

Santa Clara County Regional Intelligence Report

Produced by Beacon Economics, LLC

San José State University Economic Summit

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REGIONAL INTELLIGENCE REPORT™



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Santa Clara County

Seventh Edition

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The U.S. Economic Outlook: Much Ado About Nothing

Ostensibly, the year has not started well for the U.S. economy. The financial markets spooked in January and equity values dropped sharply even as treasuries rallied to highs not seen since 2012. The markets have recovered, but that hasn't stopped the perpetual worries about China, oil prices, high-yield credit, tech bubbles, deflation, and so on.

However, taking a step back from the noise, the reality is that the U.S. economic expansion continues to move along at a steady, if mediocre, pace. More importantly, there is little reason to believe that the nation will stray from its current path of growth in 2016. Beacon Economics continues to forecast growth in the 2.5% plus range for the year, with perhaps even better numbers next year.

Consumer Spending: Retail sales grew at their weakest pace in years at the end of 2015. But interpreting these data can be tricky since they are based on nominal numbers and inflation is the slowest it has been in decades. Real spending data from the Bureau of Economic Analysis indicates that 2015 was a strong year for consumer spending on goods, particularly in the auto sector where U.S. automakers enjoyed a record year. This shouldn't be surprising given the strong labor market and rising real incomes. The modest slowing seen in the first quarter of this year is being offset by an increase in savings—savings that will surely be spent later in the year.

Construction: The building industry has been one of the slowest recovering sectors in the United States. Single-family housing starts are still under 800,000 (SAAR), one-third less than the long-term, stable number of 1.1 million. But the pace of construction is rising and 2016 is shaping up to be a good year. Fundamentals such as the average equity share of owners and the overall housing vacancy rate have finally returned to historic norms. Credit is slowly easing for borrowers and household formation is picking up. Home prices are still relatively good given low mortgage rates.

Manufacturing: While the ISM Manufacturing Indexes have been running below 50, suggesting contraction, real output data from the U.S. Federal Reserve indicates the opposite—that manufacturing output is up, albeit at a slower than normal pace. January's figure was the highest since the 'Great Recession' began. Some sectors, such as autos, are performing well. Others, particularly primary metals, are being hit by the global commodity glut. All in all, the sector added 50,000 jobs last year—not bad given the circumstances.

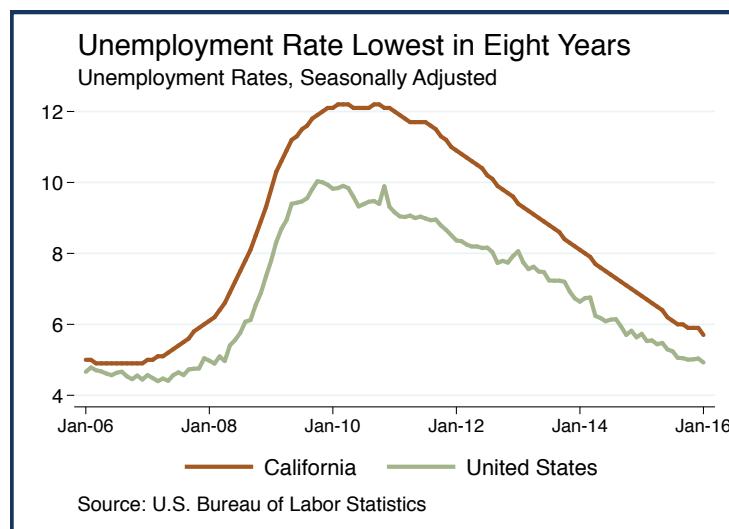
Exports: The final worry is the troubled global economy and its impact on U.S. exporters. But despite a slow down in China, oil-producing nations that are in various states of economic distress, and a strong U.S. dollar, exporters managed to increase their overseas sales in 2015 over the previous year by a small amount. The widening trade deficit last year was driven by imports, as U.S. consumers ramped up spending.

