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Silicon Valley Roundtable  
National Association of Business Economists  
**Silicon Valley Forecasts**  
September 1999

**Silicon Valley Forecasts**

by Claire Starry, TDS Economics

Members of the board of the Silicon Valley Roundtable Chapter of NABE prepared the following consensus forecasts of selected Silicon Valley indicators. These forecasts support our opinion that the local economy will continue to be robust into the year 2000. Venture capital spending in the Valley, already surpassing previous highs, continues to be a key driver of growth and prosperity. Employment growth is outpacing available labor supply, resulting in labor shortages in many critical job categories. The demand for commercial real estate is outstripping supply, and lease rates are surging upward. Housing shortages are common. With longer commutes and more workers, congestion is worsening. Despite these negative effects of growth, most of our intrepid Silicon Valley forecasters believe that there is no near-term recession in sight. However, one forecaster believes that a softening of the economy is imminent and will relieve some of the pressure on housing and congestion.

**Venture Capital in Silicon Valley**

by Micheal Kelly, University of Ottawa

This has already been a record year for venture capital in Silicon Valley. According to the Pricewaterhouse Coopers Money Tree Survey, the area attracted \$1.7 billion in Q1 1999 and \$2.7 billion in Q2, breaking the \$2 billion mark for the first time. This is more venture money than invested in the Valley in all of last year (\$3.3 billion).

The Valley's share of VC investment nationally has increased from 33% last year to over

40% for the first half of 1999. The explosive growth of the Internet and the capital demands of Internet companies are fueling this investment surge.

While Silicon Valley is widely recognized as playing the lead role in the VC capital scene, it should also be noted that it is now the center of the world's VC industry. Over the last decade, local VC has been supplemented by a rapid influx of venture groups from around the world, seeking investment opportunities in, and linkages with, high technology companies in the area. Today, alongside the major players such as Kleiner Perkins, the Mayfield Fund and IVP, one can find a host of foreign corporate VC groups including Sony, Telecom Italia, Siemens, NEC, Panasonic, LG and Nokia. Dozens of VC firms from Asia, Europe and Israel have set up operations in the area. Most of the major Japanese Trading Houses (e.g. Mitsui) are also doing venture investments through local subsidiaries. Overall, these groups have probably added several billion dollars to the Valley's venture pool. However, as their investments tend not to be picked up in standard surveys, the amount is hard to verify. One estimate puts Asian venture investments (excluding Japan) in Silicon Valley at about \$500 million in 1997.

More than money, however, these foreign venture funds and corporate investors have further added to the rich networks that link the region and its companies to the rest of the world. They can provide unique access to foreign manufacturing opportunities, skills, markets and partners.

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## **Housing and the Quality of Life**

by Richard Carlson, Spectrum Economics

Silicon Valley's economy is experiencing the unstoppable force of high-technology business growth meeting the immovable object of a desperate housing shortage. Housing costs have spiraled to levels that now match and will soon exceed what were once the highest in the nation: Honolulu, Manhattan and few elite suburbs near Boston and New York City. The median 2,000 sq. ft. home costs over \$500,000 on the Mid-Peninsula and over \$300,000 in all of Santa Clara County. Home price inflation has been 10% to 20% per year since the mid-1990s. In the face of these spiraling housing costs, home construction is declining, from 8,800 units in 1997 to about 7,000 units in 1999 in Santa Clara County, where communities compete to restrict home construction.

Faced with an already desperate housing situation that is clearly only going to get worse, both workers and employers learn to adapt. Employees lengthen their commutes to ever more distant refuges of normally priced housing markets, vary their commute times, work out of their homes, live in RV's in parking lots, and double up families in homes and apartments. Families without high-income earners simply leave the area. Employers are forced to bid-up wages—fast food restaurants now pay \$9 per hour. Cost sensitive firms are forced to move to find an affordable labor force.

