

PLACER COUNTY INFORMATION TECHNOLOGY STUDY

Prepared for the

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OFFICE OF ECONOMIC DEVELOPMENT**
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Executive Summary

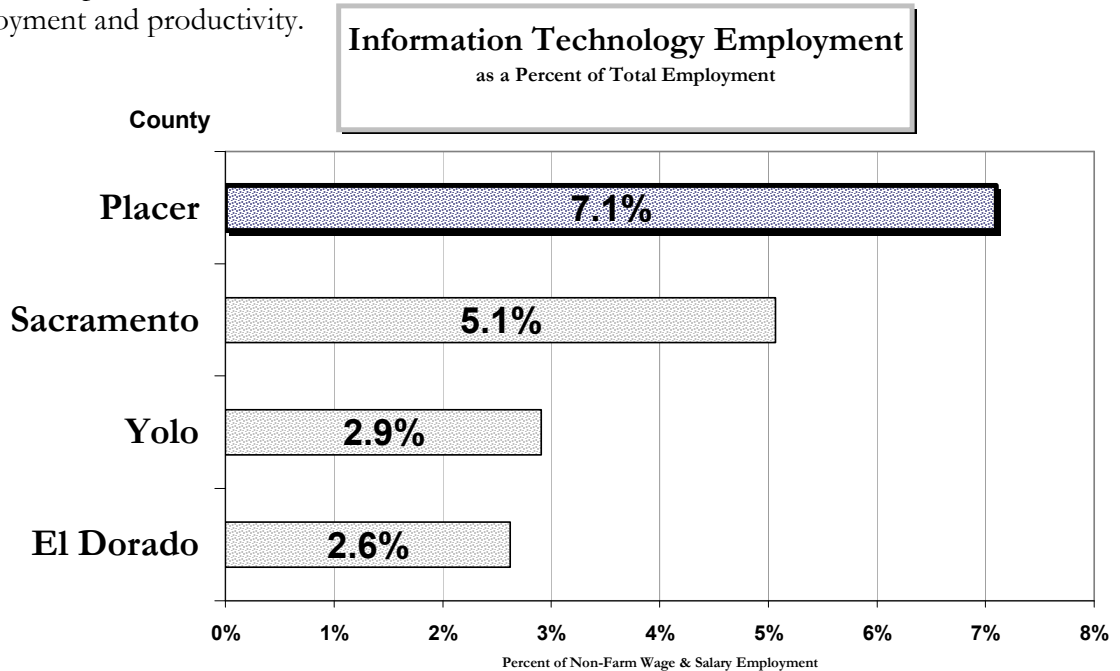
Placer County has the highest percentage of its employment in Information Technology in the Sacramento Region, and has an IT concentration approaching that of some of California's leading IT economies, according to a study just released by the Regional Economics & Land Use Institute at California State University, Sacramento.

The Information Technology (IT) or "new economy" includes not only the manufacture of computers, servers, network and communications equipment, but also the computer network services, software, digital network services, and applications of this technology. This industry is the nation's fastest growing economic sector and is responsible for most of the past decade's increases in employment and productivity.

Information technology in Placer County provides about 7.1% of its total employment, well ahead of the Sacramento Region's other counties.

Placer County had 418 firms in the IT sectors, with 7,304 employees. The annual IT payroll of Placer County was about \$363 million, or about 18% of the County's total private employer payroll.

The average 1998 wage in Placer County IT firms was \$51,593, nearly twice the overall county wage level of \$27,088.



Source: Bureau of Labor Statistics ES-202 1997.
Data for SIC sectors 357, 366, 481, 737, and 87.
CSUS-Regional Economics & Land Use Institute

PLACER COUNTY INFORMATION TECHNOLOGY STUDY

This is a major revision of the view of Placer as primarily a manufacturing area.

The IT concentration in Placer County places it well ahead of the State of California average of 6.2%, and ahead of the major Southern California economies except San Diego. Placer's IT percentage is just below that of Alameda County, containing the Tri-Valley communities of Livermore, Pleasanton, and San Ramone, which are viewed as leading New Economy nodes. Santa Clara and San Francisco are the California IT leaders.

The study also shows that most of Placer's IT firms are not spillover from Silicon Valley, but are local startups. Even firms who moved to Placer County mostly moved from other Sacramento region locations.

Further, they do not primarily depend on Silicon Valley customers. Most of the customers are either here in the Sacramento region or elsewhere in California, the US, and foreign clients.

A survey of the level of satisfaction of IT firms in Placer County showed they are very happy to be there, with 85% giving it an above average or very satisfied rating. Only 6% were below average, and no firms responded as "very dissatisfied."

