

# CONNECT INNOVATION REPORT

A QUARTERLY  
EVALUATION OF OUR  
INNOVATION ECONOMY  
IN SAN DIEGO AND  
ACROSS CALIFORNIA

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Reprinted from San Diego Union Tribune

## County's tech startups percolate in down economy

By [Dean Calbreath](#), UNION-TRIBUNE STAFF WRITER

Tuesday, March 23, 2010 at 12:03 a.m.

Despite one of the roughest years on record for startup firms, entrepreneurs in San Diego County launched 319 tech-related companies in 2009, a 13 percent increase from the 284 created in 2008, according to a quarterly report released yesterday by Connect, a nonprofit support group for tech companies in the region.

Based on employment data collated by Dun & Bradstreet, Connect estimated that the new startups were responsible for creating 1,070 jobs in the county.

Connect senior program manager Steve Hoey, who compiled the report, said the numbers show that growth in startups has been relatively stable throughout the recession.

But the jobs being created by the startups haven't matched the jobs being shed by tech firms. The latest data from the state Employment Development Department show that between January 2008 and 2009, the county lost 4,100 jobs in scientific research and development or scientific and technical services in 2009, although the work force stabilized toward the end of last year.

"One reason why innovation and technology startups percolate in down times is because you have individuals who have been let go from other companies who turn around and say, 'Let's go try this idea,' which is also the pattern we've seen in past recessions," Hoey said.

In the fourth quarter:

- 74 technology companies were created in San Diego County, slightly less than the 78 in the previous quarter but slightly ahead of the 72 created during the fourth quarter of 2008.
- 25 pharmaceutical, biotech or medical device businesses were created, the second-highest number in the state after the 34 life-science startups in Los Angeles County.
- 29 mergers or acquisitions of tech-related firms in the county were completed, with an estimated value totaling \$1.3 billion. That's far ahead of the \$99 million worth of acquisitions and mergers that occurred in the third quarter. Hoey suggested that a number of firms had put off mergers until they could find "more favorable economic conditions." The largest acquisition was in December, when Cubist Pharmaceuticals of Massachusetts bought San Diego's Calixa Therapeutics for \$402.5 million.

Although venture capital money in San Diego County fell sharply from \$1.2 billion in 2008 to \$900 million last year, federal research grants rose from \$889 million to \$1.2 billion, largely because of stimulus funding. Hoey said the government funding is already falling back to historical levels, "but it's still very important for the county."

**Find this article at:**

<http://www.signonsandiego.com/news/2010/mar/23/startups-percolate-in-down-economy>

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## Introduction

### The CONNECT Innovation Report provides a set of indicators of the strength and impact of the innovation economy

The Report is initially focused on San Diego, and includes:

- The number of new innovation start-ups in key regions across California;
- San Diego's technology start-ups' new job creation figures;
- Venture capital investment across the U.S., California, and San Diego;
- Mergers and acquisition activity across California and San Diego;
- Private placement investment in California and San Diego;
- Initial and follow-on public equity offerings in the U.S. and California;
- New patent applications and patents granted in San Diego and selected regions;
- NIH, NSF, NASA and NOAA research grants in San Diego and selected regions; and,
- Research employment and wages in San Diego and selected regions.

The CONNECT Innovation Report tracks the health of the San Diego innovation economy by comparing data year-on-year and quarter to quarter, comparison to other regions, and monitoring availability of capital. The data helps policymakers and trade organizations plan and advocate effectively for sufficient workforce housing, transportation solutions, zoning and availability of resources. The Report also serves as a recruiting and retention tool, demonstrating to research, leadership and management talent from around the world that San Diego is a leading center for innovation.

### CONNECT Innovation Report Program Committee

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- **Steve Hoey**, CONNECT
- **Jim Ingraham**, PricewaterhouseCoopers LLP
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CONNECT is a nonprofit organization dedicated to creating and sustaining the growth of innovative technology and life science businesses in San Diego. Since 1985, CONNECT has assisted in the formation and development of over 2,000 companies and is widely regarded as the world's most successful regional program linking inventors and entrepreneurs with the resources they need for success. CONNECT focuses on research institution support, business creation and development, entrepreneurial learning, access to capital, public policy advocacy, awards, recognition and networking. Nearly 40 countries and regions have adopted the CONNECT model, including the U.K, Sweden, Norway, Denmark, Australia, and China, and most recently, New York City. For more information, please visit [www.connect.org](http://www.connect.org).

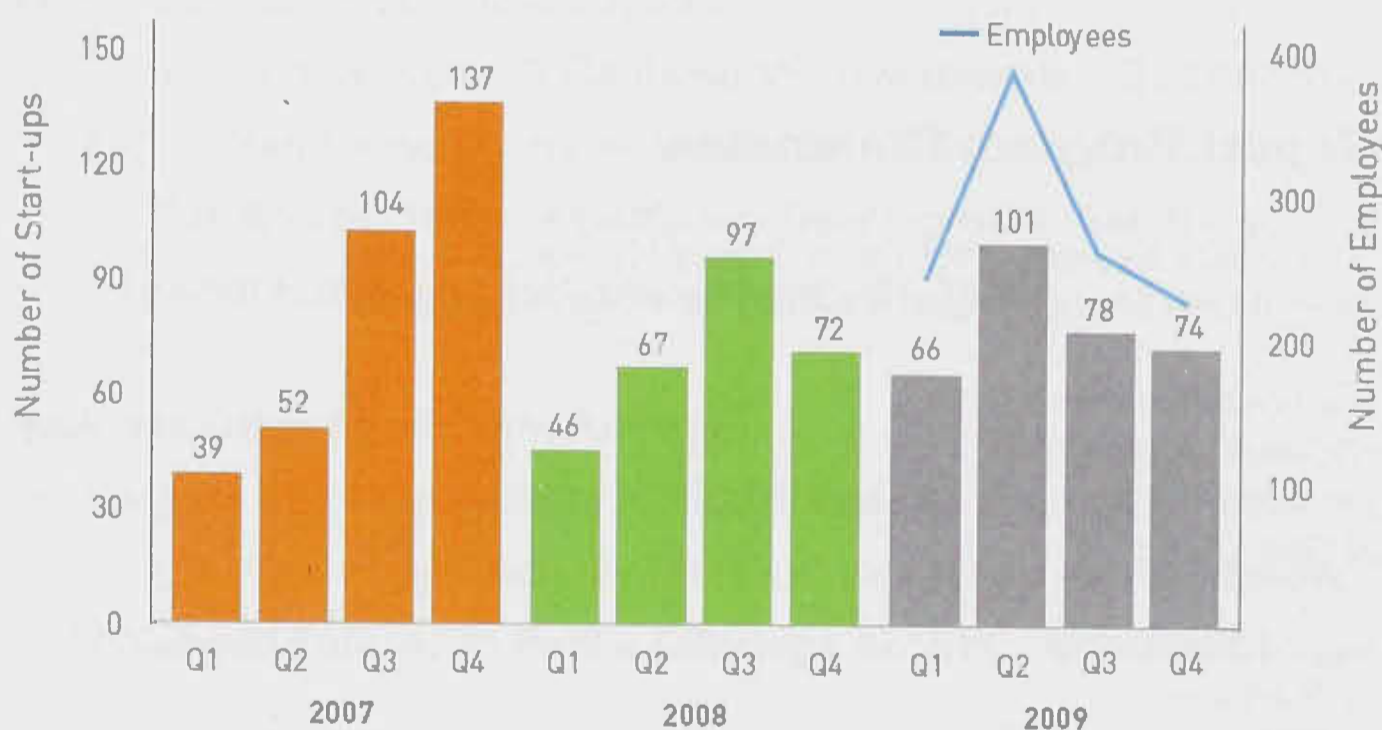
## In 2009, New San Diego Tech Start-Ups Create Over 1,000 Jobs; Federal Grants Exceed \$1.1 Billion

CONNECT's newly released Fourth Quarter 2009 Innovation Report shows over 300 new technology start-ups were formed in San Diego in 2009, up 13% from the previous year. Tech start-ups created an estimated 1,070 jobs in San Diego in 2009. Federal funding from the National Institutes of Health and National Science Foundation awarded to San Diego organizations in 2009 rose 35% to nearly \$1.2 billion. Award levels were lower in the fourth quarter of 2009 as compared to the previous quarter.



Statewide, San Diego accounted for 11% of new technology businesses in the fourth quarter of 2009, ranking third after Los Angeles (LA) and Santa Clara counties. San Diego had 74 start-ups, down slightly from the previous quarter while LA had 145 start-ups, up from 105, and Santa Clara had 108, a slight jump.

### SAN DIEGO INNOVATION START-UPS BY QUARTER



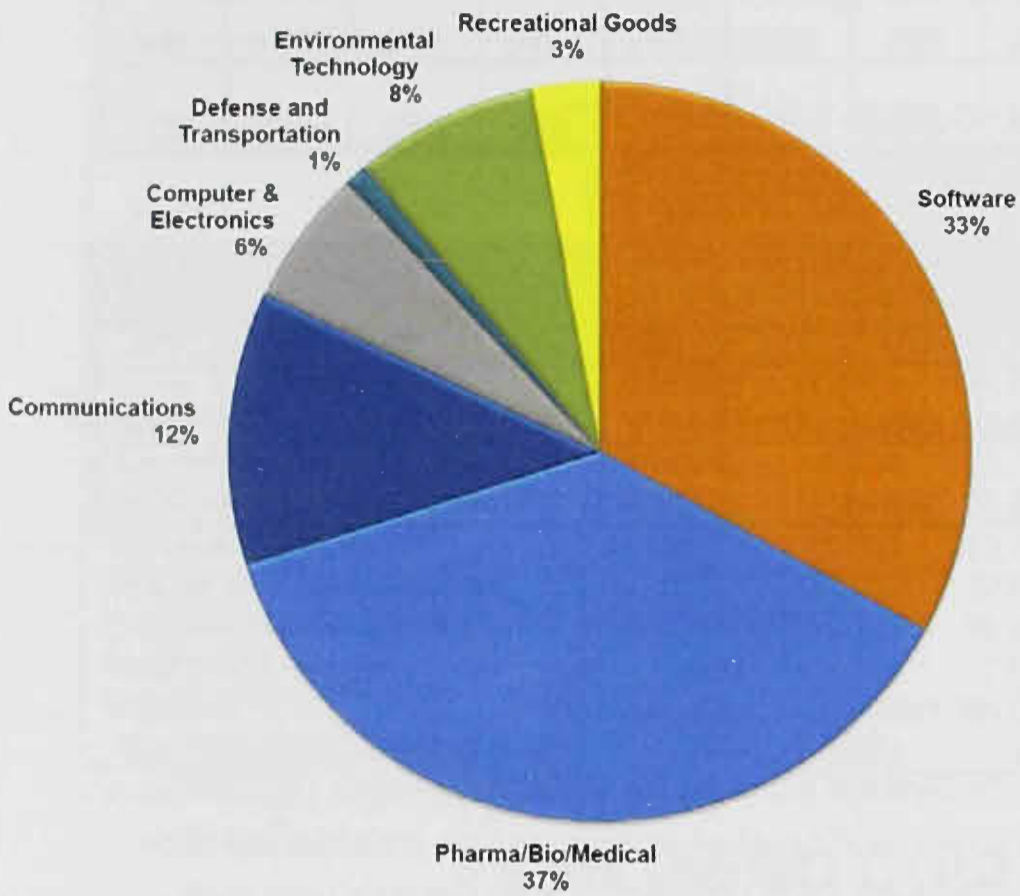
Source: CONNECT; National University System Institute for Policy Research

San Diego also ranked third in life science start-ups after LA and Santa Clara in the fourth quarter with 25 new companies. San Diego's software sector again showed the strongest gain in number of new companies with 30 new companies – up 15% from 26 start-ups in the third quarter of 2009. The communications sector ranked third with nine start-ups. San Diego's computer electronics and environmental technology (cleantech) sectors both had four start-ups each.

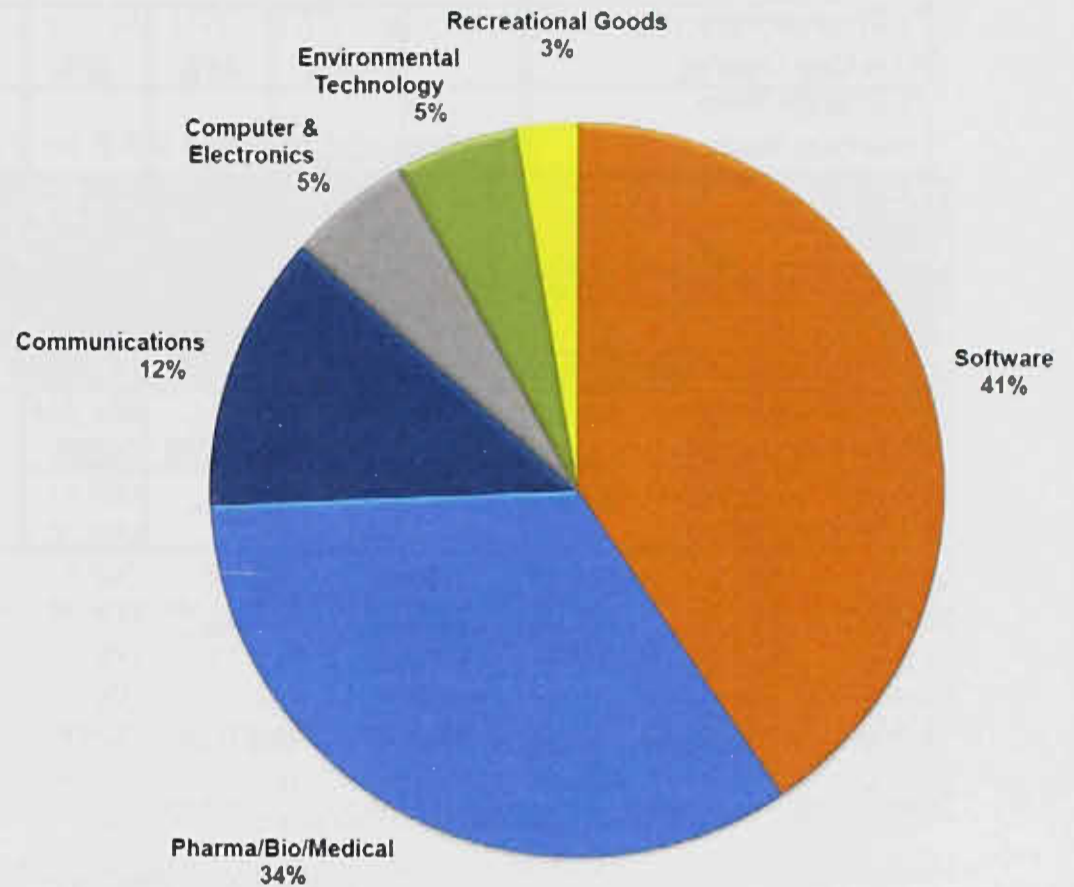
California overall showed an increase in start-up creation in the fourth quarter with 700 new technology companies established compared to 617 in the third quarter – a 13% increase. This was up 21% from the fourth quarter of 2008 when 580 companies were started. Consistent with the trend in San Diego, California's software sector accounted for the highest number of technology start-ups in the fourth quarter of 2009 with 231 new companies statewide, up 20% from third quarter. Pharma/biotech/medical devices followed with 162 startups, up 17%. The largest percentage increase in new company formation was in the recreational goods (action & sports innovation manufacturing) sector though with a modest 13 start-ups, up 117% over the third quarter. California start-ups were up 18% in computer electronics (125) and 29% in defense & transportation (31). The communications sector was down 5% with 98 new companies. Year-on-year, California had 2,522 innovation start-ups in 2009, up 15% from 2,197 in 2008.

