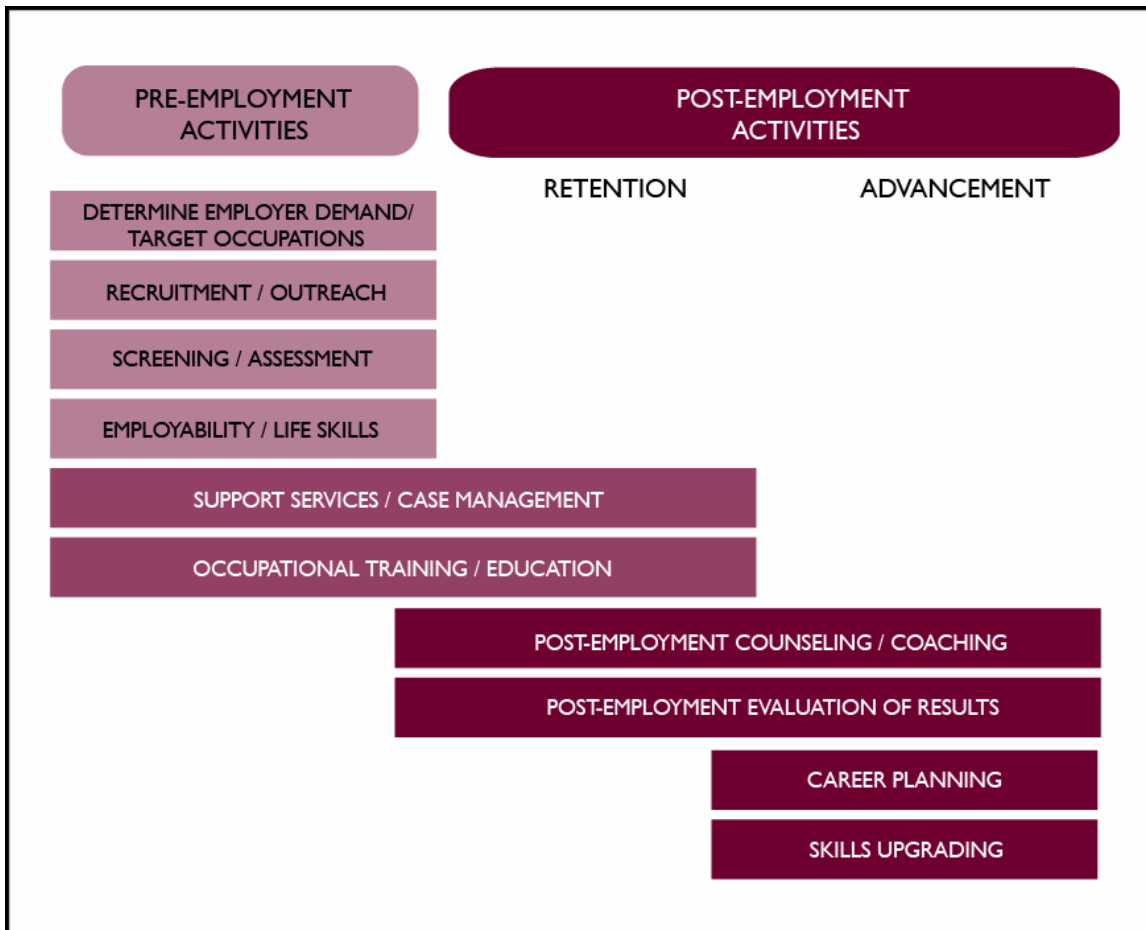
<b>HEALTH/WELLNESS</b>		
<b>Occupational Title</b>	<b>Employment</b>	<b>Average Wage</b>
<b>Entry-Level</b>		
Home Health Aides	780	\$22,138
Food Preparation and Serving-Related Occupations	1,290	\$23,894
Building and Grounds Cleaning and Maintenance Occupations	1,010	\$25,627
Nursing Aides, Orderlies, and Attendants	1,470	\$26,481
Healthcare Support Occupations	3,690	\$28,680
Emergency Medical Technicians and Paramedics	230	\$28,733
Office Clerks, General	680	\$30,579
Medical Assistants	560	\$31,050
Personal Care and Service Occupations	1,680	\$31,316
Community and Social Services Occupations	1,680	\$31,881
<b>Mid-Level</b>		
Office and Administrative Support Occupations	4,380	\$32,933
Installation, Maintenance, and Repair Occupations	250	\$33,360
Medical Records and Health Information Technicians	190	\$33,973
Medical Secretaries	630	\$34,779
Billing and Posting Clerks and Machine Operators	190	\$36,716
Pharmacy Technicians	110	\$38,179
Executive Secretaries and Administrative Assistants	300	\$42,055
Fitness Trainers and Aerobics Instructors	610	\$44,986
Licensed Practical and Licensed Vocational Nurses	530	\$46,651
Radiologic Technologists and Technicians	310	\$54,015
<b>High-Level</b>		
Business and Financial Operations Occupations	610	\$56,144
Respiratory Therapists	190	\$57,636
Dietitians and Nutritionists	110	\$58,336
Clinical, Counseling, and School Psychologists	150	\$60,638
Physical Therapists	160	\$66,644
Life, Physical, and Social Science Occupations	310	\$66,665
Registered Nurses	3,120	\$68,808
Healthcare Practitioners and Technical Occupations	8,160	\$77,638
Medical and Clinical Laboratory Technologists	130	\$78,723
Management Occupations	1,140	\$88,310

