



2018 Market Forecast Report

Colliers International
Silicon Valley



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ABOUT THE NEWSLETTER

This newsletter represents the one hundred fifth in a series published by Colliers International. The information basis for this newsletter is Colliers International's commercial property database from which the absorption-related statistics are developed and derived. Colliers maintains monthly statistics within Silicon Valley for 14 cities, 31 geographical areas and 7 commercial/industrial building types.

If you desire more data in order to analyze sub-markets not specified in this newsletter, please submit your request through your Colliers International sales representative at 408 282 3800 or write to Colliers International at 450 West Santa Clara Street, San Jose, California 95113. In addition you may send your inquiry to lena.tutko@colliers.com. We look forward to supporting your specific needs.

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TRUST

HONESTY

INTEGRITY

RESPECT

FAMILY

GENEROSITY

PROFESSIONALISM

WELCOME TO TRENDS2018!

2017 was quite a year, with twists and turns that no one predicted or expected. Mother Nature was angry. She gave us killer earthquakes in Mexico, three of the most damaging hurricanes in memory, and here at home epic wildfires followed by mudslides. Scenes and stories we heard from the wine country wildfires in Santa Rosa were horrifying.

None of this disrupted the economy from surging forward. Certainly not here in Silicon Valley, San Francisco and the greater San Francisco bay area. These are Gold Rush era times, 168 years later. Stock markets worldwide also set records.

The president and congress got the tax reform bill passed just before the Christmas break, and while it may be a windfall for Corporate America, it is, frankly, very good for the commercial real estate industry as many companies listed on the New York and other exchanges will invest substantially in facilities, people, and processes, thus driving demand for properties in every sector of our industry.

The 2017 economy marched forward. The Eurozone's economy had its best year in a decade, with 2017 gross domestic product growing at 2.5%, its fastest (or best) expansion since 2007. That blew away the European Central Bank's expectations for the year, which they had pegged at a low 1.7%. Why is this significant to the U.S. economy? Europe accounts for about a quarter of world GDP and is America's largest trading partner. Europe's economy bodes well for the U.S. economy in 2018.

On the first day of February three of the biggest tech companies reported record quarterly financial result as they extended their dominance over swaths of the global economy. Apple Inc., Alphabet Inc., and Amazon.com, Inc. have a combined market value approaching \$2 trillion. Apple's revenue rose 13% to \$88.29 billion in the fourth quarter, Google's parent company reported its 32nd consecutive quarter of revenue growth over 20% and even Amazon, long-known for prioritizing growth over profits, delivered a profit exceeding \$1 billion for the first time on revenue that jumped 38% to \$60.5 million.

So, what could impact this roaring economy? Its own energy, its own mass, its own strength, perhaps.

That's the message from two of the speakers at the Trends Presentation on February 13, Dr. Christopher Thornberg from Beacon Economics and Greg Valliere, the Chief Global Strategist at Horizon Investments. They fear the economy could overheat in the next 18 months, citing constrained labor markets (lack of labor) and the threat of inflation, which the Federal Reserve seems poised to combat by raising interest rates at least three times in 2018.

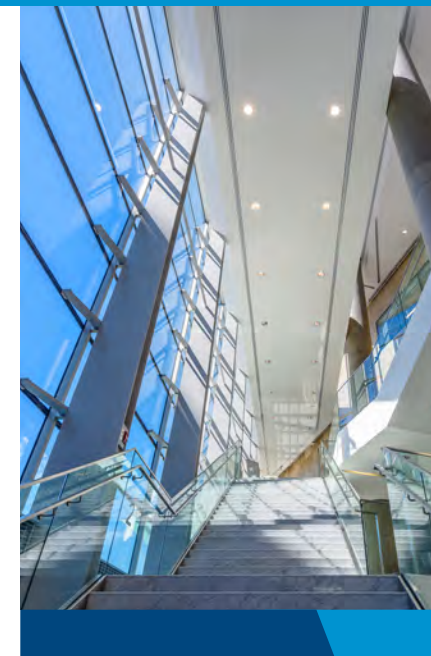
Just a little over a week ago financial markets shuddered twice at the prospect of wage-growth inflation: on February 2 the Dow had its biggest one-day drop (2.5%) since June 2016, which was when the U.K. voted to leave the European Union; and then dropped again on February 5 when it suffered its biggest one-day drop in history at 4.6%, the same day Jerome Powell was sworn in as the 16th chairman of the Federal Reserve. The benchmark 10-year Treasury note, meanwhile, climbed to its highest level of 2.852% since January 2014. Most analysts attribute this to the anticipation of inflation and the higher cost of money for businesses to run on. They are also forecasting increased volatility in stock markets for the year.

