



## Innovation Economy Continues to Lead San Diego's Job Recovery

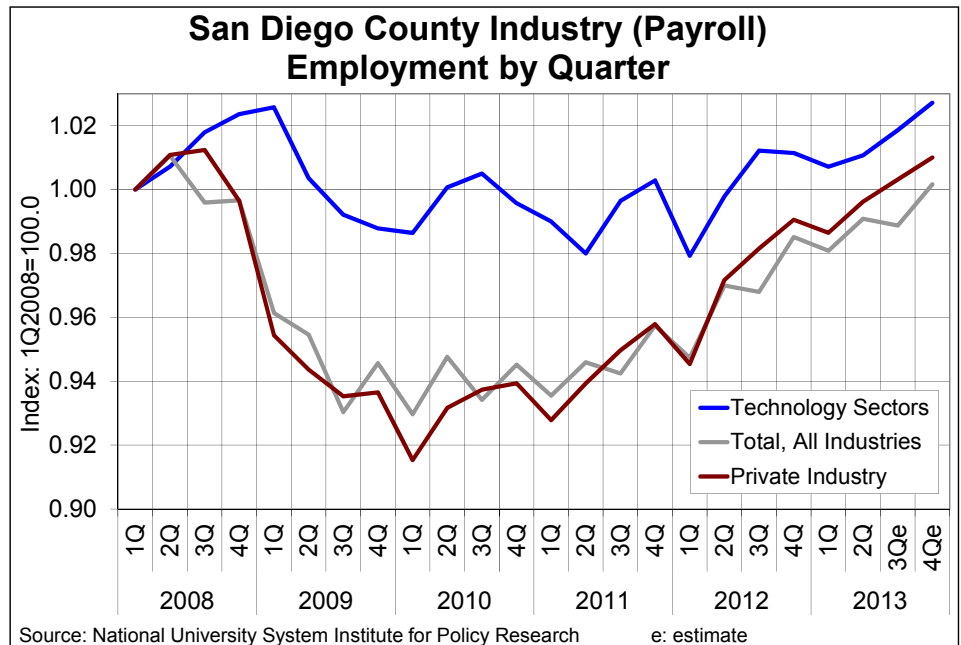
### Summary of San Diego technology-oriented industries

Technology sectors continue to lead San Diego's job growth and economic recovery. Tech-based sectors have significantly positive impacts on employment, wages and overall economic prosperity. This is the result of both direct impacts on job growth and indirect effects of spending by technology workers.

Over the course of the recession, technology employment did not decline nearly as much as the rest of the regional economy. The sector also rebounded more strongly. By the end of 2013, technology jobs had already exceeded the former high mark and continued to grow. Meanwhile, overall private employment had not quite yet returned to the pre-recession peak.

San Diego technology oriented businesses in total employed 142,100 workers during 2013. Payrolls reached an estimated \$15.6 billion during the year, generating \$41.4 billion in sales, and directly adding \$21.5 billion to the San Diego regional economy. Technology industries directly contributed 12 percent of San Diego's gross domestic product (GDP), and, in total, accounted for 22.9 percent of all economic activity.

Multipliers measuring indirect and induced effects indicate a total 353,400



jobs in San Diego are traced or dependent upon local technology industries. This accounted for 27 percent or more than a quarter of all payroll jobs in the County.

### Measuring San Diego technology sectors

For purposes of this report, technology industries are knowledge-based sectors on the leading-edge of research, innovation, and development of the technologies. These sectors are defined by businesses involved in the development and production of technical equipment, communications, and/or advanced technology services. The specific technology sectors encompass:

- Research and development in physical, engineering and life sciences;
- Biomedical products;
- Biotechnology and Pharmaceuticals;
- Communications (Telecommunications);
- Computers and Electronics;
- Defense and Transportation;
- Environmental technology;
- Recreational goods; and
- Software.



The number of technology firms, payroll jobs, and total wages are determined by specific North America Industry Classification System (NAICS) codes as measured by the Quarterly Census of Employment and Wages (QCEW). The QCEW is produced by the California Employment Development Department. This conforms with methodological reporting of employment and wages by the U.S. Bureau of Labor Statistics (BLS) covering 98 percent of all employment and wages in the U.S.<sup>1</sup>

Technology sectors are defined by the San Diego Association of Governments

### SUMMARY OF SAN DIEGO TECHNOLOGY JOB IMPACTS, 2013

Impact Type	Employment	Labor Value Output		
		Income	Added	(Sales)
		(\$billions)		
Direct Effect	142,100	\$15.6	\$21.5	\$41.4
Indirect Effect	91,300	6.2	10.1	16.6
Induced Effect	120,000	5.7	10.7	16.6
Total Effect	353,400	\$27.5	\$42.3	\$74.6
multiplier	2.49	1.77	1.97	1.80

Source: National University System Institute for Policy Research.