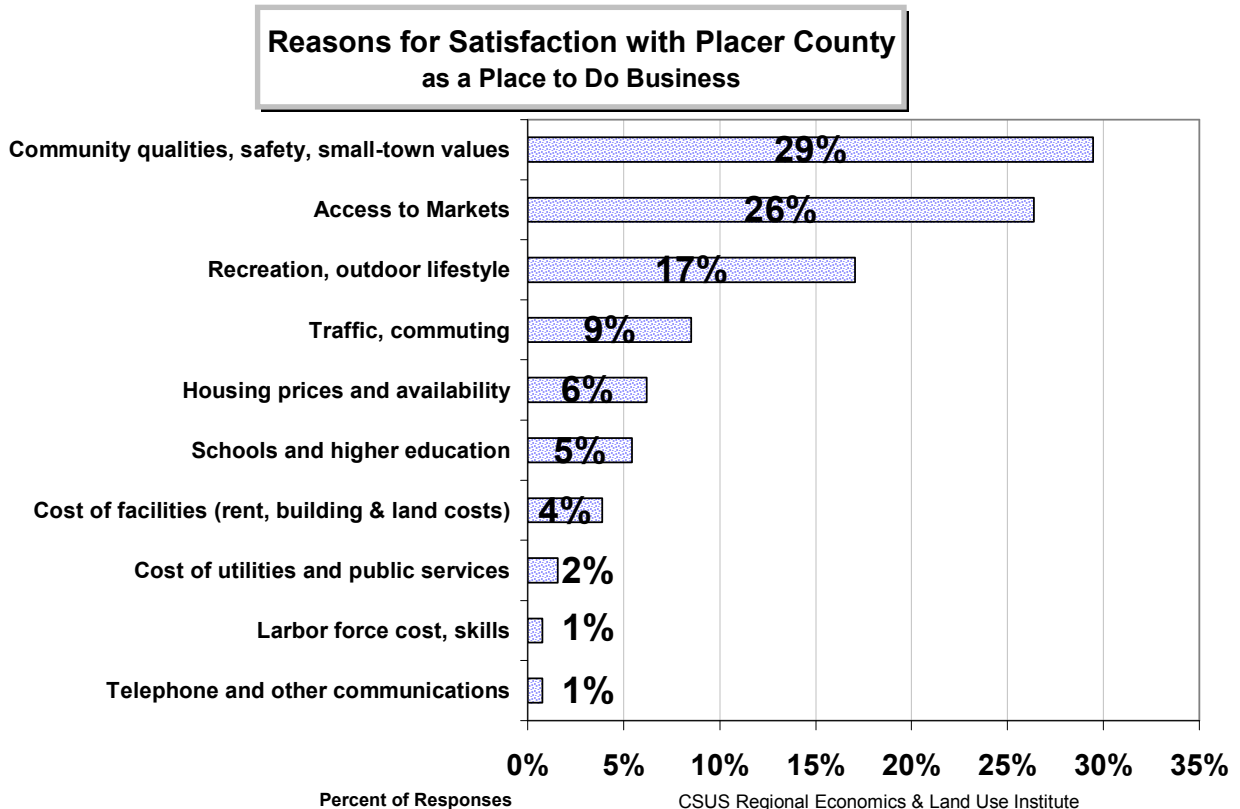
County	Information Technology Employment as Percent of Total
Santa Clara	18.1%
San Francisco	8.5%
San Diego	7.8%
Alameda	7.4%
Placer	7.1%
Orange	6.1%
LA	5.2%
Riverside	2.0%
CA	6.2%

Data for SIC sectors 357, 366, 481, 737, and 87.
 Source: Bureau of Labor Statistics ES-202, 1997.
 Percent of Non-farm Wage & Salary Employment.

The reasons IT firms are so successful in Placer County are not the usual cost-of-doing-business reasons. The quality of communities and residential amenities are at the top of the list, and other quality of life issues are among the top reasons for their satisfaction with Placer County. The only traditional business factor these firms ranked highly is access to customers.

There is no expectation of a recession in the Placer County IT industry. Only 2.2% of firms expect a downturn in employment in 2001, while 52.2% expect to expand in 2001 and about 46% expect no change. Many firms are in the process of introducing new products or services, especially firms in manufacturing activities.

The satisfaction with traffic and commuting shows that for those who live in Placer County and work in Placer County, there is no traffic problem.