The result of all these factors is the continual replacement of "normal" families and businesses by high income, high technology workers, families and firms. Silicon Valley is an enormous "gentrification" area with an economy constrained by its housing market. There is no end in sight for this process. There is no political support for more housing supply. Housing costs, incomes, traffic and wages will continue to grow much faster than national

averages. Job growth will continue, but at 10,000 to 20,000 jobs per year, not the up to 50,000 jobs per year that local industry could provide. Commutes will lengthen and Silicon Valley industry will spread beyond its current boundaries into Alameda, Santa Cruz, and San Benito counties. Silicon Valley firms will continually move all or part of themselves to other locations in the U.S. and abroad.

## **Valley Pivotal to Gore Campaign**

by Kenneth Jacobson, Lockheed-Martin

Silicon Valley promises to be a key battleground in the 2000 presidential election. As Vice President Al Gore visited California for the 49th time to get the endorsement of Governor Gray Davis, pundits compared him unfavorably to President Bill Clinton in terms of his appeal to California voters. Gore is in a dead heat with Republican George W. Bush in California polls and is faced with a growing challenge from Bill Bradley for the Democratic nomination. California is pivotal to the Gore campaign. Clinton's strong appeal in the nation's most populous state was based on two pillars, Silicon Valley and the entertainment industry. Gore, however, has had trouble maintaining Clinton's popularity with Valley corporate leaders, many of whom have contributed to Bush's huge campaign war-chest. Some insiders give three reasons for Gore's limited appeal to Silicon Valley movers and shakers: his ties to labor; his image as an environmental crusader; and his wooden and doctrinaire personality. Others more sympathetic to the Vice President point to the national phenomenon of "Clinton fatigue." In either case, the Valley remains central to Gore's presidential aspirations. He has billed himself as an apostle of high-tech education. Lack of support here—at the ballot box or in campaign contributions—would hurt him badly in the November election, even if he triumphs over Bradley in the primaries.

## E-Christmas 1999

by David Raphael, Marcar Management Institute

This year's online Christmas season will be a surprise. Most Internet firms, ranging from web retailers across the nation to web enablers—most of which are located in Silicon Valley—are hoping that it will be a blockbuster Christmas. Consumer sales on the Internet were an estimated \$7.0 billion in 1998, most of which occurred during the busy Christmas season, often causing chaos and confusion for newly started e-businesses. This year, some research firms are calling for a 60% to 70% increase over 1998's online sales. Traditional brands such as Toys "R" Us, Macy's, Nordstrom and Wal-Mart are developing new sites that will go head-to-head with "born digital" firms such as Amazon, eToys, Yahoo, and AOL. All of these firms are gearing up for the anticipated record sales. The implications for Silicon Valley are significant. First, it will create more jobs and a boost for Silicon Valley firms directly or indirectly involved in web retailing. These firms, such as Respond, Plantx, Andromedia, Moai Technologies, MySimon, Pandesic, TixtoGo, Webvan, Broadvision, and eBay, should benefit as consumers become more comfortable with web commerce. Secondly, a successful e-commerce Christmas will encourage more Silicon Valley start-ups, and thirdly, the amount of capital, especially from VCs and angels, will grow to help these new firms get off the ground.