## SAN DIEGO TECHNOLOGY PAYROLL EMPLOYMENT, 2012-2013

Sector	Establishments			Employment			Annual Payroll (\$millions)			Average Annual Wage		
	2012	2013	Chg	2012	2013	Chg	2012	2013	Chg	2012	2013	Chg
<b>Technology TOTAL</b>	<b>6,186</b>	<b>6,506</b>	<b>5.2%</b>	<b>139,962</b>	<b>142,144</b>	<b>1.6%</b>	<b>\$14,099.6</b>	<b>\$14,731.4</b>	<b>4.5%</b>	<b>\$100,700</b>	<b>\$103,600</b>	<b>2.9%</b>
Biotech/Pharmaceutical/Biomedical	636	685	7.7%	30,330	31,304	3.2%	2,947.1	3,263.1	10.7%	97,200	104,200	7.2%
Biomedical Products	192	197	2.5%	7,089	7,741	9.2%	568.9	599.3	5.3%	80,300	77,400	-3.6%
Biotechnology & Pharmaceutical	444	488	10.0%	23,241	23,563	1.4%	2,378.2	2,663.8	12.0%	102,300	113,000	10.5%
Communications Equipment	811	818	1.0%	26,515	26,946	1.6%	3,118.1	3,179.7	2.0%	117,600	118,000	0.3%
Computer & Electronics	196	196	0.0%	11,721	10,898	-7.0%	1,220.8	1,228.6	0.6%	104,100	112,700	8.3%
Defense and Transportation	191	196	2.9%	22,526	22,413	-0.5%	2,211.7	2,277.3	3.0%	98,200	101,600	3.5%
Environmental Technology	458	475	3.7%	10,697	10,924	2.1%	854.8	863.3	1.0%	79,900	79,000	-1.1%
Recreational Goods	71	69	-2.1%	2,157	2,380	10.3%	168.7	165.2	-2.1%	78,200	69,400	-11.3%
Software	1,988	2,077	4.5%	27,222	27,897	2.5%	2,972.9	3,047.3	2.5%	109,200	109,200	0.0%
Other Tech Consulting Services	1,836	1,990	8.4%	8,796	9,382	6.7%	605.5	706.9	16.7%	68,800	75,300	9.4%
Technology percent of All Industries	6.1%	6.5%		11.0%	10.9%		21.0%	21.0%		190.7%	192.6%	
<b>All Industries TOTAL</b>	<b>101,168</b>	<b>99,746</b>	<b>-1.4%</b>	<b>1,273,965</b>	<b>1,304,142</b>	<b>2.4%</b>	<b>\$67,295.5</b>	<b>\$70,176.0</b>	<b>4.3%</b>	<b>\$52,800</b>	<b>\$53,800</b>	<b>1.9%</b>
Non-tech sectors	94,982	93,240	-1.8%	1,134,003	1,161,997	2.5%	53,196	55,445	4.2%	46,900	47,700	1.7%

Source: Census of Employment and Wages, California Employment Development Department; National University System Institute for Policy Research.

(SANDAG) "cluster" definitions in conjunction with *CONNECT*, and further refined in collaboration with the *National University System Institute for Policy Research*.

### San Diego's tech sectors

During 2013, there were 6,506 businesses in the aforementioned categories, employing an annual average of 142,144 San Diegans. The number of technology establishments increased 5.2 percent over the year while the number of jobs increased only 1.6 percent. This difference reflects the start-up nature of San Diego's technology sectors. In contrast, establishments overall in San Diego declined 1.4 percent, but employment increased 2.4 percent.

Technology firms made up 6.5 percent of all San Diego establishments as of 2013, up from 6.1 percent in 2012. Employment among technology firms, however, account for 11 percent of all payroll jobs, and 21 percent of total payroll dollars. Wages among technology firms are more than double the average for non-tech companies, \$103,600 com-

pared to \$47,700. Total payrolls among technology sectors increased at a slightly greater pace than other industries (4.5 percent versus 4.2 percent) with average wages among tech firms increasing by a higher pace as well (2.9 percent versus 1.7 percent).

### San Diego's Diversity

One way of measuring the strength of an industry within a regional economy is location quotient (LQ) calculations. (See Appendix B on page 5 for explanation of how Location Quotients are calculated.) San Diego almost uniformly outperforms in each technology sector by this measure. LQs above 2.0 for both employment and payrolls reveal considerably greater concentration in these specific technology industries.

