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Economic and Workforce Development Opportunities in San Mateo County's Labor Market: *A Snapshot and Preliminary Analysis*

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The author remains solely responsible for any errors or omissions.

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Executive Summary

Introduction

At its core, employment training and broader workforce development initiatives involve training, placement and support services to help job seekers find decent employment. But successful workforce development initiatives can do more than simply help disadvantaged sectors of the workforce. Over the long-run, by improving employees skills and knowledge, workforce development policies and programs can increase business productivity, contributing to job growth and economic expansion. By building relationships of trust and competence with employers, these programs can also reduce the organizational, individual, and social costs of job search, thereby reducing the costs of social services and unemployment benefits and promoting effective and efficient adaptation to changing economic competition. By pooling industry knowledge and monitoring broad trends, workforce development policies and programs can also help firms and individuals anticipate changing skill requirements and be better positioned to take advantage of new technologies and economic opportunities.

To achieve these multiple goals, workforce development policies and programs must do more than simply provide short-term training for immediately available job opportunities. While such training is important and can provide immediate benefits to low-income job seekers, what happens if the jobs of today disappear tomorrow? How do programs ensure that people aren't being trained for jobs with no future, and that the appropriate curriculum is being developed to ensure a trained workforce for 2, 3, and 5 years from now? Developing a longer-term strategy is important for workforce development programs to provide needed training, and to build the trusting relationships with employers—relationships built on demonstrated competency and experience—that is so important for meeting the broader economic and social goals of workforce development.

This report is intended to help contribute to such a workforce development strategy for San Mateo County. The report provides information on broad labor market trends in San Mateo County, providing an analysis of labor market dynamics and identifying promising industry sectors where significant investments in training and workforce development could provide significant employment opportunities and contribute to economic growth in the County. The evidence presented in this report should be considered preliminary, but hopefully provides a useful resource to support further efforts to develop regional strategies for workforce development.

Key findings from the report include the following:

Demographically, the County is characterized by an ethnically diverse labor force, with substantially higher educational attainment levels than the national average. Unfortunately, the labor force is also racially segmented, with Asians and Anglos having disproportionately high educational levels and employed disproportionately in higher paying industries and occupations. Latinos and African-Americans, which together make up more than 26% of the County's population, are disproportionately employed in low-wage industries and occupations.

Overall employment levels in the County in 2007 (the most recent year with complete data) were still below 2001 levels in the County as a whole (down on average 1.4% per year) and were down in most industries as well.

- Only 5 broad industry sectors saw substantial growth (greater than 1% a year) in this time period: educational services; arts, entertainment, and recreation; utilities; accommodation and food services; and health care and social assistance.
- The sectors in which the County has the highest concentration index (a measure of specialization and competitive success) all saw employment decline between 2001 and 2007. These sectors are: information; transportation and warehousing; and professional and technical services.
- Growth has occurred in relatively low-paying industries, including accommodation and food services, and certain portions of health care.

Despite the generally discouraging picture presented by this data, an analysis of sub-sectors provides evidence of some places in the San Mateo labor market that have been more resilient, and provide significant growth opportunities:

- Within manufacturing, bio-tech, pharmaceutical, and related medical device and supplies manufacturing grew dramatically in the County between 2001 and 2007. Growth in pharmaceutical manufacturing grew an average of nearly 14% a year, for example, between 2001 and 2007.
- Growth in pharmaceutical manufacturing also had impacts in related service industries, as scientific research and development services also grew substantially during this period, at a 2.9% annual rate.
- Within the health care and social assistance field, there has been substantial employment growth in hospitals, outpatient care services, home health care services, community elderly care facilities, and individual and family social assistance services. While wages are low in most of these sectors, average pay in hospitals and outpatient care services is significantly higher, and grew substantially between 2001 and 2007.
- The transportation and warehousing sector is a major area of concern, though also of opportunity, for the County. Employment in air transportation has dropped by 33% between 2001 and 2007, or an average of 7.9% a year. Nonetheless, there has been some modest growth in support activities for transportation. Overall the air transportation industry has an employment concentration index of 11.4, and directly employs more than 14,000 people. The San Francisco Airport is a key factor in shaping employment opportunities in San Mateo County, and is a key asset of the regional economy. Further investigation of employment in this sub-sector might reveal some opportunities for expansion here.

Conclusion

This preliminary analysis of the San Mateo County 1abor market suggests possibilities for productive workforce development engagement in the following sectors:

- Bio-tech/pharmaceuticals
- Health care

In addition, given the size of employment in the San Francisco airport relatively to total employment in the County, and concerns about the substantial decline of transportation related employment in the County, a focus on trying to expand employment opportunities in the airport is also worth considering.

More detailed analysis of these industries would have to be conducted to affirm opportunities and to recognize the type of workforce development that would be most productive.

Introduction

At its core, employment training and broader workforce development initiatives involve training, placement and support services to help job seekers find decent employment (Giloth 2004; Giloth 2004). But successful workforce development initiatives can do more than simply help disadvantaged sectors of the workforce. Over the long-run, by improving employees skills and knowledge, workforce development policies and programs can increase business productivity, contributing to job growth and economic expansion. By building relationships of trust and competence with employers, these programs can also reduce the organizational, individual, and social costs of job search, thereby reducing the costs of social services and unemployment benefits, and promoting effective and efficient adaptation to changing economic competition. By pooling industry knowledge and monitoring broad trends, workforce development policies and programs can also help firms and individuals anticipate changing skill requirements and be better positioned to take advantage of new technologies and economic opportunities (Harrison and Weiss 1998; Fitzgerald 2004; Rothwell and Gerity 2008; Harper-Anderson 2008).

To achieve these multiple goals, workforce development policies and programs must do more than simply provide short-term training for immediately available job opportunities. While such training is important and can provide immediate benefits to low-income job seekers, what happens if the jobs of today disappear tomorrow? How do programs ensure that people aren't being trained for jobs with no future, and that the appropriate curriculum is being developed to ensure a trained workforce for 2, 3, and 5 years from now? Developing a longer-term strategy is important for workforce development programs to provide appropriate training, and to build the trusting relationships with employers—relationships built on demonstrated competency and experience—that is so important for meeting the broader economic and social goals of workforce development.

This report provides information and an analysis of the labor market in San Mateo County. The primary goal of this report is to provide a preliminary assessment of promising industry sectors where significant investments in training and workforce development could provide significant employment opportunities and contribute to economic growth in the County. The evidence presented in this report should be considered preliminary, since it represents simply a review of available secondary data, and only provides data up to the end of 2007 (the most recently available data with full information on wages and detailed industry sectors). Nonetheless, this analysis should provide a useful guide to further investigation of labor market dynamics, that would include 'ground-truthing' this information through interviews with employers, job seekers, and workforce development specialists in the County.

The geographic focus of this report is San Mateo County itself, but it is important to remember that labor markets are not restricted by political boundaries. Businesses and residents of San Mateo County are very much part of the broader Bay Area Regional Economy, with particularly strong ties to the knowledge-based and tourism based industries in Silicon Valley to the South

and San Francisco to the north. While these broader regional ties are important, they also have served at times to make San Mateo's particular economic strengths and weaknesses somewhat hidden, overshadowed at times by the higher visibility of its prominent neighbors. Thus, this report aims to provide a specific analysis of labor markets in San Mateo County, but within the context of the broader region.

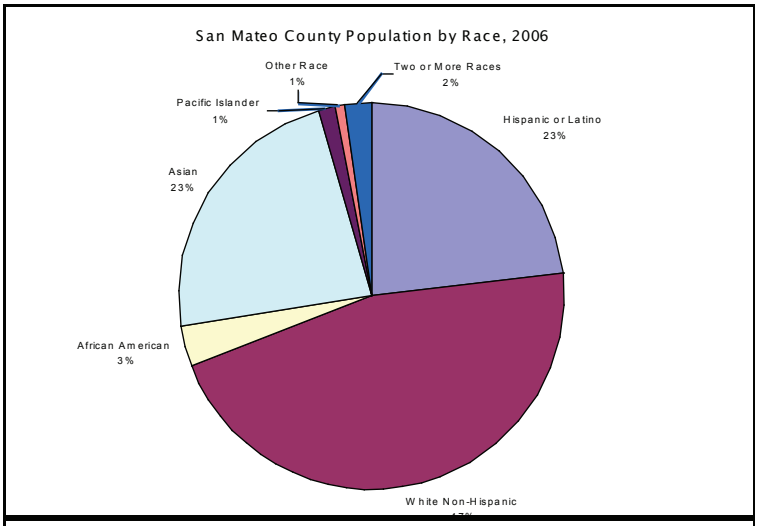
The primary focus of this report is an analysis of economic trends from 2001 to 2007. The primary source of data is the Quarterly Census of Employment and Wages, from the Federal Bureau of Labor Statistics. This provides detailed establishment, employment, and wage information on public and private sector establishments on a quarterly basis, with the end of 2007 the most recently available data at the time of writing (October 2008). This does not cover people who are self-employed. Businesses are classified using the North American Industry Classification System (NAICS).

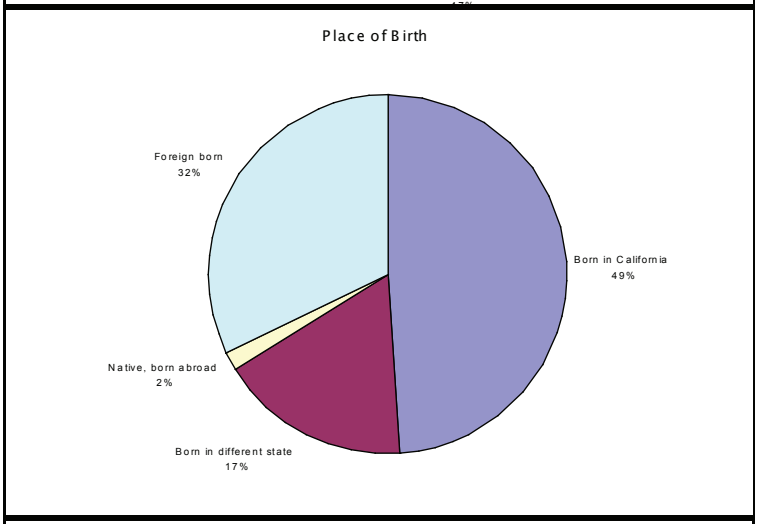
The report begins by first taking a look at the demographic characteristics of the labor force in San Mateo County, and broad commute patterns. This is followed by an overview of the economy and all major industry sectors. The report then moves into a more detailed examination of specific industrial sectors, including manufacturing and professional and technical services. The report then moves to an examination of specific industries that have shown significant employment growth and/or promising employment concentration, and then concludes by highlighting again the most promising sectors for further analysis.

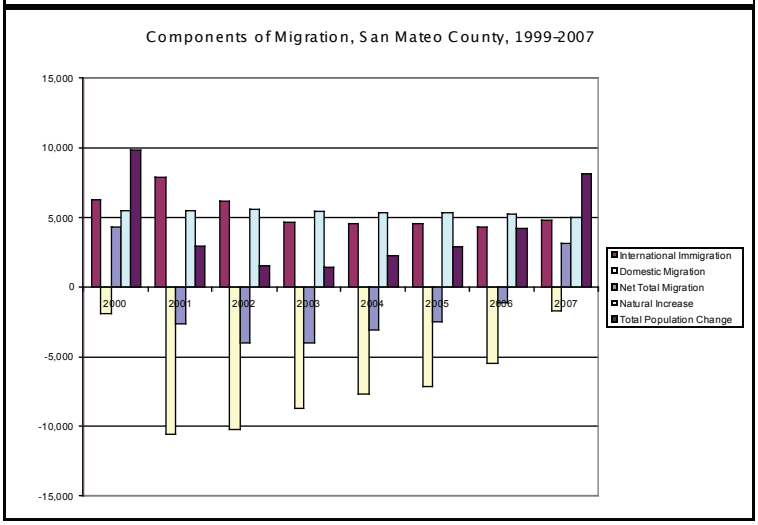
I. Labor Force Demographics and Commuting Patterns

The total population of San Mateo County according to the most recent U.S. Census data was 705,499. No single race makes up a majority of the County's population. The largest racial group is Non-Hispanic Whites, who account for 47% of the County's population. Asians and Hispanics/Latinos account for another 23% of the population each. African-Americans account for 3% of the population, with the remainder including Pacific Islanders, Native Americans, people of two or more races, or other races.

A full 32% of the people in the County were born in another country. International immigration to San Mateo County has continued to contribute a significant component of the County's population increase since 2000, despite the economic downturn. Domestic migration, however, has consistently contributed a net decrease in the County's population—more people are moving away from San Mateo than are moving to San Mateo County from other places in the U.S.



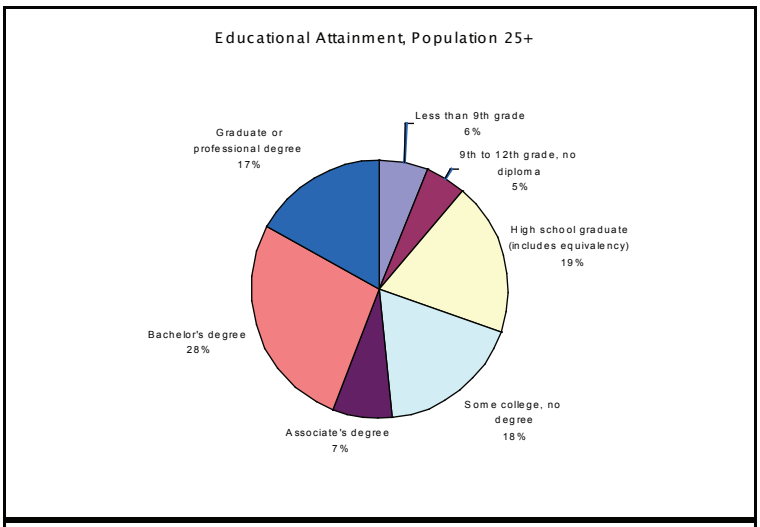




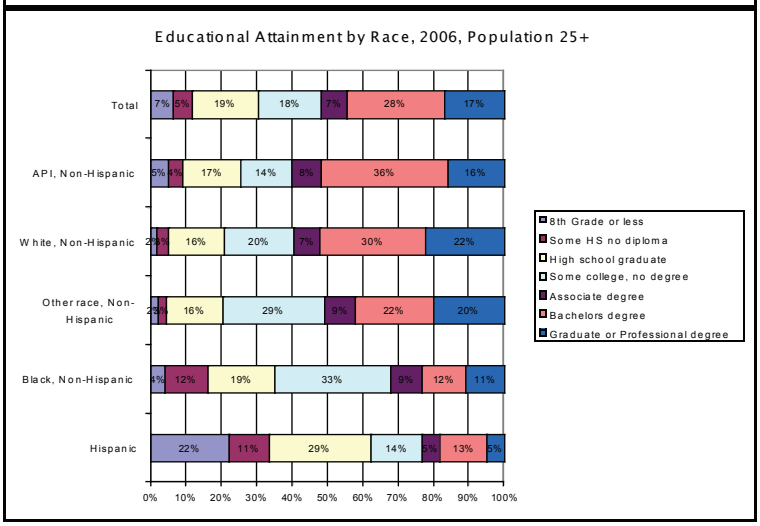
[1] From the American Community Survey 2006.