### Silicon Valley Consensus Forecasts, September 1999

		1994	1995	1996	1997	1998	Average 1999	High 1999	Low 1999	Average 2000	High 2000	Low 2000
<b>Economic Indicators</b>												
Establishment Employment (1)	thousands	1,101	1,142	1,204	1,265	1,305	1,325	1,345	1,320	1,345	1,370	1,340
Labor Force (2)	thousands	1,233	1,234	1,266	1,325	1,361	1,401	1,405	1,390	1,426	1,470	1,408
Average Wages (3)	thousands of dollars	41	44	46	48	49	51	53	50	53	57	51
Manufacturing Exports (4)	billions of dollars	29	38	41	40		45	53	38	48	60	37
<b>Company Indicators</b>												
SV Venture Capital (5)	billions of dollars	0.9	1.1	1.8	2.9	3.3	5.1	7.1	3.5	5.0	6.7	3.4
SV IPOs (6)	companies	30	72	76	45	32	45	50	36	37	45	20
SV 150 Profits (7)	billions of dollars	7.6	12.7	13.4	15.4	14.2	19	21	17	21	24	18
SV 150 Revenues (7)	billions of dollars	109.5	142.2	170	185.3	206.3	225	230	220	245	250	240
<b>Commercial Real Estate</b>												
Commercial Vacancy Rate (8)	Percent	13	8	5	5	6	5.3	6.0	4.0	6.0	8.0	5.0
R&D Lease Rates (9)	dollars per SF	0.80	0.85	1.05	1.40	1.74	1.9	2.0	1.8	1.9	2.1	1.6
<b>Quality of Life</b>												
Congestion (10)	Percent of freeways		11	21	29	31	36	42	33	39	50	35
Housing Affordability (11)	Percent of houses	42	40	40	35	39	39	42	39	41	44	39
Apartment Rental Rate (12)	1991=100	102	110	132	142	152	159	167	156	168	184	156

Sources: Joint Venture Silicon Valley (JVS), San Jose Mercury News, and Employment Development Department.

What is Silicon Valley? Unless otherwise indicated, the data are for the following cities:

Belmont, Campbell, Cupertino, East Palo Alto, Fremont, Foster City, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Menlo Park, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Newark, Palo Alto, Redwood City, San Carlos, San Jose, San Mateo, Santa Clara, Santa Cruz, Saratoga, Scotts Valley, Sunnyvale, and Woodside.

(1) Employment in Santa Clara and San Mateo counties for June, from Employment Development Department.

(2) Labor force in Santa Clara and San Mateo counties for June, from Employment Development Department.

(3) Average wages for Silicon Valley employees, reported by JVS, original data from Employment Development Department.

(4) Manufacturing Exports from Silicon Valley-based firms, reported in JVS.

(5) Total Venture Capital financing in Silicon Valley, as reported by JVS.

(6) IPOs in Silicon Valley, reported in JVS.

(7) SV 150 Profits and revenues as reported by the San Jose Mercury News.

(8) Vacancy rates for office, R&D, industrial and warehouse space, from JVS.

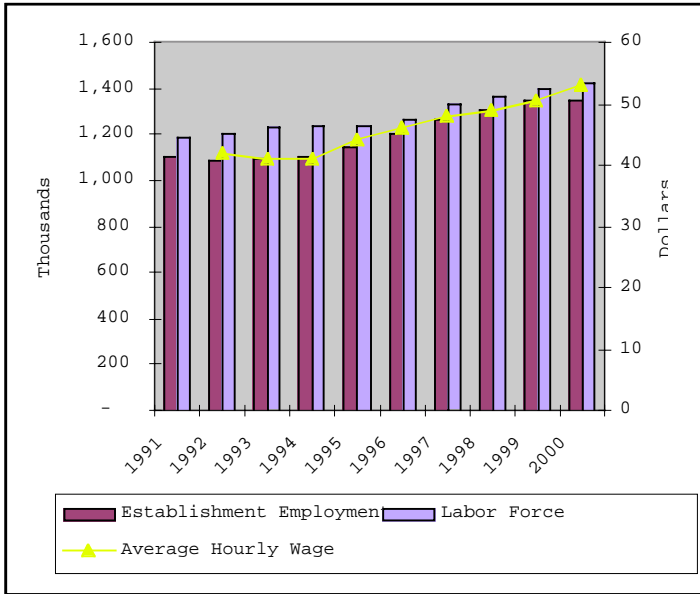
(9) Average quoted R&D space lease rates, quoted in JVS.

(10) Santa Clara County freeway congestion, percent of freeway miles operating at lowest service level, F, during afternoon peak travel time.

