ATTACHMENT 4.2
VENTURE CAPITAL INVESTMENT IN THE SCAG REGION – YEAR 2001 REVIEW

COMMUNITY, ECONOMIC & HUMAN DEVELOPMENT COMMITTEE
MARCH 06, 2003

REPORT

TO: **Community, Economic and Human Development Committee**

FROM: **Bruce DeVine, Chief Economist, 213-236-1903, devine@scag.ca.gov**

SUBJECT: ***Venture Capital Investment in the SCAG Region – Year 2001 Review***

DATE: **March 6, 2003**

EXECUTIVE DIRECTOR'S APPROVAL:

RECOMMENDED ACTION:

1. Accept the report.

BACKGROUND:

As part of the Jobs/Housing Balance Program for Fiscal Year (FY) 2001-02, SCAG staff collected, mapped, and analyzed data on venture capital investments in high technology companies within the SCAG region. This 2001 year-end report shows that venture capital investment activity curtailed in the region, state, and nation in 2001, compared to 2000 and 1999. The report analyzes the location of the investments, showing that there are five distinct investment nodes in the region: West Los Angeles, Irvine/South Orange County, the Conejo Corridor, Pasadena, and the South Bay of Los Angeles County. Staff will present the findings to the CEHD Committee at its March 6, 2003, meeting.

The report itself, in draft form, has been included in the agenda and will be available to any interested party pending CEHD and RC approval.

ATTACHMENT:

A. Report

FISCAL IMPACT:

This report was prepared in the last fiscal year. The activities to prepare this report were included in SCAG's Overall Work Program (OWP) for FY01-02. Activities to disseminate this report, should it be approved, are included in the OWP for FY02-03.

Venture Capital Investment in the SCAG Region: Year 2001 Review

ASSOCIATION of GOVERNMENTS

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Project Management
Mark Pisano, Executive Director
James Gosnell, Deputy Executive Director
Hasan Ikhrata, Interim Director, Planning and Policy
Lynn Harris, Manager, Community Development

Author
Brett Sears, Associate Regional Planner, Community Development

With research support from
Dr. Bruce DeVine, Chief Economist
Dr. Frank Wen, Senior Economist

Technical Assistance
Joseph Carreras, Lead Regional Planner
Welma Fu, Senior Graphics Designer
Risa Leshowitz, Graduate Research Intern

Executive Summary

This report reviews venture capital investments in high technology companies in the Southern California Association of Governments' (SCAG) region in relation to different regions of the United States and California for the years 1995-2001. "New economy" high technology companies are seen as the economic engines that will sustain the regional economy in the future years. Regions actively pursue these companies and go to great lengths to foster their development because of high paying jobs and other economic benefits that high technology companies bring. Venture capital investment firms provide the investments that launch high technology companies and fund their expansion and growth. This report uses venture capital investment data compiled by a consortium of companies that produce the nationally recognized *Money Tree Survey*. The analysis finds that for 2001:

- The SCAG region's per capita average of venture capital investment is less than the national per capita average.
- The SCAG region saw its national investments ranking fall from fourth in 2000 to eighth in 2001.
- The SCAG region is home to 48% of the population of the State of California yet only received 11% of investments in high technology companies in the state.
- Within the state of California, the SCAG region lost investments to the benefit of the San Diego and Sacramento regions.
- Out of the four venture capital investment regions within the state of California, the SCAG region was most negatively impacted by the high technology slump as it recorded the greatest percentage decrease in investment from 2000 to 2001.
- Within the SCAG region, investments clustered in five identified high technology nodes, with little investment occurring in companies outside of these nodes.
- No investment was reported for companies in the Inland Empire, Imperial County, or North Los Angeles County.
- Within the SCAG region in 2001, investment clustered in companies grouped in three out of the five historical regional high technology nodes: West Los Angeles, Irvine, and Pasadena.