## San Diego and California Tech Start-ups – By Industry Sector

San Diego Q3 2009 – 78 New Companies

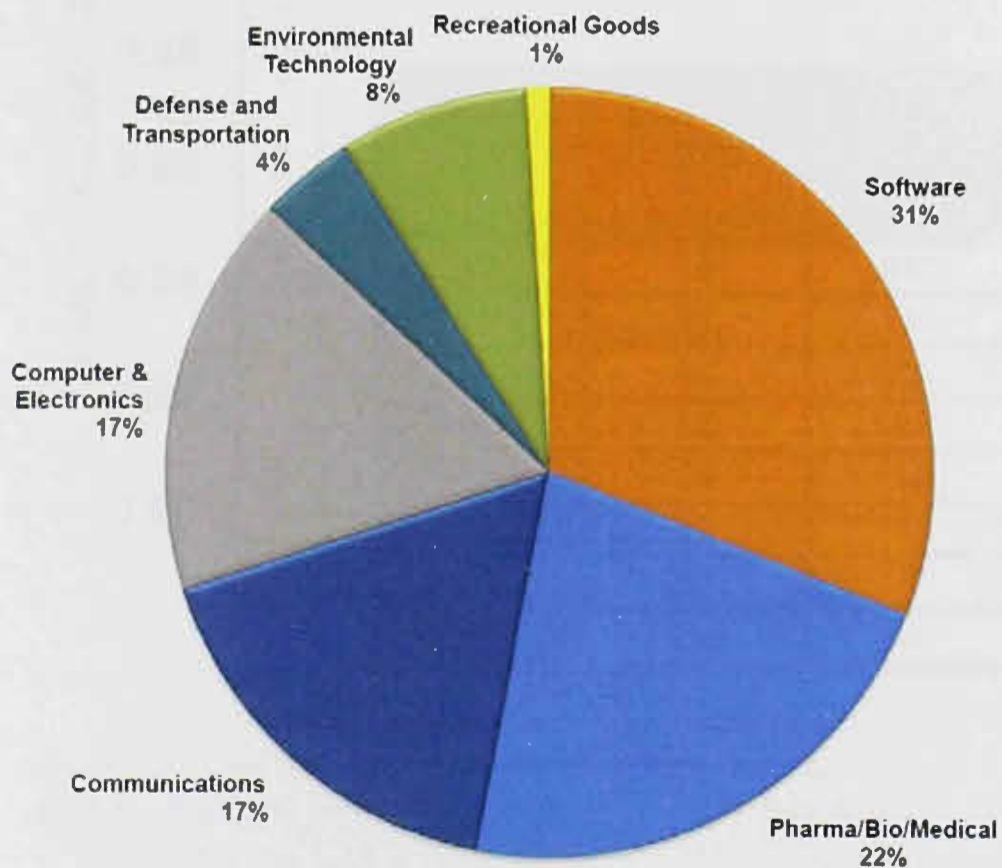


San Diego Q4 2009 – 74 New Companies

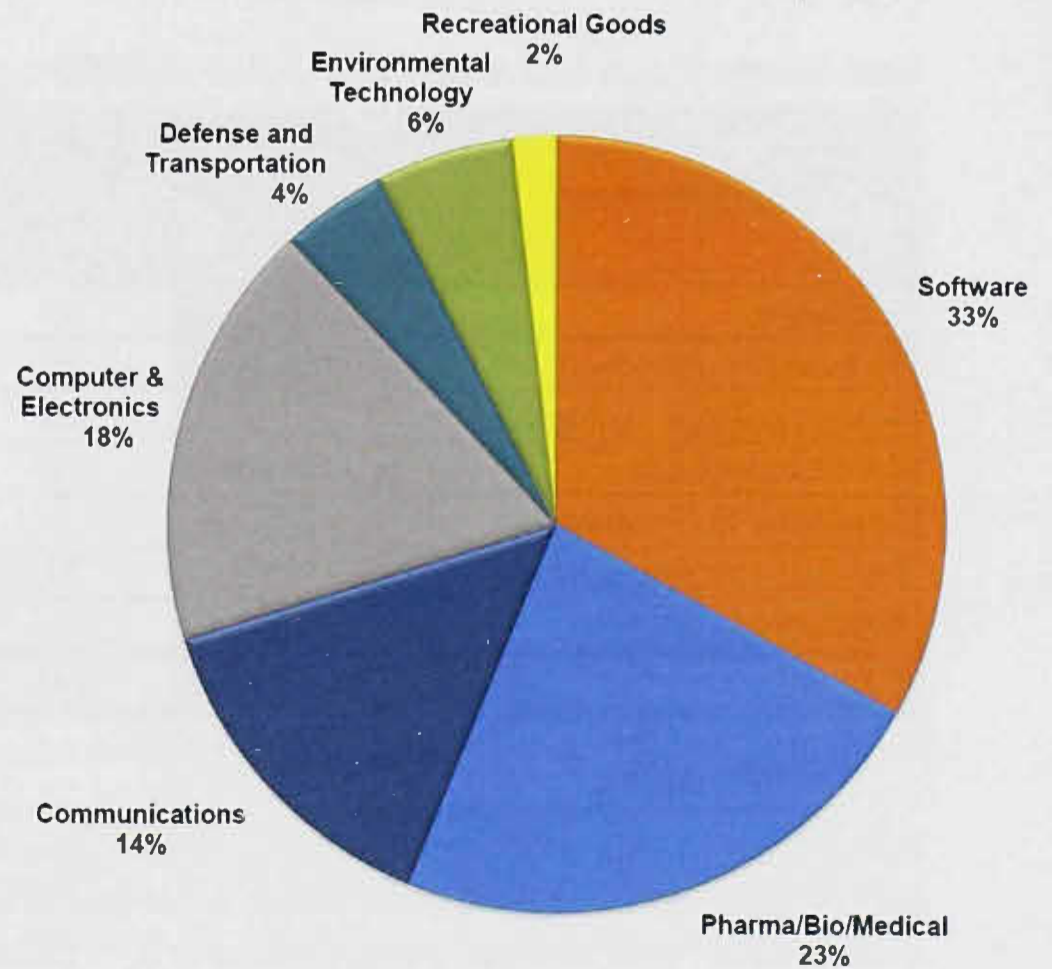


Source: CONNECT; National University System Institute of Policy Research

California Q3 2009 – 617 New Companies



California Q4 2009 – 700 New Companies



Source: CONNECT; National University System Institute of Policy Research

## Number of Innovation Start-ups: Change by Quarter, Q1 2007 – Q4 2009

### San Diego

	2007				2008				2009			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
# of Innovation Start-ups	49	64	105	149	47	76	103	72	66	102	78	74
% Change from Previous Quarter		31%	64%	42%	-68%	62%	36%	-30%	-8%	55%	-24%	-5%
% Change from Previous Year					-4%	19%	-2%	-52%	40%	34%	-24%	3%

### California

	2007				2008				2009			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
# of Innovation Start-ups	330	423	866	1,319	414	473	730	580	476	729	617	700
% Change from Previous Quarter		28%	105%	52%	-69%	14%	54%	-21%	-18%	53%	-15%	13%
% Change from Previous Year					25%	12%	-16%	-56%	15%	54%	-15%	21%

Source: CONNECT; National University System Institute for Policy Research

## Employment & Wages in San Diego's Innovation Economy

In this Report, working in partnership with National University System Institute for Policy Research (NUSIPR), we have added employment data for new job data for San Diego innovation start-ups as well as established tech companies in San Diego's innovation economy. At least 1,100 jobs were created by San Diego's new tech companies in 2009. During 2009, the software sector created more than 300 jobs, while the life sciences sector generated 280 jobs. In the fourth quarter, over 200 jobs were created in San Diego led by the life sciences sector with 76 employees, closely followed by the software sector with 69. Because the data reflect the number of employees as of the quarter the company was started, the overall new jobs total for 2009 may be larger than the 1,100 reported here due to subsequent company growth during the year.

### San Diego Tech Start-up New Jobs in 2009

Industry Sector	2009 # of Employees	Q1 2009 # of Employees	Q2 2009 # of Employees	Q3 2009 # of Employees	Q4 2009 # of Employees
Software	318	43	138	67	69
Pharma/Bio/Medical	280	50	117	37	76
Environmental Technology	155	53	45	35	22
Communications	139	22	38	52	26
Computer & Electronics	102	9	37	45	11
Defense and Transportation	62	51	0	11	0
Recreational Goods	14	3	6	0	5
<b>TOTAL</b>	<b>1,069</b>	<b>231</b>	<b>382</b>	<b>247</b>	<b>209</b>

Source: CONNECT; National University System Institute for Policy Research

Based on data from the California Employment Development Department (EDD) quarterly census of Employment and Wages, technology establishments (businesses or employers) in San Diego numbered 5,852 as of second quarter 2009, with 140,400 employees, and \$3.0 billion total annual payroll. To put this in perspective, technology companies represent only 6.1 percent of all San Diego establishments/employers, but technology sector employment represents 11.2 percent of all jobs and 25.6 percent of all payrolls.



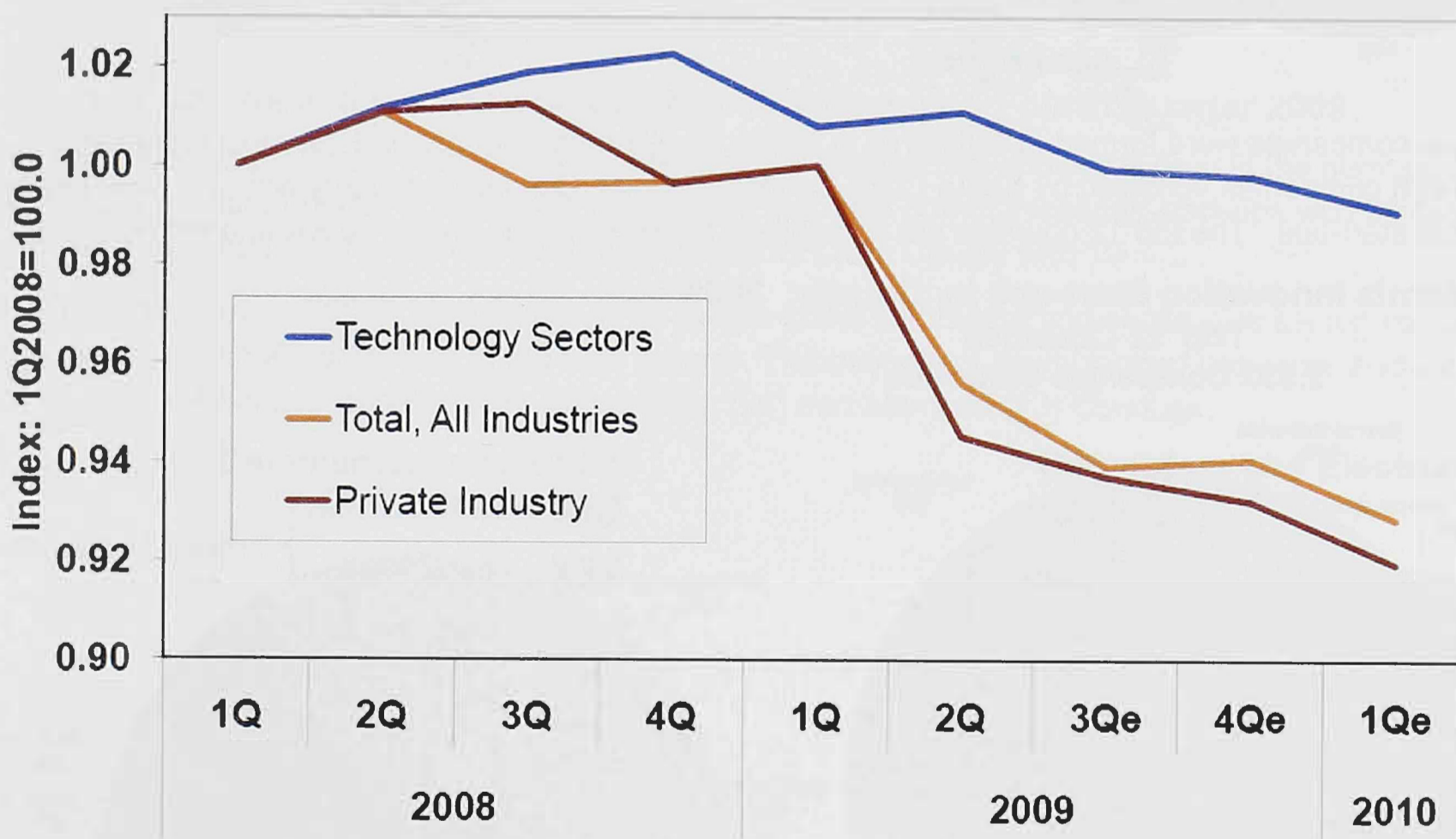
## Employment & Wages in San Diego's Innovation Economy (con't.)

It is readily apparent that tech employment pays considerably more than average. Average pay among tech firms is \$85,800, more than 80 percent higher than San Diego's overall average of \$47,400 per job. Communications and equipment manufacturers (\$101,900) and computer and electronics (\$98,000) have the highest averages, followed by software (\$85,000), biotechnology and pharmaceuticals (\$82,100), defense/transportation (\$79,400), and environmental technology (\$78,100).

### TECHNOLOGY EMPLOYMENT IN SAN DIEGO COUNTY

Employment	Actual						Estimate		
	1Q 2008	2Q 2008	3Q 2008	4Q 2008	1Q 2009	2Q 2009	3Q 2009	4Q 2009	1Q 2010
<b>Total, All Industries</b>	1,316,600	1,330,600	1,311,300	1,312,200	1,316,600	1,258,700	1,236,700	1,238,500	1,222,600
<b>Total Private</b>	1,089,700	1,101,400	1,103,200	1,085,700	1,089,700	1,030,100	1,021,300	1,015,900	1,002,100
<b>TOTAL Technology</b>	139,000	140,600	141,600	142,100	140,100	140,500	138,900	138,700	137,700
Biomedical Products	6,600	6,600	6,200	6,200	6,600	6,500	6,300	6,200	6,100
Biotechnology & Pharmaceutical	18,000	18,300	18,700	18,800	18,000	20,100	20,000	20,200	20,000
Communications Equipment Mfg	30,400	30,600	31,000	30,900	30,400	29,300	29,100	29,000	28,800
Computer & Electronics	13,100	13,800	13,700	13,600	14,000	13,600	13,200	13,000	13,000
Defense and Transportation	26,700	27,000	27,100	27,100	26,900	26,500	26,100	25,700	25,500
Environmental Technology	10,300	10,200	10,400	10,300	10,300	10,000	9,900	9,900	9,800
Recreational Goods	2,800	2,700	2,600	2,600	2,800	2,600	2,500	2,500	2,500
Software	25,400	25,500	25,800	25,800	25,400	25,800	25,700	26,000	25,800
Other Technical Consulting Svcs	5,700	5,900	6,100	6,800	5,700	6,100	6,100	6,200	6,200