<b>PROFESSIONAL/INNOVATION SERVICES</b>		
<b>Occupational Title</b>	<b>Employment</b>	<b>Average Wage</b>
<b>Entry-Level</b>		
Tellers	1,020	\$24,954
Receptionists and Information Clerks	160	\$26,358
Office Clerks, General	460	\$26,896
Building and Grounds Cleaning and Maintenance Occupations	110	\$29,747
Secretaries, Except Legal, Medical, and Executive	170	\$30,181
<b>Mid-Level</b>		
New Accounts Clerks	260	\$32,865
Office and Administrative Support Occupations	5,340	\$34,281
Insurance Claims and Policy Processing Clerks	340	\$34,661
Loan Interviewers and Clerks	320	\$34,751
Customer Service Representatives	670	\$36,856
Bookkeeping, Accounting, and Auditing Clerks	280	\$38,578
Network Systems and Data Communications Analysts	70	\$38,977
Executive Secretaries and Administrative Assistants	550	\$43,696
Architectural and Civil Drafters	210	\$48,403
First-Line Supervisors/Managers of Office and Administrative Support Workers	450	\$49,053
Installation, Maintenance, and Repair Occupations	510	\$50,205
<b>High-Level</b>		
Claims Adjusters, Examiners, and Investigators	320	\$53,594
Loan Officers	410	\$60,964
Architecture and Engineering Occupations	1,180	\$65,237
Business and Financial Operations Occupations	1,990	\$66,784
Computer and Mathematical Occupations	490	\$68,339
Sales and Related Occupations	1,390	\$68,898
Management Analysts	130	\$72,760
Securities, Commodities, and Financial Services Sales Agents	340	\$78,354
Financial Managers	250	\$86,204
Management Occupations	1,080	\$106,597

3. *After potential career entry points and progressions have been mapped out, the Team should assess who in the County is preparing people for which occupations, identify and fill gaps and/or expand capacity to fill needs.* This will enable the teams to build on the current work that is being done, as well as to devise innovative solutions to fill existing voids. As Figure I-14 shows, a comprehensive, systemic workforce development strategy will need to consider more than education and training to ensure that residents gain access and progress through careers in the clusters of opportunity. An integrated continuum of support is needed that:

- builds on existing services and fills key gaps where necessary
- connects pre- and post-employment activities and makes them easily accessible to residents

**Figure I-14: Integrated Continuum of Support**



Helping residents get into key occupations in the identified clusters of opportunity and moving them through career progression calls for a collaborative and systemic approach. All the cluster focus groups stressed requirements that can be accomplished primarily through systemic advancements.

- Expose students to careers at an earlier age (K-12) through career counseling, internships and mentoring
- Educational systems have to be flexible to adapt to changing labor market needs
- More training/mentoring opportunities for jobs at all levels like paraprofessionals and jobs in building and trades
- Better infrastructure, particularly affordable housing and transportation
- Increased collaboration between education and business and within/between sectors of the economy to focus on training, business development and job placement
- Strong political will and public policy to invest in infrastructure, expand training/mentoring programs, and facilitate sector-wide collaborations to strengthen economy

Requirements unique to the Hispanic focus group included investing in building business and political leadership in the community, coordinated bi-lingual services for Hispanic small business incubation, increased resources for bilingual instruction and training in financial investing.

## CONCLUSION

Sonoma County already recognizes the importance of matching economic opportunities with new strategies and has undertaken innovative approaches to support the clusters of opportunity identified in the early 1990s. This report provides timely data on the region's economic landscape and a framework for aligning workforce development strategy with changing economic realities. Given its fiscal constraints, local governments are not always in the position to invest significant new resources to address the challenges inherent in aligning workforce development with a moving economic target. However, with the public, private and non-profit sectors working together, Sonoma County can connect economic opportunity and workforce strategy, creatively combining ideas and resources to grow its workforce and clusters, providing jobs and careers for its people and prosperity for its communities.

