

## Tech is (still) concentrating in the Bay Area: An update on America's winner-take-most economic phenomenon

The hope persists among tech and urban optimists for what Revolution LLC funder Steve Case calls “the rise of the rest”—the spread of tech companies into the Heartland.

In fact, recent announcements from Amazon, Google, and Apple—which are adding high-level jobs away from Seattle and the Bay Area—encourage such hope, with their hints that the tech giants are increasingly outgrowing their West Coast roots. Maybe Big Tech really is going to take its incessant talent hunt—and economic contributions—into new places and seed wider-spread economic vitality at a time of economic divides.

So what's the reality when we look closer? Unfortunately, the story isn't great, despite the recent news. Building on our last look at tech locational trends from March 2017, this new analysis of job-creation in four key digital services industries—software publishing, data processing and hosting, computer systems design, and web-publishing/search—finds again that while employment in tech is growing all over America, it really isn't “spreading out” in terms of more cities gained increased shares of the tech pie. To the contrary: By our measure tech has continued to concentrate in a short list of metros during the last few years. The upshot: “Winner-take-most” in tech seems more the rule than the hoped-for “rise of the rest.”

To be clear, tech remains a compelling contributor to regional growth, and is in fact growing in new places. Digital services continue as a critical part of the national economy, and accounted for fully 80 percent of the nation's advanced industries growth from 2015 to 2017 as employment grew 4.2 percent a year based on compound annual growth rate (CAGR) calculations.

Likewise, unexpected Heartland metros far from the coastal tech hubs like the Bay Area and Seattle and Boston surfaced as fast-growing tech centers in the recent period. Among the 100 largest U.S. metros, for example, Wichita, Kan.; Lakeland-Winter Haven, Fla.; Chattanooga, Tenn.; Boise, Idaho; and Orlando, Fla. all posted digital services growth of almost 10 percent a year over the same period. Midwestern stalwarts Kansas City, Mo.-Kan.; Madison, Wisc.; and St. Louis have all seen growth of more than 4 percent a year.

In short, there's no doubt that tens of thousands of digital services jobs—central to the current artificial intelligence-driven tech boom—are sprouting up in more up-and-coming inland towns and bringing with them growth, hope, good pay, and attractive multiplier effects.

But, even though more cities are enjoying the growth of tech jobs, the sector is in fact concentrating even faster than it was a few years ago. This dynamic may reflect the rising importance of early-stage work in AI and machine learning. Or it might reflect the depressing persistence of groupthink. But at any rate, the numbers are eye-popping.

The top five metros with the highest share of digital services account for 28 percent of all of these jobs nationwide, and the top 10 metros with the highest share of digital services now encompass 44.3 percent of all of these jobs across the nation (based on their national shares of such sectors in 2017). The same top 10 metros captured almost half (49.1 percent) of the new tech jobs created from 2015 to 2017, with eight of these metros—including San Francisco, Seattle, San Jose, Los Angeles, and Austin—all increasing their share of the nation's tech work. Those five metros alone captured 34 percent of all new digital services job growth and increased their share of the nation's core tech employment by 1.2 percentage points.

Consider further that the super-rich tech folks—epitomized by San Francisco and San Jose—got even richer in the last two years. San Francisco alone added over a tenth of the entire nation's new digital services jobs (over 25,000), and San Jose increased its share of the nation's sector by nearly 18,000 jobs. Together, the two Bay Area hubs now encompass 10.7 percent of the nation's digital services employment, up from 10.1 percent in 2015, 8.9 percent in 2013, and 7.5 percent in 2010. Note too that virtually all of Amazon's and Apple's newly announced workforce locations will take place in the biggest 10 of America's “superstar” metros.

Only a few cities in the rest of the country truly “rose” in the last couple years by expanding their share of the nation's digital services employment.

Notably, just nine of the largest 100 metros in the nation increased their share of the sector by more than one-tenth of a percentage point. These “winners” of the last few years included San Francisco, Seattle, San Jose, Los Angeles, Austin, Denver, Orlando, Kansas City, and Charlotte.