There are plenty of reasons why the U.S. economy will not grow as rapidly as everyone would like over the next couple of years, but there is little reason to believe the nation's economy will stop growing. The slow pace of growth may even be an underlying strength as the surest path to a downturn often comes from major imbalances that form in the heady days of a rapid economic expansion. Sometimes it pays to be a tortoise—particularly when that 'tortoise' offers the relatively high quality of life that so many American's enjoy.

California Economy Outpacing the Nation

California did it again. The high-priced, over-regulated, fruits-and-nuts state that everyone loves to hate turned in another strong performance in 2015. For the fourth year in a row, California outpaced the nation in job growth as well as output. The state experienced broad-based gains across its key industries ranging from agriculture to high tech, and nearly everything in between.

By the end of 2015, the unemployment rate stood at 5.9%, the lowest since late 2007. Meanwhile, California outpaced the nation in growth of wage and salary (nonfarm) jobs (3.0% vs. 2.1% for the U.S.), and actually accelerated to its fastest pace of job growth in over fifteen years. The state added over 460,000 jobs, with both coastal and inland regions participating in that growth.



Nearly every industry in California experienced job gains over the past year, generally adding to the gains of recent years. Health Care & Social Assistance, Leisure & Hospitality, and Construction led the state's industries, combining to produce nearly 45% of the state's total job gains last year. Only Mining and Logging lost jobs, as that sector reeled from the plunge in energy prices.

Job Gains Across California's Industries

| Industry | 2015 Jobs (000s) | Change '14-15 (000s) | Change '14-15 (%) |
|----------------------------|---------------------|----------------------------|-------------------------|
| Construction | 726.6 | 52.2 | 7.7 |
| Transport, Warehouse, Util | 553.5 | 30.1 | 5.8 |
| Information | 482.5 | 19.6 | 4.2 |
| Leisure and Hospitality | 1,828.3 | 69.4 | 3.9 |
| Education/Health | 2,455.8 | 90.0 | 3.8 |
| Admin Support | 1,058.8 | 33.8 | 3.3 |
| Prof Sci and Tech | 1,207.4 | 34.1 | 2.9 |
| Real Estate | 271.9 | 6.7 | 2.5 |
| Retail Trade | 1,663.4 | 34.5 | 2.1 |
| Management | 230.1 | 4.5 | 2.0 |
| Government | 2,460.0 | 48.3 | 2.0 |
| Finance and Insurance | 526.2 | 9.6 | 1.9 |
| Farm | 423.3 | 6.9 | 1.6 |
| Other Services | 545.3 | 8.7 | 1.6 |
| Wholesale Trade | 720.8 | 10.8 | 1.5 |
| Manufacturing | 1,292.2 | 18.0 | 1.4 |
| NR/Mining | 29.0 | -2.6 | -8.3 |
| Total Private | 13,591.7 | 419.4 | 3.2 |
| Total Nonfarm | 16,051.8 | 467.7 | 3.0 |

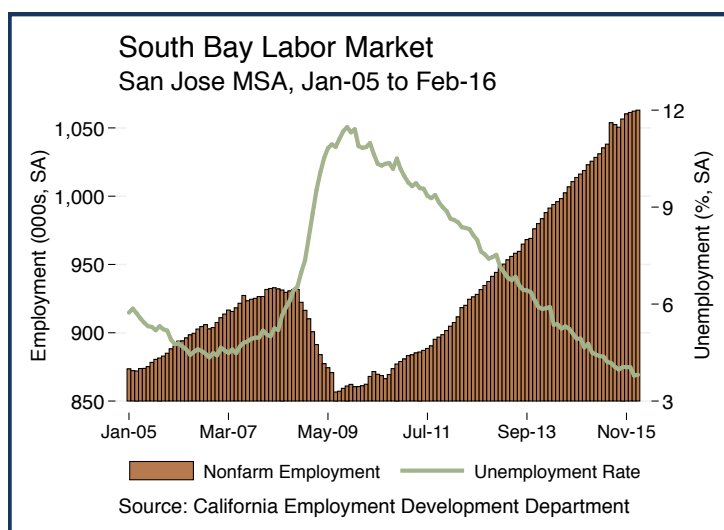
Source: California Employment Development Department