[2] State of California, Department of Finance, California County Population Estimates and Components of Change by Year, July 1, 2000-2007. Sacramento, California, December 2007.

The population of the County is highly educated. A full 45% of the adult population, aged 25 years or older, has completed a higher education degree—either a Bachelor's Degree (28%), or a Graduate or Professional School Degree (17%). Still, 11% of the adult population of the County has not completed high school.



Educational attainment differs significantly by race. Non-Hispanic Whites, Asians and Pacific Islanders (API), overall, have achieved the highest levels of education, as measured by the percent of population with a college degree or higher. 52% of the adult API population, and 52% of the Non-Hispanic White population have a Bachelor's or Graduate degree.

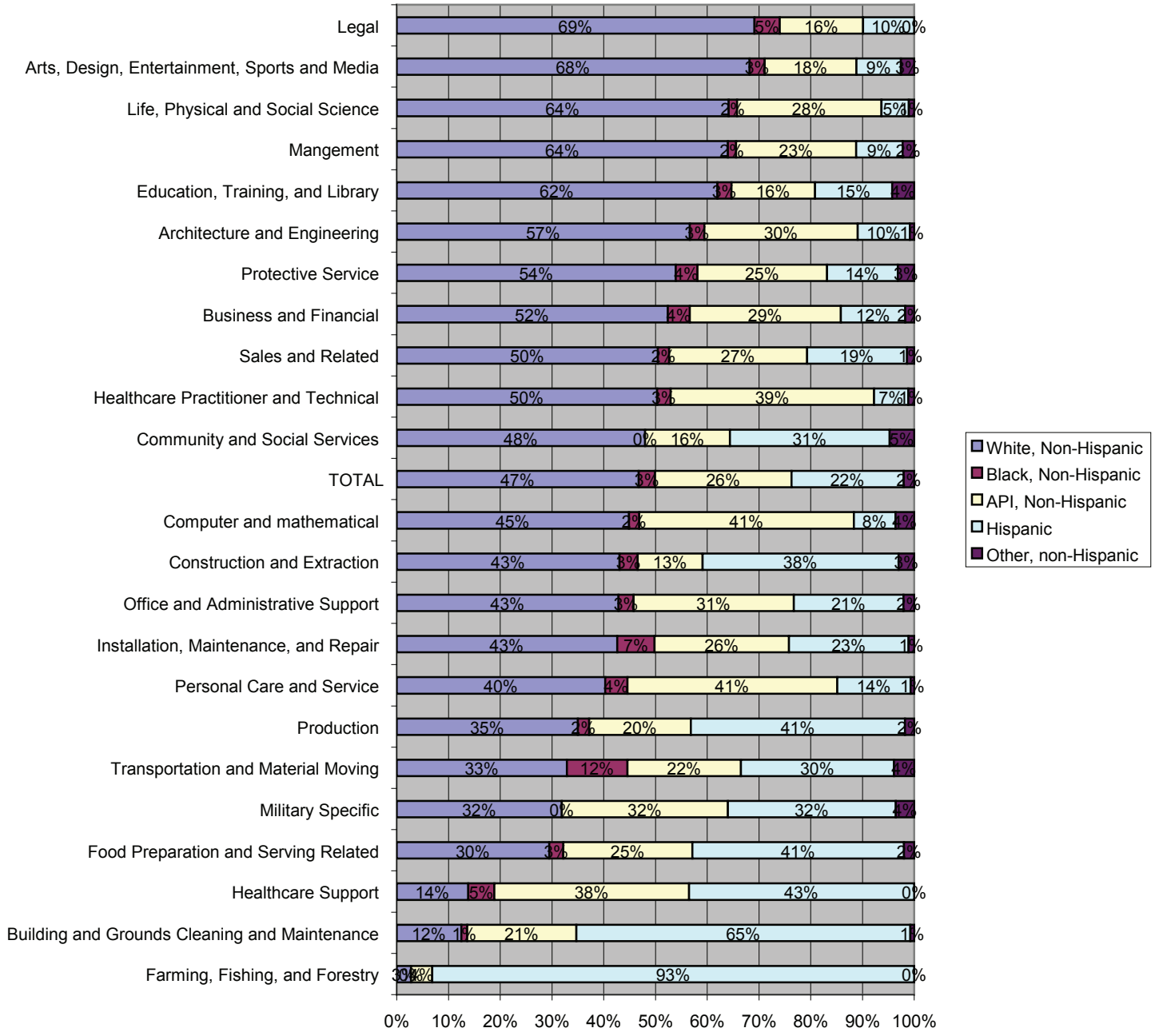


At the other end of the spectrum, only 18% of the Latino population in the County has been able to attain a Bachelor's or Graduate level degree, and 33% have graduated from High School.

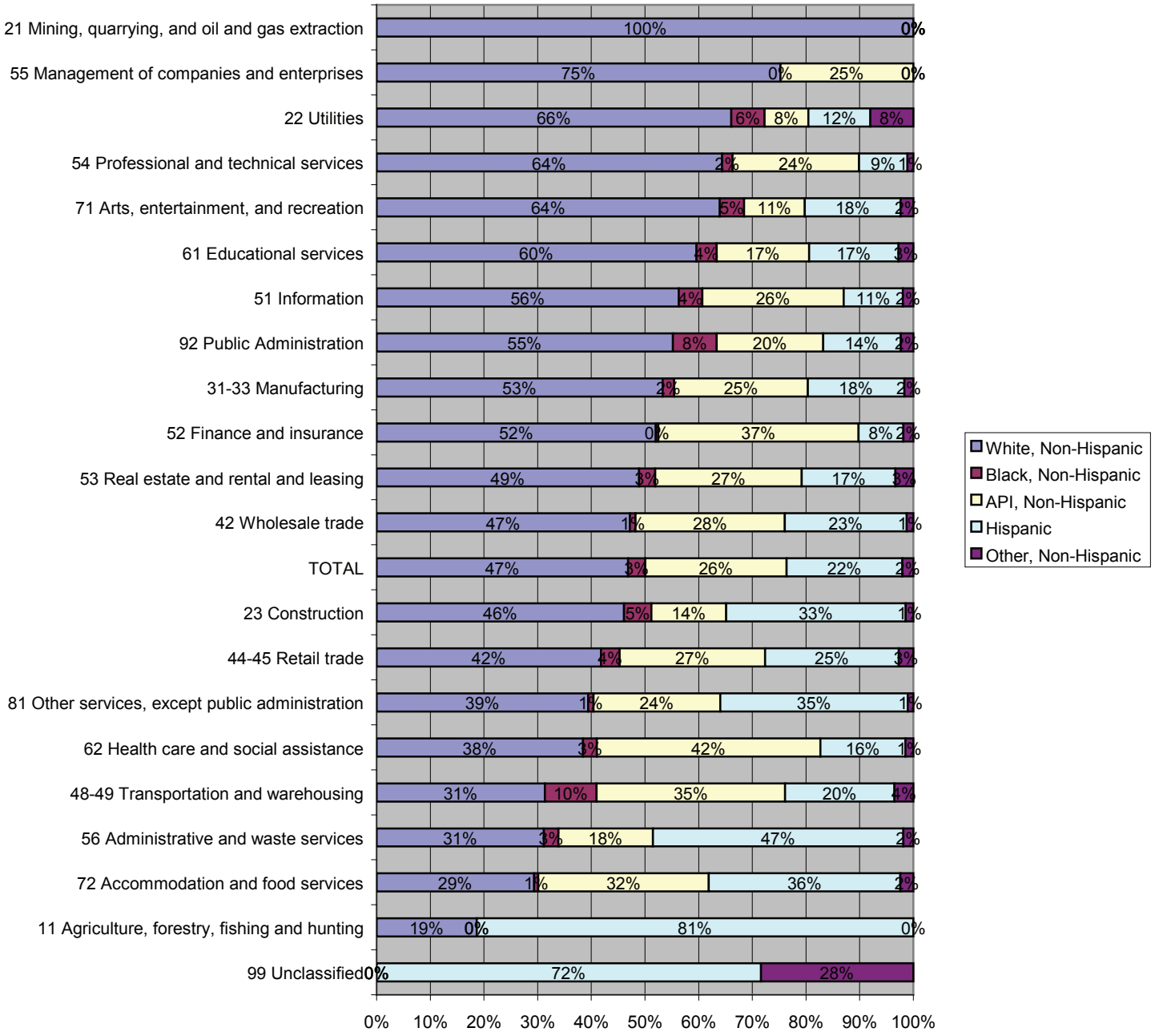
These inequalities in educational attainment directly relate to inequalities in the labor market. The racial composition of the workforce in any particular occupation or industry also differs dramatically. On the following pages are two charts, which show the racial composition of employment in all different occupations and industry categories. Both the occupational and industry categories are ordered so that the categories with the smallest percentage of non-White employment are at the top, and those with the largest percentage of non-white population are at the bottom.

The charts show that professional occupational categories, such as legal occupations, life science, physical science and social science occupation, and management occupations have a disproportionately high proportion of Anglo employees. On the other end of the spectrum, occupations such as building and grounds maintenance, food preparation, and production jobs have a high proportion of Hispanic employees. Industries with a high proportion of Anglo employees includes utilities, professional and technical services, and educational services, while industries such as accommodation and food services, administrative and waste services, and transportation and warehousing employ a disproportionate percentage of the non-white population.

Employment in Occupational Category by Race, 2006



Industry Employment by Race, 2006



The age structure of the workforce is also an important factor to consider. Overall in the County, 22% of the population is aged 55 or over—within ten years or less of being eligible for retirement benefits. On the next two pages are charts showing the age of people currently employed in all industries and occupations, sorted by the percentage of people aged 55 and older.

Note that in certain industries and occupations, the percentage of the workforce that is close to retirement is much higher than the County average. For example, in the utilities industry, a full 40% of the current workforce is aged 55 or over. Similarly, within community and social services occupations, 41% of the current workforce is over 55 years old. In those industries and occupations with a high proportion of older workers, as large numbers of people retire, there are likely to be significant workforce training needs and skills shortages that will need to be filled. Industries with large numbers of employees and high proportion of elderly workers that should be of concern to workforce development practitioners include:

- Utilities
- Public Administration
- Transportation and Warehousing
- Healthcare and Social Assistance

Occupations with large number of employees and high proportion of elderly workers that should be of concern to workforce development practitioners include the following occupational groups:

- Community and Social Services
- Installation, Maintenance and Repair
- Healthcare Practitioner and Technical

Finally, another factor to keep in mind in relationship to labor markets in San Mateo County is how much they are integrated into surrounding counties. In 2000, a total of 147,283 people commuted to work in San Mateo County from another County, while 148,003 San Mateo residents commuted to work in other counties (by comparison, 206,093 people both lived and worked in San Mateo County). The vast majority of this commuting occurs with neighboring counties, but over 3,000 people commuted to San Mateo from as far away as the Central Valley.

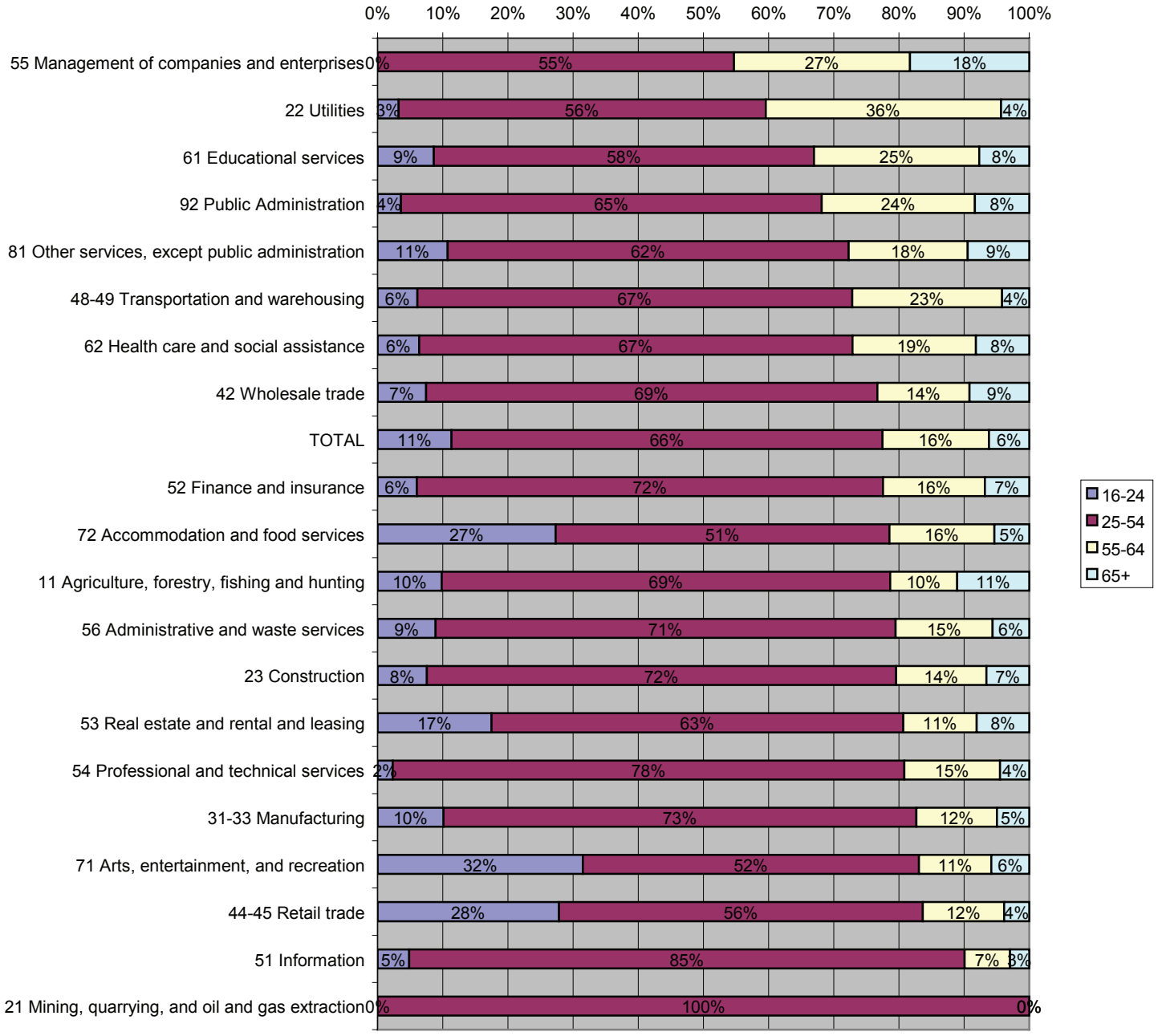
San Mateo County to County Commuting, 2000