Within the SCAG region, there are disparities between investment locations. The investment hot spots all are located near the coast. As venture capital tends to cluster, it is hard for companies in the Inland Empire or other inland regions to attract funding for high technology companies. Based on the analysis of the data in this report, regional leaders may look for ways to create the environment needed for high technology companies and to development more high technology centers.

Using this report as well as SCAG's April 2001 report *The New Economy and Jobs/Housing Balance in Southern California* and the SCAG July 2002 report *Linking Workers and Job Training through Transit*, regional leaders can implement policies with a goal of expanding the amounts and distribution of venture capital funding. This will spread the benefits of the high paying jobs of the new economy to as many people as possible in the region.

Introduction

California is the leading region in the world for venture capital investment and new economy companies. Within the state, there are distinctive nodes of investment centered in the Silicon Valley/San Francisco Bay region, the Los Angeles/Orange County region, the San Diego region, and the Sacramento region.

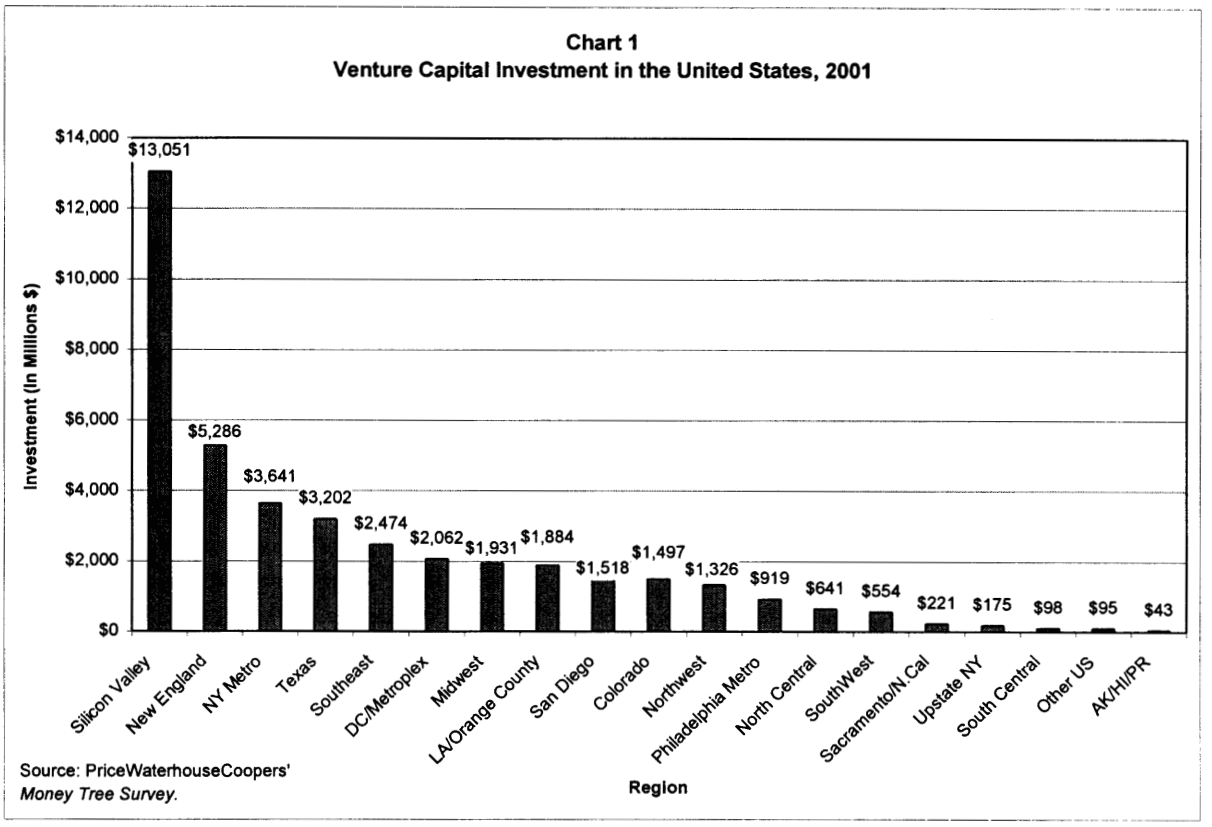
Venture capital investment fuels high technology companies that create the cutting edge products of today's marketplace. These companies, collectively labeled "the new economy," are seen as the future for industry. High technology companies employ highly skilled workers and these companies value their workers as their largest asset. These highly skilled workers command large salaries. Along with their companies, they spur a host of service industries that cater to them.