California's housing market continued its upward trajectory last year in terms of prices, sales, and new construction. The statewide median price for a home was \$403,600 in final quarter of 2015, an increase of 5.5% from one year earlier. Sales rose by 10.5%, but were still constrained by lean inventories. Meanwhile, rental markets across the state were marked by low vacancy rates and rising rents, as the state's homeownership rate (54.3%) showed little sign of improvement. Looking ahead, higher home prices and sales, driven mainly by income growth, low but rising mortgage rates, and demographics, ought to trigger an increase in construction over this year and next.

This year is shaping up to be one of steady gains in overall economic activity and employment, with the state's key industries continuing to see job growth and the fortunes of California's households improving with rising wages and growth in personal income. Despite concerns over the business climate, the state economy is one of the most dynamic in the country, as evidenced by the large amount of venture capital it has attracted on a consistent basis over the last several years.

Employment

The labor market in the South Bay has continued to tighten as we move into 2016. Nonfarm employment in the region increased 3.6% between February 2015 and February 2016, while the unemployment rate has sustained its downward trend during this time period. In fact, the very low unemployment rate in the South Bay (3.8%) implies that the region's labor market is considerably tighter relative to California overall (5.5%). This holds true closer to home as well, as the unemployment rate in the region remains below the levels observed in Napa (4.1%) and Oakland (3.1%) during February 2016.



The Information and Professional, Scientific, and Technical industries continue to drive employment gains in the region. The Information industry, in particular, added 6,500 jobs over the year, a 9% increase compared to the previous year. However, this does mark a slowdown in growth compared to previous years. What is driving this trend is not yet clear, as more granular breakouts of employment in this industry have yet to be released. That being said, this slowdown is more likely than not a function of the strong growth observed over the last few years, as opposed to an early indication that the tech-led employment boom is coming to an end.

In fact, the next stage of tech-driven employment growth may have already begun, given recent developments in autonomous-vehicle technology. Recently, automakers have linked up with tech startups to accelerate advancements in this field. For example, General Motors acquired a Silicon Valley startup that specializes in autonomous vehicles technology, while Ford Motor Co. has selected a site in Palo Alto for its latest automotive research and development facility. Moreover, Apple and Google have each received pledges from nearly 40 automakers to work with their technology.¹

Some suggest that Silicon Valley is on its way to becoming the next Detroit for carmakers, as the industry further expands its technological capabilities. Self-driving technology is even spreading to motorcycles — Yamaha joined the mix of vehicle manufacturers expanding their presence in the South Bay, with up to \$20 million in investments planned for the region.

Employment by Sector, San Jose MSA

| Sector | Feb-16 (000s) | YOY Change (000s) | YOY Change (%) |
|-----------------------|------------------|-------------------------|----------------------|
| NR/Construction | 46.4 | 4.5 | 10.7 |
| Admin Support | 65.2 | 5.5 | 9.3 |
| Information | 78.3 | 6.5 | 9.0 |
| Transport/Warehouse | 14.6 | 1.2 | 9.0 |
| Utilities | 1.8 | 0.1 | 5.9 |
| Prof, Sci, & Tech | 145.1 | 6.8 | 4.9 |
| Management | 12.9 | 0.6 | 4.6 |
| Education/Health | 160.1 | 6.9 | 4.5 |
| Leisure & Hospitality | 98.5 | 3.9 | 4.1 |
| Retail Trade | 88.7 | 1.0 | 1.1 |
| Wholesale Trade | 36.5 | 0.3 | 0.9 |
| Manufacturing | 162.0 | 1.5 | 0.9 |
| Finance & Insurance | 21.8 | 0.1 | 0.7 |
| Government | 91.2 | -1.3 | -1.4 |
| Real Estate | 13.1 | -0.4 | -3.2 |
| Total Nonfarm | 1,063.0 | 37.4 | 3.6 |