County	Commuting From This County to San Mateo County	Commuting From San Mateo County To This County
TOTAL	147,283	148,003
Adjacent Counties		
San Francisco	43,306	71,702
Santa Clara	40,666	55,473
Alameda	33,501	14,783
Santa Cruz	2,010	214
Other Bay Area Counties		
Contra Costa	9,279	1,789
Solano	2,880	303
Marin	2,614	973
Sonoma	1,633	345
Napa	462	141
Central Valley Counties		
San Joaquin	1,434	51
Stanislaus	899	31
Sacramento	671	180

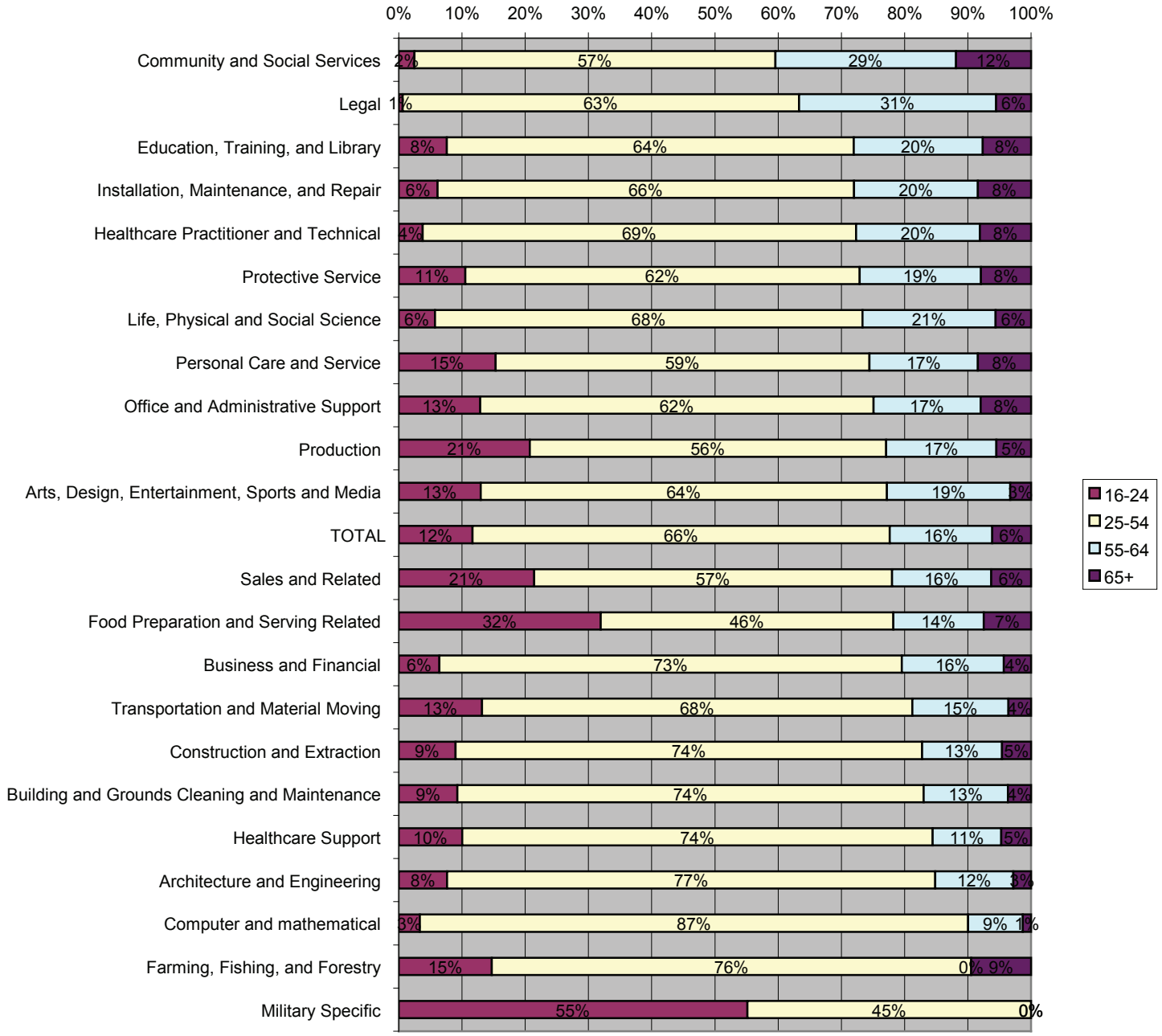
Source: U.S. Decennial Census 2000

Note: 206,093 people both lived and worked in San Mat

Employment in Industry Category by Age, 2006



Employment in Occupational Category by Age

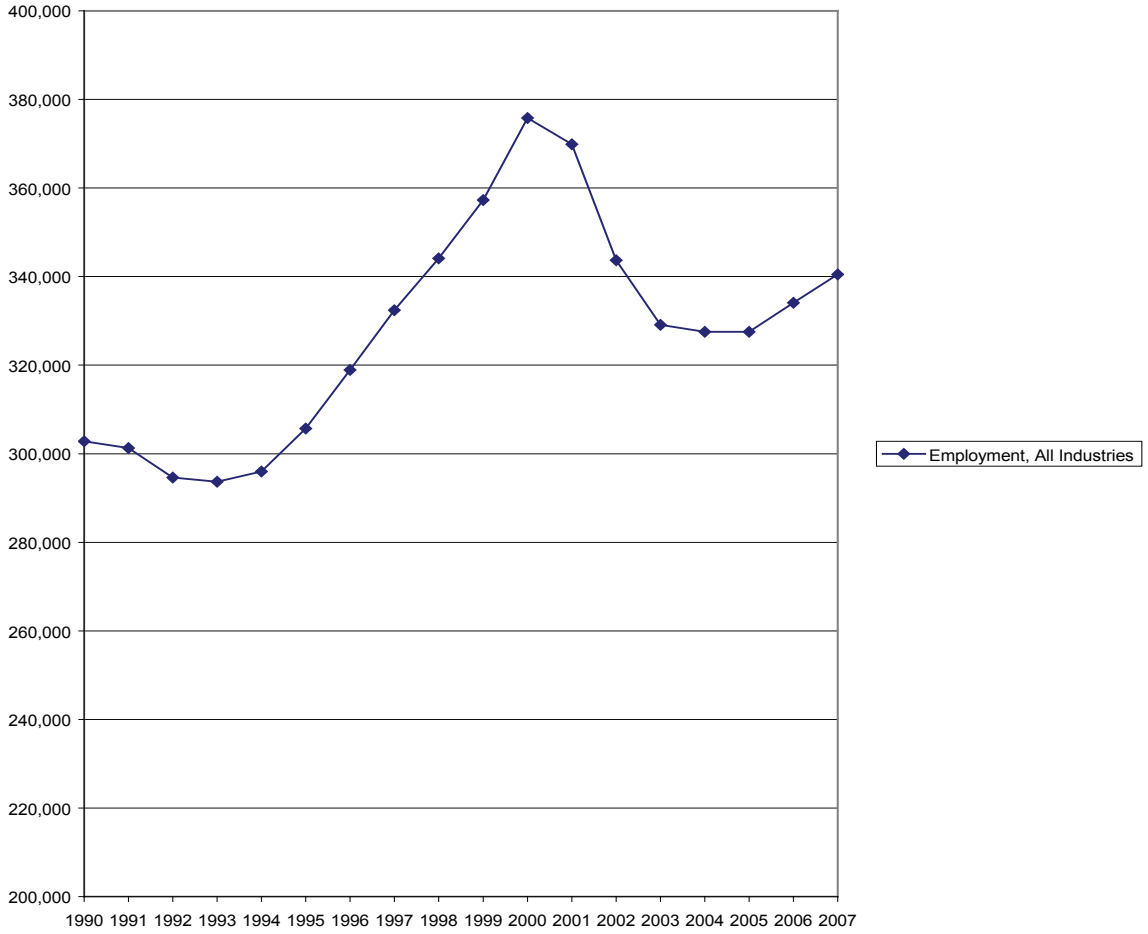


II. Overall Employment Structure

Job Growth

The U.S. economy last entered into a recession in 2001. According to the official dates for the business cycle, the last period of economic expansion ended in the first quarter of 2001, with the recession officially over by the 4th quarter of that year. The effects of the recession in San Mateo County, however, were felt much more strongly and lingered longer. As shown in the graph below, on an annual basis, employment in San Mateo County peaked in the year 2000, with 2001 marking the first of five straight years when the total employment in the County declined or was stagnant. It wasn't until 2006 that the County began to experience job growth again. Total employment in 2007 still remained 9% below the peak of employment in 2000, and still 7.7% below total employment in 2001, since the end of the recession.

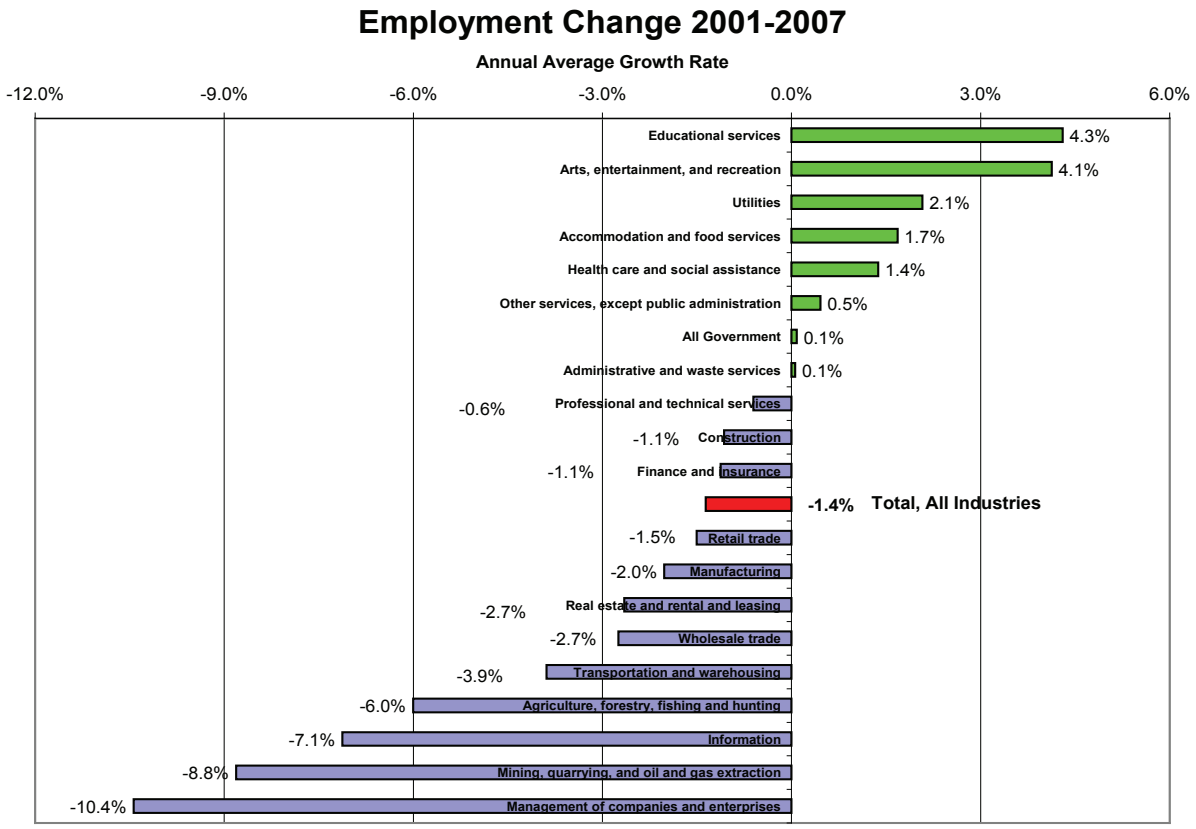
Employment, All Industries, San Mateo County, 1990-2007



[3] See http://www.nber.org/cycles.html for official dates of business cycle expansions and contractions.

[4] These figures are all based on California Employment Development Department data available at: http://www.labormarketinfo.edd.ca.gov/?pageid=166

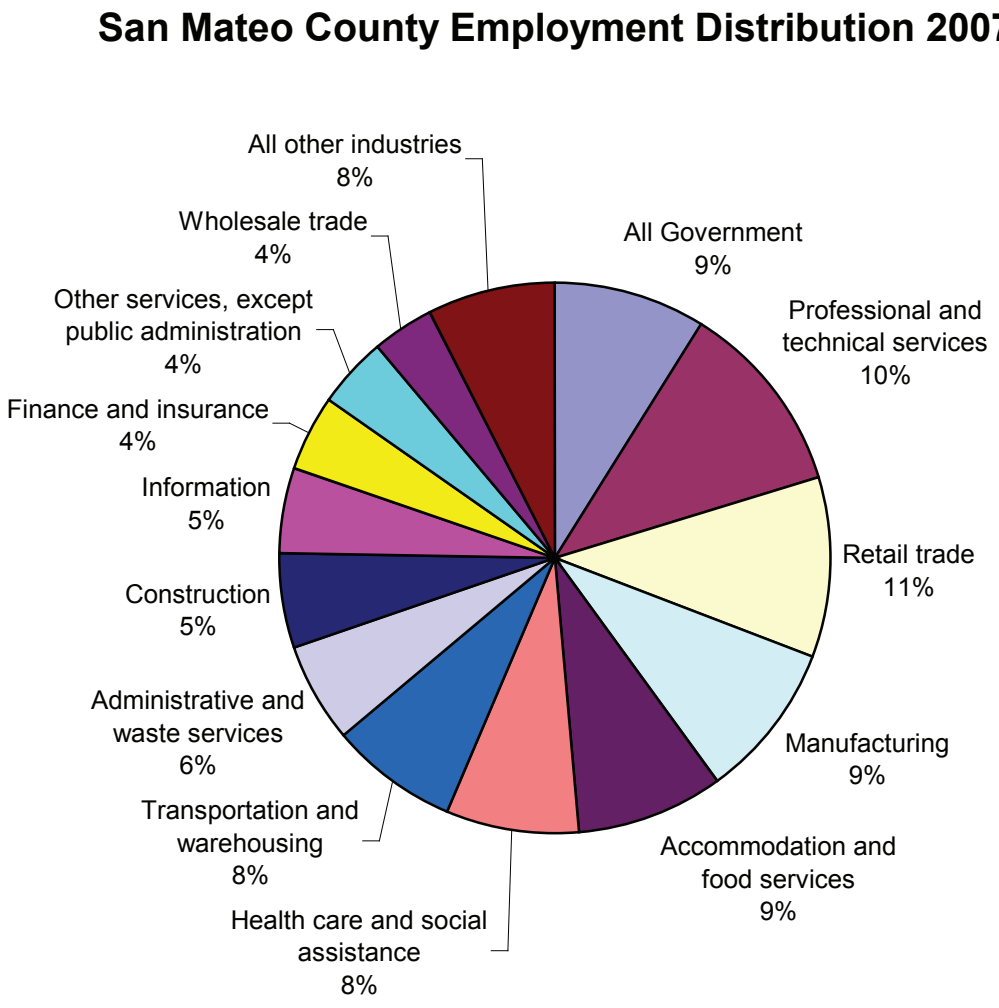
Overall, between 2001 and 2007, San Mateo County saw a decline in employment that averaged 1.4% per year. The total number of people employed in the County declined during this time from 369,867 people to 340,703 people. The industry with the largest percentage decline in employment during this time was management of companies and enterprises (NAICS code 55) which saw a decline on average of 10.4% per year. Other prominent industries in the County that saw a decline include information, which declined on average 7.1% per year, transportation and warehousing, which declined at a 3.9% rate, and manufacturing, which declined at a 2.0% rate. Much of the job losses in the County occurred between 2001 and 2004, and many of these industries had begun to see stabilization or job growth in the most recent years, but still hadn't returned to employment levels prior to 2001. On the other hand, industries that were relatively insulated from the economic downturn in the region, and that have seen a net employment increase in the 2001-2007 period include educational services (4.3% average annual growth rate), arts, entertainment and recreation (4.1%), and health care and social assistance (1.4%).