The Southern California Association of Governments (SCAG) is tracking venture capital investments in its six-county region as reported by the PriceWaterhouseCoopers' (PWC) *Money Tree Survey* (please see the appendix for a description of the data source). SCAG has collected detailed data since the second quarter of 1997 that shows where investments have occurred in Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties. The data collected include company name, new economy industry classification of the company, company location by city and zip code, and the amount of investment received.

This report looks at year-end figures for 2001 for the SCAG region and compares SCAG with the nation and the State of California. The report also examines where the investments are clustered within the SCAG region.

The SCAG Region in the National Picture for Venture Capital Investments for 2001

Nationally, the SCAG region (classified as LA/Orange County by PWC) in 2001 finished well below its historical place in the top echelon of venture capital investment regions. The top two regions remain the same, the Silicon Valley and New England. These two regions were followed by the New York Metro area, Texas, the Southeast, the Washington, DC Metro area, and the Midwest before the SCAG region finally appears as the eighth of eighteen regions categorized by PWC's *Money Tree Survey*.



The SCAG region ranked fourth in the nation for venture capital investments when these data were first collected in 1995. In 1996, the region ranked eighth. Since that year, the SCAG region has climbed back up the national ladder, to sixth, fifth, and then fourth place in nationwide investments in the year 2000. The Los Angeles/Orange County region was hit hard percentage-wise by the high technology slowdown across the nation in 2001. The 70% decrease in venture capital investments in the Los Angeles/Orange County region was greater than the national average decrease in investments of 62%. As a result, the region lost ground to other parts of the country and saw its national ranking in venture capital investments tumble.

The Los Angeles/Orange County region in 2001 did not attract venture capital investments comparable to its population. The average investment per person in the United States in 2001 was $145. For the SCAG region, average per person investment was $116. The year 2000 was a different story, as the SCAG region did attract venture capital investments in proportion with its population.

To summarize, venture capital investment in the SCAG region in 2001 was particularly hard hit in relation to the nationwide downturn in venture capital investments. Investors disproportionately decreased funding levels in the SCAG region in 2001 compared to the previous two years' funding levels. Not only did the SCAG region's ranking in venture capital investments fall in 2001, but also the investments fell to a point where now the

region is behind the national average. The region must play catch up just to attract investments that are equal to its population.

Investment within the State of California

Turning now to venture capital investments within the State of California, the Silicon Valley received the greatest amount of investment in 2001, as it has every year since 1995. Table 1 shows the investment amounts from 1995 through 2001 for each of the four regions in California that PWC tracks for venture capital investment activity. These are the four investment hot spots in the state.

Table 1
Regional Venture Capital Investments Within California, 1995-2001 (In Millions $)

Region	1995	1996	1997	1998	1999	2000	2001
LA/Orange (SCAG)	$521	$554	$809	$1,343	$3,733	$6,332	$1,884
Sacramento	$39	$28	$21	$83	$92	$263	$221
San Diego	$321	$906	$545	$596	$1,325	$2,337	$1,518
Silicon Valley	$1,945	$3,950	$4,819	$6,244	$18,719	$35,404	$13,051
California	$2,826	$5,438	$6,194	$8,266	$23,869	$44,336	$16,674

Source: PriceWaterhouseCoopers *Money Tree Survey*. May 17, 2002.