### SAN DIEGO COUNTY INDUSTRY EMPLOYMENT BY QUARTER



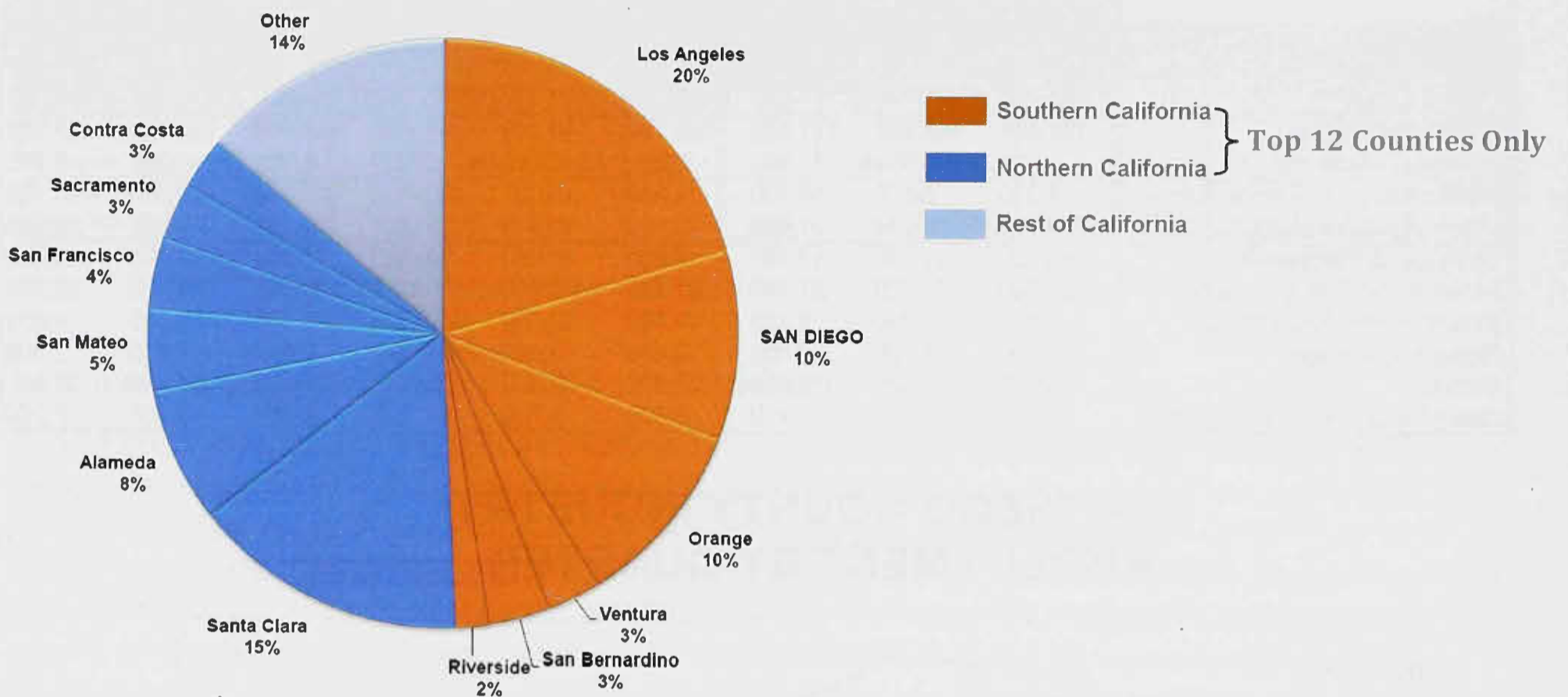
Source: National University System Institute for Policy Research; California Employment Development Department (EDD)

The impact on technology sector employment has not been nearly as pronounced as the recession's overall effect on the economy as a whole. Technology sector employment between the second quarter of 2008 and the first quarter of 2010 fell only 2.1 percent (2,900 jobs). Three segments (biotechnology, software, and other technical consulting services) have actually seen modest increases. Worst hit were the region's communications sector (shedding 1,800 jobs) and defense/transportation sectors (a decline of 1,500 jobs) since the second quarter of 2008. Job losses in the technology sector were particularly pronounced in the third quarter of 2009.

## California Innovation Start-ups: By County and Industry Sector – Q4 2009

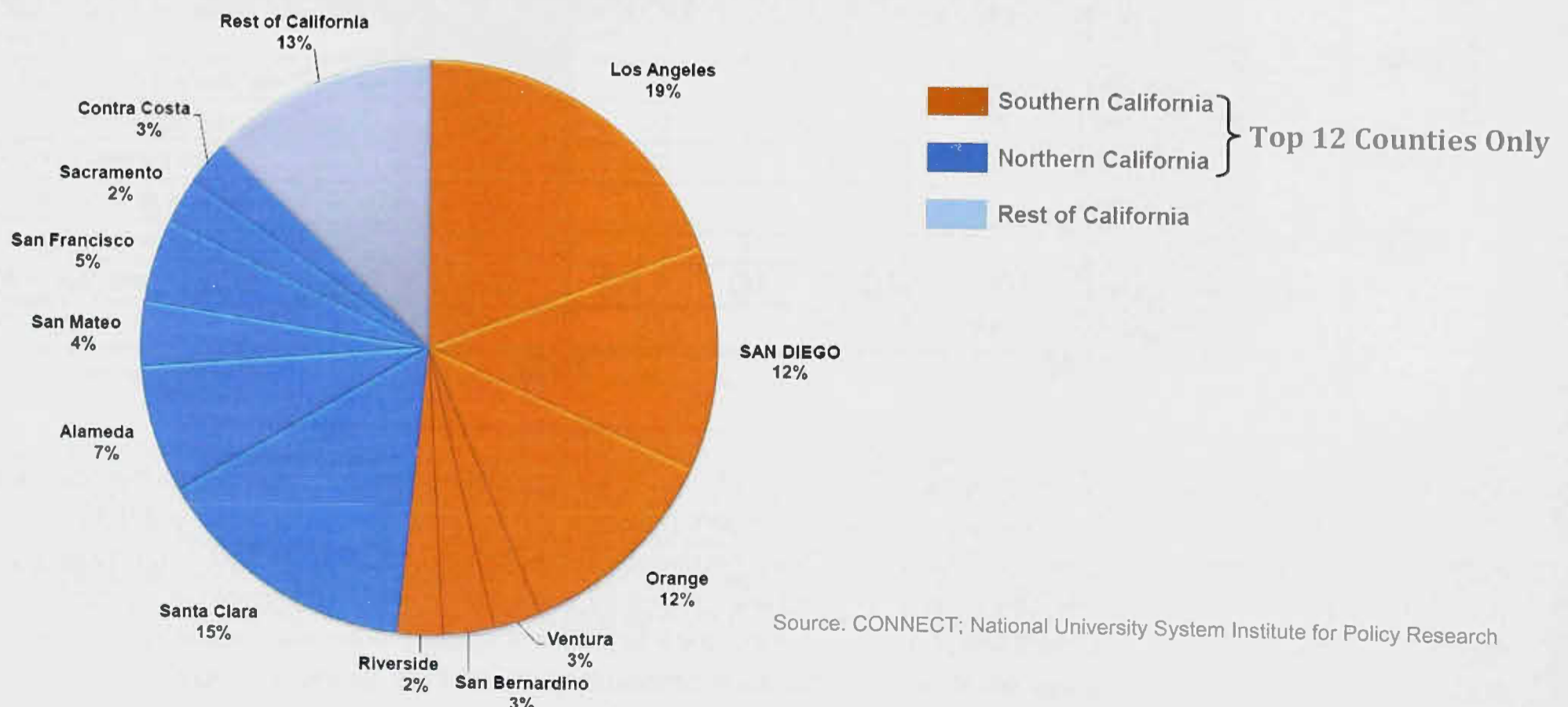
Southern California accounted for over 50% of the 700 California technology start-ups established in the fourth quarter of 2009 with over 350 technology companies established. Silicon Valley accounted for 34% of the start-ups in the fourth quarter of 2009 with 240 new technology companies. In the fourth quarter, Sacramento and the remainder of the state accounted for 120 new technology companies, or just over 17% of the total number of innovation companies established in the fourth quarter of 2009.

**California Innovation Start-ups by County – Q4 2009**  
**Top 12 Counties**  
**700 Companies Statewide**



Over 2,500 new companies were formed in California in 2009: Los Angeles County had the most technology start-ups with 486 companies, followed by Santa Clara County with 378, San Diego County with 319, and Orange County with 299 start-ups. The top 12 counties are highlighted by region in the charts above and below.

**California Innovation Start-ups by County: 2009**  
**Top 12 Counties**  
**2,532 Companies Statewide**

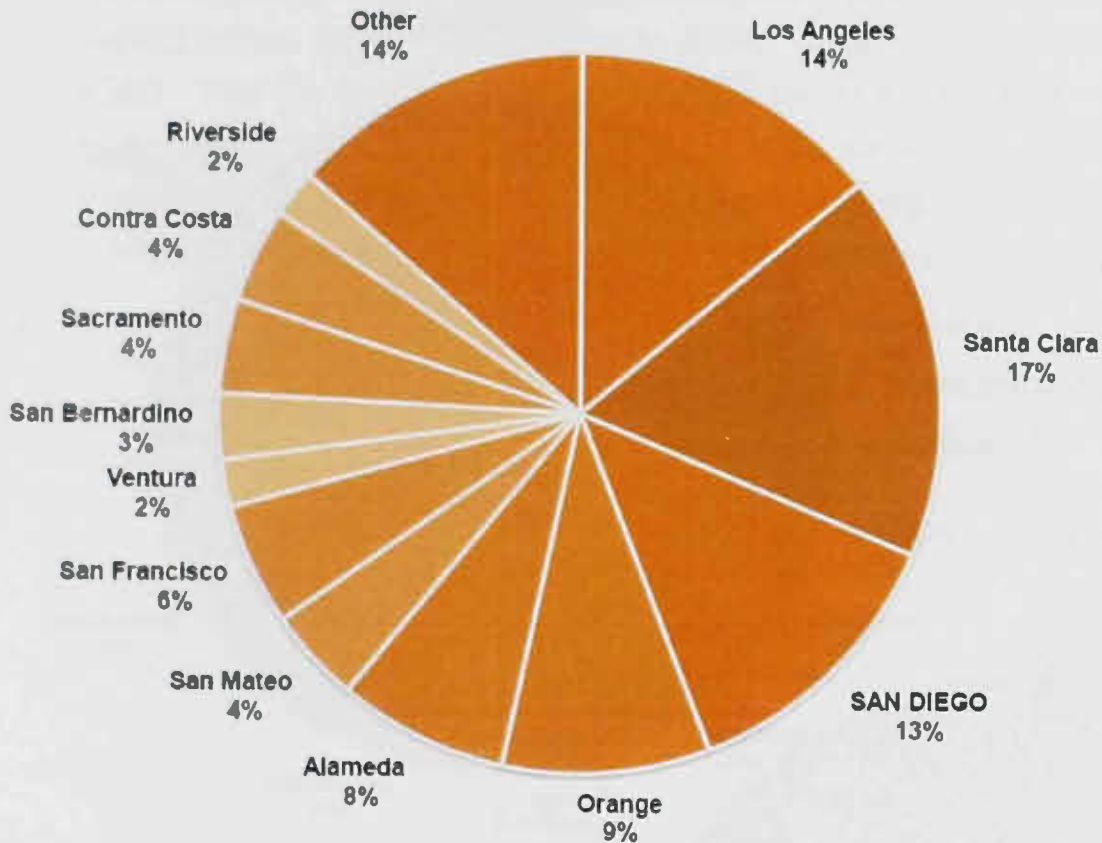


Source. CONNECT; National University System Institute for Policy Research

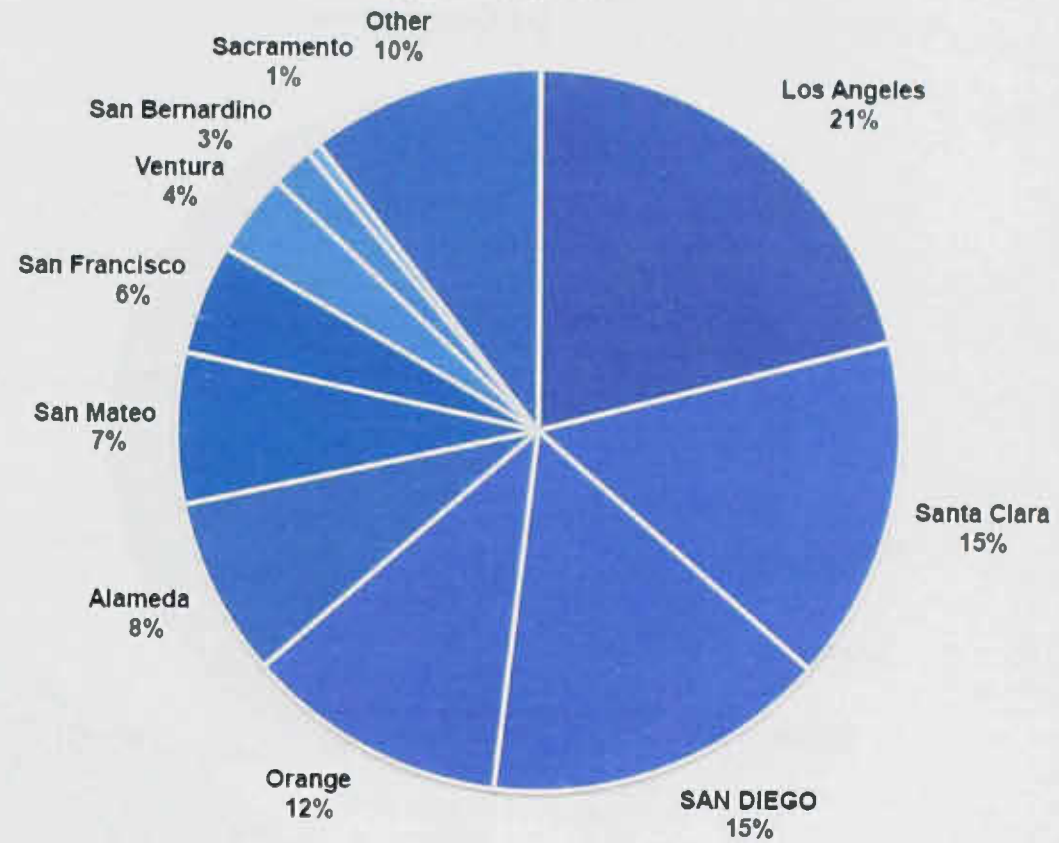
## Software and Life Sciences Sectors – Fourth Quarter 2009

In the fourth quarter of 2009, Santa Clara County had the most software start-ups with 40 new companies followed by Los Angeles (LA) County with 33 companies and San Diego County with 30 new companies. In addition, the sector was up 37% year-on-year in the fourth quarter of 2009, and up 20% from the third quarter of 2009. LA County led the state in the fourth quarter in the life sciences sector with 34 new companies formed, followed by San Diego and Santa Clara Counties with 25 start-ups each. The number of start-ups was up 17% over the third quarter and 27% from the fourth quarter of 2008.