[5] All industry data from this point through the end of the report are based on the Quarterly Census of Employment and Wages (QCEW), cooperatively run by Bureau of Labor Statistics and State Employment Security Agencies of all 50 states. The QCEW program produces a comprehensive tabulation of employment and wage information for workers covered by State unemployment insurance (UI) laws and Federal workers covered by the Unemployment Compensation for Federal Employees (UCFE) program. Full details available at: http://www.bls.gov/cew/cewover.htm

Job Distribution by Industry

Overall, in 2007, the sectors of the economy that employed the largest number of people included government (9% of all employment), professional and technical services (10%), retail trade (11%), manufacturing (9%), accommodation and food service (9%), health care and social services (8%), and transportation and warehousing (8%). All together, the top ten industry sectors (as measured by 2-digit NAICS code), when added to employment in government, accounted for 84% of all employment in the County.

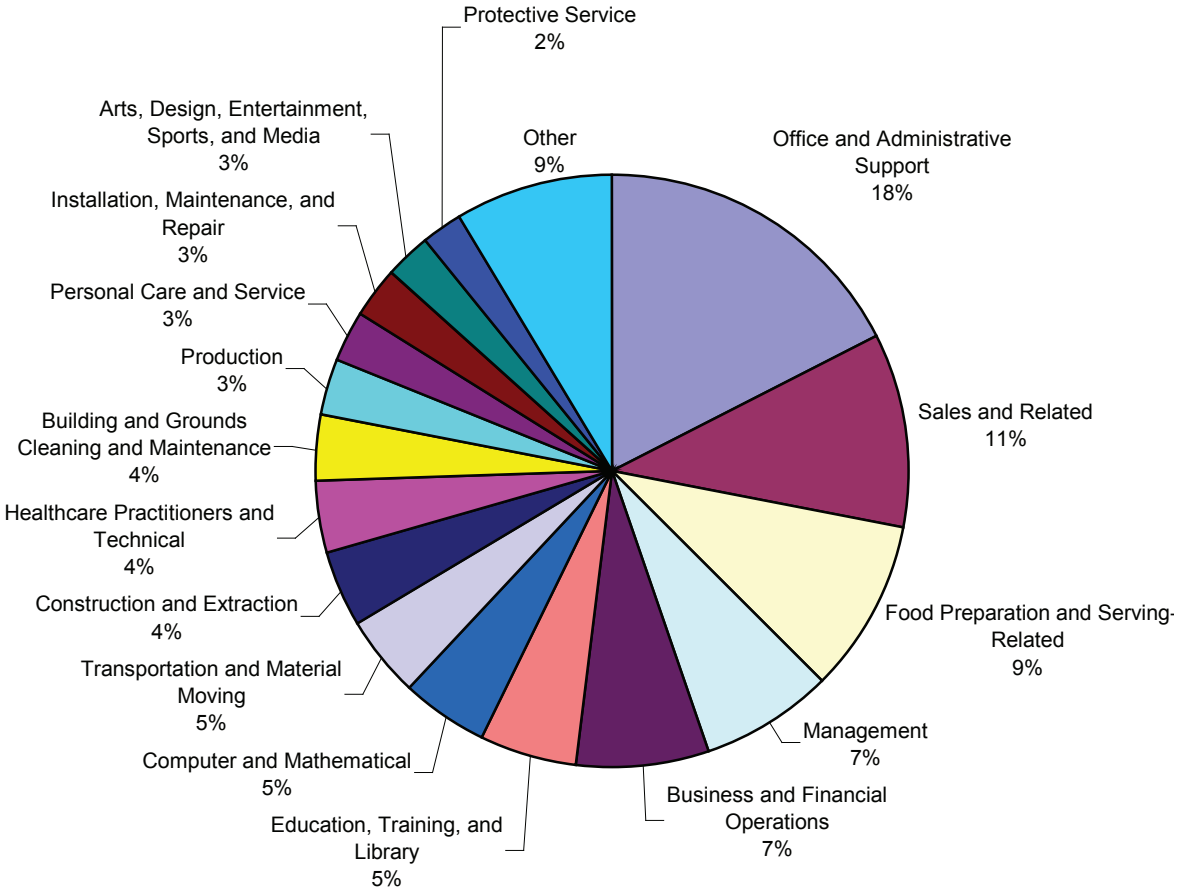


Job Distribution by Occupation

Another way to look at job distribution is by occupation, rather than industry. Looking at job distribution and growth by industry alone is valuable, since job growth is predominantly shaped by the products and services that are sold in the economy, which is captured by industry data. However, looking at occupational distribution and growth is also valuable, since it gives a more direct picture of skill requirements. Some broad occupational categories, such as health care practitioners, fall almost entirely within the related industry category, and thus changing industry trends are directly related to changing occupational patterns. Other occupational categories, however, such as office and administrative support, are distributed through-out multiple industries. Thus, changes in these occupations are less driven by specific industries, and more by general changes in the economy as a whole.

As shown in the chart below, nearly 1 out of 5 jobs in San Mateo County are in office and administrative support occupations, a sign of the importance of administrative work in all industries. Other major occupational categories employing large numbers of people include sales and related occupations (11%), food preparation and serving occupations (9%), management occupations (7%), and business and financial operations (7%).

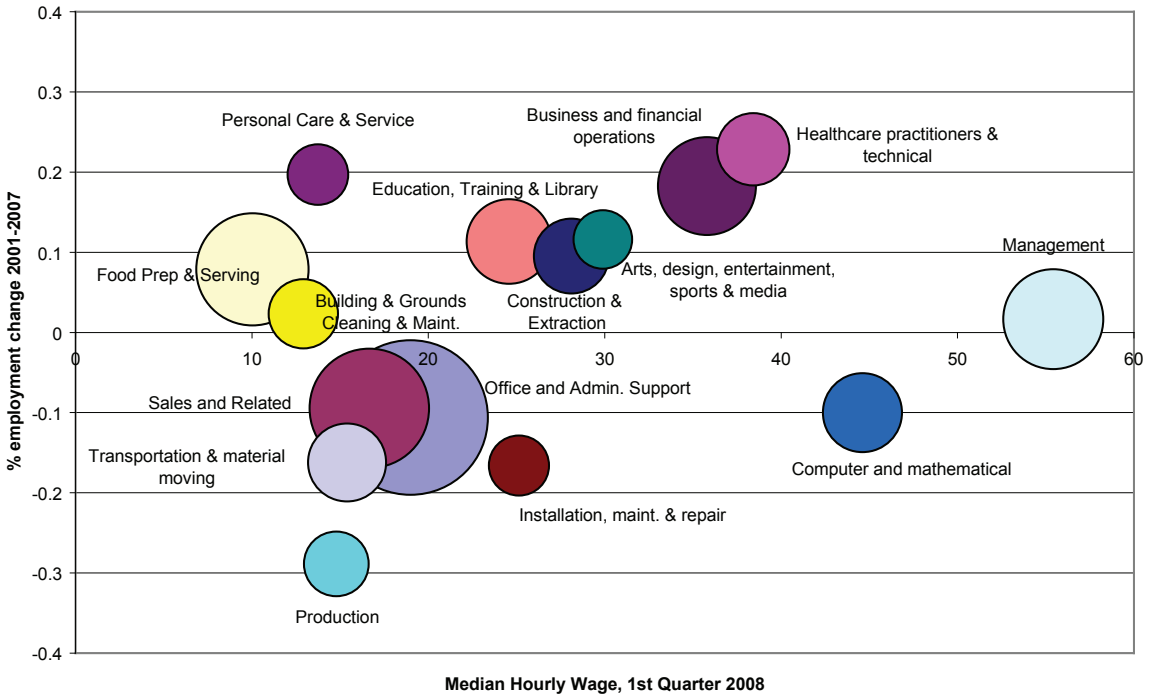
Total employment by occupation



Looking at the 15 occupational categories with the largest employment, as shown in the chart below, we can see highly divergent trends. In this "bubble chart", as in all the bubble charts that follow, the size of the bubble is proportional to the total employment in that employment category. The x-axis in this chart reflects the median hourly wage in the 1st quarter of 2008 in the broad occupational category. The y-axis reflects total employment change between 2001 and 2007. In this chart (as in all bubble charts in this report), the upper right-hand quadrant of the chart represents the most beneficial quadrant (here, a high wage and high employment growth), while the lower-left hand quadrant represents the least beneficial.

Employment in office and administrative support declined by 11% between 2001 and 2007, as did employment in sales and related occupations, computer and mathematical occupations, transportation and material moving occupations, production, and installation, maintenance and repair occupations. Occupations that experienced the greatest growth in employment include healthcare practitioners and technical occupations, which grew 23% between 2001 and 2007, and personal care and service occupations, which grew 20%. Business and financial service occupations also grew substantially, increasing by 18% over that 6 year period. The third largest occupational employment category, food prep & serving occupations, also saw substantial growth, growing 8% from 2001 to 2007. These occupations pay a median wage of only $10/hour in 2008, raising concern about the growth of low-wage jobs. On the other hand, note that that there are a cluster of occupational categories that had a median wage between $25 and $40 hour in the first quarter of 2008 that have also seen substantial growth between 2001 and 2007, including education/training/library occupations, construction, and arts, design, entertainment, sports and media occupations.

2001-2007 Employment Change and 2008 Median Hourly Wage, by Occupational Category



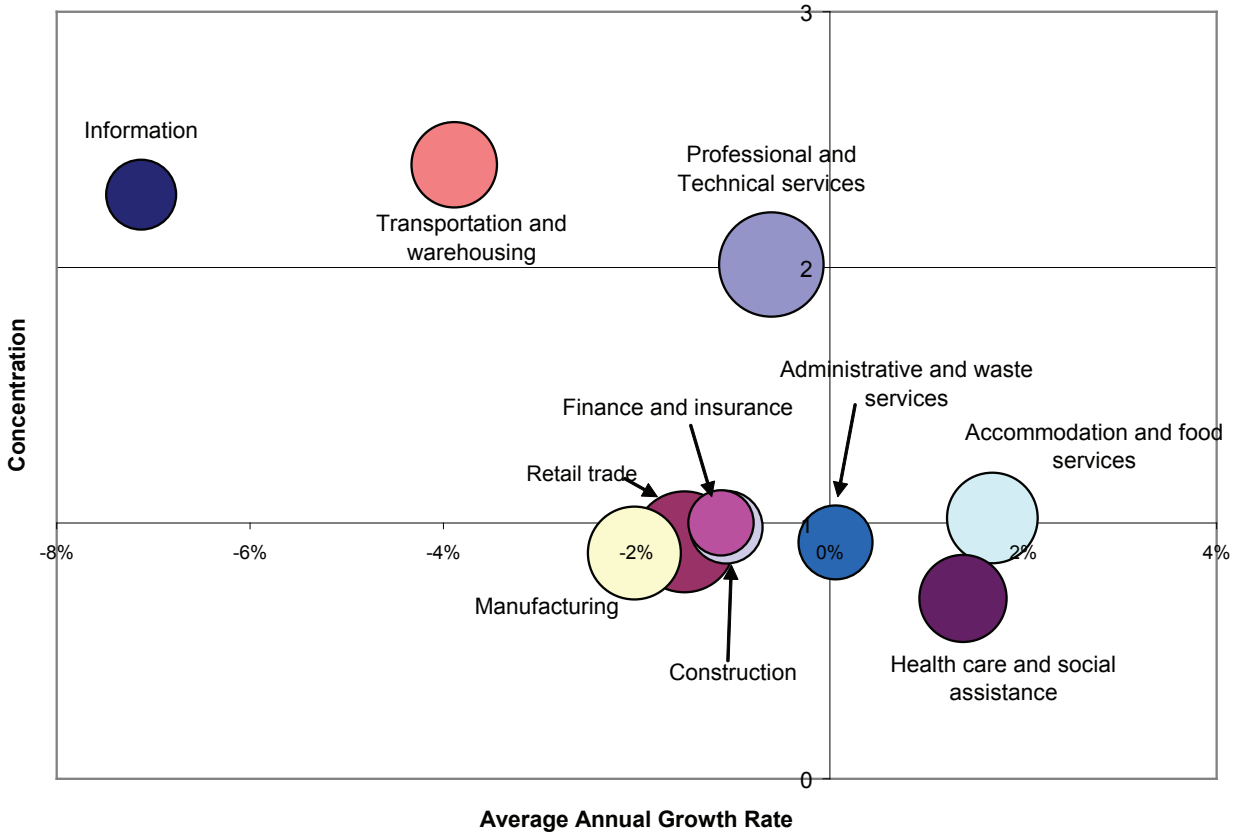
Employment Concentration and Growth

The concentration of employment in an industry in the County, when compared with the concentration of employment in that industry at a national level, provides an indicator of the importance of that industry to the regional economy. A high concentration level is an indicator that the County has a specialization in that industry, which suggests that firms in that industry has certain competitive advantages compared to firms in other regions.

In the bubble chart that follows, the horizontal axis represents the average annual growth rate for the industry over the 2001-2007 period. The vertical axis represents the level of concentration within San Mateo of that industry. A concentration level greater than 1 indicates relative concentration in that industry.

As can be seen, the industries with the highest levels of concentration include transportation and warehousing (2.40), information (2.28), and professional and technical services (2.01). The high concentration in transportation is reflective of the presence of San Francisco Airport, and related transportation enterprises in the County. High levels of information and professional and technical services reflects the ties with Silicon Valley's information technology industries, and the growth of biotech and pharmaceutical enterprises in the County (more on this below). Unfortunately, the industries in which the County has the greatest concentration are also those industries which have seen large job losses in the past six years.