The Silicon Valley-San Francisco Bay Area is the statewide as well as the national leader in venture capital investments. Major corporations have their headquarters in this region, including Hewlett Packard, Cisco Systems, and Apple Computers. Prominent universities in the area, like Stanford University, feed these and other firms with highly skilled workers.

The Silicon Valley attracted 32% of national venture capital investment in 2001. This equates to 78% of the investment in the State of California. The Silicon Valley averages $1,587 in venture capital investment per person. The high investment in this venture capital mecca propels the California average to $503 per person. San Diego County is above the state average and attracts $538 in venture capital investments per person. The SCAG region is well below the state average, at $116 per person. California companies located outside of these three high technology nodes attracted only $37 per person.

The SCAG region is not attracting the amount of investments in the state that are proportionate with the region's population compared to state population. With approximately 48% of the state population living in the 6-county SCAG region, companies within the region only attracted 11% of investments within the state in 2001. The overwhelming majority of investments went to the Silicon Valley. San Diego County attracted investments above its population-designated regional share. It should be noted that San Diego's percentage share of venture capital investment dollars is still below its levels of 1995 and 1996. In California, the strongest region has grown stronger as the Silicon Valley has increased its percentage share of venture capital investment dollars from 69% in 1995 to 78% in 2001.

SCAG and the rest of the state, including the Sacramento region, are well behind the Silicon Valley and San Diego in receiving investments commensurate with their share of state population. Table 2 shows the percentage of venture capital investments made within different regions of California on a yearly basis from 1995 through 2001.

Table 2
Regional Percentage Distribution of Venture Capital Invesment Within California, 1995-2001

Region	1995	1996	1997	1998	1999	2000	2001
LA/Orange (SCAG)	18%	10%	13%	16%	16%	14%	11%
Sacramento	1%	1%	0%	1%	0%	1%	1%
San Diego	11%	17%	9%	7%	6%	5%	9%
Silicon Valley	69%	73%	78%	76%	78%	80%	78%

Source: PriceWaterhouseCoopers Money Tree Survey. May 17, 2002.

All regions of California experienced a decrease in venture capital funding in 2001. The average statewide decrease in funding between 2000 and 2001 was 62%. This equaled the national average for a decrease in funding. Both the Silicon Valley and the SCAG regions experienced decreases larger than average. While the Silicon Valley saw its absolute dollars invested decline the greatest, the high technology slump had the biggest impact on the SCAG region where venture capital investments fell 70%.

The decrease in funding in the SCAG region came at the benefit of the San Diego region, which saw its percentage share of investments within California climb from 5% in 2000 to 9% in 2001. Investments decreased in San Diego, but by a much smaller percent. The high technology field held stable in San Diego, resulting in companies located in the San Diego region receiving a larger share of investment in California. San Diego finished 2001 with investment amounts that were above the state and national averages. The SCAG region, which lost a small amount of money compared to the losses in the Silicon Valley, was hit harder by the technology slump because of its large percentage loss in investments. The percentage loss has poised San Diego County to overtake the SCAG region and become the number two center for venture capital investment within California. Table 3 depicts the percentage change in investments made within different regions of California from 1995 through 2001.

Table 3
Regional Percentage Change in Investments Within California, 1995-2001

Region	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001
LA/Orange (SCAG)	6%	46%	66%	178%	70%	-70%
Sacramento	-26%	-26%	296%	10%	187%	-16%
San Diego	182%	-40%	9%	122%	76%	-35%
Silicon Valley	103%	22%	30%	200%	89%	-63%
California	92%	14%	33%	189%	86%	-62%

Source: PriceWaterhouseCoopers Money Tree Survey. May 17, 2002.