Primarily because of the presence of several large golf club and related equipment manufacturers in San Diego, the LQ of recreational goods employment and payrolls are exceptionally high. Other technical consulting services and biotechnology and pharmaceutical production have very high LQs as well. Communications and defense/transportation are very strong as well.

The lowest LQs shown among San Diego technology sectors is for software, alt-

## COMPARISON OF 2012 TECHNOLOGY AVERAGE WAGES: SAN DIEGO, U.S.

Sector	Average Annual Wage		
	San Diego	SD/US	United States
<b>Technology TOTAL</b>	<b>\$103,100</b>	<b>111%</b>	<b>\$93,200</b>
Biotech/Pharmaceutical/Biomedical	103,300	118%	87,800
Biomedical Products	80,300	115%	70,000
Biotechnology & Pharmaceutical	110,200	111%	99,000
Communications Equipment	115,800	134%	86,200
Computer & Electronics	96,600	94%	103,200
Defense and Transportation	103,700	117%	88,400
Environmental Technology	82,300	101%	81,700
Recreational Goods	72,800	149%	48,900
Software	109,700	105%	104,000
Other Technical Consulting Services	78,000	102%	76,800
<b>All Industries TOTAL</b>	<b>\$54,000</b>	<b>111%</b>	<b>\$48,500</b>
Non-tech sectors	48,100	104%	46,100

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics; National University System Institute for Policy Research.

though employment and payrolls are also relatively strong compared to the rest of the country. Computer and electronics and environmental technologies have the next lowest LQs, but also still well above national averages.

### High wage averages among San Diego technology sectors

Technology worker wages in San Diego average 11 percent more than the national averages in the same fields of technology. Discounting for tech wages, other wages in San Diego are only 4 percent above national averages.

Communications equipment has the highest wage average (\$115,800) among San Diego's tech sectors. This shows a significant premium (+34 percent) over the national average for this sector as well.

Average wages among recreational goods in San Diego, although the lowest

### SAN DIEGO LOCATION QUOTIENT/U.S. TOTAL

Sector	Estab-lishments	Employ-ment	Total Payroll
<b>Technology TOTAL</b>	<b>1.29</b>	<b>2.07</b>	<b>2.06</b>
Biomedical Products	1.20	1.84	1.90
Biotechnology & Pharmaceutical	2.13	3.83	3.83
Communications Equipment	1.17	2.06	2.48
Computer & Electronics	1.71	1.63	1.37
Defense and Transportation	1.89	2.85	3.00
Environmental Technology	1.05	1.78	1.61
Recreational Goods	3.49	5.46	7.30
Software	0.75	1.24	1.17
Other Tech Consulting Services	3.91	4.86	4.44
<b>All Industries TOTAL</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>

Source: Census of Employment and Wages, U.S. Bureau of Labor Statistics; National University System Institute for Policy Research.

among local tech sectors, also had the greatest variance (+49 percent) above the national average within this industry.

The only local tech sector where wage averages are below national averages is computer and electronics, (\$96,600 versus \$103,200). This may partly reflect the extremely high wages found in Silicon Valley and other prominent computer producing areas for this industry. Computer wages in San Diego are still significantly above average for local wages.

### San Diego's technology employment by sector trends

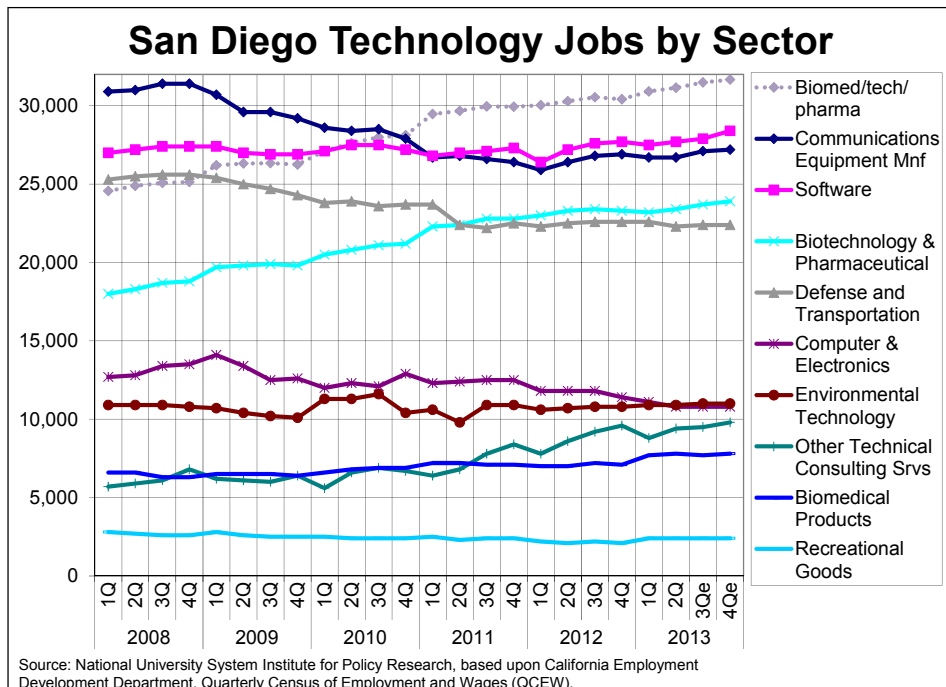
Combining biotechnology and pharmaceutical with biomedical production reveals bio related companies account for San Diego's single largest sector of technology employment. Both sectors continued to add jobs throughout the recession, overtaking both communications and software to become the region's single largest technology industry.