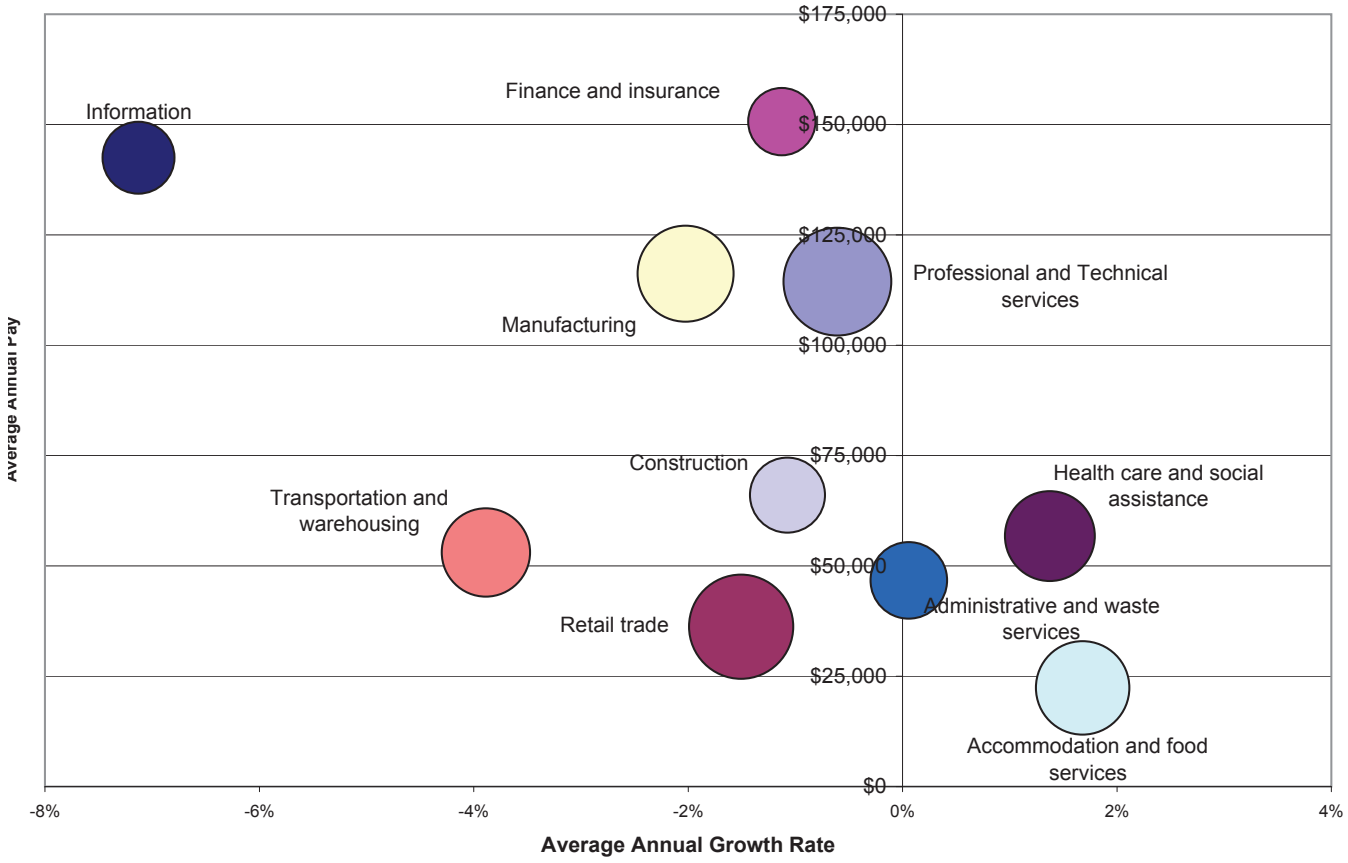
Concentration, Size, and Growth, 10 Largest Private Industries



Growth and Wages

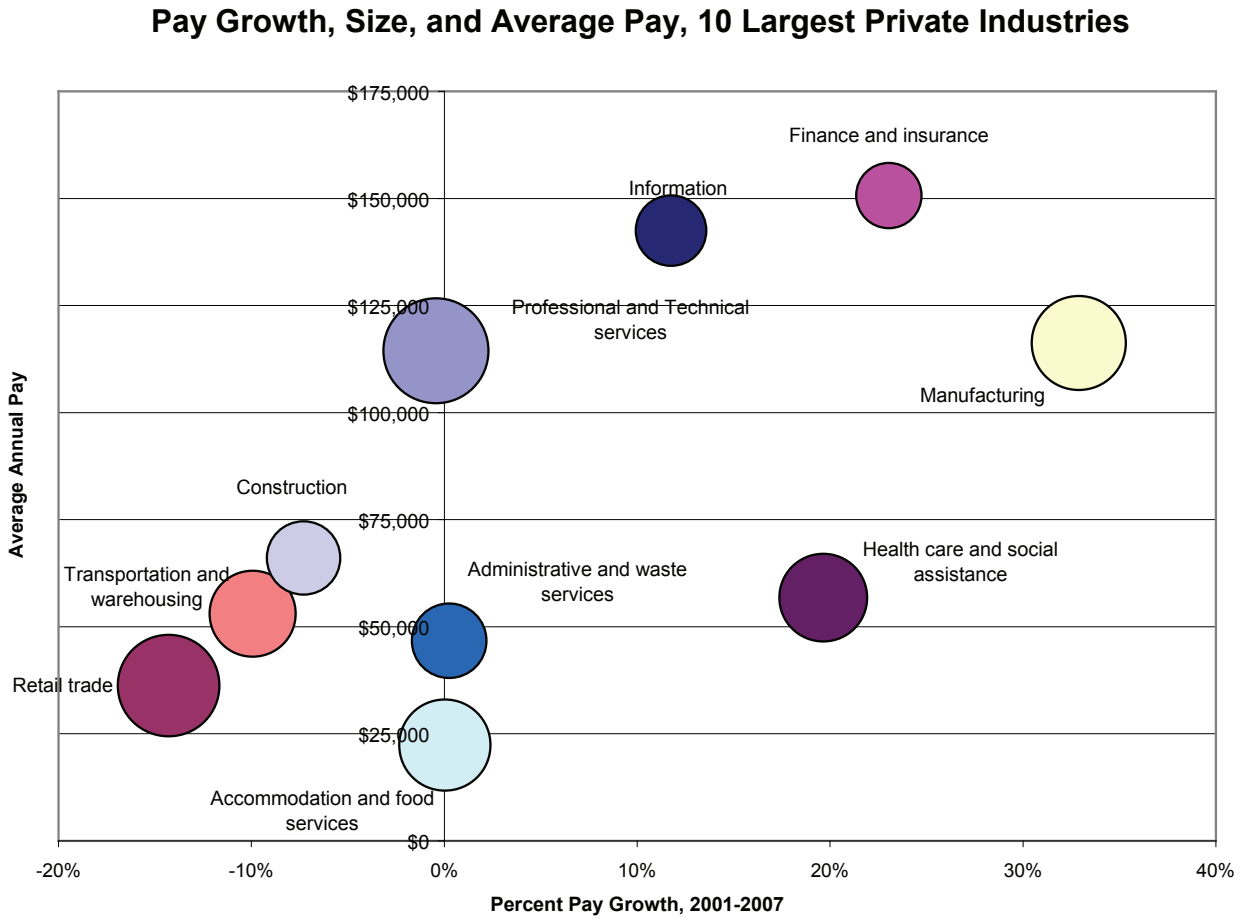
One of the current challenges in San Mateo's labor market is that job growth has been concentrated in industries that pay lower wages. Of the 10 largest private sector industries, accommodation and food services has seen the greatest growth (1.7% average annual growth rate or AAGR), but it also pays the lowest. This is partly due to low average hourly wages, and high levels of part-time and/or seasonal employment. Overall, in 2007, the average annual pay in accommodation and food services was only $22,355. Wages in health care and social assistance, which has also seen substantial growth in recent years (1.4% AAGR) are significantly better, averaging $56,742 in 2007. Unfortunately, jobs in higher paying industries, including construction, manufacturing, and professional and technical services, have been declining.

Average Annual Pay, Size, and Growth, 10 Largest Private Industries



Wage Trends

It is important not only to look at current wages, but also to look at longer term wage trends. Unfortunately, in the County, the average annual pay in the majority of industry sectors has either been stagnant or declined from 2001 to 2007 (when adjusted for inflation). The only broad industry sectors that have seen an increase in real wages over this period are health care and social assistance (where real average annual pay grew by 20% between 2001 and 2007) and manufacturing (where real average annual pay grew by 33%).



III. Sub-sector Industry Analysis

Regional economists tend to divide industries into two broad-categories: export-oriented and locally-serving. Export-oriented industries tend to sell a majority of their goods and services to people and businesses in markets outside the region, whether elsewhere in the U.S. or internationally. These industries are important for the economic health of the region, since they bring in new capital and provide a driver for economic growth. Locally-serving industries primarily sell their products and services to people and businesses located locally. These industries are important for regional prosperity, since in most regions they employ the majority of the population and pay in these industries provide a substantial portion of regional demand.

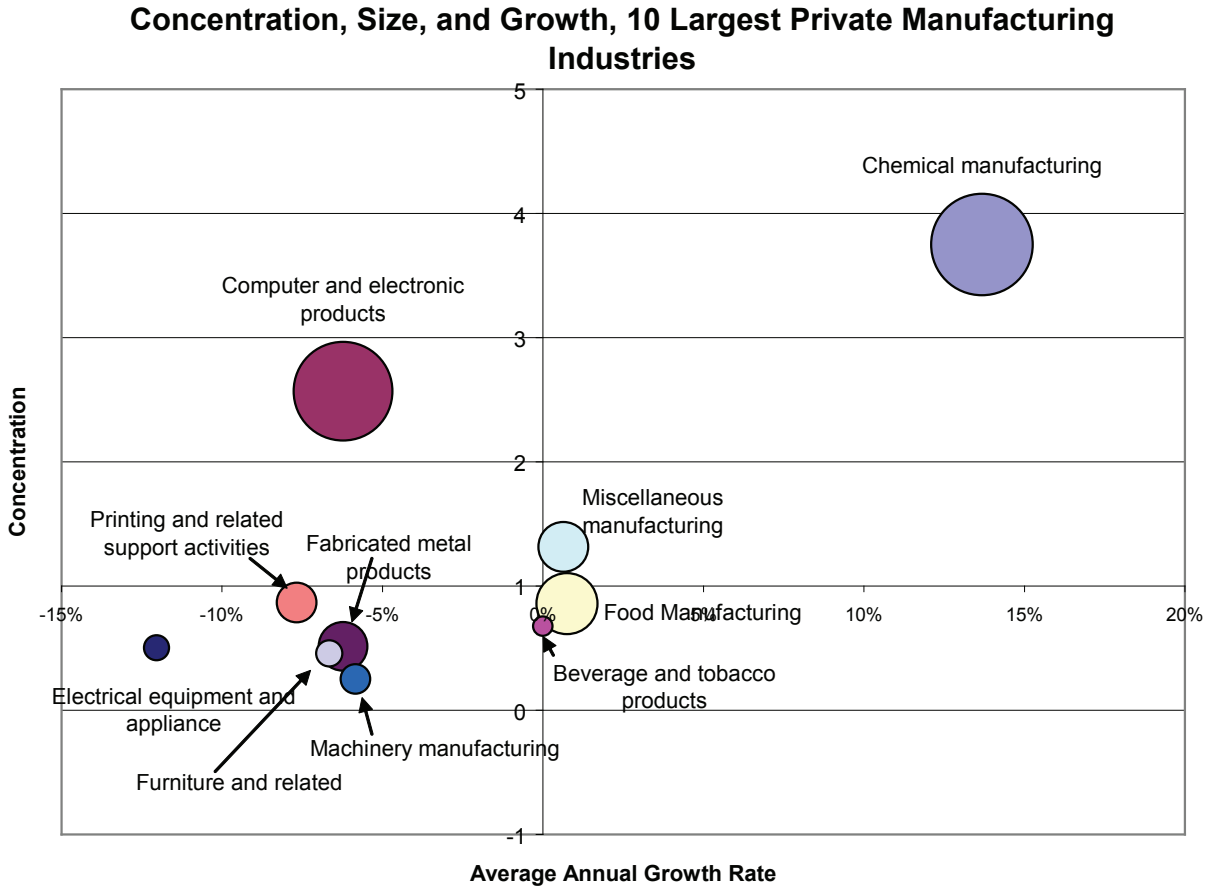
From the overview of the regional economy, the sectors that appear the most promising and worth further analysis include manufacturing, and professional and technical services (both export oriented industries) and health care and social assistance (primarily a local serving industry). In this section, I also look at transportation and warehousing, since it is a large employment sector in the County that is accessible to workers without a college degree, and that pays wages that are higher than the low-wage service sectors.

Manufacturing Employment and Concentration

A more detailed analysis of employment within manufacturing shows that employment in San Mateo is heavily concentrated in two distinct sub-sectors: computer and electronic products, and chemical manufacturing (approximately 93% of employment within chemical manufacturing is in pharmaceutical and medicine manufacturing). Due to non-disclosure policy, the latest data we have for chemical manufacturing is for 2006. At that point, that sub-sector had a concentration index of 3.75, and had experienced an average annual growth rate since 2001 of nearly 14%, growing from employing 4,588 in 2001, to over 8,700 in 2006, growing consistently through the downturn of the early part of the decade. Also of note here is employment within the category of "Miscellaneous manufacturing". The majority of employment in this sector is within the sub-sector medical equipment and related supplies.

Computer and electronics manufacturing was also a major manufacturing employment sector in the County, employing 8,209 people in 2007, with a concentration index of 2.57. However, the industry was hit heavily during the technology downturn, and on average employment in the industry declined by 6.2% a year. Also note that the largest category under miscellaneous manufacturing is medical equipment and supplies manufacturing.