Source: California Employment Development Department

While employment in the region continues to post sizable gains, two industries shed jobs over the past year. Government employment contracted 1.4% between February 2015 and February 2016, due in part to local tax issues. San Jose has persistently struggled with its tax base, resulting in some of the lowest tax revenues per capita in Santa Clara County.² These revenue issues have hindered the local government's ability to fund existing public services, let alone expand them. Indeed, while "...companies in this city and in surrounding Santa Clara County, which encompasses Silicon Valley, have raked in billions over the last few years, the city of San Jose has been trying its hardest not to go broke."³ At the same time, employment in the Real Estate industry fell 3.2%, driven by the rapid cooling of the local market for residential real estate. A slowdown in this industry was inevitable, as the region's housing market had been growing at an unsustainable pace for much of the economic recovery.

¹"Explaining the uneasy alliance between Detroit and Silicon Valley." *The Washington Post*. January 11, 2016.

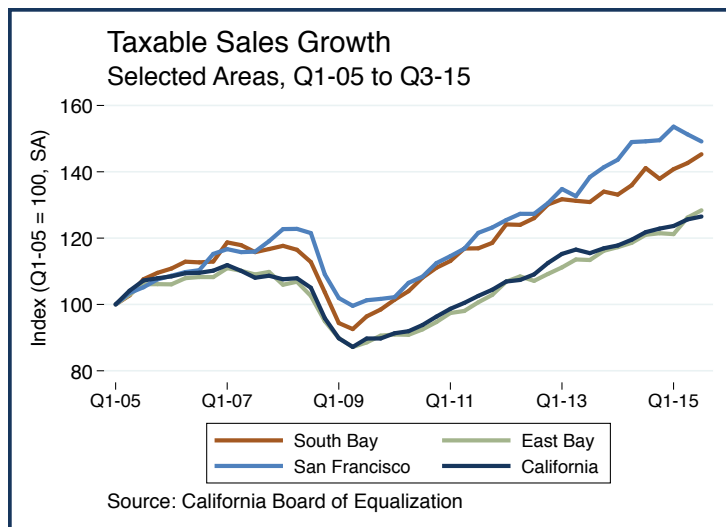
²Why San Jose Is Barely in the Black Despite the Tech Boom." *KQED News*. July 7, 2015.

³"Budget Woes in One of America's Wealthiest Cities." *The Atlantic*. February 25, 2016.

Local Spending

The gains observed in the South Bay's labor market over the past year have been a boon to spending activity in the region. Silicon Valley is one of the nation's best places for young professionals. Extensive opportunities entice college graduate to the area despite the high costs of living. Moreover, Silicon Valley's median pay is the highest in the nation for not only early career workers (\$78,400), but also mid-career workers with more than 10 years of working experience (\$143,000).⁴ Growing wages are helping to support growth in consumption patterns in Silicon Valley.

To this end, taxable sales in the South Bay increased 3.0% from the third quarter of 2014 to the third quarter of 2015. However, the growth in spending activity observed in the region over the past year lagged behind the statewide average (3.9%), and more locally, the East Bay (6.1%).



Taxable sales receipts grew across all categories except Fuel & Service Stations, a decline that coincides with falling gas prices. Wage growth helped support consumption in Autos & Transportation (7.8%) and Restaurants & Hotels (up 7.1%), which led the way in terms of increased spending activity. Growth jobs and wages has encouraged people to increase spending on long-term expenditures, such as purchasing a new car, as well as short-term purchases in other areas of the economy such as leisure and hospitality.