# APPENDIX

## Appendix A

### Sonoma County Focus Groups 11/17/2005

Focus Group Results	
Sonoma Experience	
Vision	Requirements
<ul style="list-style-type: none"> <li>• World renowned destination for full circle food, wine, relaxation experience</li> <li>▪ World renowned destination to experience authentic, unique, sustainable agriculture-growing, processing, and selling</li> <li>▪ Sonoma County is as well known nationally as Napa County as a tourism destination</li> <li>▪ Extend Sonoma County “experience” to Sonoma County wine at home with friends and family</li> <li>▪ Premier wine country in U.S.</li> <li>▪ Incubator for hospitality industry</li> <li>▪ Hospitality/wine software capital</li> <li>▪ More heightened awareness of the area</li> <li>▪ High recognition of Sonoma County as destination of choice</li> <li>▪ Attracting large scale conventions</li> <li>▪ Tourism revenue to county as viable source of income → county</li> <li>▪ Strong collaborative relationships linking wine, tourism and agriculture</li> <li>▪ Conflict between ag-tourism and rural residents is/is not resolved</li> <li>▪ 80% annual occupancy</li> <li>▪ Better transportation option (Air/mass transit)</li> <li>▪ Unspoiled Sonoma experience</li> <li>▪ Preserve agricultural beauty</li> <li>▪ Cluster housing</li> <li>▪ Better transportation</li> <li>▪ Outgoing hospitality</li> <li>▪ Promote the arts</li> <li>▪ More organic wineries</li> <li>▪ Packaging wine tours with eco-adventures</li> <li>▪ Sonoma as a sustainable agricultural area</li> <li>▪ Sonoma has high quality of place</li> </ul>	<p><b>Education</b></p> <ul style="list-style-type: none"> <li>▪ Coordinate educational programs between local JC, So. State schools to focus on ag/wine hosp &amp; tourism. Attract high level companies to Sonoma County – maintain those that are here (7 votes)</li> <li>▪ Food and wine center to include educational aspect. Four year program for hospitality/culinary at S.S.U. Public education on efforts to grow with balance (5 votes)</li> <li>▪ Goal oriented high school education</li> <li>▪ Education to connect to business skills</li> <li>▪ Well and jointly conceived curriculum addressing tourism skills. Must build strong relationships between industry and education to ensure success</li> <li>▪ Increase SRJC programs in grape growing, wine making, culinary arts</li> <li>▪ Increase SSU business courses in wine business</li> <li>▪ Recognized programs at high school level/JC level</li> <li>▪ Promote hospitality sector at high school level as a career path</li> <li>▪ Establish hospitality department at SSU-undergraduate and graduate</li> <li>▪ High school curriculum for wine marketing/hospitality</li> <li>▪ Need academic programs that encourage expertise in innovative tourism choices</li> <li>▪ Reach out to local markets and training</li> </ul> <hr style="border-top: 1px dashed black;"/> <p><b>Infrastructure</b></p> <ul style="list-style-type: none"> <li>▪ Transportation from major airports – train – highway improvement (4 votes)</li> <li>▪ Real convention center airport service (1 vote)</li> <li>▪ Transportation needs to be accessible with an emphasis on limiting congestion and environmental impacts</li> <li>▪ Better transportation – light rail to relieve congested freeways</li> </ul> <hr style="border-top: 1px dashed black;"/> <p><b>Public Policy</b></p> <ul style="list-style-type: none"> <li>▪ Less road blocks for business to come to Sonoma County (4 votes)</li> <li>▪ Public policies supporting ag-tourism (1 vote)</li> <li>▪ Change immigration laws to increase legal residents to essentially 100% (1 vote)</li> <li>▪ Affordable housing for low income workers</li> <li>▪ Encourage agricultural diversity</li> <li>▪ More flexible zoning for farm sales</li> <li>▪ Raise minimum wage</li> <li>▪ Incubate new technology companies building hospitality wine software</li> </ul>