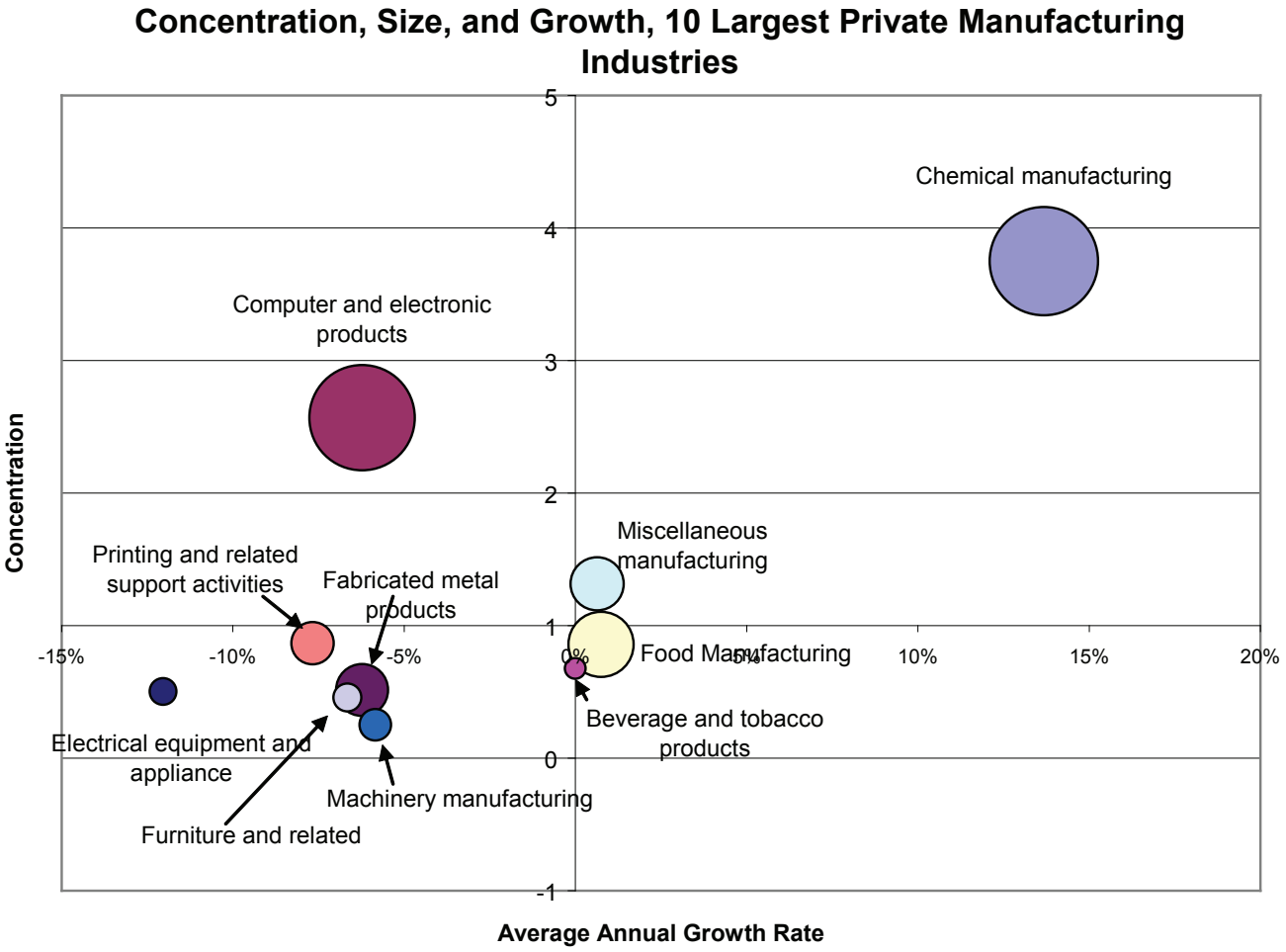
There is also employment in a range of other manufacturing subsectors, including food manufacturing, printing, and fabricated metal products, but total employment in these sectors is significantly smaller.



Manufacturing Wages and Wage Trends

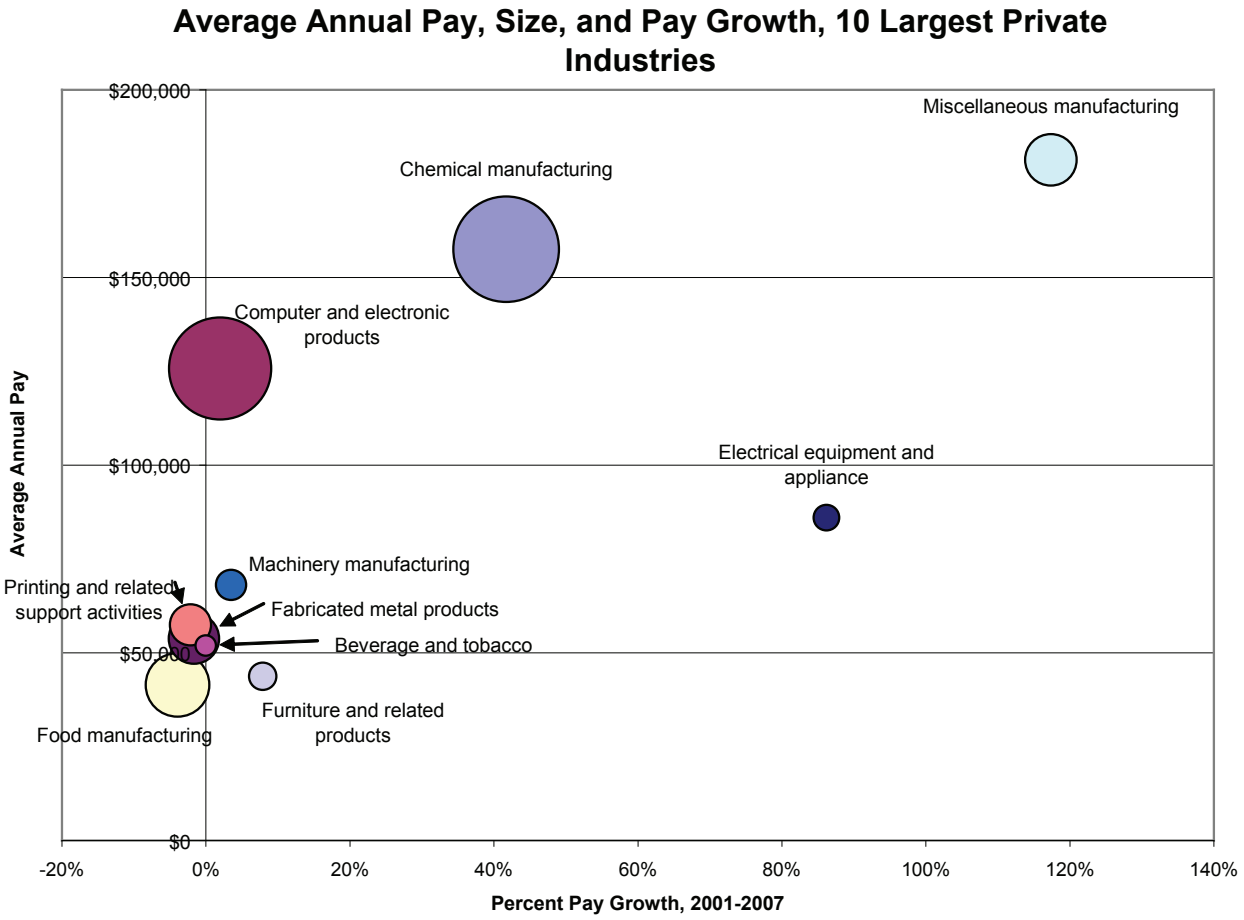
Wages in manufacturing in San Mateo County are extremely high. In the two largest sectors, of chemical (pharmaceutical) manufacturing, and computer and electronic products, average annual pay exceeds $125,000 a year, reflecting the knowledge intensive nature of manufacturing in these industries. Annual pay in miscellaneous manufacturing (primarily medical equipment) is also very high, averaging $181,000 in 2007.

Wages in most of the other manufacturing sectors are significantly below the country average in the private sector of $74,434. In food manufacturing, average annual pay is only $14,499.



Manufacturing Wage Trends

Pay trends in manufacturing show an increasing divergence in economic fortunes. Average annual pay in the knowledge-intensive sectors of computer and electronic products, chemical manufacturing, miscellaneous manufacturing, and electrical equipment, have increased since 2001, in some cases quite substantially. Average annual pay in chemical manufacturing has grown by 42% since 2001, and according to the preliminary figures, have grown by nearly 120% in real terms in miscellaneous manufacturing (which is primarily medical equipment--these figures are still preliminary, and may be adjusted, since they reflect a substantial jump from the previous year's annual pay of $110,206.



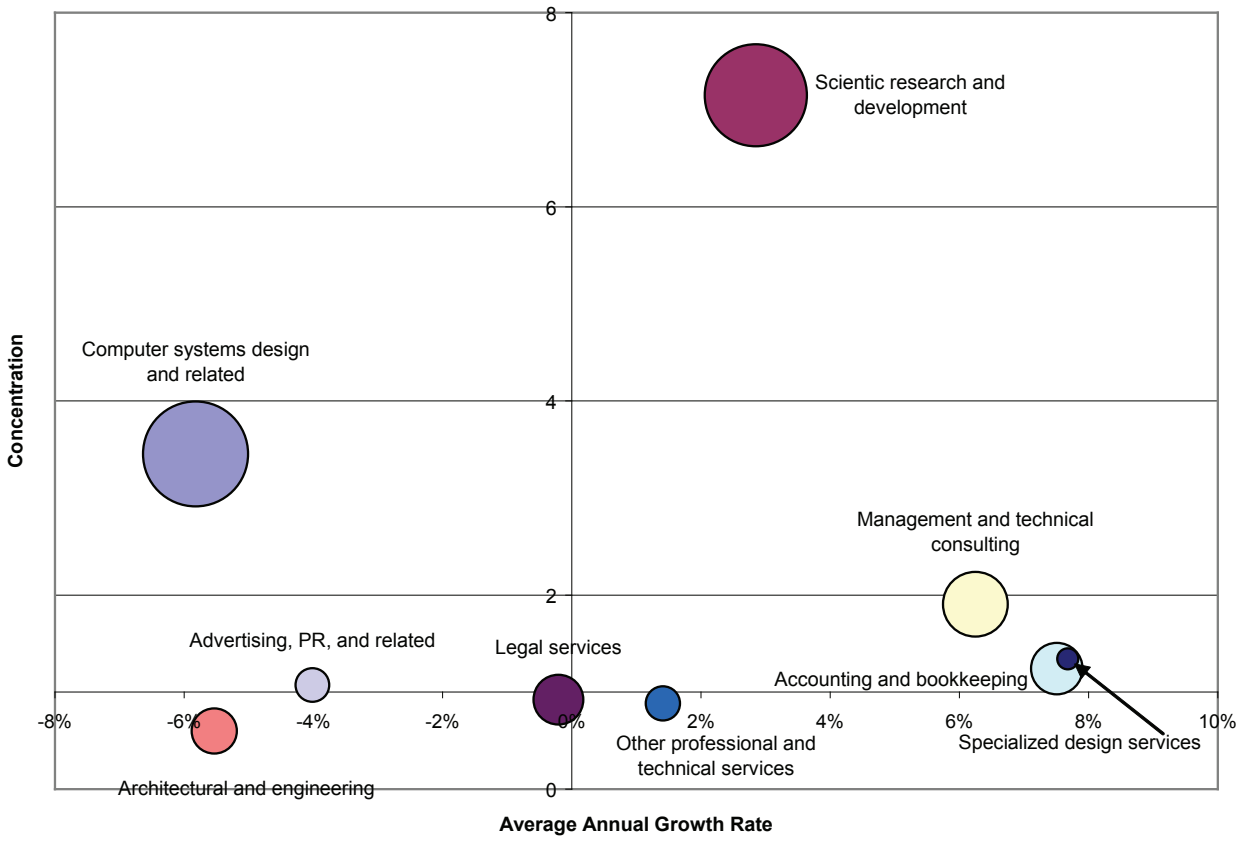
Professional and Technical Services Employment and Concentration

Employment within the professional and technical services industry is similarly dominated by services directly related to the information technology and biotech/pharmaceutical manufacturing industries in the region. The two largest sub-sectors of employment are scientific research and development, and computer systems design and related services. The two sub-sectors have somewhat divergent trends, though. Employment in scientific research and development, which has an extremely high concentration index of 7.15, has grown an average of 2.9% a year since 2001. This likely reflects strong ties with the growing bio-tech/pharmaceutical industry in the area. Management and technical consulting and specialized design services have also shown rapid growth in recent years, by on average 6.2% and 7.7% respectively.

In contrast, the computer systems design and related services subsector, which has also has a high concentration index of 3.45, has declined on average by 5.8% a year since 2001 (though most of this was concentrated in the early part of the decade).

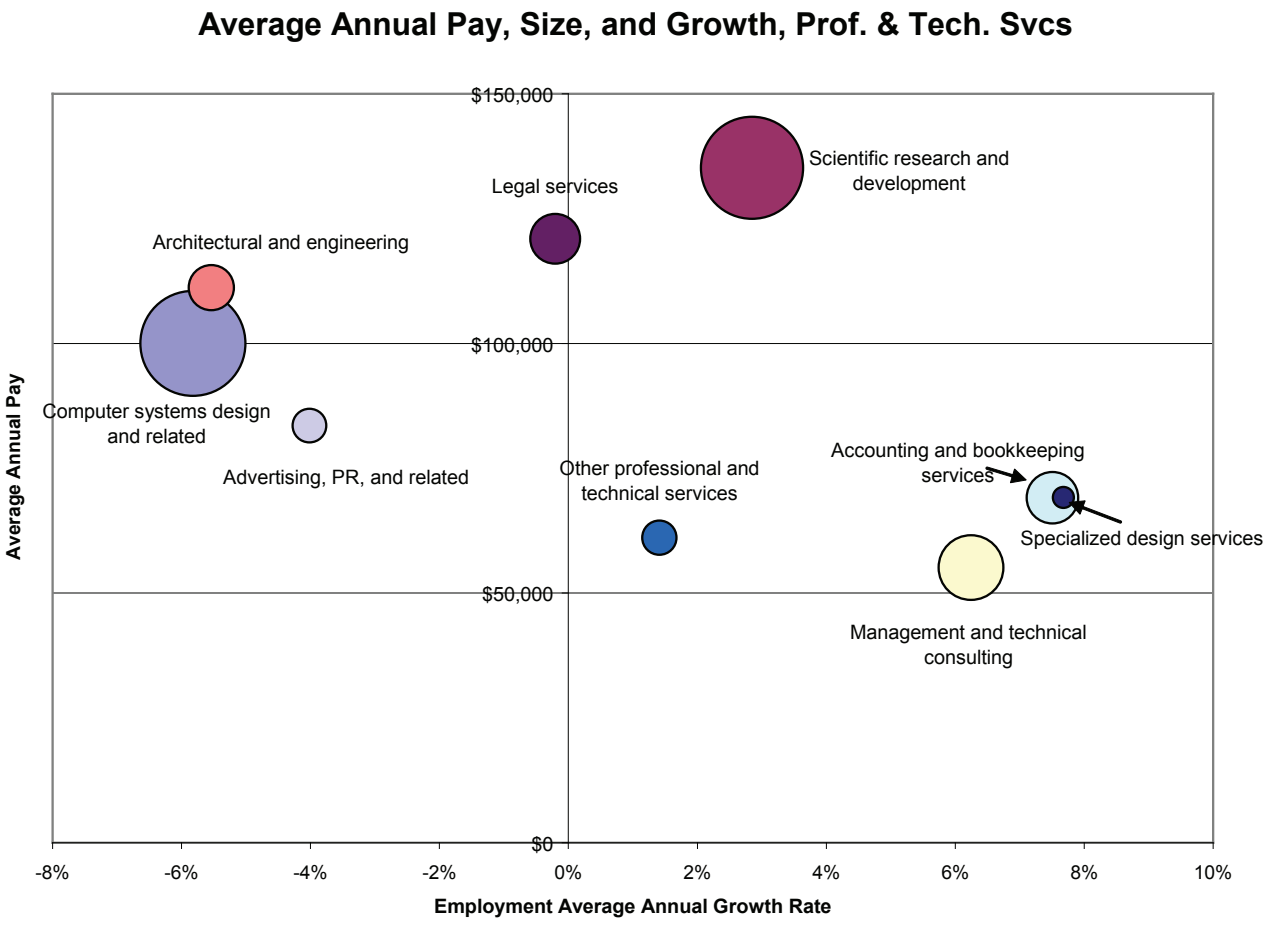
Other services within this sector, including thing like advertising/PR, accounting and bookkeeping, legal services, and architectural services, employ between 1,500 and 3,000 people each, but have concentration levels that suggest little regional specialization.