Communications equipment absorbed the most jobs lost in the recession downturn. Over the past two years, however, employment appears to have stabilized and shown modest gains. Software held up fairly well and grown the past 2 years. Other technical services have also continued to grow for the most part since 2010.

Defense and transportation absorbed several thousand job losses, primarily among ship builders. Aerospace employment actually increased, in part because of the region's strength in unmanned aerial vehicles (UAV), an area of strength and growth for the local aerospace industry. Computer and electronic jobs also decreased and remain somewhat down from previous years. Environmental tech jobs appear fairly stable the past few years. Although jobs among recreational goods appear fairly flat, numbers have been slowly dwindling the past several years.

### Recognized technology industry strengths in San Diego

San Diego's strength in innovation and the diversity of technology-oriented businesses have been noted by others. The *Kauffman Foundation's* entrepreneurship.org describes San Diego as having "built an entrepreneurial ecosystem around the unlikely combination of wireless, digital medicine, bioscience, action sports and military contracting."<sup>2</sup> Ad-



vances in technology created entirely new growth industries including e-commerce, online information services, mobile communications, and greater advances in medical research.

The *Milliken Institute* ranked San Diego 7<sup>th</sup> according to their criteria of leading high-tech metro areas in North America. San Diego was cited as "an important high-tech center with the world's most geographically dense biotech cluster, an enviable position in telecom hardware and services, and strong representation in several fields."<sup>3</sup>

Milken goes on to note that "San Diego's biotech network is a closely knit and wide range of member institutions and endeavors. Prominent research facilities include *The Scripps Research Institute*, the *Salk Institute for Biological Studies*, the *Burnham Institute*, and the *University of California San Diego*. These research institutes and firms receive a disproportionate share of NIH funding, National Science Foundation basic research funding, Small Business Innovation Research Awards, and Small Business Technology Transfer awards in biotech research. San Diego is home to large biotech firms such as *Amylin Pharmaceuticals* and many mid-sized and start-up firms. *Qualcomm* is a key player in the communication chips area, while *AT&T* also has a major presence in telecommunications undertakings."<sup>4</sup>

While stating ideal weather as supplied by the sun as a major benefactor, entre-

preneur.com further says "Befitting something powered by a star, San Diego's entrepreneurial ecosystem is powerful and diverse. Because the city has transformed itself since World War Two, it's not beholden to legacy industries and 'that's the way we've always done it' thinking. Military R&D, Qualcomm and the research on Torrey Pines Mesa help the city stay abreast of new business possibilities. San Diego also is helped by entrepreneurs' willingness to help each other and collaborate on areas of mutual interest.

On the negative side, San Diego does have to contend with California's business-unfriendly regulations and taxes. It's also a very expensive place for new college graduates to live and start businesses. The startup support network must work to stay relevant to young entrepreneurs."<sup>5</sup>

### Metro comparisons of technology sector strengths

QCEW data for metropolitan areas shown to employ the most physical, engineering and biological research (NAICS: 54171) workers reveals San Diego among those having the highest relative concentration of these jobs. San Diego's LQ of 5.18 was by far the highest of the nation's top 11 metro areas.

Comparing seven additional major NAICS categories for technology industries, among the 11 metro areas, San Diego ties Boston and San Francisco for highest relative strengths as shown in the

industry LQs. San Diego's LQ was above national averages for seven of the eight major technology sectors.