While the national battle for venture capital investment was fierce, the state battle may be fiercer. Within the state, SCAG is competing with the international heavyweight, the Silicon Valley. San Diego is a powerhouse that is looking to replace SCAG as the number two center for venture capital investments in the state. Sacramento is up-and-

coming as companies find less traffic congestion and more affordable housing in the state capital region. In 2001, while every region of California slipped, the SCAG region saw funding levels slip the furthest. 2002 should shed some light on whether or not there will be a high technology recovery and where the SCAG region will find itself in terms of funding level within the state and nation.

Investment Nodes in the SCAG Region

Five investment nodes can be identified in the SCAG region when analyzing the location of venture capital investments made from 1998 through 2001. These are the years where SCAG's database is complete for all four quarters. The two principal nodes for venture capital investment in the SCAG region are easily identified. They are in West Los Angeles, including Santa Monica and the area around Los Angeles International Airport, and in the Irvine - South Orange County area. These nodes have been the two stalwarts in the region since SCAG began tracking venture capital investment funding in 1997. A smaller, albeit consistent, investment cluster exists in Pasadena. The Conejo Corridor along Route 101 between Los Angeles and Ventura Counties is a fourth investment center. The South Bay of Los Angeles County is the fifth concentration in the region.

The West Los Angeles venture capital node has been the strongest investment node over the last five years. This node, which encompasses Santa Monica, Culver City, the area around Los Angeles International Airport, and the West Side of the City of Los Angeles, including the University of California – Los Angeles, is home to many multimedia, software, and dot-com firms. With the recession and downturn in venture capital funding, this area has seen its investment levels dip. Although the West Los Angeles center remains the strongest magnet in the region, the Irvine area of Orange County has narrowed the gap between West Los Angeles and South Orange County.

The Irvine area is a hot spot for medical devices and biotechnology. It is also a center of computer hardware-related firms. The Irvine area offers technology campuses that appeal to some manufacturing-based new economy companies. In its sphere is the University of California – Irvine and John Wayne Airport.

The California Institute of Technology and the Jet Propulsion Laboratory supply the human capital that makes the Pasadena area a venture capital investment node. Pasadena is also the home of Idealab, the high technology incubator that housed several successful startups in the heyday of the high technology boom in 1999 - 2000.

The Conejo Corridor extends along US Route 101 through the San Fernando Valley and into Ventura County. Several biotechnology firms reside in this area, including Amgen. This area is similar to the Irvine investment center in that it provides room for high technology companies to set up campuses of low-rise buildings for their industries.

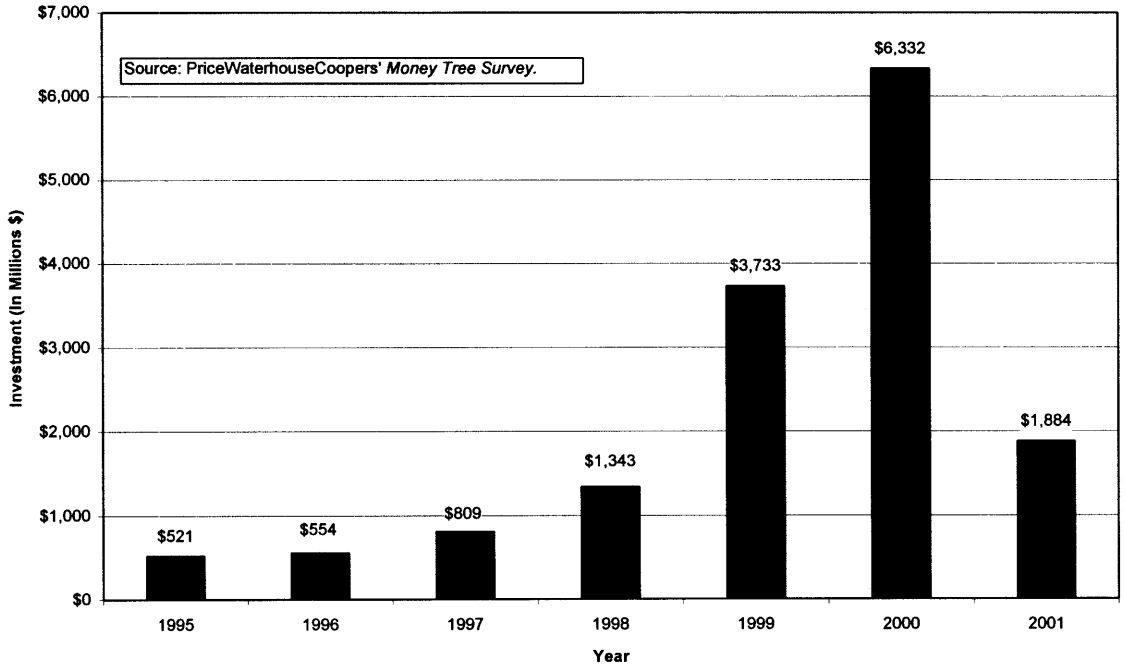
The South Bay venture capital grouping is centered in Torrance and includes the beach cities of Redondo Beach, Hermosa Beach, and Manhattan Beach, as well as El Segundo. This region is home to dot-com, aerospace, and defense companies, as well as serving as