**Software Sector**  
231 Companies



**Pharma/Biotech/Medical Device Sector**  
162 Companies

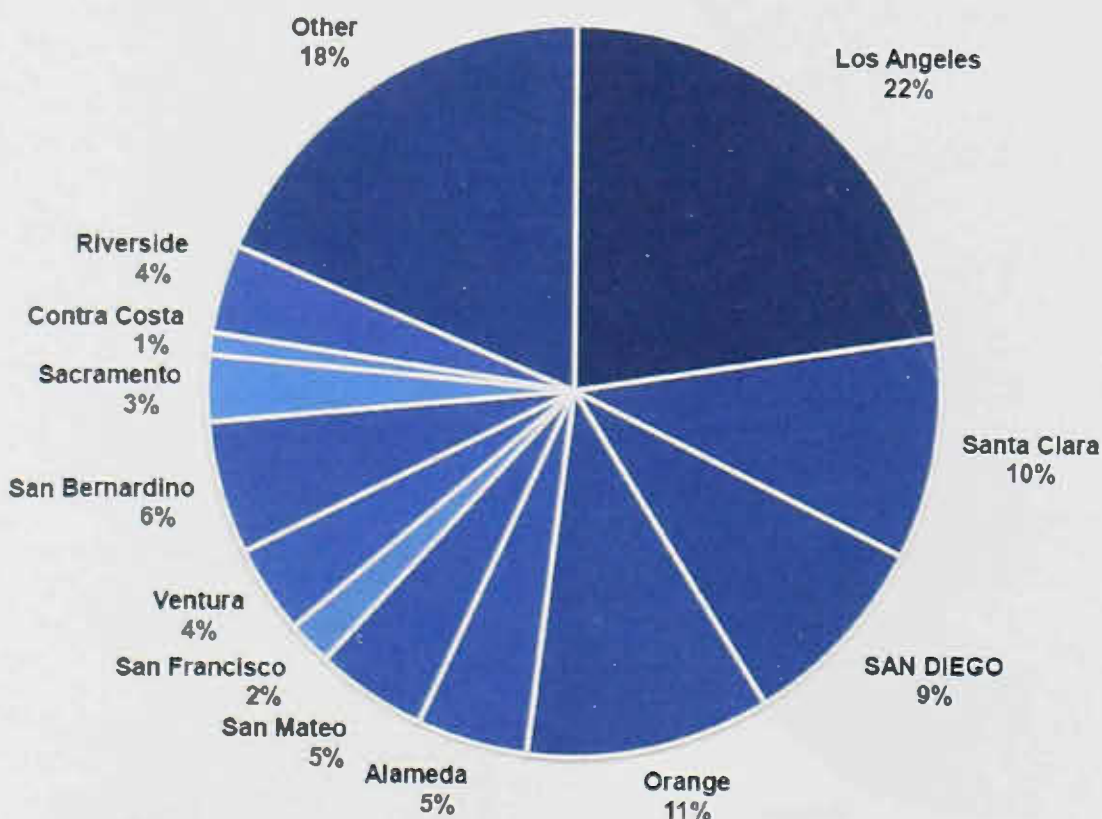


## Communications and Computers & Electronics Sectors – Fourth Quarter 2009

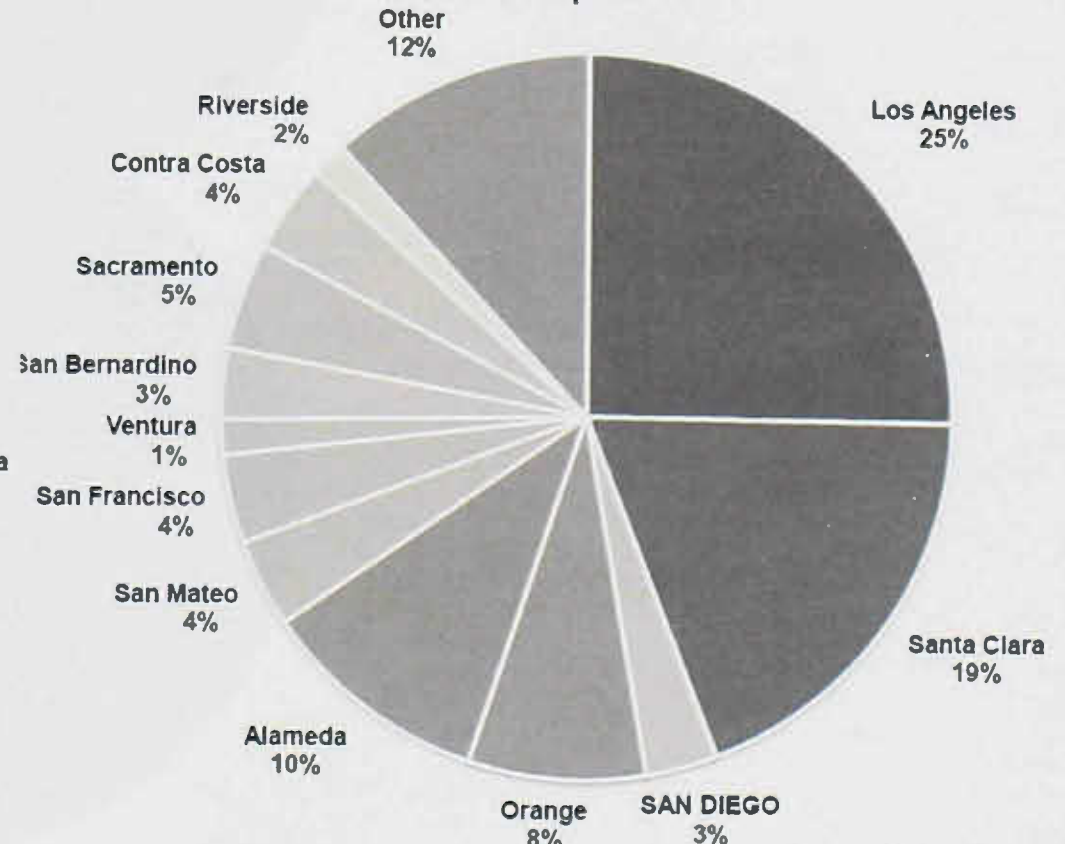
The communications sector was the one of two industry sectors that showed a drop in the number of start-ups (-5%) from the third quarter of 2009. LA County had the most communications start-ups with 23 companies, followed by Orange County with 11 start-ups and Santa Clara County with 10.

In the fourth quarter of 2009, new company formation in the computers and electronics sector was up 18% compared to the 106 companies in the third quarter. The majority of newly formed computer and electronics companies were in Los Angeles (32), Santa Clara (24) and Alameda (13) Counties.

**Communications Sector**  
98 Companies



**Computers and Electronics Sector**  
125 Companies

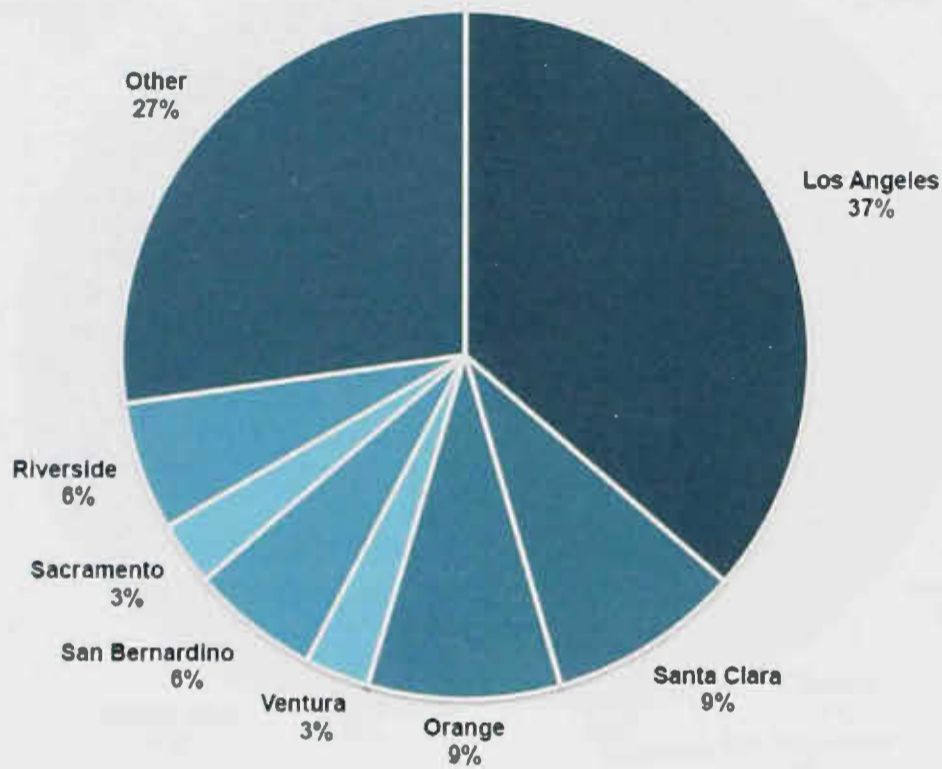


## Defense and Transportation and Environmental Technology Sectors – Fourth Quarter 2009

LA County again led the state with 12 defense and transportation start-ups (39%) in the fourth quarter of 2009, while San Diego and Orange Counties each had three new companies. New company formation was down 24% year-on-year from fourth quarter 2008, but up 29% over the third quarter of 2009.

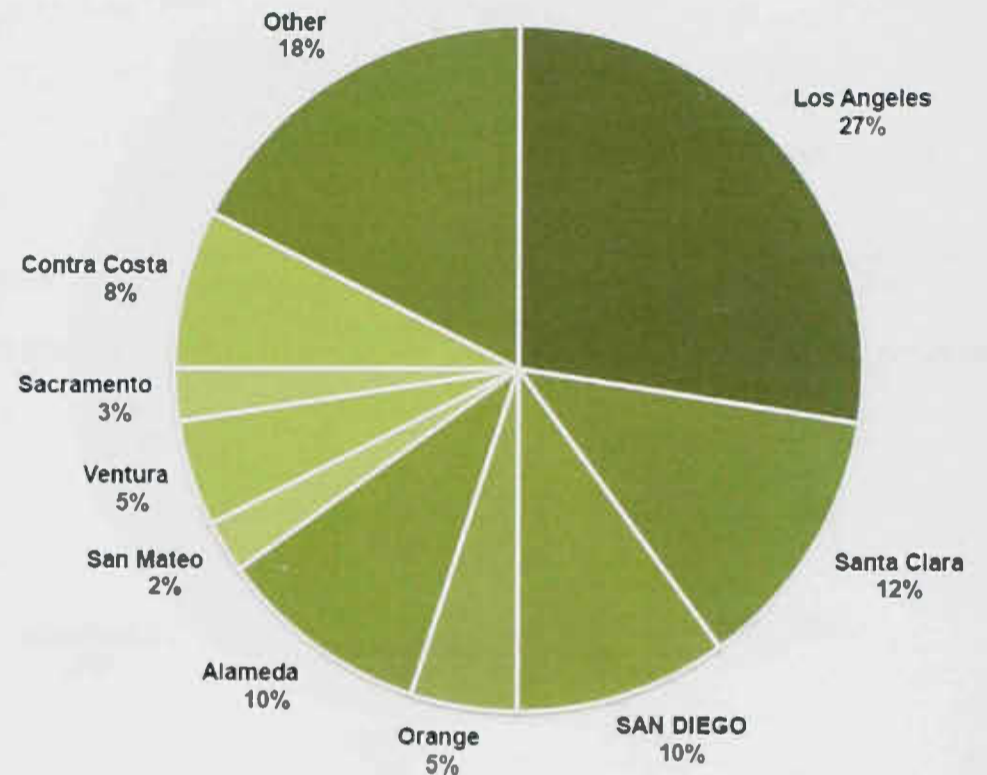
In addition, LA County had the largest number of environmental technology (cleantech) start-ups with 11 companies formed, followed by Santa Clara with five, and San Diego and Alameda Counties with four companies each. The sector was up 74% from the 23 companies started in the fourth quarter of 2008, but down 17% from the third quarter of 2009.

**Defense and Transportation Sector**  
31 Companies



\* Other counties include Fresno, Kern, Placer and San Luis Obispo

**Environmental Technology Sector**  
40 Companies

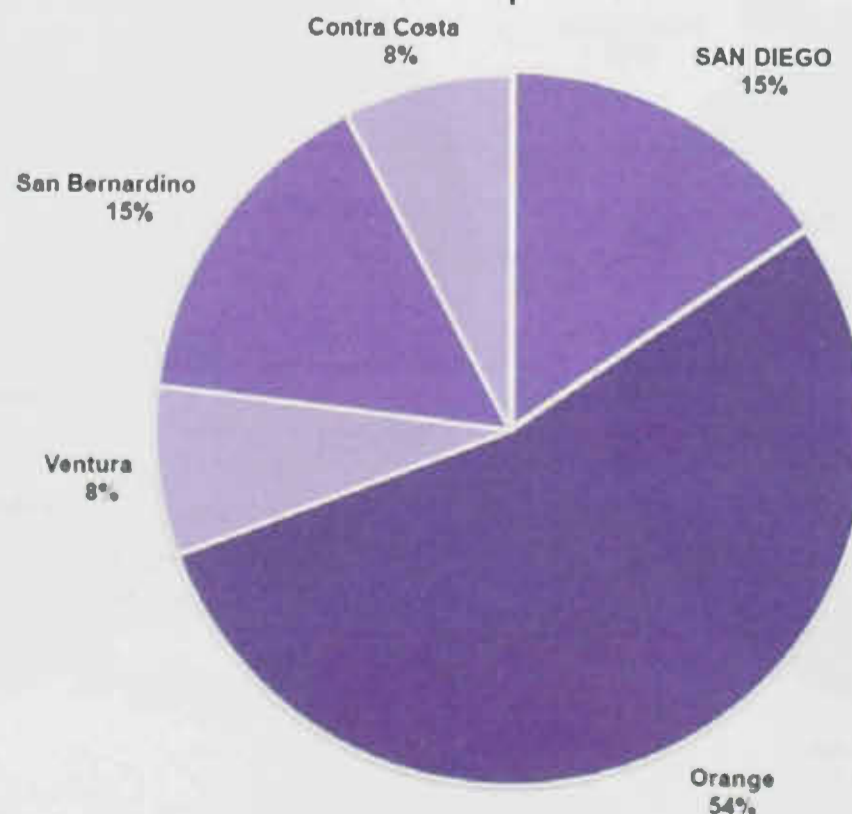


\* Other counties include Kern, Monterey, San Luis Obispo and Yolo

## Recreational Goods Manufacturing Sector – Fourth Quarter 2009

In a turnaround from the previous quarter, the recreational good manufacturing sector showed the largest percentage gain (117%) in new company formation in the fourth quarter of 2009 with 13 start-ups statewide compared to six in the third quarter; however, the sector was down 28% from the 18 start-ups in the fourth quarter of 2008. Orange County generated over half of the recreational goods manufacturing start-ups in the state with seven new companies in the fourth quarter of 2009, while San Diego and San Bernardino Counties had two start-ups each.

**Recreational Good Manufacturing Sector**  
13 Companies



Source: CONNECT, National University System Institute for Policy Research

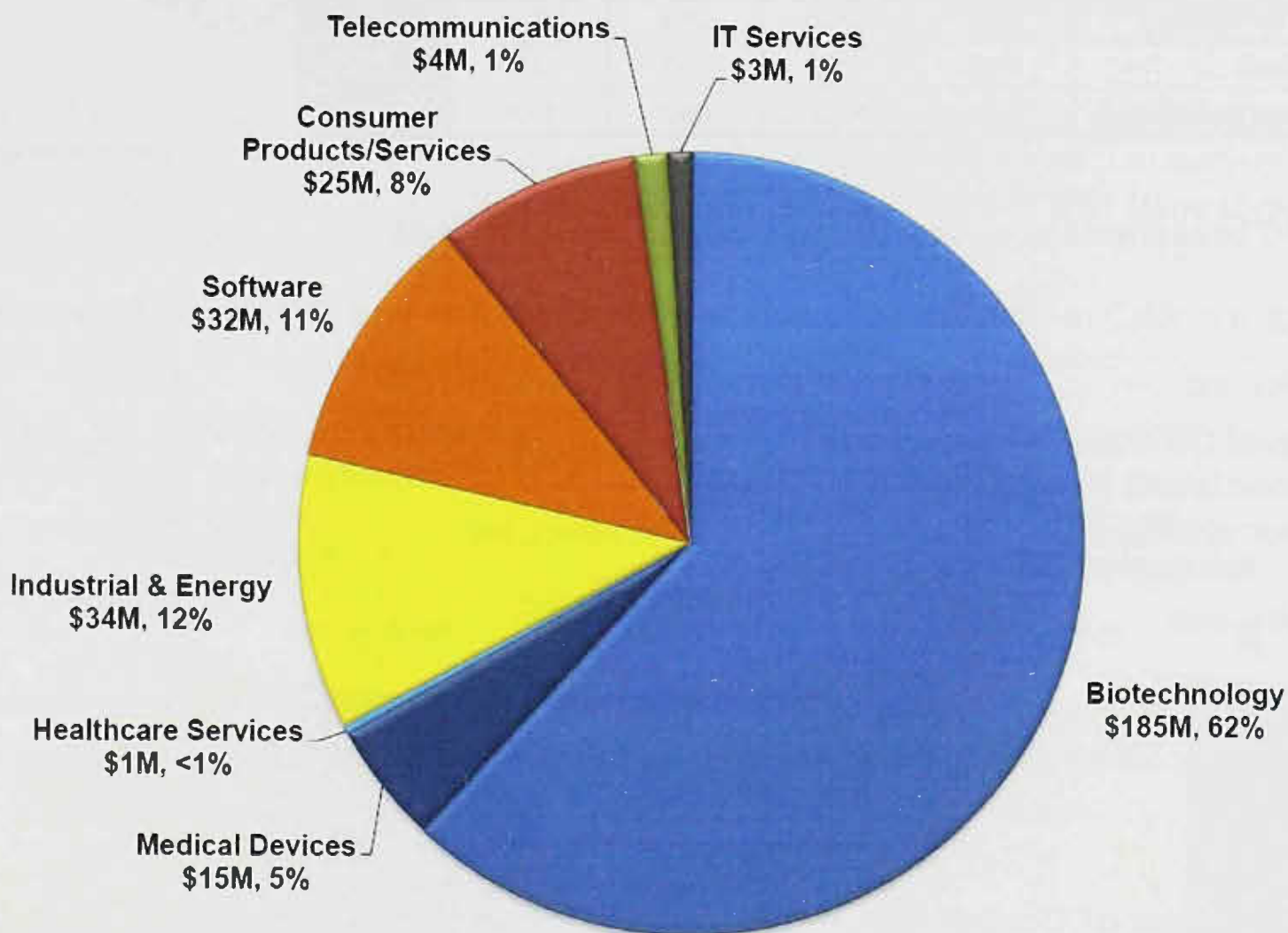
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## San Diego VC Funding Up In Fourth Quarter, Ranking 4<sup>th</sup> in Nation

In the fourth quarter of 2009, 30 San Diego companies received \$300 million, up 16% from the \$259 million raised by 35 San Diego companies in the third quarter of 2009, according to the latest PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ quarterly report. San Diego as a region moved up to fourth behind Silicon Valley, New England, and New York Metro regions. Southern California (San Diego and LA/Orange Counties) ranked third nationally with VC investments of \$588 million for the quarter. The amount of San Diego VC funding was up 52% from the fourth quarter of 2008, when \$197 million was invested in 26 companies.