Article continues (5 additional paragraphs) at link below

Download the data appendix at <https://brook.gs/2CK5yJE>

UNEMPLOYMENT

Region	November 2017	October 2018	November 2018	Percentage Point Change	
				1 month	12 months
San José–Sunnyvale MSA	2.8%	2.5%	2.4%	- 0.1	- 0.4
San Francisco MD	2.4%	2.2%	2.1%	- 0.1	- 0.3
California	4.2%	4.0%	3.9%	- 0.1	- 0.3
United States	3.9%	3.5%	3.5%	0.0	- 0.4

INDUSTRY EMPLOYMENT

Sector — November 2018	San Jose MSA	San Francisco MD	Combined Region	Percentage Change (Combined Region)	
				1 month	12 months
<b>Total Nonfarm</b>	<b>1,158,100</b>	<b>1,156,700</b>	<b>2,314,800</b>	<b>+ 1.0%</b>	<b>+ 2.7%</b>
Construction	51,400	41,000	92,400	+ 0.3%	+ 1.4%
Manufacturing	175,100	39,200	214,300	+ 0.2%	+ 2.9%
Retail Trade	88,500	85,300	173,800	+ 4.2%	- 0.5%
Information	95,400	82,300	177,700	+ 0.6%	+ 6.5%
Professional & Business Services	241,300	290,800	532,100	+ 0.6%	+ 3.9%
Educational Services	50,300	29,400	79,700	+ 1.9%	+ 2.6%
Health Care & Social Assistance	131,400	112,700	244,100	+ 0.6%	+ 4.5%
Leisure & Hospitality	105,200	144,100	249,300	+ 0.6%	+ 2.3%
Government	101,400	133,100	234,500	+ 1.3%	+ 1.6%

NOTE: San José MSA (San José–Sunnyvale–Santa Clara Metropolitan Statistical Area) = Santa Clara and San Benito Counties  
 San Francisco MD (San Francisco–Redwood City–South San Francisco Metropolitan Division) = San Mateo and San Francisco Counties

Source: California Employment Development Department, LMID

LABOR FORCE & ANNUAL CHANGE

Labor Force by Metropolitan Statistical Area (U.S. High-Tech Regions)

	LABOR FORCE			UNEMPLOYMENT			UNEMPLOYMENT RATE		
	November 2017	November 2018	Change	November 2017	November 2018	Change	November 2017	November 2018	Change
<b>United States</b>	<b>160,533,000</b>	<b>162,770,000</b>	<b>+ 1.1%</b>	<b>6,616,000</b>	<b>5,975,000</b>	<b>- 9.7%</b>	<b>4.1%</b>	<b>3.7%</b>	<b>- 0.4</b>
Austin, TX	1,166,201	1,204,584	+ 3.3%	32,650	32,392	- 0.8%	2.8%	2.7%	- 0.1
Boston, MA	2,693,215	2,819,971	+ 4.7%	75,380	66,688	- 11.5%	2.8%	2.4%	- 0.4
New York City, NY	4,205,500	4,202,000	- 0.1%	171,100	156,400	- 8.6%	4.1%	3.7%	- 0.4
Seattle, WA	1,662,530	1,692,974	+ 1.8%	67,597	60,994	- 9.8%	4.1%	3.6%	- 0.5
California	19,383,700	19,715,600	+ 1.7%	812,600	777,500	- 4.3%	4.2%	3.9%	- 0.3
San Diego	1,590,900	1,623,300	+ 2.0%	55,900	51,300	- 8.2%	3.5%	3.2%	- 0.3
San Francisco	1,026,000	1,048,600	+ 2.2%	24,900	22,200	- 10.8%	2.4%	2.1%	- 0.3
San José	1,077,600	1,115,200	+ 3.5%	30,600	26,900	- 12.1%	2.8%	2.4%	- 0.4
<i>NOVA Region</i>	<i>787,100</i>	<i>809,000</i>	<i>+ 2.8%</i>	<i>18,800</i>	<i>16,600</i>	<i>- 11.7%</i>	<i>2.4%</i>	<i>2.1%</i>	<i>- 0.3</i>

NOTE: Totals may not add correctly due to rounding

Source: California Employment Development Department, LMID

REGIONAL LAYOFF ACTIVITY

November 2018 Events

Company	Location	# Affected
Addepar	Mountain View	20
Cisco	Milpitas	57
Genentech	South San Francisco	83
Infinera	Sunnyvale	53
Novartis Pharmaceuticals	San Carlos	1
Orchard Supply Hardware	Multiple cities	112
Pacific Maintenance	Santa Clara	11
Savers	Milpitas	54
Udacity	Mountain View	40
Veritas Technologies	Mountain View	50
<b>Total</b>		<b>481</b>

WARN SUMMARY

Events YTD <sup>†</sup> :	29
Individuals Affected YTD:	1,777
Individuals Previous YTD <sup>‡</sup> :	1,864

\* **WARN: Worker Adjustment and Retraining Notification** (notice of mass layoff or closure)

† **YTD: Year to Date** (Program year: July 1–Present)

‡ **Previous YTD:** (Same date range as YTD, one year prior)

NOTE: Layoff data are preliminary and should be considered an estimate of monthly regional activity

Source: NOVA's internal Rapid Response database