RESEARCH REPORT

Introduction

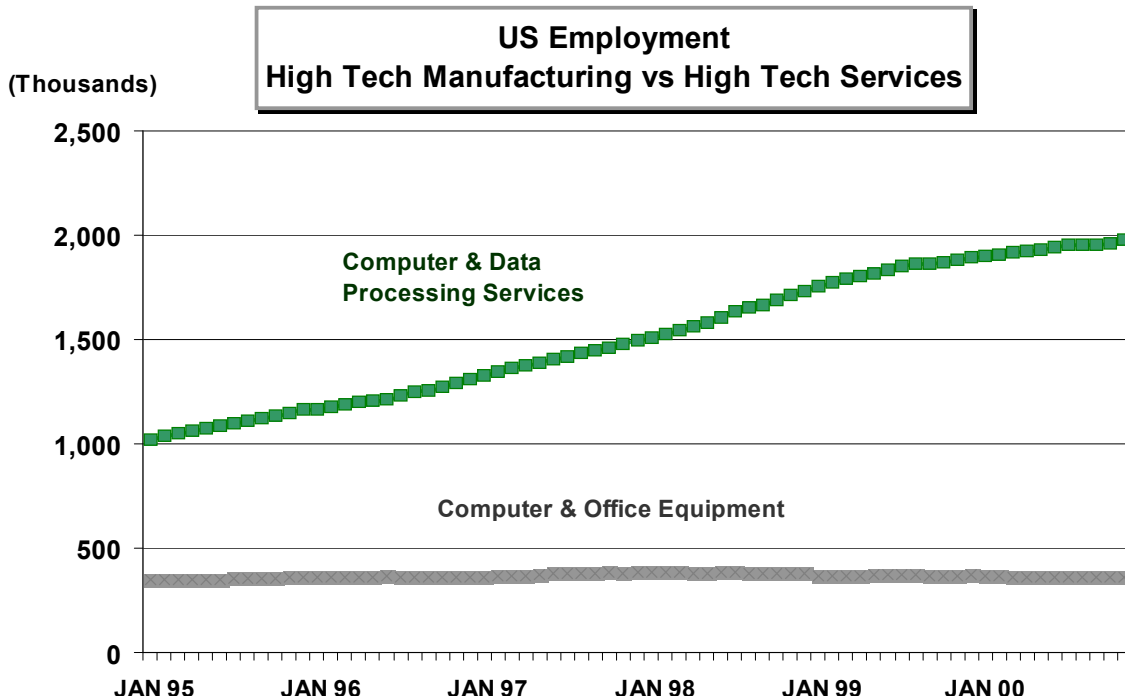
The Placer County Information Technology study was conducted to determine the extent of this important “New Economy” industry and its role in the rapid employment growth of Placer County.

The Information Technology (IT) or “new economy” refers to the application of information technology to all phases of business, government, and personal activities in a way which revolutionizes how transactions of all types occur. It includes not only the manufacture of computers, servers, and other network and communications equipment, but also the computer network services, software, digital communications networks, and the applications of this technology to business, commerce, entertainment, and governmental activities.

The growth of information technology is primarily in the services sectors, where employment nationally has doubled over the past 5 years while manufacturing has remained essentially unchanged.

This transformation is occurring at a pace unknown in our previous economic history, and is having a profound effect on economic productivity. Federal Reserve Chairman Alan Greenspan has stated that the decade of high employment and low inflation is primarily due to high worker productivity due to the deployment of information technology.

The firms which create IT capacity are now receiving most of the public attention, as the industry is in its early development stages. As the industry matures, the applications and users of IT will ultimately dominate the industry. In the long run, IT will disappear into the normal fabric of commerce, and become a necessary and accepted part of all activities.



Placer County is one of California's leading IT economies.