	<p><b>Training/Mentoring</b></p> <ul style="list-style-type: none"> <li>▪ Promote food business entrepreneurship</li> <li>▪ Teach/train sustainable practices</li> <li>▪ Mentoring</li> <li>▪ Advanced hospitality training centers in local economy</li> <li>▪ Internships</li> <li>▪ Skills – programs to trains workers for vocational skills. Perhaps targeted at the younger workforce</li> </ul> <hr/> <p><b>Communications/Collaboration</b></p> <ul style="list-style-type: none"> <li>▪ More consistent messaging to reinforce/build Sonoma County brand (6 votes)</li> <li>▪ Sustained marketing program for county-focused on core values (2 votes)</li> <li>▪ Attempt to reduce the amount of repetition of efforts between the groups</li> <li>▪ Better communication (1 vote)</li> <li>▪ County advertising funds supporting ag-tourism and marketing farms (1 vote)</li> <li>▪ Market to internal customers over 50</li> <li>▪ Communication, recognition of what is being accomplished</li> <li>▪ Agriculture, wine and tourism must work together to develop and recognize common goals and objectives</li> <li>▪ Cohesive promotional plan – agriculture, wine, tourism need to collaborate to market Sonoma County</li> <li>▪ Improved partnership/collaboration between existing groups</li> <li>▪ Contrived public relations efforts to better educate our target clients on Sonoma County. Educate local public on Green Music Center and its potential to our area</li> <li>▪ Continued/better links between ag-tourism-eco tourism</li> </ul> <hr/> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>▪ Increase markets/sales</li> <li>▪ Sustain the course</li> <li>▪ A workforce challenge is to provide career ladders so hospitality employees have increased wages and can afford to live in Sonoma County</li> </ul>
<b>Health/Wellness</b>	
<b>Vision</b>	<b>Requirements</b>
<ul style="list-style-type: none"> <li>▪ Growth</li> <li>▪ Workplace shortages</li> <li>▪ Opportunity for increased wellness in the community</li> <li>▪ Focus on production</li> <li>▪ Growing in the 5+ years</li> <li>▪ Cost of healthcare will increase, thus need to focus on prevention of chronic diseases through lifestyle changes</li> <li>▪ Growth – Outpatient services, technology advancement in diagnosis/support to clinical staff, career opportunities for all level of health</li> </ul>	<p><b>Education</b></p> <ul style="list-style-type: none"> <li>▪ Attract K-12 to align education experience with needs of healthcare career paraprofessionals (9 votes)</li> <li>▪ Board of Supervisors should sponsor the theme of a healthy county – wellness as good business, early education (8 votes)</li> <li>▪ Many students seeking training for health careers lack basic academic skills (match etc.) to succeed. Do a better job preparing youth before high school (2 votes)</li> <li>▪ Focus on prevention (1 vote)</li> <li>▪ Private sector and health care must work collaboratively to fund education</li> <li>▪ Career path programs at the high schools</li> <li>▪ Collaborative higher education programs for SSU and Santa Rosa JC</li> <li>▪ Provide academic support for those who are struggling to pass prerequisites</li> <li>▪ Increased funding for SRJC &amp; SSU nursing programs – increase nursing instructors and graduates</li> </ul>