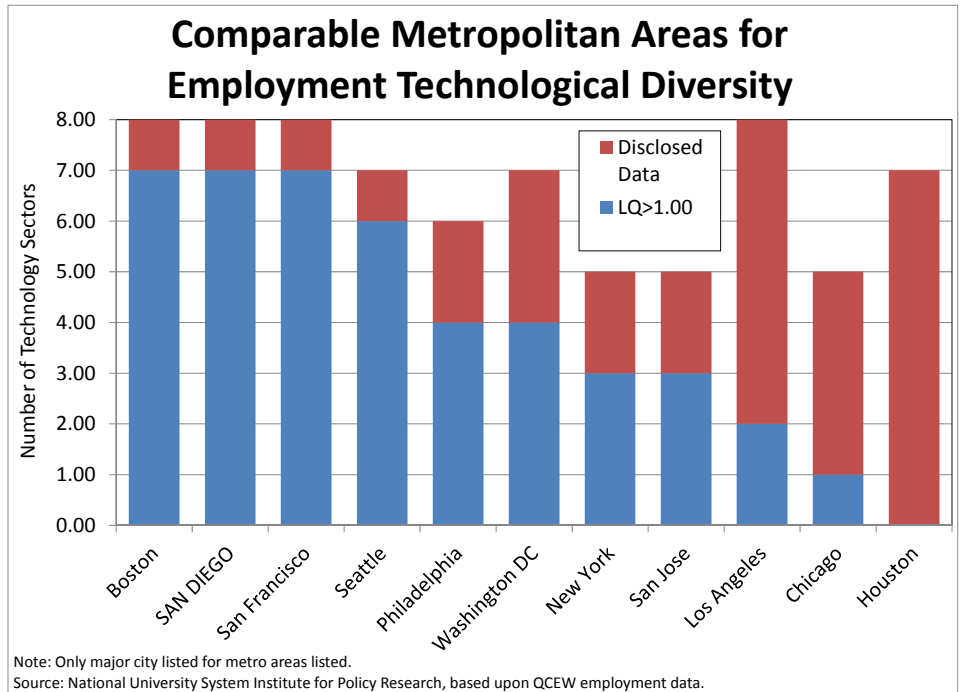
This confirms San Diego's relative diversity and strengths for technological pursuits. For example, whereas the San Jose metropolitan area shows exceptional strength in computer and electronics (NAICS: 334) with LQ of 13.2 and computer systems and design (NAICS: 5415) LQ of 4.35, they were below average for pharmaceutical and medicine and environmental consulting services. Nearby Los Angeles indicates technology strength in just two sectors, computer production and design.

San Diego displays relative strengths across the spectrum of tech sectors. San Diego also matches San Francisco's competitive advantages, and significantly exceeds in the one less than average sector for transportation equipment manufacturing.

### Conclusions

San Diego not only displays relative strengths for various technology sectors, but also much greater diversity. This diversity of technology places the region at a unique position for strength among cross-industry collaborations and emerging technologies. For example, the integration of telecommunications with biomed diagnostic equipment and computer and electronic monitoring systems has immense possibilities and advantages for each of these technology clusters concentrated in San Diego.

The diversity, high wages, and strong job



growth of San Diego's technology sectors extend considerable economic power and greater potential of further technological developments. As the nation continues to struggle to emerge from the effects of the Great Recession, and as industries and economic foundations continue to restructure, San Diego is well positioned across diverse sectors of technology innovation leading 21st century development.

<sup>1</sup>The NAICS codes used to define tech industries were determined by CONNECT and the San Diego Association of Governments (SANDAG) in its 2006 "Traded Clusters in the San Diego Region" study. Appendix A, page

5, lists the specific NAICS codes used to define the nine technology sectors.

<sup>2</sup>ID8NATION, "The sun shines on San Diego's entrepreneurs", Kauffman Foundation, [www.entrepreneurship.org/ID8/San-Diego.aspx](http://www.entrepreneurship.org/ID8/San-Diego.aspx)

<sup>3</sup>Ross C. DeVol, Kevin Klowden, Armen Bedroussian, and Benjamin Yeo, North America's High-Tech Economy: The Geography of Knowledge-Based Industries, The Milken Institute, 2009, [www.milkeninstitute.org/pdf/NAHTweb.pdf](http://www.milkeninstitute.org/pdf/NAHTweb.pdf)

<sup>4</sup>ibid.

<sup>5</sup>Entrepreneur.com, San Diego: A Sunny Forecast, [www.entrepreneurship.org/ID8/San-Diego/THE-BIG-PICTURE/A-Sunny-Forecast.aspx](http://www.entrepreneurship.org/ID8/San-Diego/THE-BIG-PICTURE/A-Sunny-Forecast.aspx).