Venture capital investment in San Diego companies was down for the second year in a row with just over \$900 million raised by 107 companies in 2009. This is down 25% from the \$1.2 billion raised by 132 companies in 2008. The life sciences sector received the majority of the financing during the fourth quarter of 2009 - \$202 million (67% of the total funding). This is up slightly from \$155 million invested in the life science sector in the third quarter. The industrial/energy sector received the second largest investment of \$34 million raised (four companies). This was followed by the software sector with \$32 million (three companies).

**San Diego VC Investments by Industry  
Q4 2009**



Source: The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial

Nationally, \$5 billion was invested in 794 companies in the fourth quarter of 2009 - down \$83 million (5%) compared to the third quarter. This figure was down 14% from the fourth quarter of 2008 when 910 companies received \$5.9 billion in funding. Total funding for 2009 was \$17.7 billion, which was down 37% from \$28 billion in 2008.

### Summary of National and Regional VC Investments

Region		2007	2008	2009	2009 Q3	2009 Q4
United States	Total (in Billions)	\$30.5	\$28.0	\$17.7	\$5.1	\$5.0
	# of Deals	4,027	3,985	2,795	689	794
	Average (in Millions)	\$7.6	\$7.0	\$6.3	\$7.4	\$6.3
California	Total (in Billions)	\$14.6	\$14.0	\$8.9	\$2.9	\$2.5
	# of Deals	1,663	1,626	1,137	293	323
	Average (in Millions)	\$8.8	\$8.6	\$7.8	\$9.8	\$7.8
Northern CA	Total (in Billions)	\$11.0	\$10.8	\$7.0	\$2.4	\$1.9
	# of Deals	1,273	1,251	871	219	253
	Average (in Millions)	\$8.6	\$8.6	\$8.0	\$10.7	\$7.5
Southern CA	Total (in Billions)	\$3.6	\$3.2	\$1.9	\$0.5	\$0.6
	# of Deals	390	375	266	74	70
	Average (in Millions)	\$9.3	\$8.5	\$7.0	\$6.9	\$8.6
San Diego	Total (in Billions)	\$1.9	\$1.2	\$0.9	\$0.26	\$0.3
	# of Deals	167	132	107	35	30
	Average (in Millions)	\$11.6	\$9.0	\$8.4	\$7.4	\$10.0

Northern California includes Silicon Valley and Sacramento.

Southern California includes Los Angeles, Orange and San Diego Counties.

Source: PricewaterhouseCoopers/National Venture Capital Association Moneytree™ Report

### The Top Ten VC investments in San Diego Companies – Q4 2009

Zogenix, Inc.	\$35.0M	Receptos, Inc.	\$23.6M
Fate Therapeutics, Inc.	\$30.5M	Fyfe Company LLC	\$20.0M
EVOFEM, Inc.	\$25.0M	Altair Therapeutics, Inc.	\$17.0M
SmartDrive Systems, Inc.	\$25.0M	Cyntellect, Inc.	\$15.5M
Pfenex, Inc.	\$24.0M	Celula, Inc.	\$15.0M

Source: PricewaterhouseCoopers/National Venture Capital Association Moneytree™ Report

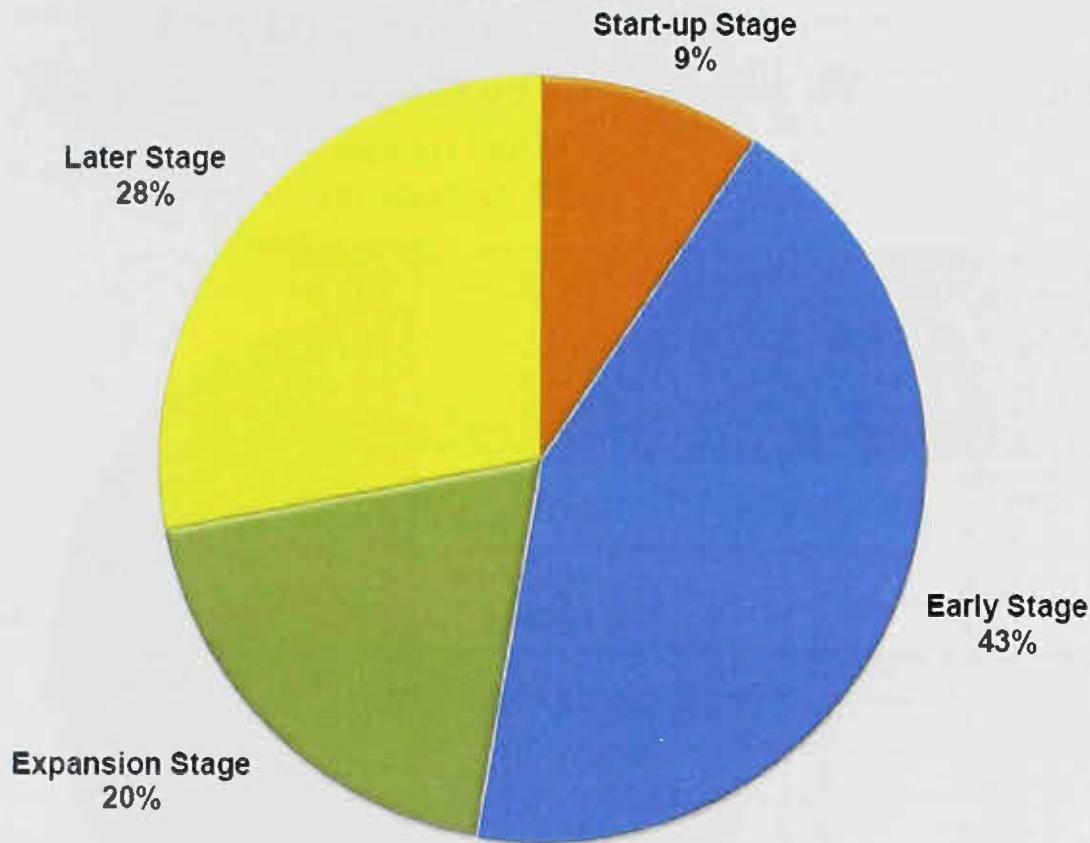
The top ten deals accounted for 77% of the total funding, and the four largest investments accounted for nearly 38%.

### VC Funding by Stage of Company Development – Fourth Quarter 2009

#### San Diego's Early Stage Companies Attract Over 50% of VC Funding

Of the total VC investment in San Diego in the fourth quarter, 53% went to start-up/early stage companies. Financing of later stage companies increased to 28% of the total compared to 16% in the third quarter of 2009. In San Diego, seed stage companies received 9% of the total funds invested in the fourth quarter of 2009, and early stage companies received 43%. This represents a decrease from the previous quarter when 67% of invested funds went to companies in these stages. Vanessa Herbert, Senior Manager at PricewaterhouseCoopers, commented, "...Southern California remains in the top three regions nationally receiving venture capital investments. Investments in San Diego continue to be predominantly in the life sciences sector."

**San Diego Q4 2009 VC Investments  
by Stage of Development**  
\$300 million  
30 companies



The Stage of Development Classifications used in the PwC/NVCA MoneyTree™ Report are as follows:

**Seed Stage**  
The initial stage. The company has a concept or product under development, but is probably not fully operational. Usually in existence less than 18 months.

**Early Stage**  
The company has a product or service in testing or pilot production. In some cases, the product may be commercially available. May or may not be generating revenues. Usually in business less than three years.

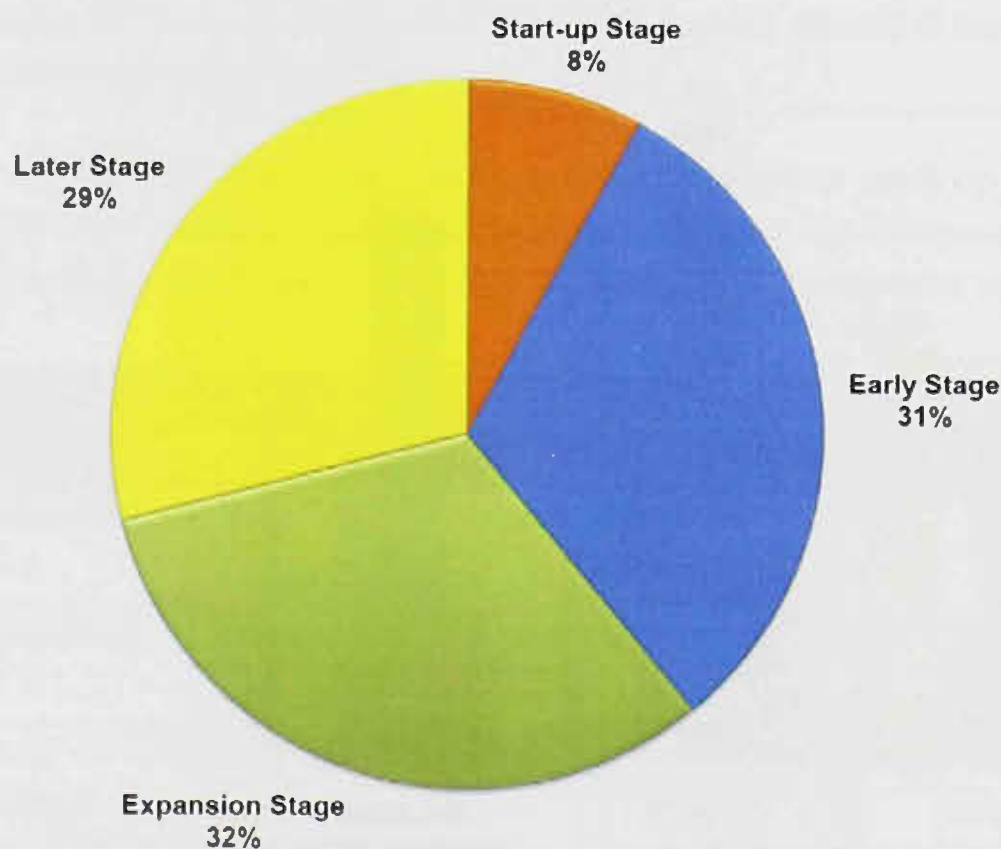
**Expansion Stage**  
Product or service is in production and commercially available. The company demonstrates significant revenue growth, but may or may not be showing a profit. Usually in business more than three years.

**Later Stage**  
Product or service is widely available. Company is generating on-going revenue; probably positive cash flow. Are more likely to be, but not necessarily profitable. May include spin-offs of operating divisions of existing private companies and established

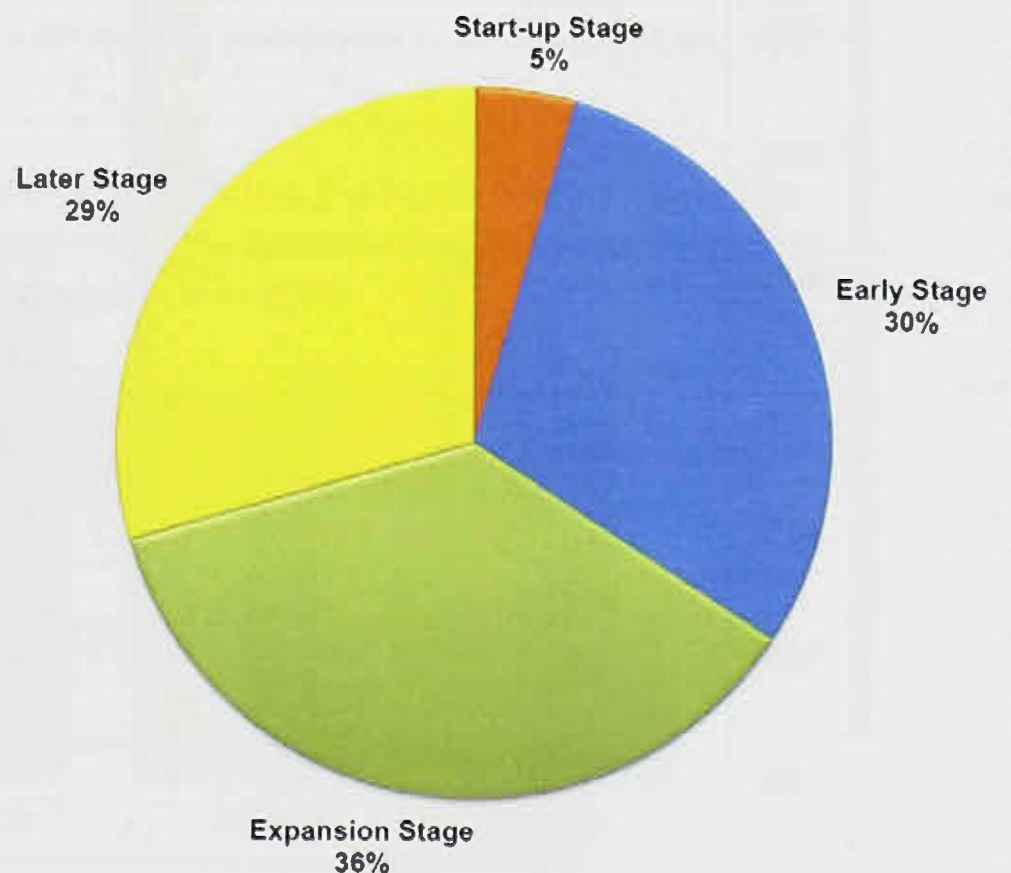
Nationally, the distribution of VC investment in seed and early stage companies increased in the fourth quarter compared to the third quarter. During the fourth quarter, 39% of VC investment went to start-up and early stage companies, compared to 32% in the third quarter. Investment in expansion and later stage companies fell in the fourth quarter to 32% and 29%, respectively.

California accounted for \$2.5 billion, or half, of the total U.S. venture investment. In California, the majority of the investments was in expansion and later stage companies.