<ul style="list-style-type: none"> <li>providers</li> <li>▪ The wellness industry will be focused heavily on prevention</li> <li>▪ Growth due to increased population</li> <li>▪ Aging population requires specific care avenues – emphasis on prevention</li> <li>▪ Growing need for care for aging population</li> <li>▪ Challenge maintaining primary care physician base</li> <li>▪ Alcohol and other drug abuse treatment services will become available to all those who need them</li> <li>▪ Move away from tertiary (hospital) care to outpatient and preventative care</li> <li>▪ Conventional growth in services – significant competition – nursing and MD shortage, access to care, inadequate training opportunities</li> <li>▪ Expanded services for aging population</li> <li>▪ Need for more culturally competent workforce</li> <li>▪ Health care worker shortage</li> <li>▪ Need to grow – culturally competent healthcare workers</li> <li>▪ Supply of qualified health care worker and professionals. Shortage?</li> <li>▪ Industry overall to grow over 5 – 10 year</li> <li>▪ Concerns are capacity and timing for resource development (bricks, people)</li> <li>▪ Overall wellness of workforce</li> <li>▪ Decreased access to private insurance will result in increased rationing of medical services</li> <li>▪ Diminished capacity for consumers and employers to afford health care coverage</li> <li>▪ Reduced access to primary care doctors</li> <li>▪ Increased revenues – flat employment due to consolidation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Vocational training for support workers</li> <li>▪ More preventative education in schools equals healthy adults</li> </ul> <p><b>Infrastructure</b></p> <ul style="list-style-type: none"> <li>▪ New technologies to relieve labor intensive duties</li> </ul> <hr/> <p><b>Public Policy</b></p> <ul style="list-style-type: none"> <li>▪ More affordable housing to address workplace shortages</li> </ul> <hr/> <p><b>Training/Mentoring</b></p> <ul style="list-style-type: none"> <li>▪ Train bilingual, bicultural health workers to provide education and prevention services as well as direct patient care (9 votes)</li> <li>▪ Expand health training beyond the usual doctor-nurse definition: more public health, planning prevention practitioners (3 votes)</li> <li>▪ Greater usage of trained practitioners to work with MDs and outpatient services – nutritionist, acupuncture, chiropractic. Train bilingual. Focus on integrative, prevention, education, community-based (1 vote)</li> <li>▪ Entry point of wellness/prevention to be clinical nutritionists trained as “generalists” to set a benchmark for other wellness professionals. Appropriate training of nutritionists to include more open mindedness! (1 vote)</li> <li>▪ Workforce – training that includes: <ul style="list-style-type: none"> <li>1. Personal health and wellness</li> <li>2. Task and technology</li> <li>3. Systems knowledge</li> <li>4. Geriatrics</li> </ul> </li> <li>▪ Workforce and Training – Begin exposing high school students at an early age to think of pursuing a career in health care. Provide incentives to individuals, scholarships, training programs</li> <li>▪ Need better infrastructure to train nurses and other technical staff</li> <li>▪ Workforce/training – Availability of funds for career training – flexibility of course offering to allow students to work as well as become educated. Need to do career counseling starting in middle school</li> <li>▪ Invest in health care professional development– education and other expenses</li> <li>▪ More money available for the already working adult (to attend school)</li> </ul> <hr/> <p><b>Communications/Collaboration</b></p> <ul style="list-style-type: none"> <li>▪ Need to attract more “20” somethings to health care professions (3 votes)</li> <li>▪ Make the business case for wellness</li> <li>▪ Invite underserved populations to explore health careers and support them through the process</li> <li>▪ Increase collaboration in medical community</li> <li>▪ Creating a wellness industry that is proactive in promoting healthy lifestyles where the jobs are highly respected and well compensated</li> </ul> <hr/> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>▪ Tremendous need for bilingual, bicultural alcohol and drug as well as mental health counselors (4 votes)</li> <li>▪ Bilingual wellness (1 vote)</li> <li>▪ Health care professions. Students need financial support for living expenses when in college (Bay Area)</li> <li>▪ Address gaps in bilingual workers</li> <li>▪ Pilot programs in the “wellness with tourist destination” theme</li> <li>▪ Nonprofits losing their staff to the private and government sectors</li> <li>▪ A way to help the non-profit mental health and alcohol and drug treatment programs</li> </ul>
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<b>Innovation/Professional Services</b>	
Vision	Requirements
<ul style="list-style-type: none"> <li>▪ Rapid growth, broad diversity</li> <li>▪ Focused/specialized</li> <li>▪ “Fast” economy</li> <li>▪ Remote employees</li> <li>▪ Custom manufacturing</li> <li>▪ Facility expansion</li> <li>▪ Collaborative tech development (computer based)</li> <li>▪ Regional biotech competition</li> <li>▪ Regional education support for life science</li> <li>▪ Increased growth</li> <li>▪ Decline in building trade</li> <li>▪ Pool of trained people</li> <li>▪ Access to new customers especially outside region/international</li> <li>▪ Diversity for strength</li> <li>▪ Vibrant information sharing viewed as intellectual capital. Mecca solutions</li> <li>▪ New technology companies emerging from the intersection of bio, med, electronics, SW and telecom with infrastructure to support.</li> <li>▪ Science education</li> <li>▪ Biotechnology</li> <li>▪ Nanotechnology</li> <li>▪ Research centers – private &amp; universities</li> <li>▪ Adequate labor, skills, talent – pool</li> <li>▪ High regulatory burden</li> <li>▪ Growth in small companies, well financed, entrepreneurial, innovative</li> <li>▪ K-12 education: equality vs. excellence?</li> <li>▪ Experiencing external forces – supply/demand energy, real estate bubble, co</li> <li>▪ Sonoma State University as technology incubator and R&amp;D support for industries</li> </ul>	<p><b>Education</b></p> <ul style="list-style-type: none"> <li>▪ Attract students to math/science/engineering curriculum through mentoring or other extracurricular programs (4 votes)</li> <li>▪ Education poised for change (2 votes)</li> <li>▪ Sonoma State should move towards being a comprehensive university (2 votes)</li> <li>▪ Flexible education system (2 votes)</li> <li>▪ Business – workforce linkage (1 vote)</li> <li>▪ Research centers (private funding ) (1 vote)</li> <li>▪ How to meet equity and excellence</li> <li>▪ Higher education undergraduate and graduate programs in interdisciplinary sciences</li> <li>▪ A vehicle is needed for strong interaction between SSU, industries and businesses</li> <li>▪ SSU/business internships</li> </ul> <hr/> <p><b>Infrastructure</b></p> <ul style="list-style-type: none"> <li>▪ Solve or mitigate “Big 8” (7 votes) <ul style="list-style-type: none"> <li>○ Transportation: 101 &amp; air services</li> <li>○ Education: Sci &amp; math K-12. major res. Univ.</li> <li>○ Cost of living, esp. housing</li> <li>○ Demographics: graying of So. Co.</li> <li>○ Business friendly: permits, regulations, taxes</li> <li>○ Access to capital</li> <li>○ Infrastructure: services to consultants</li> <li>○ Network mentality a la Silicon Valley</li> </ul> </li> <li>▪ Maintain quality of life (2 votes)</li> <li>▪ Extensive team education resources (2 votes)</li> <li>▪ Reasonable government regulatory oversight (1 vote)</li> <li>▪ Workforce housing for talent</li> <li>▪ Maintenance of amenities</li> <li>▪ Reasonable highways</li> <li>▪ A means for very small companies to access a resource pool rather than having to invest on their own resource pool <ul style="list-style-type: none"> <li>○ Computing/databases</li> <li>○ Leveraging knowledge-base</li> <li>○ Management expertise</li> <li>○ Finding nexus points</li> <li>○ Facility</li> </ul> </li> </ul> <hr/> <p><b>Public Policy</b></p> <ul style="list-style-type: none"> <li>▪ “Affordable” housing (7 votes)</li> <li>▪ Public policy, social policy, political will (2 votes)</li> <li>▪ Political will to run government like a business</li> </ul>