the U.S. headquarters for several Asian automobile manufacturers. This region saw firms clustering in its sphere in 1999 and 2000, but firms here have not weathered the high technology downturn well. There was little investment in companies in the South Bay in 2001. The renewed national interest in security may give life to some of the defense and aerospace companies located in the South Bay.

Year 2001 Review of Investment for the SCAG Region

Venture capital investments in the SCAG region peaked 2000 and dropped sharply in 2001, as Chart 2 depicts. Despite the drop in the full-year total for 2001, the fourth quarter of 2001 ended on a high note. This is surprising in light of the terrorist attacks on the United States and the instability in the stock market. The first quarter 2002 data show less investment than the fourth quarter of 2001. Nationally, investments continued their downward trend. It remains to be seen if investment amounts can rebound in the remaining three quarters to eclipse the totals for 2001.

Chart 2
Venture Capital Investment in the SCAG Region, 1995-2001



None of the five investment areas in the region received the levels of funding they had in the previous two years. The $1.2 billion investment available to be mapped during 2001 was almost two-thirds less than the $3.25 billion invested in the region in 2000 and only half the $2.59 billion invested here in 1999. (Note: Data for mapping is available from the *Money Tree Survey* for the current quarter only. PWC later amends these data to reflect new information. The amounts mapped will be less than the amounts reported by PWC as total investments by quarters.)

Total investment within the region has not been spread equally geographically. The five nodes for investment all are clustered near the coast, with the Pasadena node being the furthest inland (Map 1). The data for 2001 show no companies located in Imperial County, North Los Angeles County, nor the Inland Empire counties of Riverside and San Bernardino receiving investments. In past years, there has been some investment in San Bernardino County near Ontario International Airport and also in the Cities of Corona, Riverside, and Temecula in Riverside County. Outside of these, the *Money Tree Survey* has not reported any investment in these two counties.

Even southeastern Los Angeles County and northern Orange County attracted little investment in 2001. These areas saw some investment during 1999 and 2000, but as overall investment in the region dropped, investors have focused on companies located within established high technology centers like those described above and have invested little in businesses located outside of these centers. The attached map shows the location of 2001 investments within the SCAG region.