**Total U.S. Q4 2009 VC Investments  
by Stage of Development**  
\$5.0 billion  
794 companies



**California Q4 2009 VC Investments  
by Stage of Development**  
\$2.5 billion  
323 companies



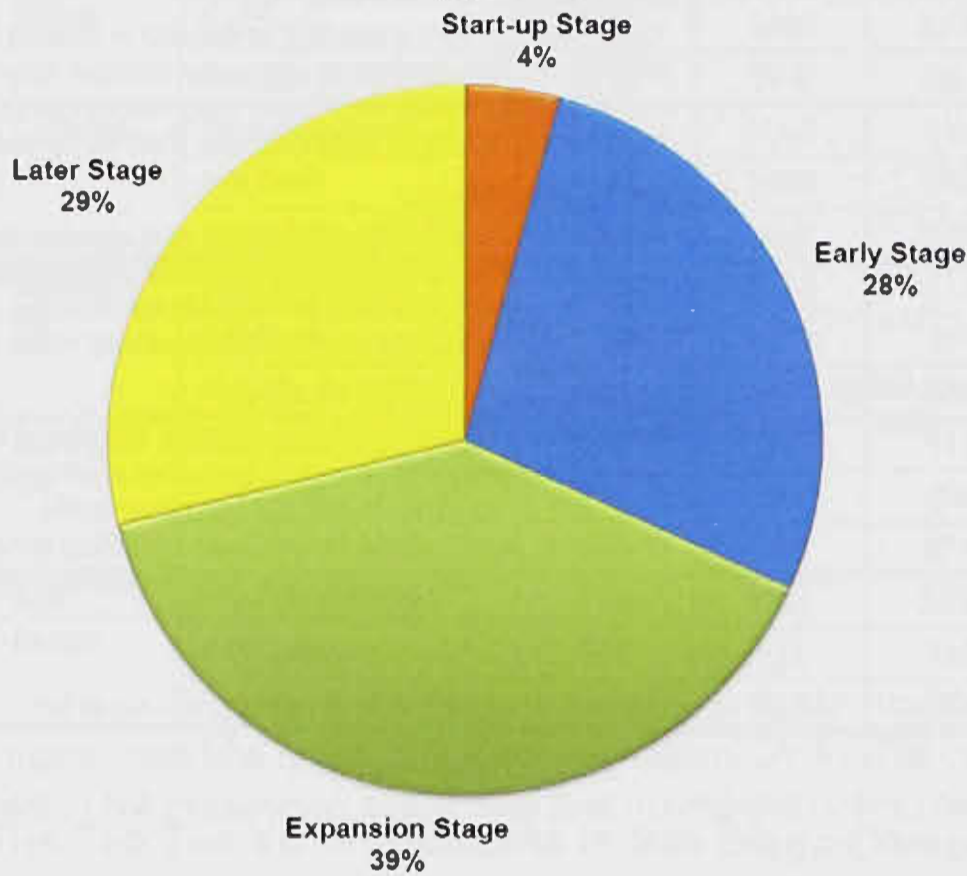
Source: CONNECT The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial

In northern California, 32% of the investment went to seed and early stage companies totaling over \$612 million invested in 114 companies – up 6% from the third quarter. In southern California, 42% of the funding went to seed and early stage companies – \$248 million invested in 34 companies in the fourth quarter.

### Northern California Q4 2009

#### VC Investments by Stage of Development

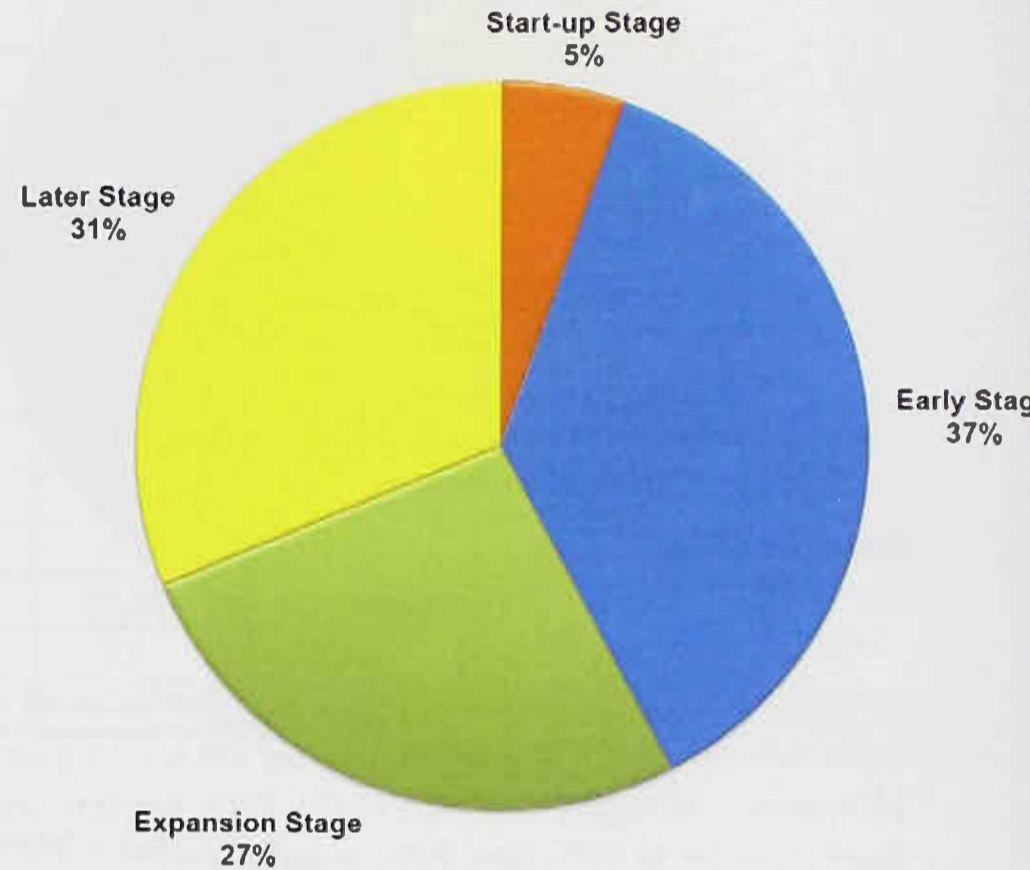
\$1.9 billion  
253 companies



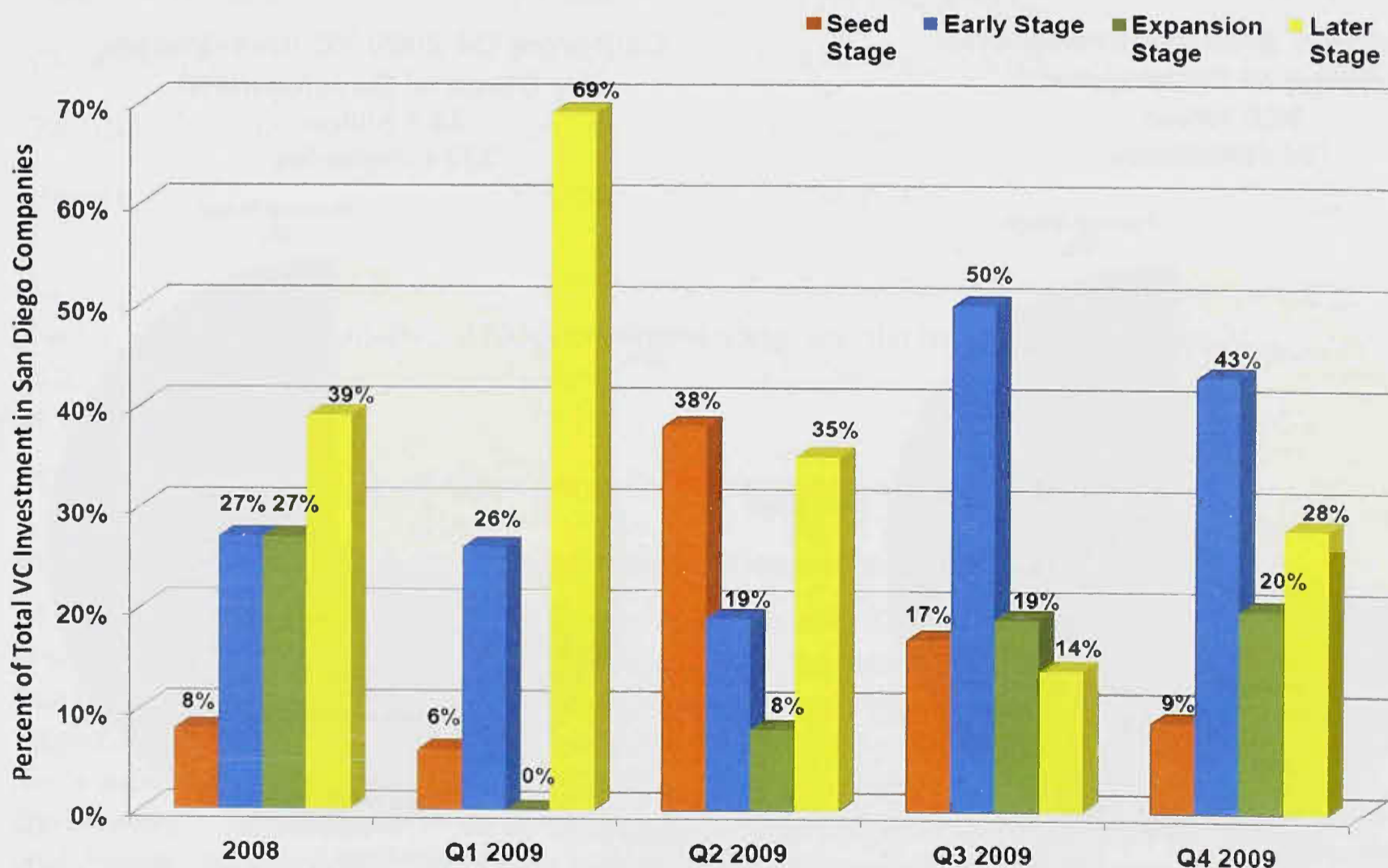
### Southern California Q4 2009

#### VC Investments by Stage of Development

\$588 million  
70 companies



### VC Investment in San Diego Companies by Stage of Development



Source: CONNECT; The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial.



## Regional VC Investment Rankings - Fourth Quarter 2009

San Diego's regional VC investment ranking rose in the fourth quarter to the 4th largest investment of any region, with 6% of the total US investments being made in San Diego, compared to almost 5% in the third quarter. Investment in the Southern California region (San Diego, LA and Orange Counties) was \$588 million for the quarter, ranking third nationwide behind Silicon Valley (\$1.9 billion) and New England (\$635 million). The top ten regions accounted for 90% of the total U.S. VC investment for the quarter.

Rank	Region	VC Investment in Millions	Number of Deals	VC Investment as % of U.S. Total
1	Silicon Valley	\$ 1,923	252	38%
2	New England	\$ 635	101	13%
3	NY Metro	\$ 466	66	9%
4	<b>San Diego</b>	<b>\$ 300</b>	<b>30</b>	<b>6%</b>
5	LA/Orange County	\$ 288	40	6%
6	Texas	\$ 189	30	4%
7	Southeast	\$ 189	31	4%
8	Northwest	\$ 185	33	4%
9	Colorado	\$ 172	20	3%
10	DC/Metroplex	\$ 163	40	3%
Top 10 Regions		\$ 4,510	643	90%
UNITED STATES		\$ 5,019	794	100%

#3 So. Cal. {

Source: CONNECT; The MoneyTree™ Report by PricewaterhouseCoopers and the National Venture Capital Association based on data from Thomson Financial.

## Value of Mergers and Acquisitions Deals Jump

The fourth quarter of 2009 saw significantly larger merger & acquisition deals compared to the two previous quarters in San Diego and the rest of the state, though the number of reported deals closed was lower. In San Diego, 29 deals totaling nearly \$1.3 billion were closed in the fourth quarter compared to 32 deals valuing \$99 million in the third quarter.

The total deal values reported in northern California were up nearly \$15 billion in the fourth quarter. Both San Diego and southern California M&A activity were up by over \$1 billion for the quarter. San Diego accounted for 14% of the deals and 11% of the reported total transaction value statewide in 2009.

Region		2009 Q1	2009 Q2	2009 Q3	2009 Q4	2009 Totals
Northern CA	Total Reported Value (in Millions)	\$4,949	\$1,866	\$2,520	\$17,134	\$26,469
	# of Closed Deals	91	89	155	136	471
Southern CA	Total Reported Value (in Millions)	\$6,195	\$1,169	\$1,827	\$3,181	\$12,372
	# of Closed Deals	103	74	134	131	442
San Diego	Total Reported Value (in Millions)	\$2,703	\$139	\$99	\$1,250	\$4,191
	# of Closed Deals	42	24	32	29	127

Source: IQ Capital; Roth Capital Partners; CONNECT

## Selected Reported Fourth Quarter 2009 M&A Deals – San Diego

Target/Issuer	Buyer/Investor	Transaction Value (in Millions)
Calixa Therapeutics, Inc.	Cubist Pharmaceuticals Inc.	\$402.5
Charlotte Russe Holding, Inc	Advent International Corporation	\$371.2
First Advantage Corporation	First American Corp.	\$226.8
BioDuro, LLC	Pharmaceutical Product Development Inc.	\$77.0

## Private Placement Investments to Public Companies Increase Significantly in 2009

Private placements (often structured as PIPE transactions – see sidebar) are an alternative way for public companies to raise capital, and are usually considered a good sign for a public company. They convey that the private placement investors believe in a company's prospects for the long term and are willing to take on market risk with their investment.

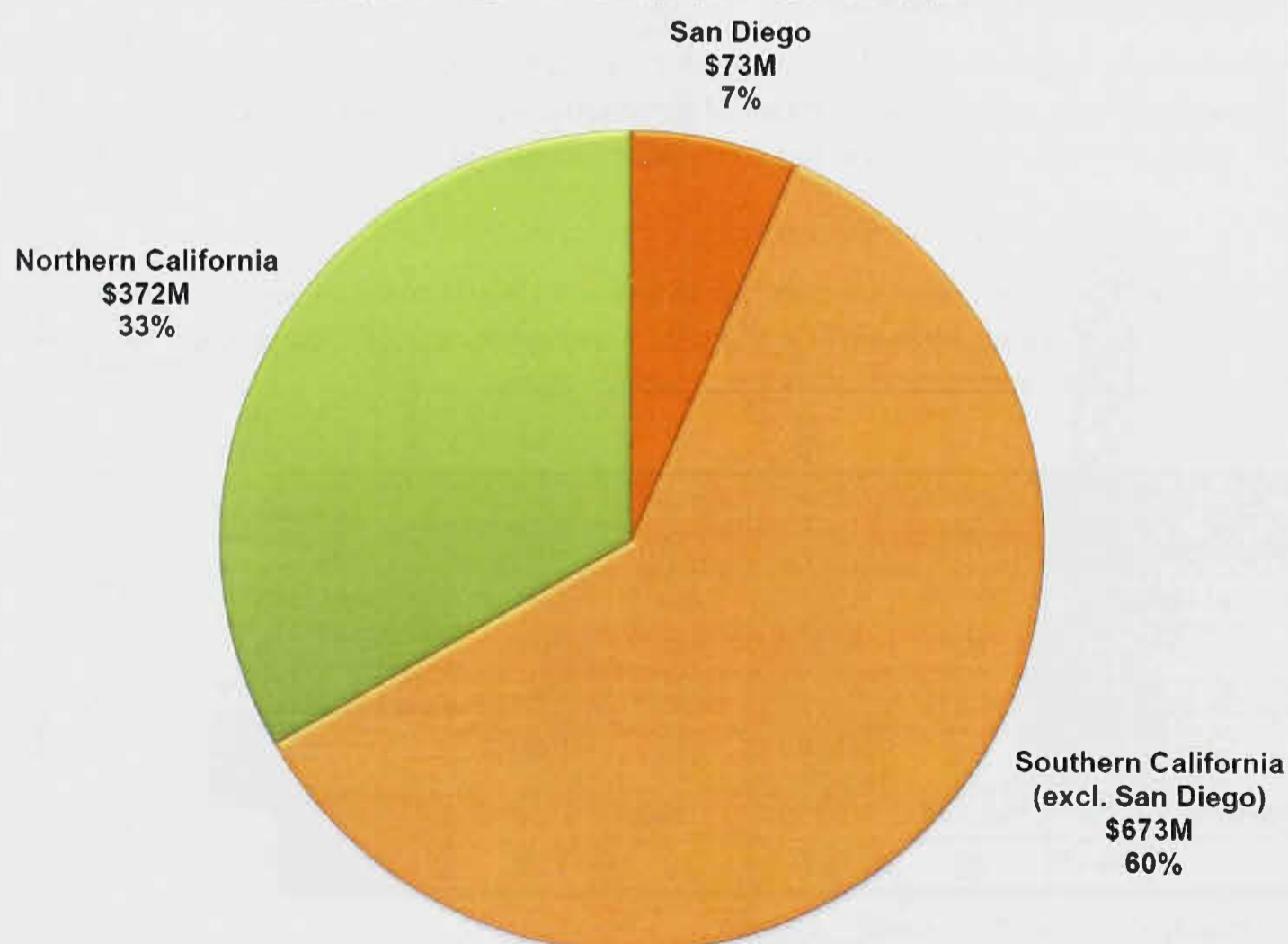
In the fourth quarter of 2009, seven San Diego companies closed deals totaling \$61 million through private placement investments – down by over half from the \$125 million raised in the third quarter of 2009. Two San Diego companies made definitive agreements for an additional total of \$12 million. Southern California (including San Diego) companies issued more than 70% of the PIPE private placements totaling nearly \$750 million in the fourth quarter.