### MEASURE OF METROPOLITAN AREA TECHNICAL DIVERSITY

Leading Technology Metropolitan Areas	Location Quotients > 1.00*	334: 336: Computer & Electronic Product Manufacturing			3254: 3391: Pharmaceutical & Medical Equipment and Supplies Mfg		5415: 54162: Computer Systems and Related Services		54171: 54162: Physical, Engineering and Biological research
		Transportation Equipment	Product Manufacturing	Telecommunications	Pharmaceutical & Medical Manufacturing	Medical Equipment and Supplies Mfg	Computer Systems and Related Services	Environmental Consulting Services	Physical, Engineering and Biological research
<b>SAN DIEGO-CARLSBAD-SAN MARCOS, CA</b>	<b>7 of 8</b>	<b>0.98</b>	<b>2.35</b>	<b>1.04</b>	<b>2.21</b>	<b>2.03</b>	<b>1.12</b>	<b>1.66</b>	<b>5.18</b>
San Jose-Sunnyvale-Santa Clara, CA	3 of 5	ND	13.20	ND	0.71	ND	4.35	0.52	4.69
Boston-Cambridge-Quincy, MA-NH	7 of 8	0.45	2.40	0.90	1.44	1.37	1.78	1.48	3.79
San Francisco-Oakland-Fremont, CA	7 of 8	0.13	1.58	1.16	2.83	1.08	2.76	2.86	3.71
Washington-Arlington-Alexandria, DC-VA-MD-WV	4 of 7	0.04	0.90	1.50	0.79	ND	4.86	2.42	2.56
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	4 of 6	0.11	0.88	ND	2.76	ND	1.07	1.27	2.12
Seattle-Tacoma-Bellevue, WA	6 of 7	5.10	1.02	1.56	ND	0.54	1.55	1.65	1.54
New York-Northern New Jersey-Long Island, NY-NJ-PA	3 of 5	0.23	0.87	ND	2.21	ND	1.12	ND	1.13
Los Angeles-Long Beach-Santa Ana, CA	2 of 8	0.96	1.63	0.93	1.00	2.03	0.66	0.92	0.86
Chicago-Naperville-Joliet, IL-IN-WI	1 of 5	0.37	0.73	ND	1.81	ND	ND	0.63	0.81
Houston-Baytown-Sugar Land, TX	0 of 7	0.23	0.84	0.85	0.22	0.33	0.80	ND	0.53

\*Among sectors with disclosed data.

ND : Not Disclosable - data do not meet BLS or State agency disclosure standards.

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics; National University System Institute for Policy Research.