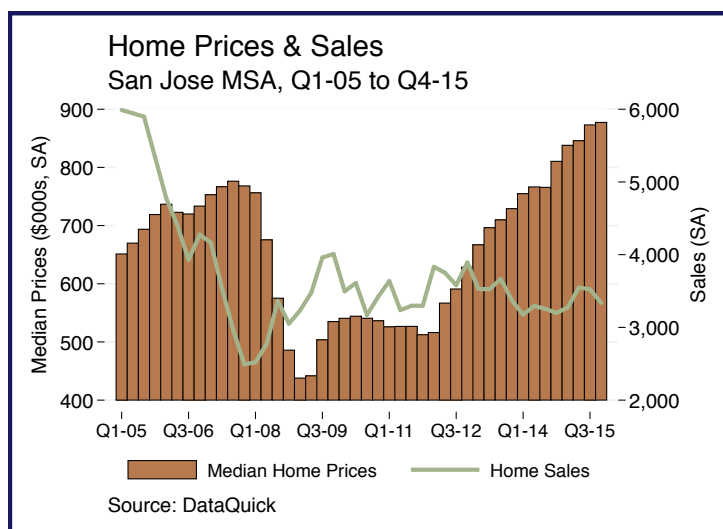
Taxable Receipts by Category, San Jose MSA

| Category | Q3-15 (\$000s) | YOY Change (\$000s) | YOY Change (%) | 3 Yr Change (%) |
|-------------------------|----------------|---------------------|----------------|-----------------|
| Autos & Transportation | 13,609 | 984.5 | 7.8 | 26.8 |
| Restaurants & Hotels | 11,766 | 775.8 | 7.1 | 30.8 |
| Building & Construction | 7,847 | 363.5 | 4.9 | 34.3 |
| Business & Industry | 25,272 | 751.8 | 3.1 | 6.0 |
| Food & Drugs | 4,155 | 108.6 | 2.7 | 10.8 |
| General Consumer Goods | 19,879 | 143.1 | 0.7 | 3.8 |
| Fuel & Service Stations | 6,777 | -700.5 | -9.4 | -9.7 |
| Total | 106,065 | 3,664.7 | 3.6 | 15.5 |

Source: HdL Companies

Residential Real Estate

The housing market in the Santa Clara County remains red-hot, with the median price for an existing single-family home increasing 8.3% from the fourth quarter of 2014 to the fourth quarter of 2015. The strong price appreciation observed over the past year has been driven by sizable growth in Sunnyvale (18.0%), Santa Clara (15.2%), and San Jose (8.2%), and is due in part to underbuilding throughout the region. The supply of housing in the region, measured in terms of months of available supply, has averaged 2 months or lower over the past three years, well below the 5-7 month range that characterizes a healthy supply of housing. The rapid rate of price appreciation observed in recent years is a telling indicator of the underlying scarcity of available homes.

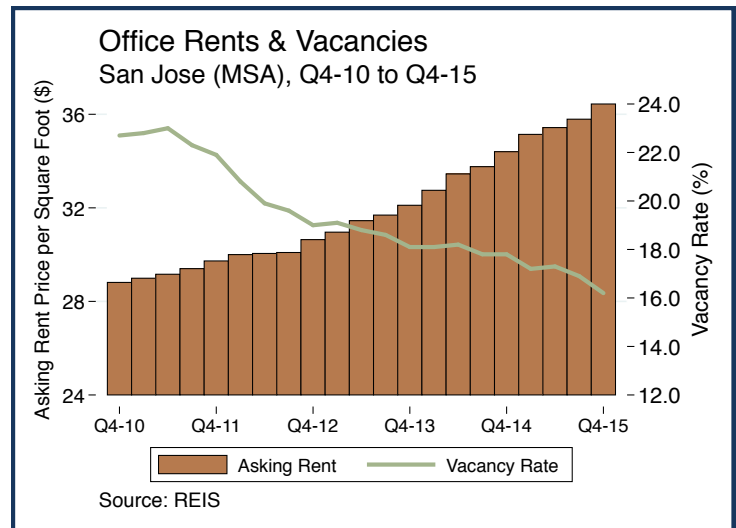
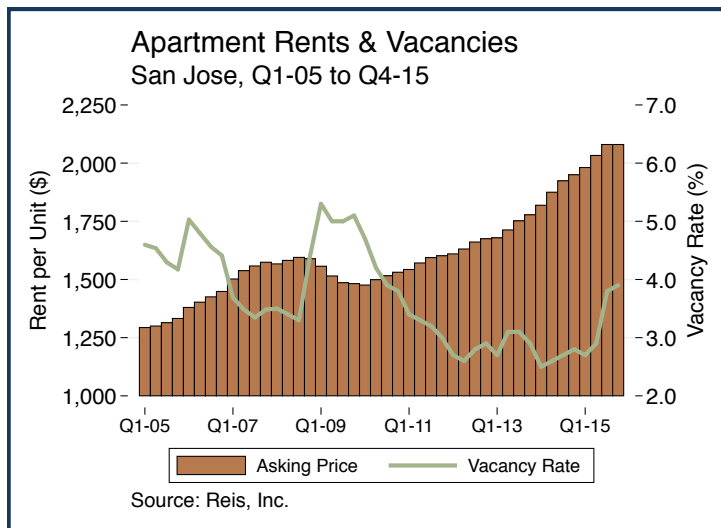