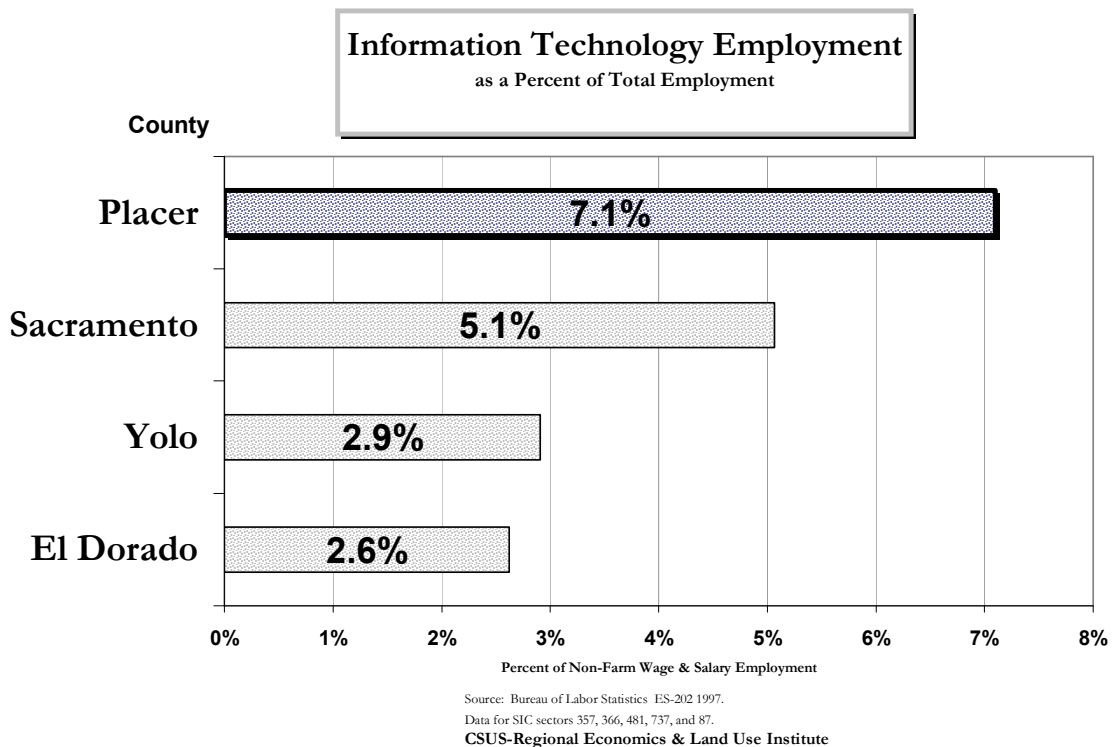
Placer County is leading the Sacramento region into the information technology era. Information technology in Placer County provides about 7.1% of its total employment, well ahead of the Sacramento Region's other counties. This is a major revision of the view of Placer as primarily a high-tech manufacturing center.

Placer County had 418 firms in the IT sectors, with 7,304 employees. The annual IT payroll of Placer County was about \$363 million, or about 18% of the County's total private employer payroll. The average 1998 wage in Placer County IT firms was \$51,593, nearly twice the overall county wage level of \$27,088.

The IT concentration in Placer County places it well ahead of the State of California average of 6.2%, and ahead of the major Southern California economies except San Diego. Placer is just below Alameda County, which contains the Tri-Valley communities of Livermore, Pleasanton, and San Ramone, which are viewed as leading New Economy nodes. Santa Clara and San Francisco are the California IT leaders.

County	Information Technology Employment as Percent of Total
Santa Clara	18.1%
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Data for SIC sectors 357, 366, 481, 737, and 87.
Source: Bureau of Labor Statistics ES-202, 1997.
Percent of Non-farm Wage & Salary Employment.



Placer’s IT Sector is Primarily Local Startup Firms

The generally accepted concept that IT in Placer is a spillover from Silicon Valley is not accurate. About 63% of Placer County IT firms started up in Placer County, with only 37% moving here from another location.

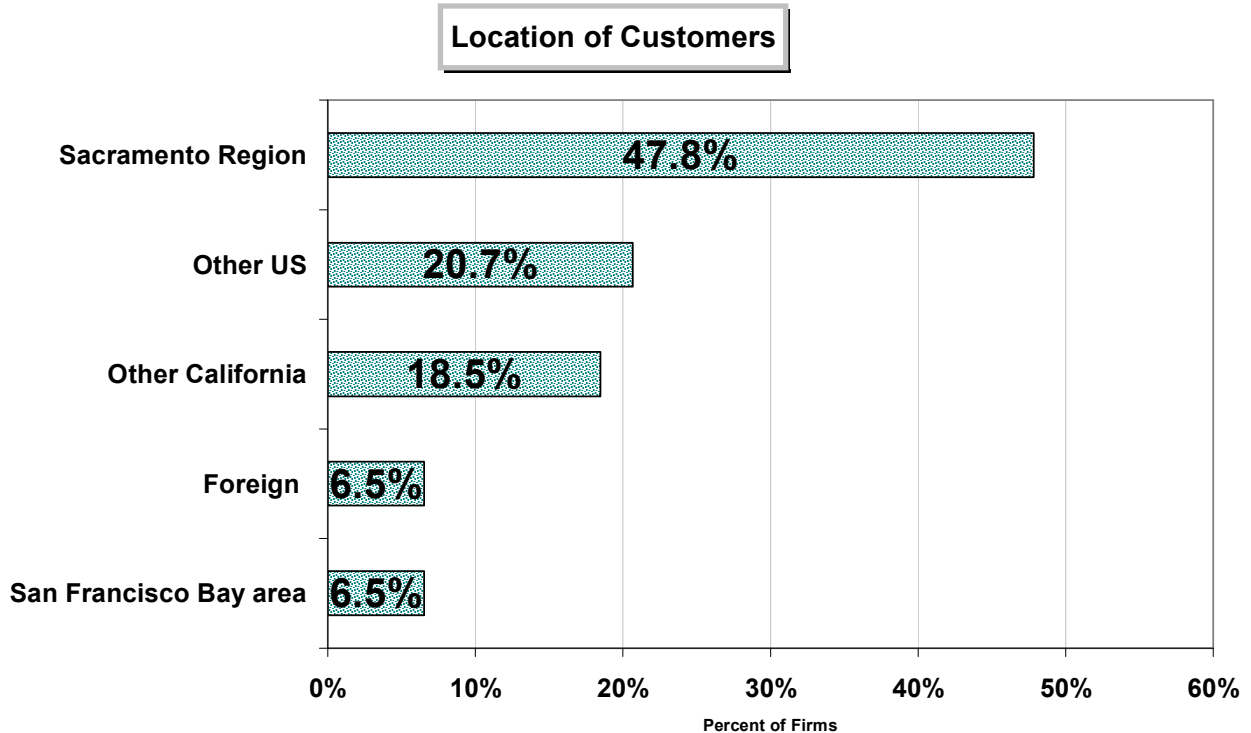
Origin of Placer County IT Firms	
Started in Placer County	63%
Moved to Placer County	37%