## Appendix A: Technology Sector Definitions

NAICS	Industry Title	Technology Sector
325199	All Other Basic Organic Chemicals	Biotechnology & Pharmaceutical
325411	Medicinal and Botanical Manufacturing	Biotechnology & Pharmaceutical
325412	Pharmaceutical Preparation Manufacturing	Biotechnology & Pharmaceutical
325413	In-Vitro Diagnostic Substance Mfg	Biotechnology & Pharmaceutical
325414	Other Biological Product Manufacturing	Biotechnology & Pharmaceutical
325998	Other Miscellaneous Chemicals Mfg	Biotechnology & Pharmaceutical
333314	Optical Instrument & Lens Manufacturing	Biomedical Products
333319	Other Commercial and Service Machinery	Environmental Technology
333411	Air Purification Equipment Manufacturing	Defense and Transportation
333412	Industrial & Commercial Fans & Blowers	Defense and Transportation
333611	Turbine Generator & Generator Set Units	Defense and Transportation
333999	Miscellaneous General Purpose Machinery	Environmental Technology
334111	Electronic Computer Manufacturing	Computer & Electronics
334112	Computer Storage Device Manufacturing	Computer & Electronics
334119	Other Computer Peripheral Equipment	Computer & Electronics
334210	Telephone Apparatus Manufacturing	Communications Equipment Mfg
334220	Broadcast & Wireless Communication Equip	Communications Equipment Mfg
334290	Other Communications Equipment Mfg	Communications Equipment Mfg
334310	Audio and Visual Equipment Manufacturing	Computer & Electronics
334411	Electron Tube Manufacturing	Computer & Electronics
334412	Bare Printed Circuit Board Manufacturing	Computer & Electronics
334413	Semiconductor and Related Devices	Computer & Electronics
334414	Electronic Capacitor Manufacturing	Computer & Electronics
334416	Electronic Coils, Transformer & Inductor	Computer & Electronics
334417	Electronic Connector Manufacturing	Computer & Electronics
334418	Printed Circuit Assemblies	Computer & Electronics
334419	Other Electronic Component Manufacturing	Computer & Electronics
334510	Electromedical Apparatus Manufacturing	Biomedical Products
334511	Search, Detection & Navigation Instruments	Defense and Transportation
334513	Industrial Process Variable Instruments	Environmental Technology
334514	Fluid Meters and Counting Devices	Environmental Technology
334515	Electricity & Signal Testing Instruments	Environmental Technology
334516	Analytical Laboratory Instruments	Environmental Technology
334517	Irradiation Apparatus Manufacturing	Biomedical Products
334519	Other Measuring and Controlling Devices	Environmental Technology
334611	Software Reproducing	Software
334613	Magnetic & Optical Recording Media Mfg	Computer & Electronics
335991	Carbon & Graphite Product Manufacturing	Computer & Electronics
335999	Miscellaneous Electrical Equipment	Computer & Electronics
336411	Aircraft Manufacturing	Defense and Transportation
336412	Aircraft Engine and Engine Parts	Defense and Transportation
336413	Other Aircraft Parts and Equipment	Defense and Transportation
336414	Guided Missiles and Space Vehicles	Defense and Transportation
336419	Other Guided Missile/Space Vehicle Parts	Defense and Transportation
336611	Ship Building and Repairing	Defense and Transportation
336612	Boat Building	Defense and Transportation
339111	Laboratory Apparatus and Furniture Mfg	Biomedical Products
339112	Surgical and Medical Instrument Mfg	Biomedical Products
339113	Surgical Appliance and Supplies Mfg	Biomedical Products
339114	Dental Equipment and Supplies Mfg	Biomedical Products
339115	Ophthalmic Goods Manufacturing	Biomedical Products
339116	Dental Laboratories	Biomedical Products
339920	Sporting & Athletic Goods Manufacturing	Recreational Goods
511210	Software Publishers	Software
517110	Wired Telecommunications Carriers	Communications Equipment Mfg
517210	Wireless Telecommunications Carriers	Communications Equipment Mfg
517410	Satellite Telecommunications	Communications Equipment Mfg
517911	Telecommunications Resellers	Communications Equipment Mfg
517919	All Other Telecommunications	Communications Equipment Mfg
518210	Data Processing and Related Services	Software
541330	Engineering Services (allocated proportions)	Environmental Technology, Communications, Software
541380	Testing Laboratories	Biotechnology & Pharmaceutical
541511	Custom Computer Programming Services	Software
541512	Computer Systems Design Services	Software
541513	Computer Facilities Management Services	Software
541519	Other Computer Related Services	Software
541620	Environmental Consulting Services	Environmental Technology
541690	Other Technical Consulting Services	Technical Consulting Services
541711	Research and Development in Biotechnology	Biotechnology & Pharmaceutical
541712	Research and Development in Physical, Engineering, Life Sciences (allocated proportions)	Defense and Transportation, Communications, and Software
611420	Computer Training	Software

Note: Employment data are based upon the *California Employment Development Department's* Quarterly Census of Employment and Wages (QCEW). Designated technology industries are defined by the North America Industrial Classification System (NAICS). In instances where EDD suppresses data that compromises confidentially promised to employers, figures are interpolated using state-wide estimates of employment. This assumes San Diego's share of employment among the industrial categories are similar to statewide ratios.

## Appendix B: Location quotient definitions

Location Quotient is an analytical statistic measurement of a region's industrial specialization relative to a larger geographic unit (usually the nation). LQ is computed as the industry's share of the regional total for an economic factor (earnings, employment, etc.) divided by the industry's share of the national total for the same statistic. For example, an LQ of 1.0 in any industry means the region and the nation are equally specialized in that industry; while an LQ of 1.5 means the region has a much higher concentration than the nation. Conversely, a measurement below 1.0 means the region has a lower concentration. This can reveal what makes the region unique in comparison to national averages.

LQs are also an indication for industries that export goods and services out of the region and bring more wealth back into the area. Industries that produce more within the region than the national average in theory produce more goods or services than the region alone consumes. Thus, industries export the excess product out and therefore bring in or increase the region's wealth. Essentially, LQ shows export-strength of the local industry.

$$\text{Location Quotient GDP formula} = \frac{(\text{San Diego sector} / \text{San Diego total})}{(\text{U.S. sector} / \text{U.S. total})}$$

LQ > 1.0 San Diego has higher concentration of production or employment than national average.

LQ = 1.0 San Diego has the same share of regional production or employment as nation.

LQ < 1.0 San Diego has a lower concentration of production or employment than national average.