⁴“America's 20 Best Cities For Young Professionals In 2016.” *Forbes*. March 28, 2016.

With price appreciation outpacing wage growth, homeownership is generally within reach for high-income earners only, typically those employed in the region's tech industry. Many potential homebuyers, however, have been priced out of owning a home in the region and are instead turning to the rental market. The cost of rent increased 6.7% year over year to \$2,080, despite a vacancy rate that increased 1.1 percentage points to 3.9% from the fourth quarter 2014 to the fourth quarter of 2015. The strong rent growth observed in recent quarters may soon be going by the wayside, however, as city officials in San Jose are considering a proposal that would tie rent increases for 44,000 units to the rate of inflation. This policy would mark a major shift from the city's current ordinance, which allows a maximum of an 8% increase. While the proposal may benefit the renters of the 44,000 apartments, it fails to address the housing shortage that has pushed a growing number of households into the rental market.

Commercial Real Estate

The South Bay's commercial real estate market has also tightened over the past year, as asking rents for commercial properties rose while vacancy rates for these properties fell. Office rents increased 5.9% to \$36.44 per square foot from the fourth quarter of 2014 to the fourth quarter of 2015. At the same time, vacancy rates for office space were down to 16.2%. The same trends were apparent in surrounding areas as well. The cost of rent increased 4.7% year over year in Oakland (MD), and 5.7% in San Francisco (MD). Similarly, office vacancy rates fell 0.7 percentage points to 16.6% in Oakland (MD), and 1.4 percentage points to 10.3% in San Francisco (MD) during this time period.



San Francisco and Los Angeles already have similar ordinances that tie rent increases to inflation. These cities have some of the highest apartment rents in the country. In San Francisco, the median rent for a one bedroom was \$3,590 in March 2016, according to Zumper. Capping rent growth will do little to address the issue of supply, which is the underlying problem. Controlling rent increases will benefit those fortunate enough to occupy one of the 44,000, but discourage the building of additional rental units.

In San Jose, the average rent for Research and Development property increased 2.1% year over year to \$14.52, while the vacancy rate fell 1.2 percentage points to 15.7% from the fourth quarter of 2014 to the fourth quarter of 2015. These trends should carry into 2016, as a handful of major deals are already in the works. Google recently struck a deal to lease nearly 280,000 square feet of office space, in addition to the purchase of eight buildings for \$250 million from NetApp. Google's expansion in the South Bay does not appear to be stopping anytime soon. "This is a lot of space they are taking in Sunnyvale, and Google's goal appears to be to acquiring as much as they can in this area," said David Vanoncini, a managing partner with the San Jose office of commercial realty firm Kidder Mathews.⁵

⁵ "Google pays \$250 million for Sunnyvale offices where 3,000 could work." *San Jose Mercury News*. March 17, 2016.

