



SAN DIEGO'S TECHNOLOGY CLUSTER

With roots tracing back to the defense cluster, UC San Diego and numerous research institutions, San Diego's technology cluster has positioned the region as a hub for innovation in converging and emerging sectors. With established companies like Qualcomm and ViaSat, innovative startups like VaultRMS and Classy, San Diego technology firms are developing unique technologies with global impact.

The region's technology cluster is now home to a number of innovative and evolving sectors, including telecommunications, cybersecurity, connected devices, data analytics, health IT, bioinformatics, gaming and software as a service (SaaS). Supporting this growth, San Diego's major research universities are also on the forefront of technology innovation. UC San Diego generates more patents than any other University of California campus.¹

HIGHLIGHTS

- » **Jobs:** The cluster accounted for about 3,270 companies and 68,825 employees in 2015.²
- » **Innovation economy:** With 3,270 companies, the technology cluster made up more than 45 percent of San Diego's innovation economy employees.²
- » **VC:** While San Diego has traditionally commanded a large share of biotech funding, in 2015, nearly half of San Diego's total VC investment was in software and related industries – a 38 percent increase from the previous year.³
- » **5G:** According to Qualcomm, the 5G mobile value chain alone could generate up to \$3.5 trillion in revenue in 2035, and support up to 22 million jobs.⁴

KEY COMPANIES

- | | | |
|----------------|---------------|------------|
| » ASML Holding | » Intuit | » Teradata |
| » Classy | » Portfolium | » VaultRMS |
| » Cubic | » Qualcomm | » ViaSat |
| » GoFundMe | » Seismic | |
| » GoPro | » TakeLessons | |



INNOVATION



MILITARY



TOURISM



LOCAL



INTELLECT

SPOTLIGHT

Qualcomm

Qualcomm, founded in 1985, has created new opportunities for mobile ecosystem players: the wireless device makers, the operators, the developers and the content creators of the world. In 2016, Qualcomm made the largest ever acquisition in the semiconductor industry with the \$38 billion of NXP Semiconductors.⁵ As of May 2016, Qualcomm had 15,000 full-time workers.⁶



RESOURCES

EvoNexus

EvoNexus is the premiere, nonprofit tech startup incubator in Southern California. By partnering with some of San Diego's biggest tech companies, EvoNexus has raised more than \$675 million for San Diego companies.
evonexus.org

CONNECT

CONNECT has assisted in the formation and development of more than 2,000 companies since 1985 and is widely regarded as the world's most successful regional program linking inventors and entrepreneurs with the resources they need for commercialization of products.
connect.org

Tech San Diego

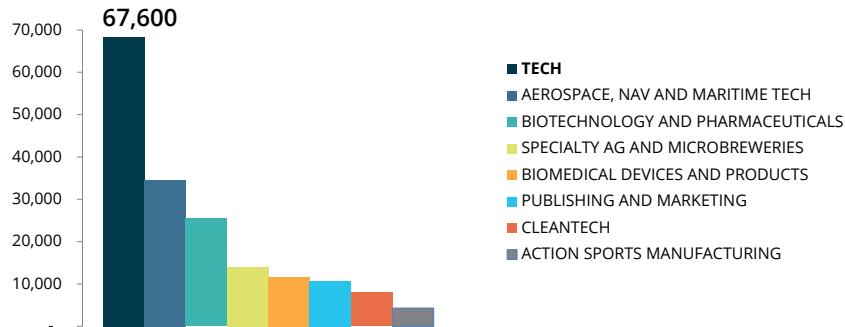
Tech San Diego brings together San Diego's software technology, data analytics and cloud-based application communities to promote industry growth and success, address common technical challenges and business opportunities and advocate for common interests.
techsd.org

BY THE NUMBERS

Employment Numbers

As of 2014, the technology cluster was responsible for **67,600** jobs in the San Diego region. The technology cluster is an intrinsic portion of the region's innovation economy. An employment breakdown within the innovation economy is shown below.

**Employment Comparisons
within San Diego Region's Innovation Economy**



Employment by Key Industries in the Technology Cluster

Industry	Employment	Avg Annual Pay	LQ*
Engineering Services	13,160	\$91,100	1.51
Custom Computer Programming Services	10,350	\$100,600	1.45
Electronic Instrument Manufacturing	10,120	\$93,400	2.68
Wired Telecommunications Carriers	5,230	\$77,200	0.90
Software Publishers	4,100	\$145,700	1.43
Res/Dev Phys, Eng, Life Sciences (ex Biotech)	3,990	\$179,500	4.80
Broadcast and Wireless Communications Equipment	3,830	\$117,000	6.82
Testing Laboratories	2,690	\$85,300	4.95
Wireless Telecom Carriers (except Satellite)	2,630	\$92,100	1.78
Other Shared Industries within Cluster	11,540	\$100,826	
Total	67,600	\$103,300	1.65

*LQ=Location Quotient

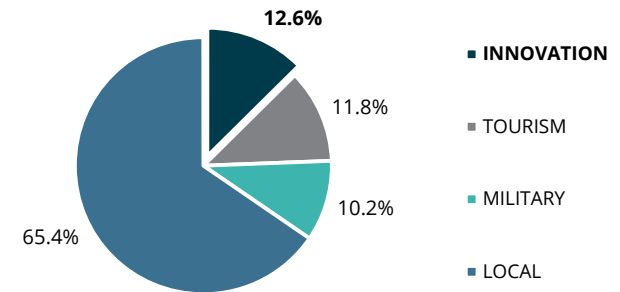
Sources: Introduction: 1. The Recorder, [UC-San Diego Director Touts Its Plethora of Patents](#), 2017 | Highlights: 2. CONNECT, ["San Diego Innovation Report"](#), 2015 3. San Diego Regional EDC with research support from CBRE, ["Software Development: Driving San Diego's Tech Ecosystem"](#), 2016 4. QUALCOMM, ["The 5G economy: How 5G technology will contribute to the global economy"](#), 2017 | Spotlight: 5. New York Time, ["Qualcomm to Acquire NXP Semiconductors for \\$38.5 Billion"](#), 2016 6. San Diego Union Tribune, ["Qualcomm cuts 1,314 jobs in San Diego"](#), 2015

Our Economies

The vitality of San Diego's economy is reliant upon the strength of the region's four economic drivers – innovation, military, tourism and local.

The technology cluster is an important part of the region's innovation economy. As of 2014, the innovation economy was responsible for more than 12 percent of the region's total jobs.

**Employment Comparisons
Across the San Diego Region's Economies**



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