Conclusion

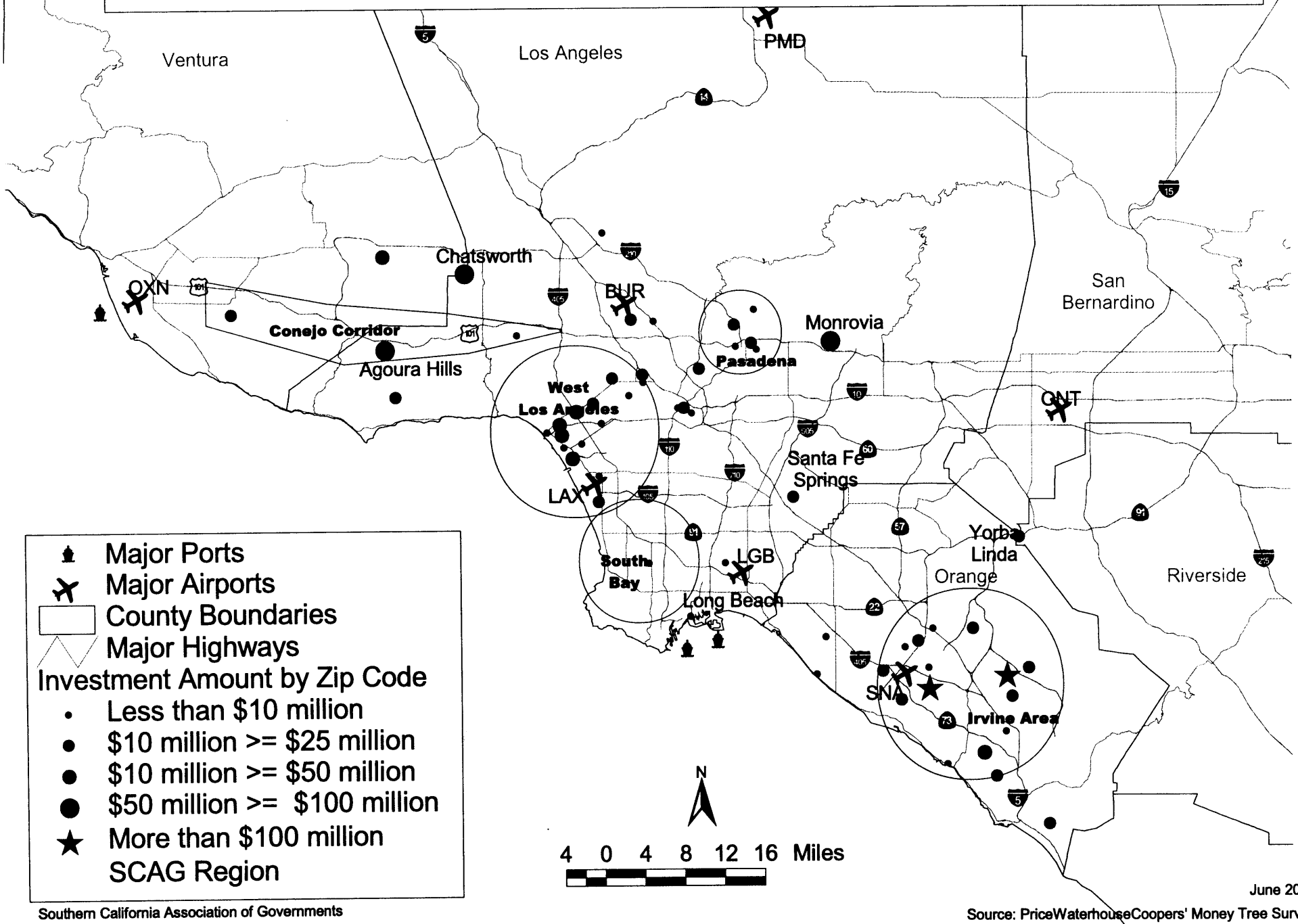
The high technology slump had a large impact on the SCAG region in 2001. Nationally, the SCAG region attracted less than the average per capita venture capital investment. The SCAG region saw its national ranking for venture capital investment fall from fourth in the nation to eighth in the nation, out of sixteen regions.

Within California, the SCAG region lost percentage share of investment to San Diego County and Sacramento as these regions weathered the technology downturn better than the SCAG region. The SCAG region suffered the largest percentage decrease of the four investment regions in the state between 2000 and 2001.