Apple is also looking to expand its presence in San Jose. San Jose officials recently approved a proposal by Apple to construct a massive office complex near Mineta International Airport, accommodating up to 4.15 million square feet of space for offices, and research and development space for up to 20,000 employees. Apple and Google alone are going a long way toward extending gains in the region's commercial real estate market into 2016.

Retail property rents in the South Bay increased 3.7% year over year to \$33.70 per square foot, while vacancy rates were relatively flat, hovering near 4.3%. Rents for retail space increased in all surrounding areas, including San Francisco (2.4%) and Oakland (2.2%). San Francisco currently has the lowest vacancy rate in the region (3.0%), although its vacancy rate increased 0.5 percentage points over the year. The increase in vacant retail space in San Francisco may stem from its higher cost of (retail) rent of \$35.54 per square foot, as the stock of retail space held steady over the year. Accordingly, retail rents continue to grow at a faster rate than in the South Bay.

Venture Capital Funding: Who grew in 2015?

Silicon Valley

The exceptionally strong growth in venture capital funding observed in 2014 did not carry into 2015. In fact, venture capital funding fell nearly 20% during this time period. In the nation, venture capital funding increased from 2014 into 2015. Despite declines across several major industries, there were a handful of bright spots: Healthcare Services, Retailing Distribution, and IT Services.

Substantial growth occurred in the Healthcare Services industry, which rose by over 2100% from 2014 to 2015. Growth in this industry was driven by 23andMe, a personal genomics company located in Mountain View. The company has a large amount of data that it recently announced is up for sale this year. Furthermore, Biotech company Genentech has already committed to pay \$60 million to access data on Parkinson's patients that have been tested through 23andMe.⁶

Retailing Distribution experienced the second largest growth in venture capital funding from 2014 to 2015, increasing by over 1700%. The primary source of growth occurred in Palo Alto's Farmigo Inc., which looked to greatly expand its operations

in 2015. The online service connects customers to farmers and local producers, allowing producers keep a larger share of profits by eliminating super markets as a middleman.

The last industry to make significant strides in 2015 was IT Services. From 2014 to 2015 IT Services grew 228% in Silicon Valley. Located in Palo Alto, Instart Logic Inc., entered into the expansion phase. The company raised over \$43 million and the momentum has continued into 2016. In January, Instart Logic Inc., raised \$45 million to increase their sales force in the United States and globally.

Although Menlo Park is considered one of Silicon Valley's largest beneficiaries of venture capital, significant growth occurred in Milpitas in 2015. From 2014 to 2015, venture capital funding grew 27.5%. Milpitas's View Inc. received over \$121 million in funding. Mountain View and Palo Alto experienced minor dips in venture capital funding in 2015, however, the combined amount of funding between the two cities was 56.7% of the total amount of venture capital funding in 2015.

The Greater Silicon Valley

Venture capital funding in the greater Silicon Valley took a big hit during the fourth quarter of 2015. However, for 2015 as a whole, the picture is less gloomy. A total of over 1,300 deals were made in 2015. While the greater Silicon Valley saw fewer deals in 2015, the total value of the deals made in venture capital grew 7.5% from 2014 to 2015 to over \$27 billion.

While the end of 2015 marked a slow period of growth for venture capital funding, significant gains were observed in particular industries for the year as a whole. For example, venture capital funding in telecommunications for the greater Silicon Valley declined 63.8% from the fourth quarter of 2014 to the fourth quarter of 2015, but grew 103.5% in annual terms from 2014 to 2015.

Although, there were declines in growth from venture capital funding, the total amount funds exceeded \$4.6 billion in 2015. Tech in both the Silicon Valley and the greater Silicon Valley has experienced a tremendous windfall in venture capital funding in recent years. The next couple of months could reveal how 2016 will play out for venture capital.

⁶ "Will 23andMe's Customers Get a Cut in the Sale of Their DNA Information?" *Inverse*. March 17, 2016.



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