In northern California, 16 companies closed private placement deals totaling over \$350 million, and one additional company made a definitive agreement to raise \$20 million.

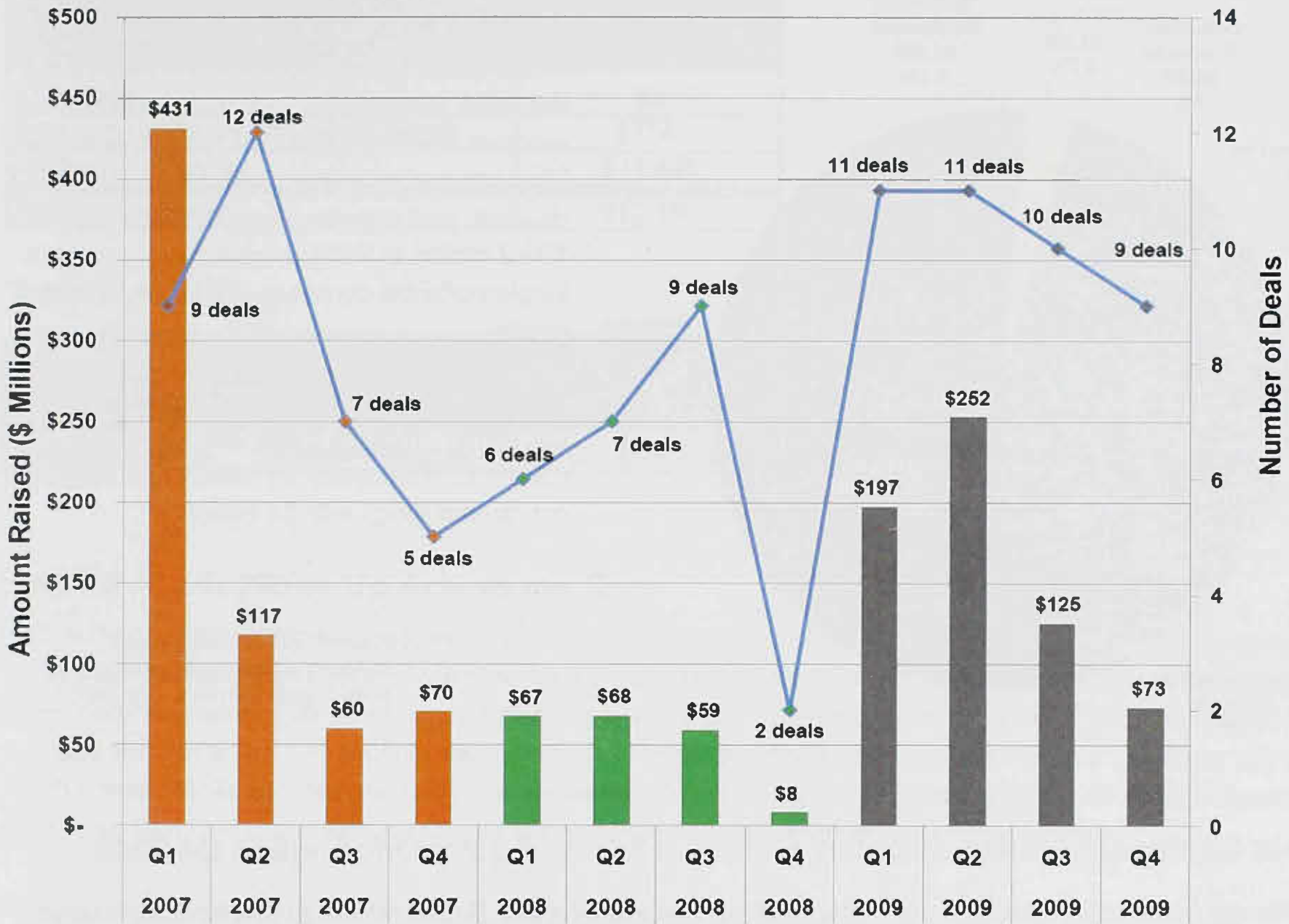
*PIPE stands for **P**rivate **I**nvestment in **P**ublic **E**quities. PIPE transactions are also referred to as **private placements** or **direct placements** in public companies. PIPE transactions are privately negotiated sales of companies' securities to individual accredited investors or institutional funds. Small and mid-size public companies often use PIPE financing because they can obtain capital from a PIPE transaction faster and cheaper than in a public offering. Especially over the past couple of years, as the markets have remained relatively closed to secondary financing, PIPEs have emerged as a stable and sustained source of equity capital for public companies of all sizes.*

Source: Sagient Research

### Private Placements by Region – Q4 2009 PIPE Transactions Funded Deals and Definitive Agreements

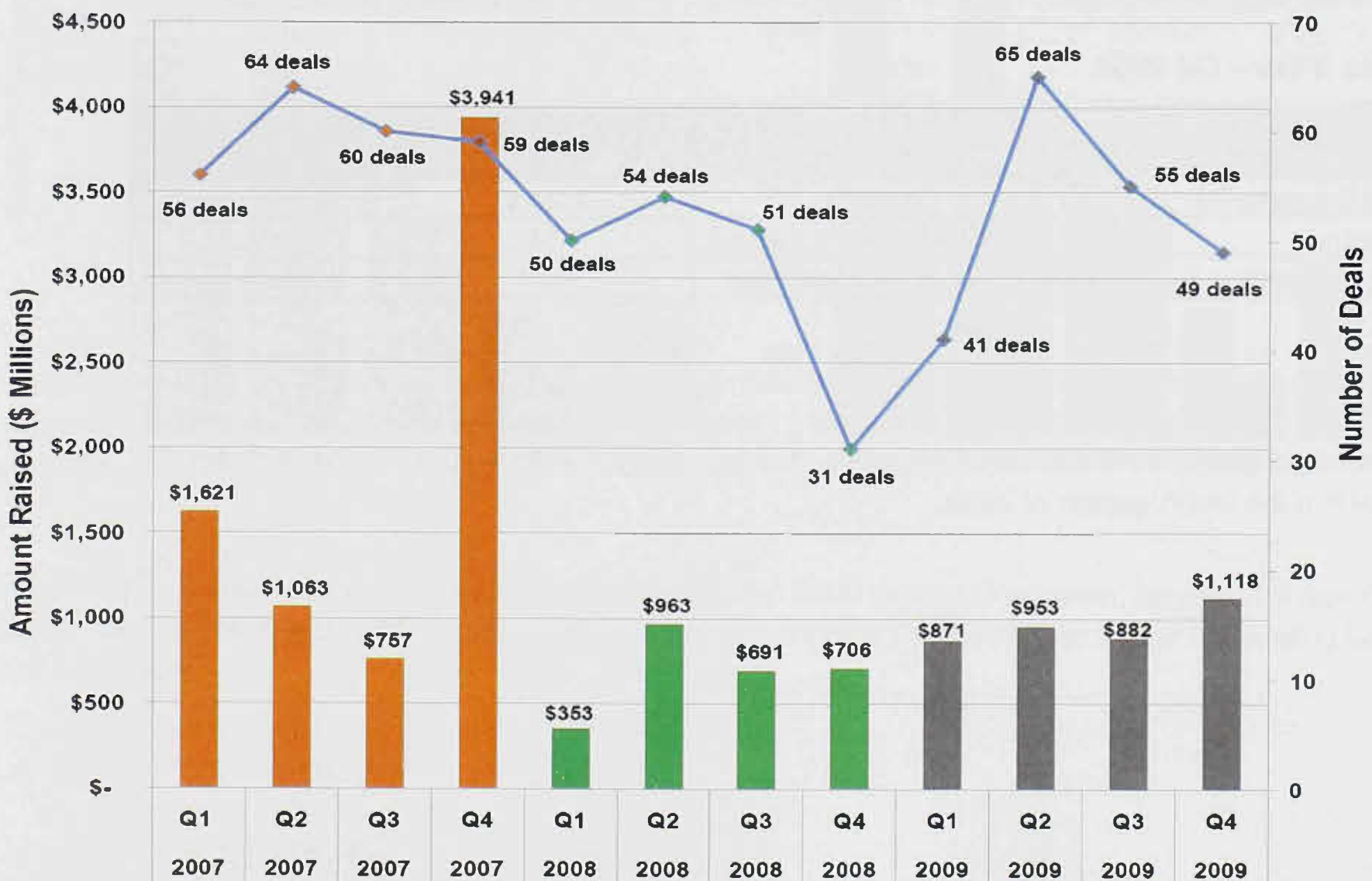


## San Diego Private Placements – PIPE Transactions

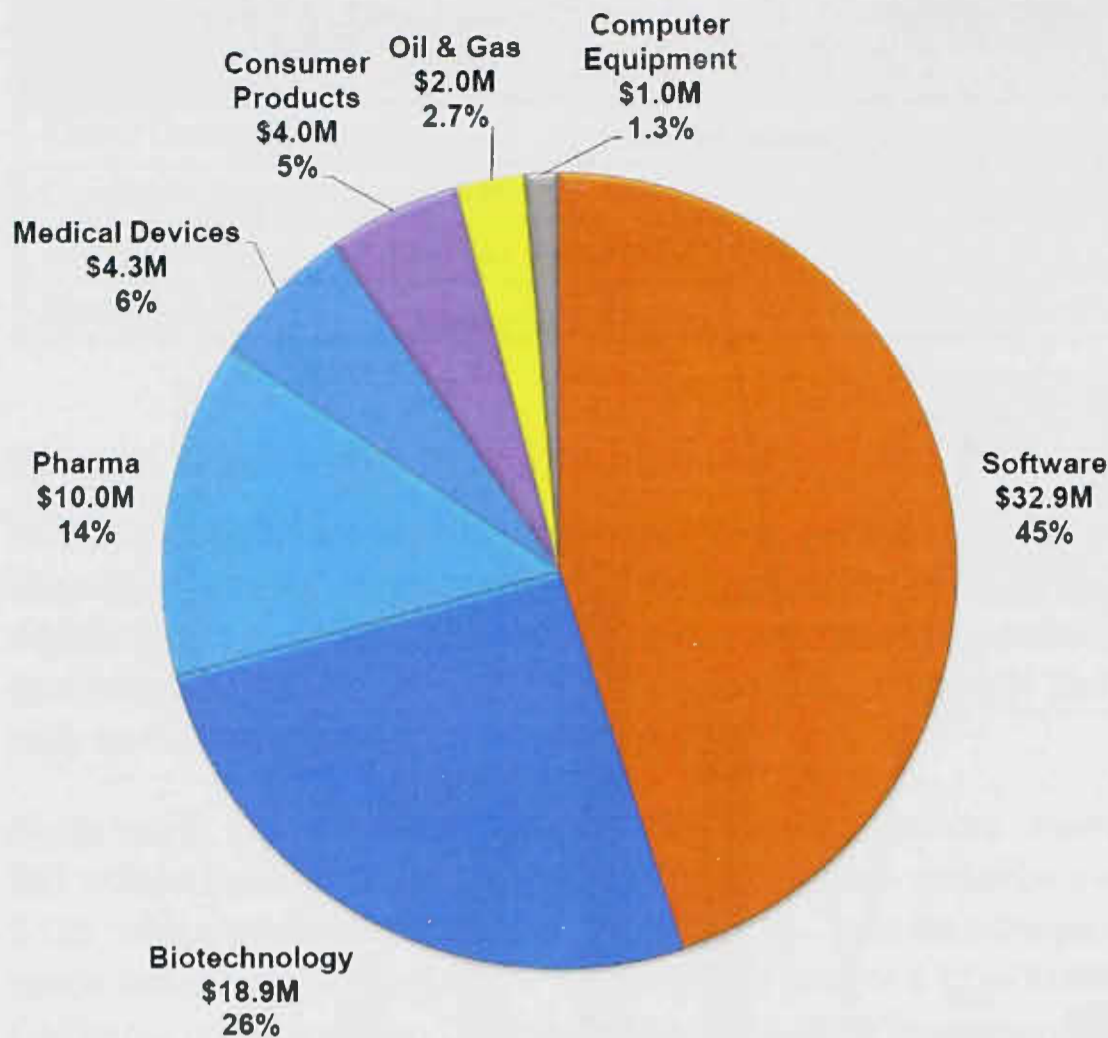


Source: Sagient Research Systems (PlacementTracker); Roth Capital Partners; CONNECT

## California Private Placements – PIPE Transactions



## San Diego PIPE Private Placements by Industry – Q4 2009



In the fourth quarter of 2009, the majority of the PIPE investments in San Diego were made in the life science and software sectors. Five companies in the biotech, medical devices, and pharma sectors raised a total of \$33.2 million in PIPE private placements. A single software company raised nearly \$33 million.

PIPE investment in other sectors included consumer products (one) with \$4 million, oil & gas (one) with nearly \$2 million and computer equipment (one) with \$1 million.

Source: Sagient Research Systems (PlacementTracker); Roth Capital Partners; CONNECT

## California Companies Raise Over \$12 Billion in Public Equity Offerings in Q4 2009

Three California companies raised nearly \$618 million through their Initial Public Offerings (IPOs) in the fourth quarter of 2009. According to a quarterly survey of all IPOs on US exchanges from PricewaterhouseCoopers' Transaction Services practice, 32 IPOs were completed in the fourth quarter nationwide, raising \$16.8 billion, a 190% increase over the \$5.8 billion raised in the third quarter, which saw 20 offerings completed.

### California IPOs – Q4 2009

Company	Industry Sector	Amount Raised (in \$M)	City
Dole Food Company Inc.	Produce	\$446.4	Westlake Village
Fortinet Inc.	Computer Network Security	\$156.3	Sunnyvale
United States Gasoline Fund, LP	Energy Investment Fund	\$14.8	Alameda

The follow-on public offering (FPO) market saw 17 California companies raising nearly \$12.2 billion in proceeds from the sale of additional share offerings to investors. This was an increase of nearly 390% over the \$2.5 billion raised in the third quarter by California companies. One San Diego company raised nearly \$4 million in follow-on equity capital in the fourth quarter of 2009.

## California FPOs – Q4 2009

Region	Amount Raised in \$M
San Diego*	\$4
Southern California (excl. San Diego)	\$714
Northern California	\$11,445
<b>Total for California</b>	<b>\$12,163</b>

Source: Sagient Research Systems (PlacementTracker); Roth Capital Partners; PricewaterhouseCoopers; CONNECT

### \*San Diego FPO

Company	Industry Sector	Amount Raised (in \$M)	Underwriter
Overland Storage Inc.	Computer Equipment	\$3.8	Roth Capital Partners, LLC

## Patents Applications Up Across the State

In San Diego, patent applications were up 6% in the fourth quarter with 1,526 applications filed compared to 1,445 in the third quarter. San Diego accounted for 16% of the patents filed in California in the fourth quarter, and 11% of the patents granted. In San Diego, 730 patents were granted in the fourth quarter of 2009, down 8% from the previous quarter when 791 patents were granted. Patent applications submitted were up in all four regions in the fourth quarter while patents granted were essentially flat in Northern California at just over 4,000. Southern California, San Diego and Boston all saw slight declines in the number of patents granted.