Looking at investment within the SCAG region, investment clustered in the five venture capital nodes. Little investment went to companies outside of these clusters. The South Bay had a particularly bad year for attracting investments. The Irvine Area node is challenging the West Los Angeles node for the largest share of investment within the SCAG region.

The SCAG region had its third best year in 2001 for companies in its region receiving venture capital investments. This report makes it evident that the fact that 2001 was the third best year is not something to take for granted. The SCAG region saw absolute dollars and percentage of investment within the region fall to the benefit of competing regions within the state. With the SCAG region slumping and the San Diego region holding firm, San Diego County may overtake SCAG and relegate the SCAG region to the third largest center for investment in California. As high technology companies tend to cluster in nodes, the gap in investment amounts between Silicon Valley and the other parts of the state could increase, leaving companies in the remaining three regions to jockey for diminishing funding.

Map 1. Venture Capital Investment in the SCAG Region Year 2001
Total Investment Mapped = $1.23 Billion



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References

PriceWaterhouseCoopers. (2002-1998). The Money Tree Survey. [Online] Available: http://www.pwcmoneytree.com/index.asp

Southern California Association of Governments. (2001, April). The new economy and jobs/housing balance in southern California. Los Angeles: SCAG.

--. (Forthcoming). Linking workers and job training through transit. Los Angeles: SCAG.

Venture Economics. (2000). Venture capital data for 4th Quarter 1998 and 1st Quarter 1999. [Online] Available: http://www.ventureeconomics.com/

Appendix

The PriceWaterhouseCoopers *Money Tree Survey* and Venture Economics

The two databases used in creating this report come from the PriceWaterhouseCoopers *Money Tree Survey* and Venture Economics, a division of Thomson Financial Securities Data. Data for the SCAG region for the fourth quarter of 1998 and the first quarter of 1999 comes from Venture Economics, as this information is no longer available from the *Money Tree Survey*. The rest of the data comes from the *Money Tree Survey*.

The primary reason for choosing the PriceWaterhouseCoopers database is its nationwide acceptance and reputation. In 2000, PriceWaterhouseCoopers joined forces with Venture Economics and the National Venture Capital Association to produce the *Money Tree Survey*. Combining forces with these two companies makes the *Money Tree Survey* the most comprehensive site for venture capital investment data. This survey is a staple for the venture capital community and policy makers across the nation. The Survey is widely quoted and followed by major media representatives who track venture capital investment. The databases are easy to access through the website http://www.pwcmoneytree.com/.

The PriceWaterhouseCoopers Survey Research Center, under the sponsorship of the Global Technology Industry Group, conducts the quarterly survey. It reflects quarterly investments of venture capitalists nationwide that have invested billions of dollars in U.S. companies in all types of industries. The *Money Tree Survey* reports venture capital activities on both a regional and national basis. The intent of the survey is to measure equity investments by the venture capital community and similar entities in private companies in the United States. Thus, it is focused on the total amount of investment actually received by a company in a particular round of financing in return for equity, usually preferred stock. As such, the survey does not include buyouts, recapitalizations, secondary purchases, IPOs, investments in public companies, or other forms of private equity involving leveraged or subordinated debt. It is intentionally designed to more closely monitor investments in entrepreneurial companies.

Venture Economics and Thomson Financial Securities Data are part of Thomson Financial, a provider of information services and work solutions to the worldwide financial community. Venture Economics' database contains information on companies receiving investment in the SCAG region by quarter. The database provides zip code information for these companies, making the data easy to assimilate with the Money Tree Survey data. At the time of data retrieval for the fourth quarter 1998 and first quarter 1999 data, however, retrieving the data from Venture Economics was more labor intensive and more costly than it was from the *Money Tree Survey*. Therefore, the Venture Economics database was used only to fill the gaps in the *Money Tree Survey*. More information can be found on Venture Economics' web site http://www.ventureeconomics.com.