Placer County IT Firms Origin of Moves to Placer County	
Within Sacramento Region	51%
San Francisco Region	38%
Other California	5%
Other US	3%
Outside US	3%

Of these movers, most (51%) originated within the Sacramento region. The San Francisco region accounts for only 38% of the 37% of movers, or about 14% of all IT firms.

Not Dependent on Bay Area Customers

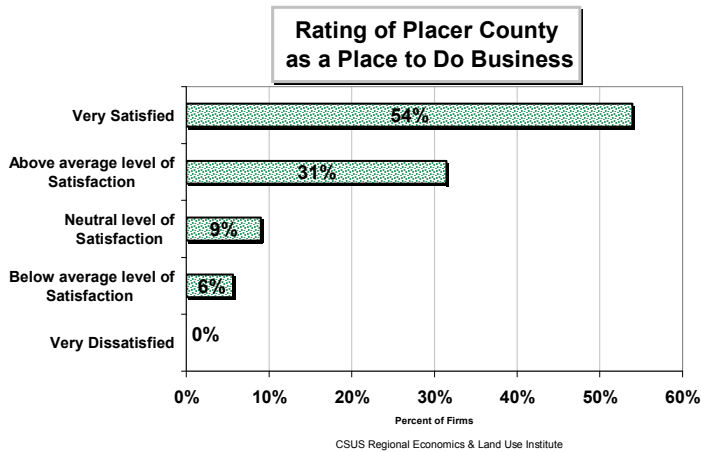
On the customer side, Placer’s IT firms are not primarily dependent on the San Francisco Bay area. Only 6.5% of firms reported that their major clients are in the San Francisco Bay area. The highest response, nearly 48% of the firms, reported that their major clients are here in the Sacramento area, where services to HP, Intel, and State of California government are very important. An almost equal number reported that their major clients are elsewhere in California, the US, and foreign.