Concentration, Size, and Growth, Prof & Tech. Svcs Industries



Professional and Technical Services Pay

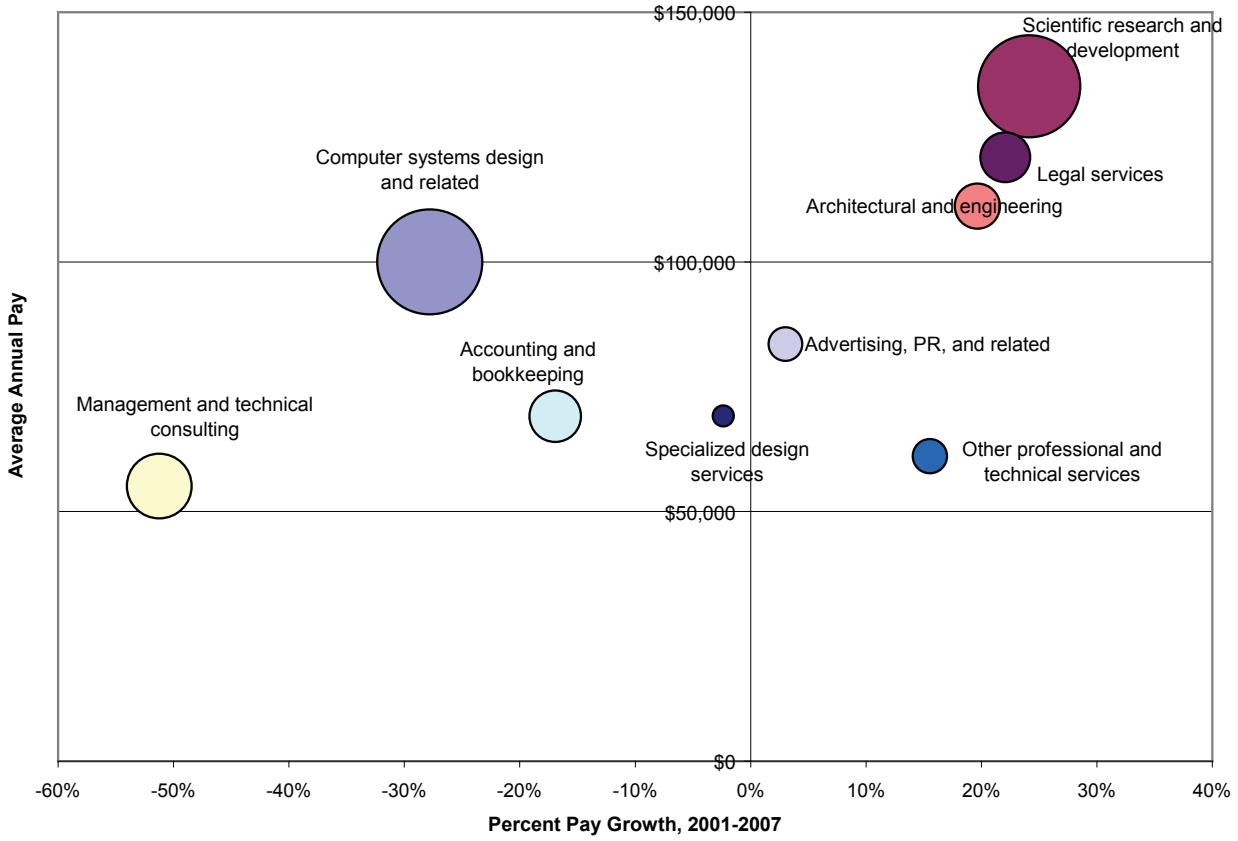
As would be expected, annual average pay in nearly all professional and technical services occupations pay significantly above the regional average. The highest level is in scientific research and development, where annual pay averaged $135,000 in the County in 2007.



Professional and Technical Services Wage Trends

Changes in pay rates in professional and technical services represent a broad spectrum of trends. At the high end, average annual pay in scientific research and development grew in real terms by 24% between 2001 and 2007. Similarly high levels of increase have also been experienced in legal services and architectural and engineering services. At the opposite end of the spectrum, average annual pay in management and technical consulting services declined by 51% between 2001 and 2007, dropping from an average of $113,000 in 2001 (in inflation adjusted 2007 dollars) to only $55,000 in 2007. This is likely partly a reflection of a decline in hourly consulting rates, but primarily due to fewer working hours during the year, as client firms cut back on external consulting contracts.

Average Annual Pay, Size, and Pay Growth, Prof. & Tech. Svcs.

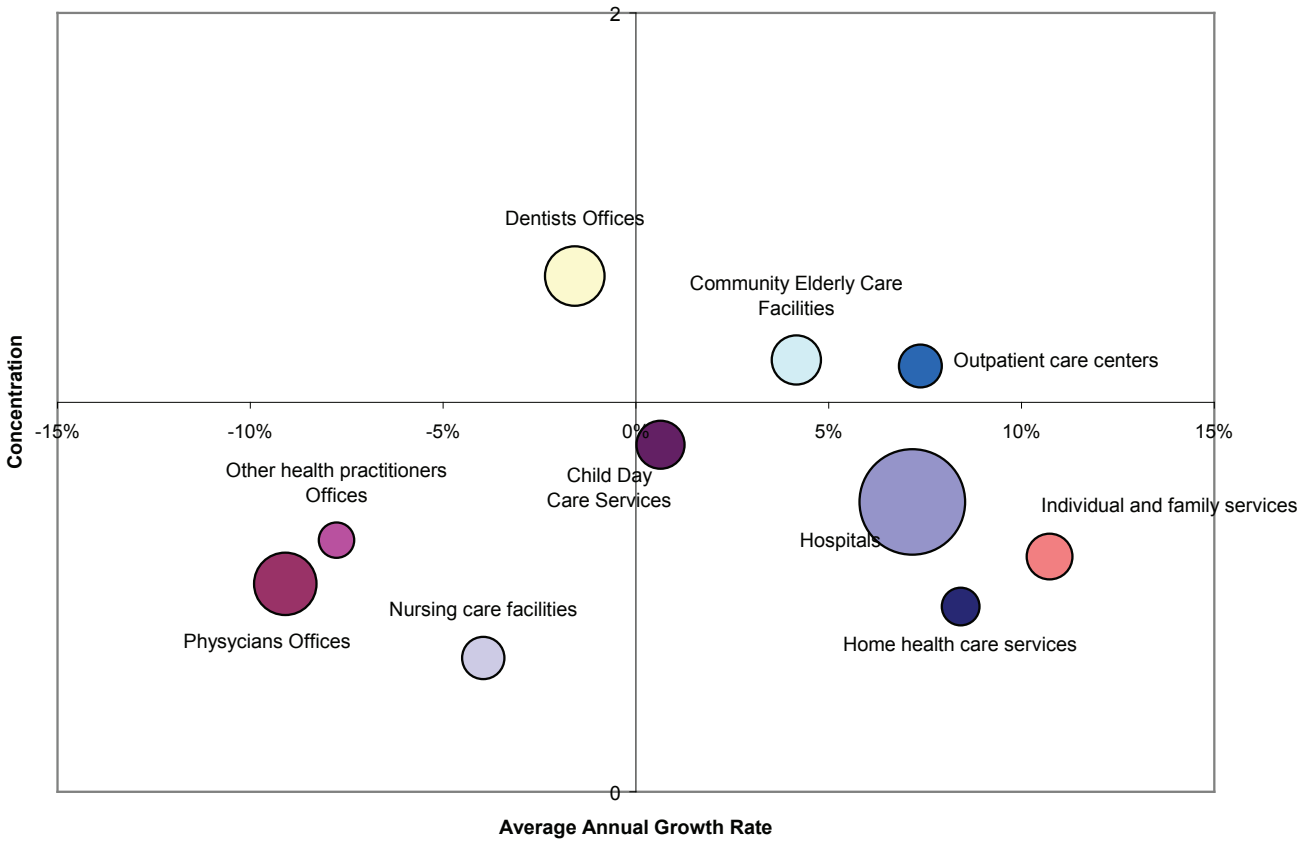


Health Care and Social Assistance Employment

Though overall employment in health care and social assistance services grew significantly between 2001 and 2007, growth hasn't been uniform across the sector. The largest component of the sector, employment in hospitals, saw an average annual growth rate of 7.2 % between 2001 and 2007. Other subsectors that have seen significant growth include outpatient care center, home health care services, and community elderly care facilities in health care, and individual and family services, in the social assistance sub-sector.

Meanwhile employment has been declining in physicians' offices, dentists' offices, nursing care facilities and offices of other health care providers. Note that the concentration indices of all these sectors are within a relatively narrow band, between 0.5 and 1.3, reflecting the locally serving nature of these industries.

Concentration, Size, and Growth, Health and social assistance

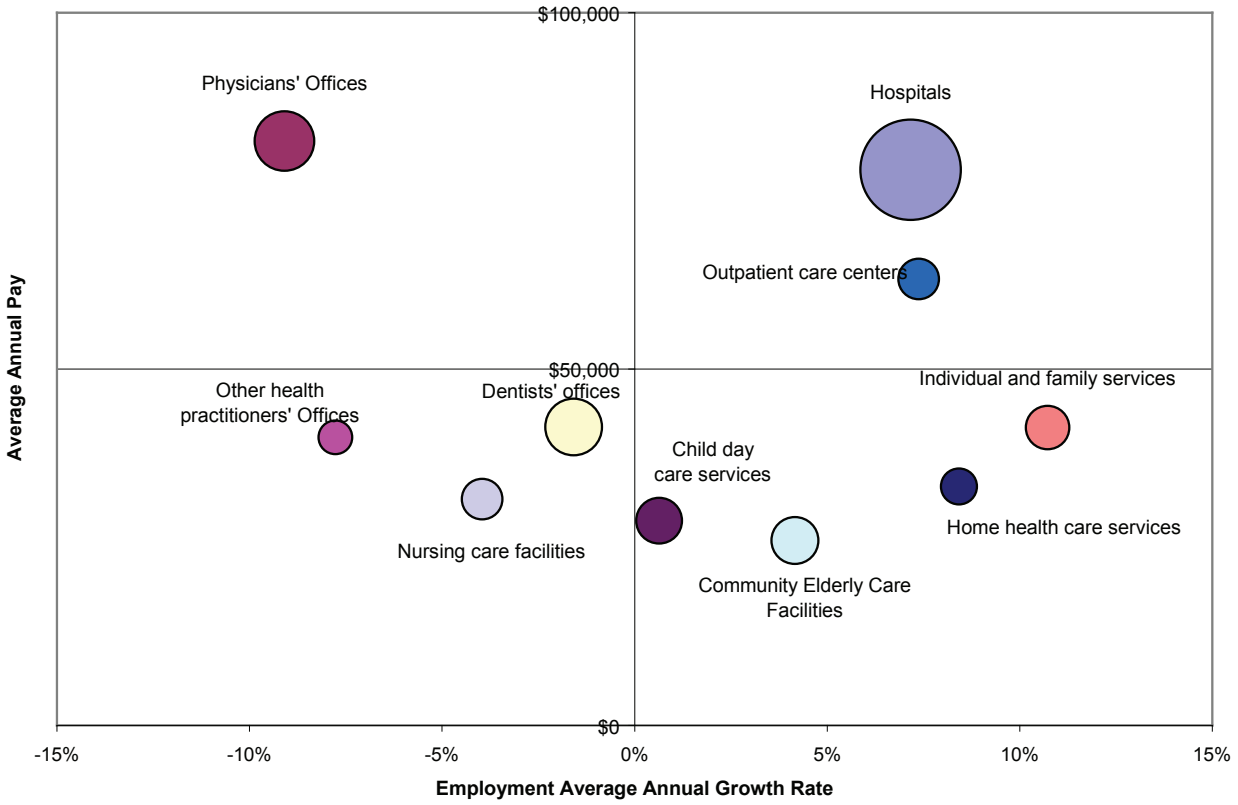


Health Care and Social Assistance Pay

Average annual pay in most sub-sectors within health and social assistance is significantly below the County average. The lowest pay is in community elderly care facilities, child day care services, nursing care facilities, and home health care services, where annual pay is all less than $34,000 a year.

In contrast, average annual pay in hospitals is nearly $78,000 a year, just slightly below the average annual pay in physicians' offices, which is $82,000 a year. One interesting sub-sector is outpatient care centers, where average annual pay is $62,600 a year, and which has seen an employment average annual growth rate of 7.4% between 2001 and 2007.

Average Annual Pay, Size, and Growth, Health and social assistance

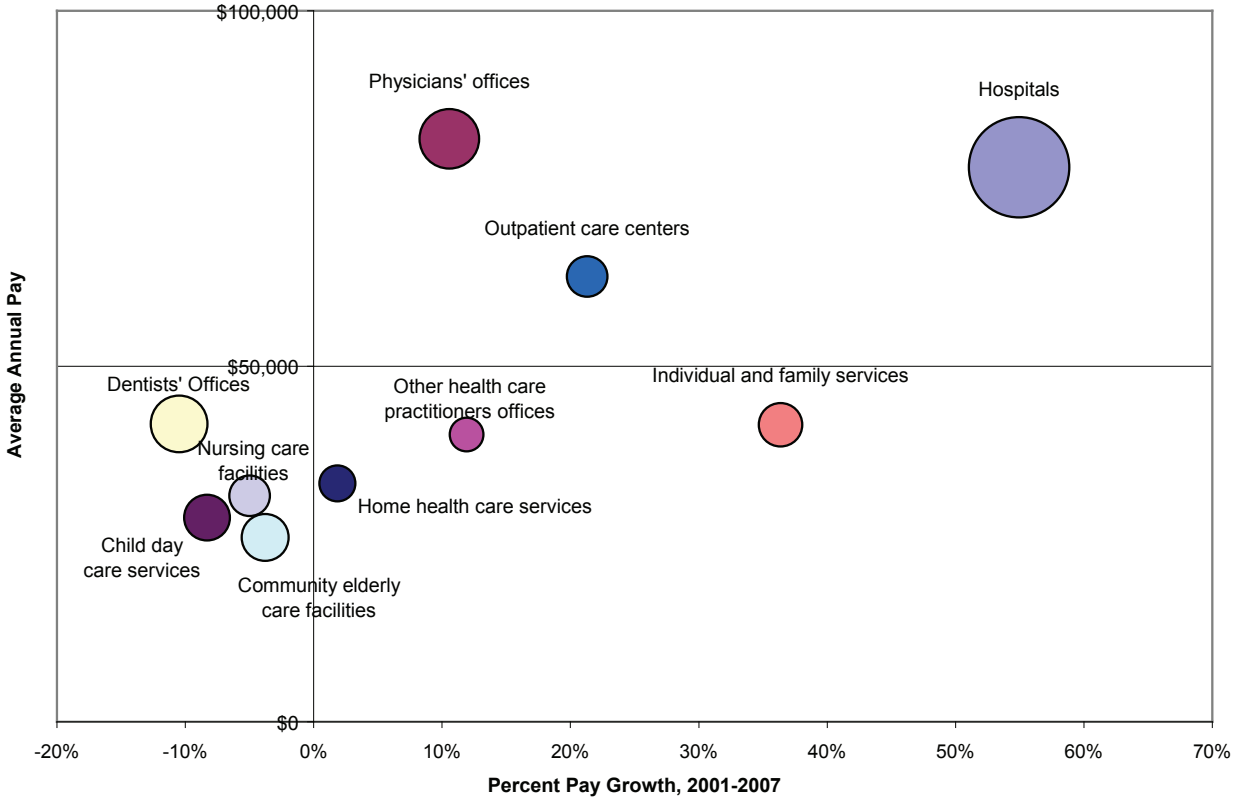


Health Care and Social Assistance Wage Trends

Overall, wage trends in health care and social assistance industries have been quite positive. Average annual pay in hospital grew by 55% between 2001 and 2007. Individual and family services average pay grew by 36% in that time. Average pay in offices of physicians (11%) and other health care practitioners (12%), outpatient care centers (21%), and even home health care services (2%) also saw growth in real terms.