	<p><b>Training/Mentoring</b></p> <ul style="list-style-type: none"> <li>▪ More opportunity for young people to learn/participate in building trades</li> <li>▪ Paraprofessional career path</li> </ul> <p><b>Communications/Collaboration</b></p> <ul style="list-style-type: none"> <li>▪ Consolidated approach not splintered (4 votes)</li> <li>▪ Groom/foster 'networking' and sharing among the upper-mid level entrepreneur-managers (2 votes)</li> <li>▪ NBTR-Sonoma <ul style="list-style-type: none"> <li>○ HR Committee</li> <li>○ Ed</li> <li>○ Technology community committee</li> </ul> </li> </ul> <hr/> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>▪ Foster risk taking work environments (e.g. ok to make mistakes)</li> <li>▪ Increase non-college jobs</li> <li>▪ Have diverse workforce at all levels of organization</li> </ul>
<b>Hispanic</b>	
<b>Vision</b>	<b>Requirements</b>
<ul style="list-style-type: none"> <li>▪ Growth Industries <ul style="list-style-type: none"> <li>○ Hospitality/Tourism</li> <li>○ Health care</li> <li>○ Construction</li> <li>○ Small business/entrepreneurs</li> </ul> </li> <li>▪ Continued growth in tourism, technology companies smaller in size, increased in numbers</li> <li>▪ Tourism and technology</li> <li>▪ Healthy economy, very mixed industry, with a high percentage of Latinos in the workforce in less low-skilled jobs</li> <li>▪ More R&amp;D opportunities</li> <li>▪ More professional services</li> <li>▪ Affordable housing a major issue!</li> <li>▪ Dependent on ag/tourism</li> <li>▪ More entrepreneurs</li> <li>▪ Self-starters</li> <li>▪ Students graduating – college university</li> <li>▪ Strong in services providers</li> <li>▪ Leadership and role models representing diverse sections of population</li> <li>▪ Continued diversity of industry</li> <li>▪ Overpopulated, increased traffic, issues – high cost for housing</li> <li>▪ Traffic congestion – highways, roadways, accidents – medical, work schedule</li> </ul>	<p><b>Education</b></p> <ul style="list-style-type: none"> <li>▪ More OJT education (2 votes)</li> <li>▪ Support for K-12 schools to ensure graduates are prepared for workforce. Ensure schools with high concentration of Hispanics are performing at same level as rest of county (1 vote)</li> <li>▪ Education! No matter what school kids go to – they can have the same chance to succeed/thrive (1 vote)</li> <li>▪ Focus on education</li> <li>▪ Promote importance of improving academic achievement among Hispanic students</li> <li>▪ Education – youth opportunities, service, community outreach</li> <li>▪ More support for students in part-time education</li> <li>▪ Management programs at SRJC/SSU/Empire</li> </ul> <hr/> <p><b>Infrastructure</b></p> <ul style="list-style-type: none"> <li>▪ Airport!</li> </ul> <hr/> <p><b>Public Policy</b></p> <ul style="list-style-type: none"> <li>▪ Increased resources for language instruction (1 vote)</li> </ul> <hr/> <p><b>Training/Mentoring</b></p> <ul style="list-style-type: none"> <li>▪ Mentoring, training/education, exposing students/youth to more opportunities (7 votes)</li> <li>▪ Leadership development program</li> <li>▪ Workforce <ul style="list-style-type: none"> <li>○ Identify industry skill needs</li> <li>○ Develop/offer appropriate education/training</li> <li>○ Opportunities for workforce to upgrade skills/retrain</li> </ul> </li> <li>▪ Training</li> <li>▪ Identify the needs of businesses</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Financial investments in training</li> <li>▪ Mentoring</li> <li>▪ Long term planning to identify future workforce needs – consider changing demographics of county</li> </ul> <p><b>Communications/Collaboration</b></p> <ul style="list-style-type: none"> <li>▪ Latino entrepreneur network. Czar (9 votes)</li> <li>▪ Develop/increase partnerships between existing organizations (i.e. SRJC, SSU, county, city, private) to develop programs or pull from existing programs to focus on training, business development, personal development, and job placement</li> <li>▪ More positive images of Hispanics in the media</li> <li>▪ Identify problem issues and address them</li> <li>▪ Promote Latino small businesses</li> <li>▪ Create a menu of services to promote and generate entrepreneurship in Hispanic community– connect</li> </ul> <hr/> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>▪ Hispanic leadership – business/political (10 votes)</li> <li>▪ Establish a Hispanic Alliance to develop political and business leaders(4 votes)</li> <li>▪ Create an environment for responsibility to the community (1 vote)</li> <li>▪ Leverage creativity, diversity</li> <li>▪ International Tourism, tourism management, topic-tourism e.g. golf – tourist/wine</li> </ul>
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**Focus Group Assessment**