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High Satisfaction Rating

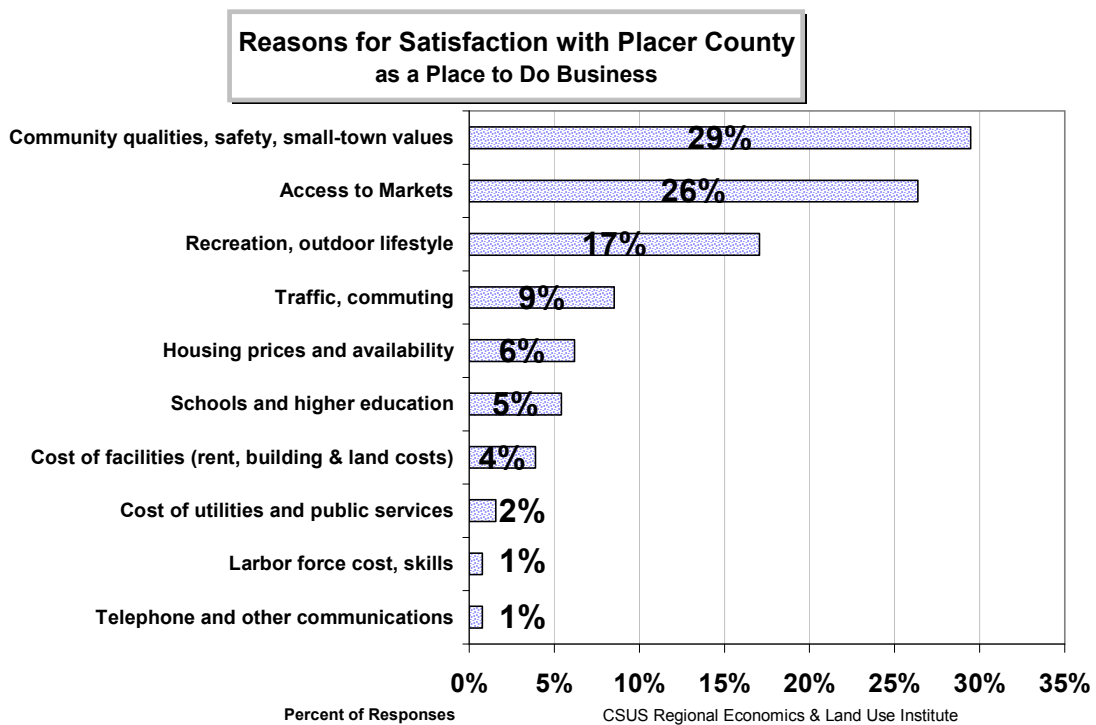
The survey showed that IT firms in Placer County are very happy to be there, with over half “very satisfied” and 85% in the two above-average categories. Only 6% were below average, and no respondents – even those whose companies are expecting to lose employees this year – were “very dissatisfied.”



Reasons for Satisfaction with Location in Placer County

The reasons IT firms are so successful in Placer County are not the usual cost-of-doing-business reasons. The quality of communities and residential amenities are at the top of the list, and other quality of life issues are among the top reasons for their satisfaction with Placer County. The only traditional business factor these firms ranked highly is access to customers.

The satisfaction with traffic and commuting was viewed as an asset for Placer County. Obviously these respondents, who live in Placer County and work in Placer County, do not have a traffic and commuting problem.



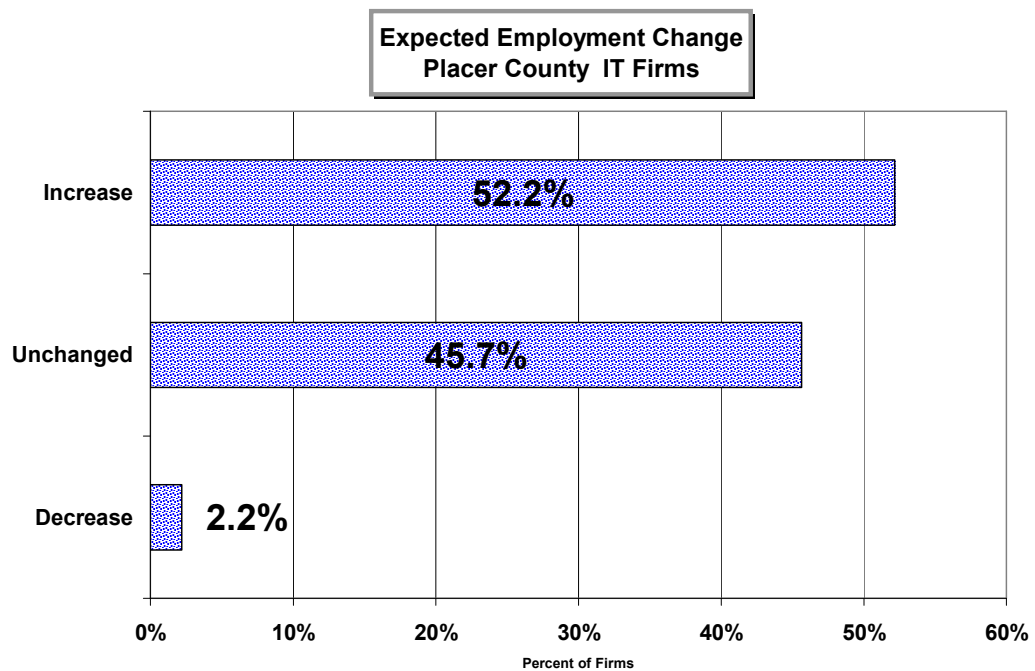
New Products or Services

These mostly new firms are in a process of expansion and restructuring. This bodes well for the future of IT in Placer County. Firms in the manufacturing part of the industry are rapidly changing and expanding, with 67% reporting significant changes in their products or services within the next year. This is good news, indicating that the manufacturing sector is not becoming obsolete but rather restructuring to take advantage of the rapid growth and changes in the information technology industry.