In contrast, pay in dentists' offices, nursing care facilities, community elderly care facilities, and child care facilities actually declined in real terms between 2001 and 2007, which is especially worrying considering the already low annual pay in most of these sectors.

Average Annual Pay, Size, and Pay Growth, Health and social assistance

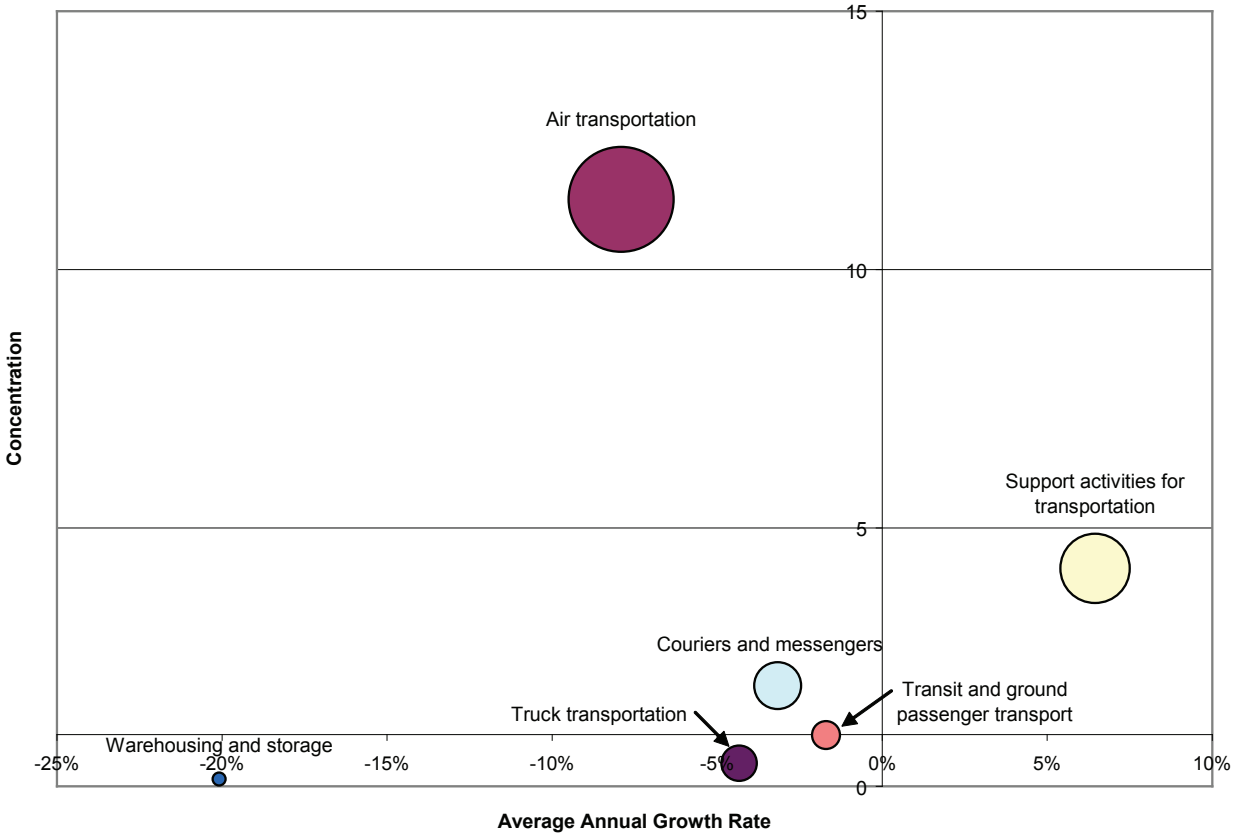


Transportation and Warehousing Employment and Concentration

The majority of employment in this sector is linked with San Francisco airport. Direct employment in air transportation totaled 14,017 in 2007, 54% all employment in the sector. Adding support activities for transportation (6,179 people) and couriers and messengers (2,848) accounts for 89% of all employment in the sector.

The concentration index for air transportation is 11.4, again reflecting how important the airport is to the County's economy. Unfortunately, employment in air transportation declined by over 7,000 people between 2001 and 2007, an average decline of 7.9% a year. Support activities for transportation, however, grew at a 6.5% rate in that time, but since it was starting from a smaller base, this only totaled 1,659 new employees. All other sub-sectors saw significant declines in employment between 2001 and 2007.

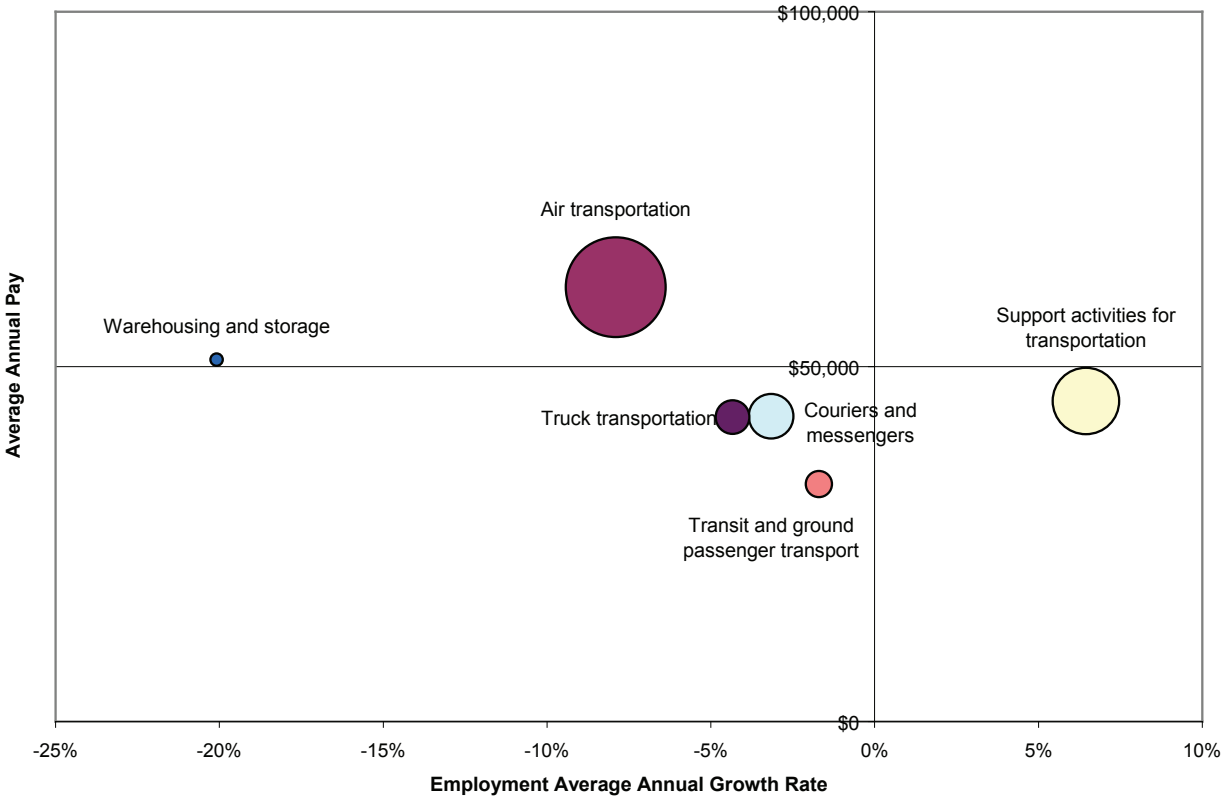
Concentration, Size, and Growth, Transportation & Warehousing



Transportation and Warehousing Pay

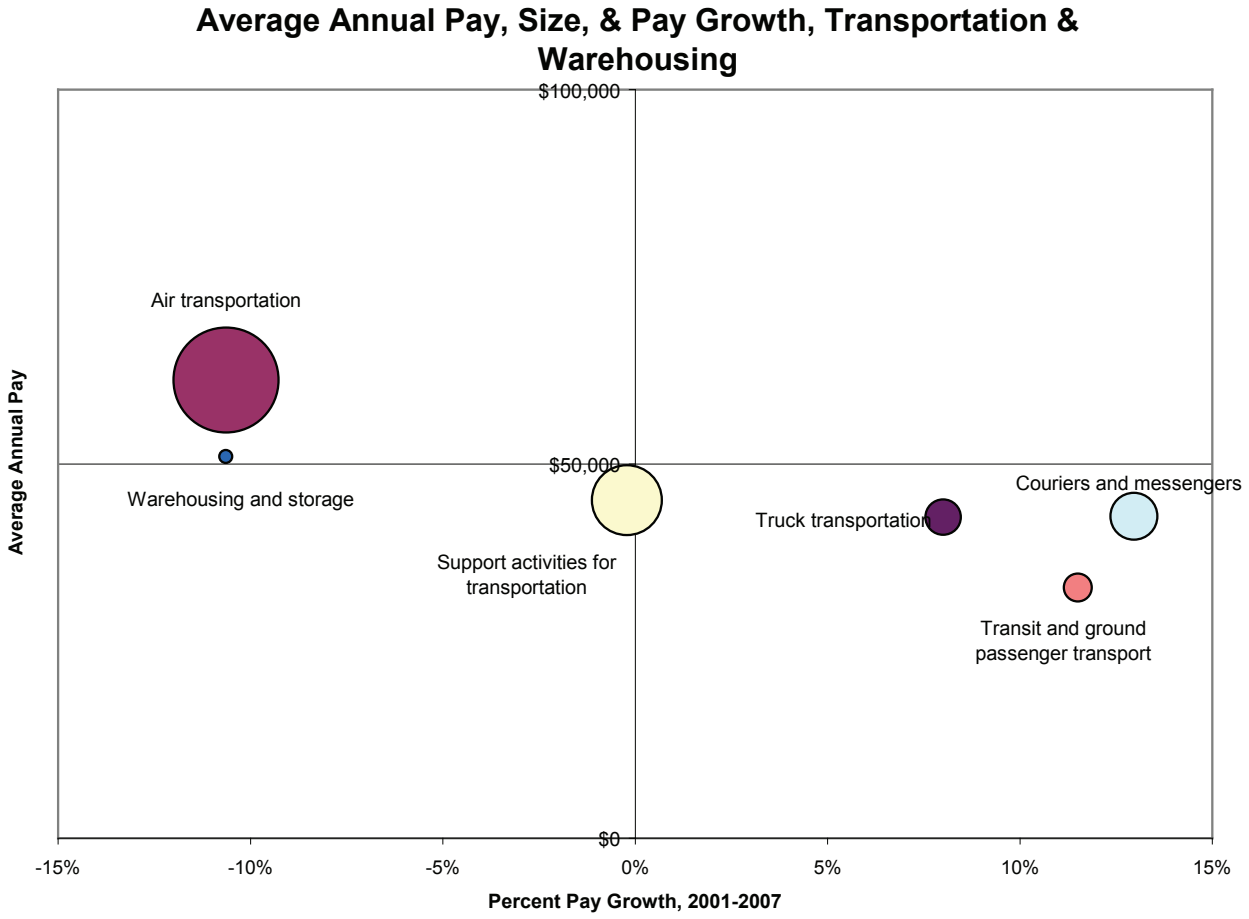
Average annual pay in air transportation in 2007 was $61,173, which is below the country-wide private sector average of $73,000, but is a substantial pay level. In the most rapidly growing portion of the industry, in support activities for transportation, average annual pay was $45,148 in 2007. The lowest pay in the sector was in transit and ground passenger transport, where the average annual pay was only $33,460.

Average Annual Pay, Size, & Growth, Transportation & Warehousing



Transportation and Warehousing Pay Trends

Another sign of the problems in air transportation in the County is the declining pay levels in the sub-sector. Average annual pay in air transportation declined by 11% between 2001 and 2007. Average annual pay in support activities for transportation were nearly flat across that period, while pay levels increased in all other sub-sectors of the industry. Couriers and messengers saw average annual pay levels increase by 13% between 2001 and 2007.



IV. Conclusion

The data presented in this report provides a broad overview of the employment structure and dynamics in San Mateo County. The picture that emerges is not encouraging. The region faced a dramatic economic shock in the wake of the 'dot.bomb' collapse in 2000 and 2001, and employment declined or remained stagnant across the County for a number of years after that. Though growth began to resume in 2006, overall employment in the County and employment in most industry sectors in 2007 remained below employment levels attained in 2001. With the current economic turbulence and the likelihood that the U.S. has already entered into, or will shortly enter into, another recession, prospects for further job growth are not encouraging.

This discouraging labor market picture also takes place in the context of significant inequality. Large portions of the San Mateo workforce are employed in low-wage jobs, largely in the retail sales and food service sector, with few opportunities for advancement or improved wages. Meanwhile, others are employed in highly paid jobs in highly technical or knowledge-related fields that typically require a four-year college degree or higher. Unfortunately, these patterns of inequality are strongly shaped by ethnic and race divisions, with disproportionate numbers of Latino and African-American residents of San Mateo suffering in the lower tiers of the labor market.

This analysis of recent labor market trends, however, is not entirely bleak for lower and middle-class workers. Despite the overall stagnant labor market, there has been significant job growth in a number of employment sectors that employ substantial numbers of people without a four-year college degree. The most prominent growth sectors include health care services and social assistance. There has also been substantial growth in the region's pharmaceutical and bio-tech industry. While many jobs in this industry require significant specialized training and advanced degrees, it is also true that there are technician jobs that are available to people with appropriate training and frequently a 2-year community college degree.

It is likely that, with appropriate investments in training, placement and other forms of workforce support systems, employment opportunities in these sectors could be expanded. The purpose of this report was not to provide a comprehensive analysis of any specific industry, or to lay out a comprehensive workforce development strategy for the County. The goal of this report is much more modest—to provide a data-driven baseline analysis of labor market trends in the County, and to identify potentially promising opportunities in the County for significant workforce development initiatives.

Hopefully this report can provide some useful material for further discussions in the County on how best to develop a comprehensive workforce development strategy that can simultaneously promote economic growth and improved employment opportunities in San Mateo County.

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