Common Themes “Vision”	Distinctions “Vision”	Common Themes “Requirements”	Distinctions “Requirements”
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>○ Rapid growth in economic and population base</li> <li>○ Diversification of economy</li> <li>○ Premiere education and research facilities that are connected to the labor market and have the capacity to provide support to emerging and existing businesses with respect to incubation and R&amp;D</li> <li>○ Adequate pool of talented workers</li> <li>○ Culturally competent workforce</li> <li>○ Sonoma County is a world-renowned tourist destination</li> <li>○ Improved technological capacity for all industries</li> <li>○ Sonoma County is increasingly export-oriented</li> <li>○ Increased collaboration/partnerships within the private sector and between government, business and education</li> <li>○ Sonoma County has a high quality of life such that people will want to live and work in the region</li> <li>○ Sonoma County attracts large scale conventions</li> </ul> <p>-----</p> <p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>○ Workforce shortages</li> <li>○ Insufficient resources for training</li> <li>○ Regulatory burdens</li> <li>○ Traffic congestion</li> </ul>	<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>○ Experience Ag: Agricultural beauty is preserved</li> <li>○ Health/Wellness: Growth and awareness of wellness industry</li> <li>○ Health/Wellness: Increased awareness of prevention and treatment</li> <li>○ Hispanic: Leadership and role models representing diverse segments of the population</li> <li>○ Innovation: Industry is more open, focused and specialized</li> </ul> <p>-----</p> <p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>○ Experience Ag: Conflict between ag-tourism and rural residents</li> <li>○ Health/Wellness: Meeting health care needs of aging population</li> <li>○ Hispanic: Continued shortage of affordable housing</li> <li>○ Health Wellness &amp; Hispanic: Shortage of bilingual health care workers and service providers</li> <li>○ Innovation: Sensitivity to external shocks such as energy and real estate bubble</li> </ul>	<ul style="list-style-type: none"> <li>○ Workforce preparation must happen before kids enter high school</li> <li>○ Expose students to careers at an earlier age (K-12) through career counseling, internships and mentoring</li> <li>○ Educational systems have to be flexible to adapt to changing labor market needs</li> <li>○ More training/mentoring opportunities for jobs at all levels like paraprofessionals and jobs in building and trades</li> <li>○ Better infrastructure, particularly affordable housing and transportation (highways/airport/train)</li> <li>○ Increased collaboration between education and business and within/between sectors of the economy to focus on training, business development and job placement</li> <li>○ Strong political will and public policy to invest in infrastructure, expand training/mentoring programs, and facilitate sector-wide collaborations to strengthen economy</li> <li>○ Less regulatory burdens for businesses</li> </ul>	<ul style="list-style-type: none"> <li>○ Health/Wellness: More preventative health related education for all ages</li> <li>○ Health/Wellness: Trained underserved populations for careers at all levels of health care industry-strong need for bilingual, bicultural workforce/services</li> <li>○ Hispanic: Focused on incubation and support for Hispanic small business, particularly with respect to coordinated services and language barriers</li> <li>○ Hispanic: Focused on developing leadership in the business and political arena</li> <li>○ Innovation: More business internships and mentoring opportunities at Sonoma State</li> <li>○ Innovation &amp; Hispanic: Leverage resources to support small business entrepreneurship</li> <li>○ Innovation: Attract more students to math/science/engineering</li> <li>○ Experience Ag: Increased agriculture, wine, tourism collaboration and marketing efforts</li> </ul>