Percentage of Placer County IT Firms Expanding or Changing Products or Services within next 12 months	
Manufacturing, Computer and Office Equipment	67%
Information & communications services	39%
Engineering and Planning Services	15%

Growth Expectations

There is no expectation of a recession in the Placer County IT industry. Only 2.2% of firms expect a downturn in employment in 2001, while 52.2% expect to expand in 2001 and about 46% expect no change. Many firms are in the process of introducing new products or services, especially firms in manufacturing activities.

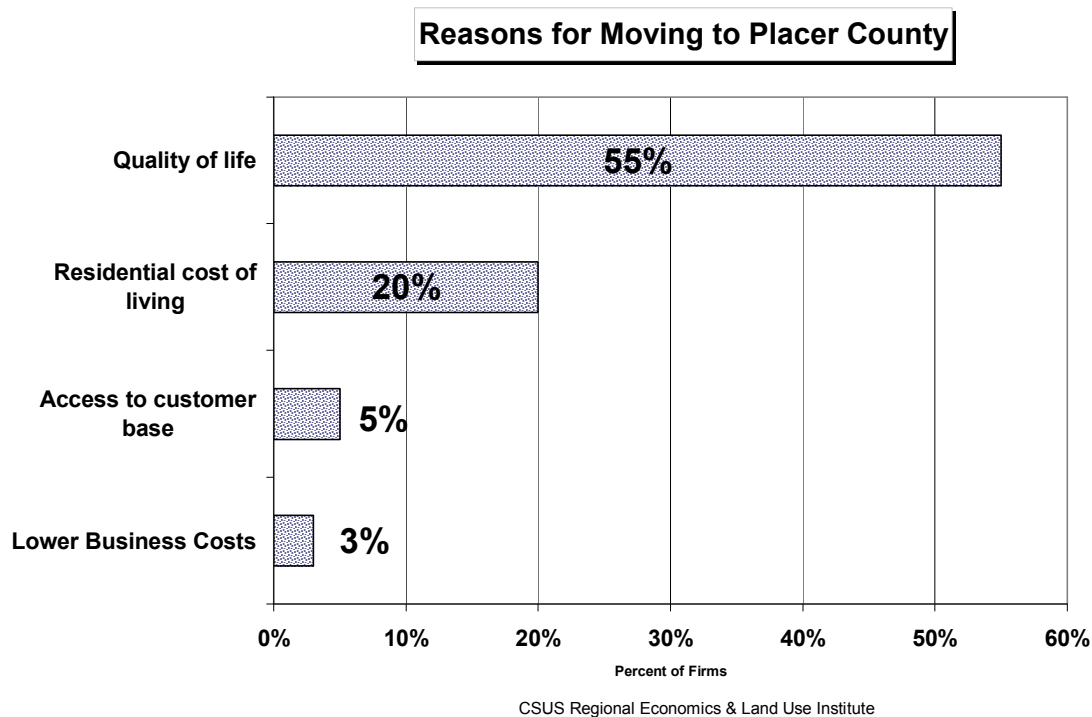


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More Information about Firms which Moved to Placer County

Reasons for Moving to Placer County

For those firms which originated elsewhere and moved to Placer County, the primary reasons given for the move are shown in the graph. The important issues are residential cost of living (home prices) and quality of life. Together these two variables account for 75% of the reasons given. This shows the high importance placed on quality of life issues in this industry where firms and employees have a wide range of choices. Traditional business costs and access to customers were of very little significance compared to the quality of life and residential issues.



Years in Placer County

For those firms which moved to Placer County, the average number of years the firms have been in Placer is 5.7 years for manufacturing firms and 8.3 for other firms except communications services. The Communications Services category is dominated by local telephone service companies with long histories in the area, and average nearly 23 years.

Years in Placer County for Firms which Moved Here	
Manufacturing	5.7
Software & Computer Services	8.3
Engineering and Planning	8.3
Communications Services	22.9

Size of Firms

The size of the firms, in terms of number of employees, averages about 36 employees, but the average varies greatly across the IT sectors. In order to reduce the impact of Hewlett-Packard and its approximately 5,500 employees, this firm has been deleted from the data in this table only. Without HP, the largest average firm size is in the communications services, which includes telephone companies, Internet providers, call centers, and business e-commerce companies. Computer and Office Equipment manufacturing (less HP) and Computer and Software Services (also less HP) are in the middle range, while Engineering and Consulting Services and Communications Equipment Manufacturing have very low average number of employees.