## Patent Applications Submitted and Granted by Region



San Diego companies receiving the most patents granted in 2009 include Qualcomm, Broadcom's San Diego group, Callaway Golf, Hewlett-Packard, Sony, and the University of California, San Diego, accounting for almost 90% of the total.

## Patents Granted to San Diego County Organizations in 2009

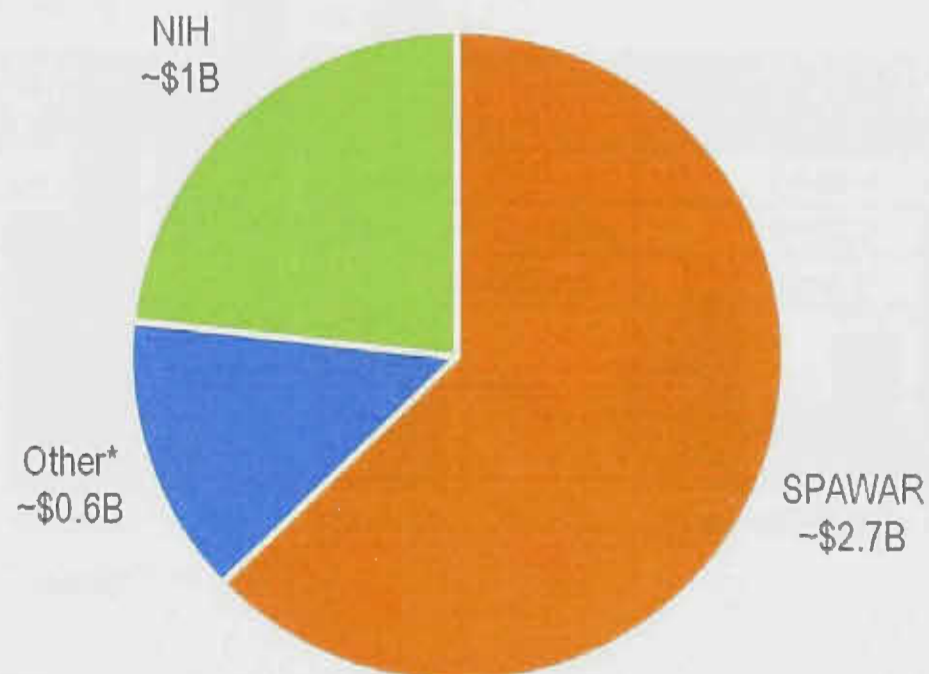
Rank	Institution	Patents Granted
1	QUALCOMM Incorporated	247
2	Broadcom Corporation (San Diego group)	81
3	Callaway Golf Company	79
4	Hewlett-Packard Development Company, L.P.	64
5	Sony Corporation	63
6	Sony Electronics Inc.	59
7	The Regents of the University of California	54
8	Acushnet Company	45
9	Kyocera Wireless Corp.	41
10	Taylor Made Golf Company, Inc.	39
11	Sun Microsystems, Inc.	37
12	The Scripps Research Institute	34
13	Nokia Corporation	22
14	SPAWAR Systems Center	21
15	Cymer, Inc.	20
15	Isis Pharmaceuticals, Inc.	20
15	Janssen Pharmaceutica N.V.	20

Source: United States Patent and Trademark Organization; University of California, San Diego; CONNECT.

## Federal Research Grants Jump to New Highs in 2009

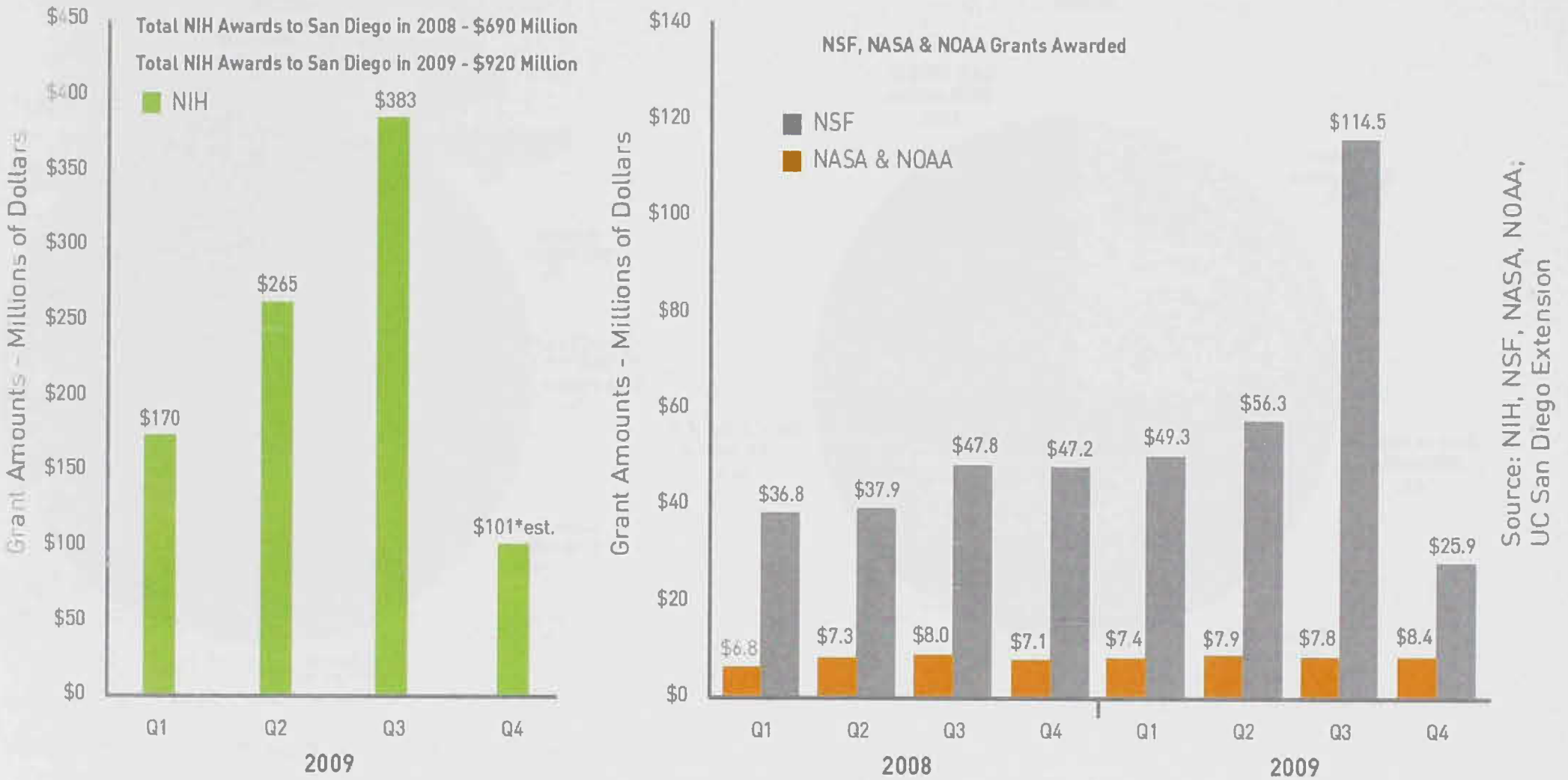
Federal funding granted to San Diego organizations by the National Institutes of Health (NIH), National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) totaled nearly \$1.2 billion in 2009 – up 35% over the \$889 million awarded in 2008. It is estimated that federal funding of defense-related research at San Diego's Space and Naval Warfare Systems Center Pacific (SPAWAR SSC Pacific) amounted to over \$2.5 billion in 2009.

## Federal Research Grants Received in San Diego – 2009 Summary



Federal research grants in San Diego fell in the fourth quarter of 2009 after a surge of funding in the previous quarter. Grant funding awarded by the NIH was up 33% in 2009 with \$920 million over \$690 million in 2008. In the fourth quarter of 2009 in San Diego, NIH funding in fell 74% to just over an estimated \$100 million compared to \$383 million in the third quarter of 2009. The NSF reported \$30 million in grants awarded in San Diego in the fourth quarter of 2009 – nearly 23% of the amount awarded in the previous quarter. Research grants from the NASA and the NOAA were up 13% with a combined total of \$8.4 million in the fourth quarter.

## Federal Research Grants Received in San Diego – NIH, NSF, NASA, and NOAA

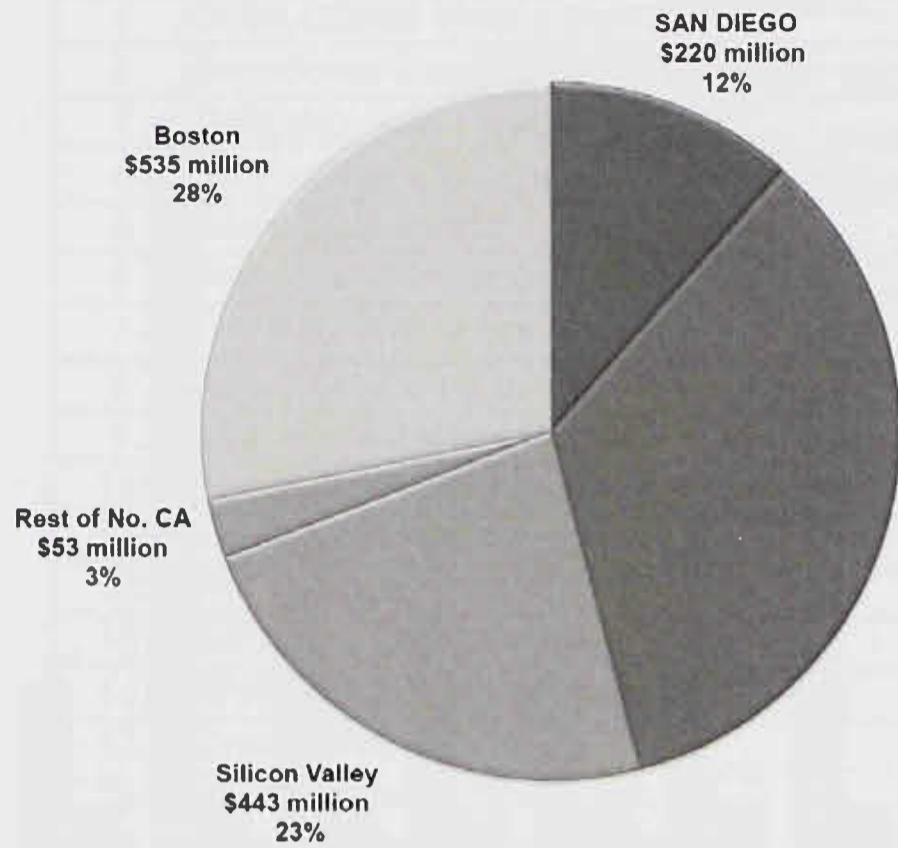


Source: NIH, NSF, NASA, NOAA;  
UC San Diego Extension

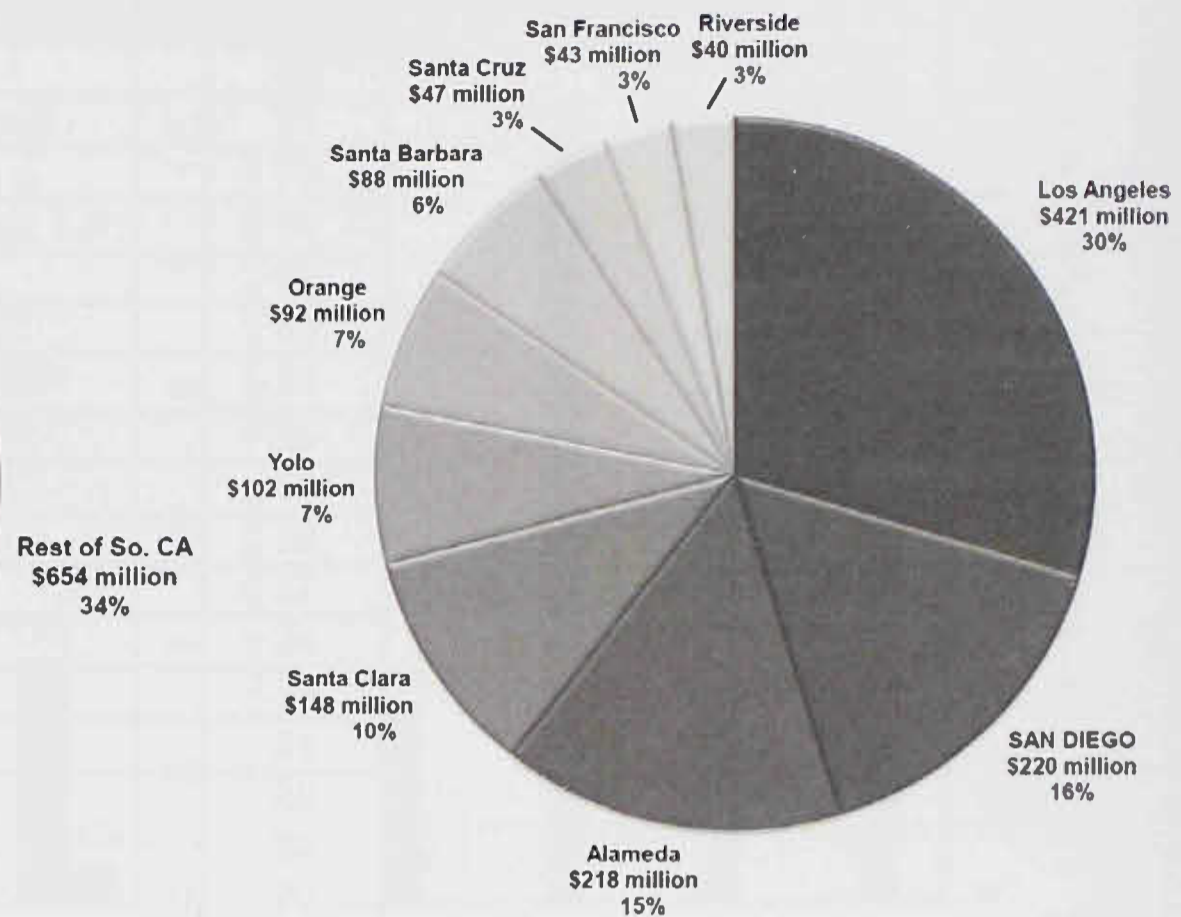
## Federal Research Grants Received by Region – NSF and NASA



### NSF Grant Awards San Diego and Selected Regions 2009



### NSF Grant Awards Top 10 California Counties 2009



Source: NIH; NSF; University of California, San Diego Extension, CONNECT

### San Diego Private Research Organizations' Wages Significantly Lower than in Northern California

Average weekly wages of San Diego private research organizations' employees fell nearly 16% in the second quarter of 2009 according to the most recently available data from the U.S. Bureau of Labor Statistics. Average weekly wages in San Diego were almost 25% lower than the average in northern California, and northern California had over 54,000 employees in the second quarter compared to nearly 50,000 in the southern California region. San Diego private research institutes employed nearly 23,500 employees in the second quarter.

### Regional Private Research Institutes' Wages & Employment



Source: Quarterly Census of Employment, U.S. Bureau of Labor Statistics; University of California, San Diego Extension



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CONNECT is a nonprofit organization dedicated to creating and sustaining the growth of innovative technology and life science businesses in San Diego. Since 1985, CONNECT has assisted in the formation and development of over 2,000 companies and is widely regarded as the world's most successful regional program linking inventors and entrepreneurs with the resources they need for success. CONNECT focuses on research institution support, business creation and development, entrepreneurial learning, access to capital, public policy advocacy, awards, recognition and networking. Nearly 40 countries and regions have adopted the CONNECT model, including the U.K, Sweden, Norway, Denmark, Australia, and China, and most recently, New York City. For more information, please visit [www.connect.org](http://www.connect.org).