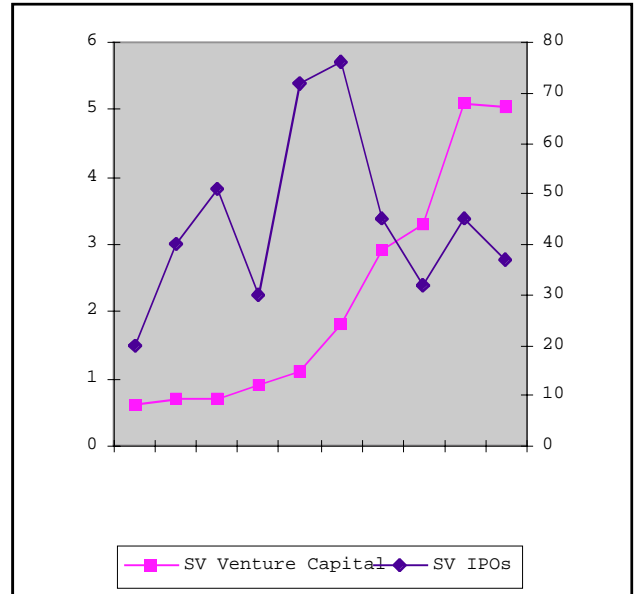
(11) Percentage of Santa Clara County houses that are affordable for households with median income, reported in JVS.

(12) Index of apartment rental rates for Santa Clara County reported in JVS.

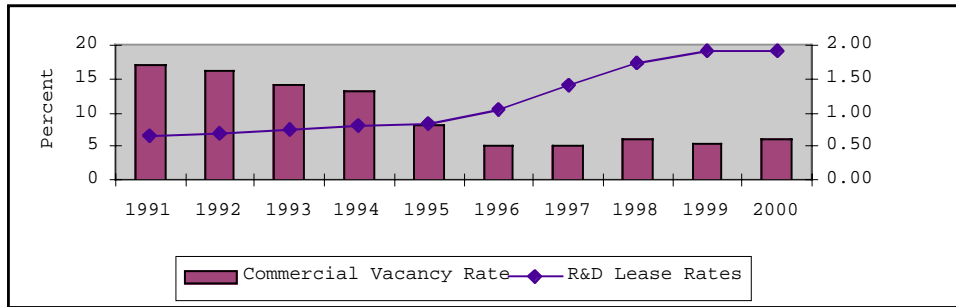
## Labor Force, Employment, and Wages



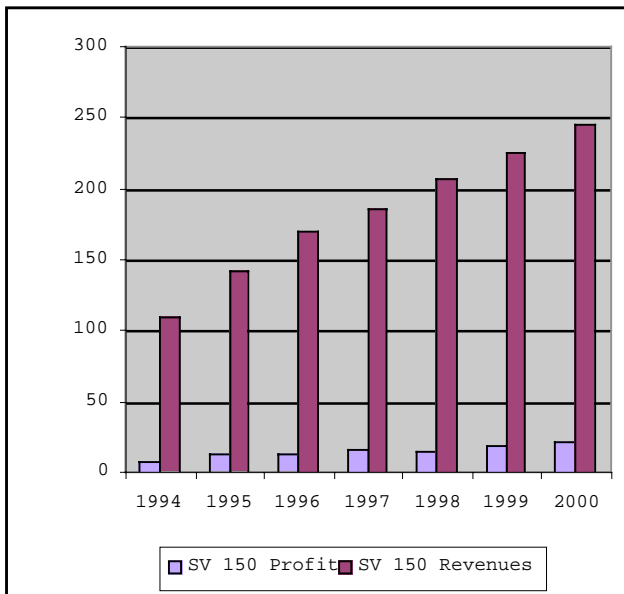
## Venture Capital and IPO's



## Commercial Real Estate Indicators



## SV150 Revenues and Profits



## Housing Indicators