Sector	Average Number of Employees
Computer and Office Equipment Manufacturing	51
Communications Equipment Manufacturing	3
Computer and Software Services	45
Communications Services	118
Engineering and Consulting Services	8
All Sectors	36

Research Methodology

The Placer County Information Technology Study was conducted to determine the extent of Information Technology (IT) industry in Placer County, and the parameters which affect the growth potential for this industry. The importance of this study is based on data which shows that information technology is replacing high technology manufacturing as the primary growth industry in California and the US. The role of Placer County in this restructuring process is a key element of planning the County's economic future.

The Information Technology industry is broadly defined as those business sectors involved in the invention, production, and application of digital communications and information handling technology to business, government, and individual tasks. The industry includes the following sectors:

- Computer and communications equipment manufacturing, which provides the hardware on which the IT process operates. This includes the manufacture of personal computers and peripherals, servers and other network communications hardware, and wire, wireless, and fiber optic transmission systems. These firms are included in the Standard Industrial Classification (SIC) 357 and 366.
- Software and Computer Services, which includes retail and special purpose software and programming as well as network design, installation, and management. These firms are included in SIC sector 737.
- Communications services, which includes Internet, intranet, and digital voice and video communications. These firms are in SIC sector 481.

- Engineering and Consulting Services, which includes the application of IT processes, databases, and software programs to business and government operations and decision making. These firms are in SIC sectors 871-874.

Studies of the information technology industry are difficult to conduct because of several data problems. The basic problem is that the method used to categorize firms was devised long before the information technology sector was envisioned, so that the IT data is scattered throughout many traditional economic sectors and difficult to identify. This is especially true of the employment-by-industry data from the monthly Current Employment Survey widely used in economic analysis.

The study took two additional approaches to provide better information about the IT industry in Placer County.

First, a detailed analysis of Placer County firms was conducted using a data base referred to as the Employment Security or ES-202 data. This Department of Labor information includes all firms which pay unemployment insurance premiums, and includes about 80% of all employers, and can provide much more detail about employment and payrolls by type of firm. The disadvantage of this data is that it takes about 2 years for the data to be collected and published, so the latest data available was for 1998, and recent changes in the economic structure are not revealed in this data.

The second solution to the data problems was a large-scale RELUI Survey. In order to obtain detailed descriptions and current data from Placer County IT firms, hundreds of firms in all segments

of information technology were interviewed, and were asked questions about what they produce, how they are changing, and their expectations for change.

A sample population of 331 firms (of the estimated 418 total) was identified from telephone listings and commercially-available data bases, and attempts were made to contact all of these firms by telephone.

Our first lesson was that many of these firms are very new, and as a result many do not have staffing to answer telephones, and some did not stay in business very long. Many of the phones were voicemail only, and others had been disconnected without forwarding numbers. Nearly 49% of the initial contacts were not reachable, leaving 169 firms contacted.

Of the firms contacted, 21 declined to participate in the survey, but a surprising 87% of those firms reached agreed to participate. This is a very high participation rate for a business survey, and many firms were interested in the study and requested copies of the report summary when it was completed. (The report summary has been distributed as requested, primarily by e-mail.)

In order to focus the study on firms which are fully qualified as information technology participants, a series of questions was asked about the exact nature of the firm's products or services. Many firms did not qualify due to their primary business being retail sales of technology products; communications firms which were primarily analog voicemail, paging, or security services; and consulting firms which were primarily accounting, architects, or other professions which do not primarily make intensive use of state-of-the-art software or data bases. Firms which did not meet the information technology definitions were not included in the ensuing survey. About 38% of the firms were eliminated from the survey for these reasons.

The remaining participants in the detailed survey included 92 firms, representing a sample of about 22% of the theoretical number of IT firms in Placer County, based on the ES-202 data.

Participation in Placer County IT Survey	
Would not disclose	12%
Disqualified, not an IT business	33%
Included in data analysis	54%
Total	100%

Importance of the Findings

The Study has revealed that Placer County is not the New Silicon Valley in terms of high technology manufacturing, but may be one of the new economy centers of California. The concentration of information technology firms in Placer County is much higher than previously realized, and a title of e-Placer may be more appropriate than New Silicon Valley.

This is very important in light of the ongoing restructuring of many California regions which are rapidly moving toward

“new technology” economies. During the past year, the shift from manufacturing toward the business applications of information technology has been phenomenal in many California regions.

The business services components of this industry accounted for 36% of the new jobs in San Jose, 33% of the new jobs in San Francisco, 20% of the new jobs in Oakland, but only 15% of new jobs in the Sacramento region. The data in this report shows that maybe the Sacramento region is not being left behind in this restructuring, but is being led toward a new economic structure by Placer County