# Dashboard Observations—March 2014

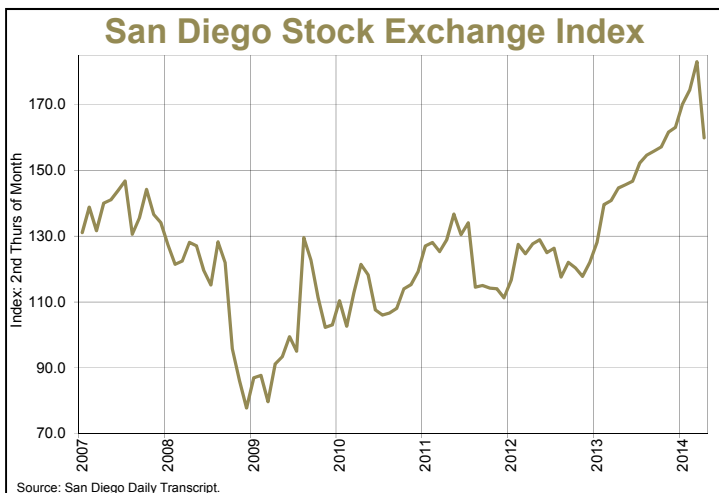
By Kelly Cunningham, Economist and Senior Fellow

After continually increasing throughout 2013, the stock index of San Diego publicly traded, headquartered companies appears to have stalled in March 2014. The index shows a 30 percent increase over the year, but in April fell 13 percent. The local index trails national indices that peaked earlier in January and February.

Residential construction shows the most vigorous gain up 175 percent since March 2013. For the year ending March 2014, the number of residential units authorized for construction total 8,783, the highest annual amount recorded in San Diego since 2007. This is about half the annual amount recorded in 2005 just prior to the market turning and falling into the recession, but is a vast improvement over the depression-like lows recorded between 2009 and 2011 when annual numbers fell to around 3,000 per year.

The number of business licenses issued by the City of San Diego seems to have leveled around 1,100 per month, which is the average amount issued per month since 2010.

The March 2014 unemployment rate of 6.9 percent was the lowest reported in San Diego for a March since 2008. The rate was also 0.9 percent lower than in March 2013. Although the rate remains stubbornly elevated, this is a considerable improvement from recessionary highs rising above 11.0 percent in some months of 2010 and 2011.



Indicator	Mar 2013	Month Change (Sea. Adj.)	Annual Change
<b>Unemployment Rate<sup>1</sup></b> San Diego County	6.9%	-0.1% ▲	-0.9% ▲
<b>Residential Building<sup>2</sup></b> Units authorized for construction San Diego County	1,142	11% ▲	175% ▲
<b>New Business Licenses<sup>3</sup></b> Issued by City of San Diego	1,120	-3.3% ▼	-1.0% ▼
<b>San Diego Stock Index<sup>4</sup></b> San Diego based companies	183	4.9% ▲	30% ▲

<sup>1</sup>California Employment Development Department.

<sup>2</sup>U.S. Bureau of the Census.

<sup>3</sup>Business Tax Program, City of San Diego.

<sup>4</sup>Second Thursday of month, Bloomberg News, San Diego Daily Transcript.

There has been some debate over “officially” reported unemployment rates not being accurate or fully reflecting real unemployment. In order to be considered unemployed, jobless workers must be actively seeking employment. Otherwise, they drop out of the labor force and are no longer counted as unemployed.

In addition to the widely-known unemployment rate reported, the U.S. Bureau of Labor Statistics (BLS) provides additional measures of labor underutilization. The official concept of unemploy-

ment defines jobless persons as those available to take a job and actively seeking work in just the past four weeks. Other jobless workers include discouraged workers who are not officially included in the labor force, but want and are available for work, and looked for a job sometime in the prior 12 months. They are no longer counted as unemployed, however, because they had not searched for work in the prior 4 weeks for the specific reason they believe no jobs are available to them. Additionally, involuntary part-time workers or individuals employed part time for economic reasons working less than 35 hours per week, but wanting to work full time and available to do so, but have an economic reason (their hours had been cut back or they were unable to find a full-time job) are working part time. The BLS provides six measures of labor underutilization for the nation as a whole, all fifty states,

and only two substate areas, Los Angeles County and New York City.

Based upon the relative difference reported for unemployment between San Diego and Los Angeles, we estimate the extended measure of San Diego’s marginally attached workers and those employed part time for economic reasons is about 14 percent. This means 1 in 7 San Diegans are eligible and willing to work but unemployed or working part-time for economic reasons.



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