## Appendix B

### North American Industry Classification System (NAICS) Codes

<b>Sonoma Experience</b>	
NAICS	2002 NAICS Description
1123	Poultry and Egg Production
11133	Noncitrus Fruit and Tree Nut Farming
1114	Greenhouse, Nursery, and Floriculture Production
11194	Hay Farming
1121	Cattle Ranching and Farming
11242	Goat Farming
1129	Other Animal Production
11521	Support Activities for Animal Production
31151	Dairy Product (except Frozen) Manufacturing
31161	Animal Slaughtering and Processing
31181	Bread and Bakery Product Manufacturing
31183	Tortilla Manufacturing
31192	Coffee and Tea Manufacturing
31213	Wineries
42382	Farm and Garden Machinery and Equipment Merchant Wholesalers
42443	Dairy Product (except Dried or Canned) Merchant Wholesalers
42447	Meat and Meat Product Merchant Wholesalers
42491	Farm Supplies Merchant Wholesalers
42493	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers
44511	Supermarkets and Other Grocery (except Convenience) Stores
44521	Meat Markets
45113	Sewing, Needlework, and Piece Goods Stores
45311	Florists
45439	Other Direct Selling Establishments
48532	Limousine Service
48551	Charter Bus Industry
54192	Photographic Services
54194	Veterinary Services
56152	Tour Operators
7139	Other Amusement and Recreation Industries
7211	Traveler Accommodation
7221	Full-Service Restaurants
72232	Caterers
72241	Drinking Places (Alcoholic Beverages)
81211	Hair, Nail, and Skin Care Services
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers
7113	Promoters of Performing Arts, Sports, and Similar Events
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing

<b>Health/Wellness</b>	
NAICS	2002 NAICS Description
622	Hospitals
6211	Offices of Physicians
6212	Offices of Dentists
6219	Other Ambulatory Health Care Services
6231	Nursing Care Facilities
6232	Residential Mental Retardation, Mental Health and Substance Abuse Facilities
6243	Vocational Rehabilitation Services
33911	Medical Equipment and Supplies Manufacturing
62131	Offices of Chiropractors
62133	Offices of Mental Health Practitioners (except Physicians)
62134	Offices of Physical, Occupational and Speech Therapists, and Audiologists
62139	Offices of All Other Health Practitioners
62142	Outpatient Mental Health and Substance Abuse Centers
62149	Other Outpatient Care Centers
62151	Medical and Diagnostic Laboratories
62161	Home Health Care Services
62331	Community Care Facilities for the Elderly
62399	Other Residential Care Facilities
62411	Child and Youth Services
62412	Services for the Elderly and Persons with Disabilities
71394	Fitness and Recreational Sports Centers
81331	Social Advocacy Organizations

<b>Innovation/Professional Services</b>	
<b>NAICS</b>	<b>2002 NAICS Description</b>
	Sonoma Subtotal
51111	Newspaper Publishers
51113	Book Publishers
5173	Telecommunications Resellers
52211	Commercial Banking
52229	Other Nondepository Credit Intermediation
52239	Other Activities Related to Credit Intermediation
52311	Investment Banking and Securities Dealing
52393	Investment Advice
52412	Direct Insurance (except Life, Health, and Medical) Carriers
52421	Insurance Agencies and Brokerages
54131	Architectural Services
54161	Management Consulting Services
54162	Environmental Consulting Services
5419	Other Professional, Scientific, and Technical Services
81391	Business Associations
54171	Research and Development in the Physical, Engineering, and Life Sciences