Against this backdrop, Colliers International welcomes friends, clients and colleagues to a New Year. We earnestly wish everyone great health and prosperity in 2018 and hope you achieve tremendous success in all of your business endeavors.

TRENDS2018 MODERATOR



David Schmidt, Sior
Executive Vice President Colliers International



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JANUARY

Donald Trump is sworn in to office.

Amazon signs lease to occupy 351k SF in Jay Paul Company's Moffett Towers II in Mountain View to be completed late 2017. Starting rents expected to be \$3.95/SF NNN.

FEBRUARY

Oroville Dam spillway malfunction causes 180,000 people to be evacuated from area.

Anderson Dam overflowed for the first time in 11 years causing the evacuation of 14,000 people in San Jose.

New England Patriots win their 5th Super Bowl and claim the largest comeback in the event's history.

North Korea launches missile across the Sea of Japan.

MARCH

Federal Reserve raises the overnight funds rate by 0.25% (0.75 – 1.0%).

The United Kingdom votes for "Brexit" by triggering article 50 of the Lisbon Treaty, officially commencing the two year process to leave the European Union.

Snap, Inc. IPOs at a \$29 billion initial valuation.

Intel buys Mobileye in \$15.3 billion deal, moves its automotive unit to Israel.

APRIL

Apple begins to move employees into Apple Park, the 3M SF circular campus commonly referred to as "The Spaceship."

Injunction request proposed by the California Apartment Association for Measure V is denied by a Santa Clara County Judge allowing the city of Mountain View to move ahead with organizing their rent control plan.

The United States launches an attack on Syria in response to chemical weapons use and drops the world's largest non-nuclear bomb (MOAB) on Afghanistan.

MAY

3335 Scott Boulevard, phase two of the three-phase development, was sold for \$157 million or \$639/SF. The 246k SF building was fully leased to HP & Aruba Networks at the time of sale. Menlo Equities and Beacon Capital were the sellers and CBRE Global Investors with CalSTRS were the buyers.

2851 Junction, a single tenant Class A building in North San Jose fully leased to TSMC trades for \$82 million or \$525/SF. Blackstone was the seller and RMA Real Estate Advisors purchased the asset.

Terrorist bombing at Ariana Grande concert in Manchester, England leaves 22 dead and more than 500 people injured.

JUNE

Sand Hill Properties and Carlyle sell the Netflix HQ Campus in Los Gatos to King Asset Management for \$200,000,000 or \$767/SF.

Federal Reserve raises the overnight funds rate by 0.25% (1.0 – 1.25%) for the second term in 2017.

United States announces its withdrawal from the Paris Climate Agreement.

JULY

Lane Partners and Walton Street Capital sell Orchard Commons in North San Jose to MetLife for \$105 million or \$270/SF.

Google and LinkedIn pull off a \$315 million strategic land swap, essentially dividing up territory in key markets.

Four Corners Properties and Rockwood Capital sell 303 Almaden, a 157,000 SF Class A office building in Downtown San Jose to AEW Capital Management for \$80.2 million or \$510/SF.

India implements largest tax reform by replacing structure with a General Services Tax.

O. J. Simpson granted parole.

AUGUST

TA Associates sells a 250,000 SF multi-tenant flex project known as North First Corporate Center to Washington Holdings for \$60 million.

Hurricane Harvey made landfall in Texas on August 25, killing more than 80 people in the Lone Star State and causing an estimated \$150 billion in damage.

A total solar eclipse in August brought the world together through more than 80 countries.

UN Security Council approves additional sanctions on North Korea.

SEPTEMBER

CalSTRS and Korea Post JV acquired 3333 Scott Boulevard from Menlo Equities and Beacon Capital Partners for \$610 million or \$650/SF. The approximately 940,000 SF project is fully leased to Palo Alto Networks.

Google purchases 675,000 SF in Moffett Park including 215 Moffett Park Drive from Four Corners Properties and Rockwood Capital for \$206.1 million or \$793/SF and the NetApp Campus for \$319 million or \$851/SF.

Hurricane Irma made landfall twice in southern Florida on September 10, killing scores of people there and elsewhere in the United States as well as in the Caribbean.

Amazon announces plans to open a second headquarters somewhere in North America that is fully equal to their existing HQ in Seattle. Their RFP received 238 proposals from cities across North America by the October 2017 deadline. Amazon expects to invest more than \$5 billion in construction and grow this second headquarters to include as many as 50,000 high-paying jobs with a secondary benefit of jobs plus tens of billions of dollars in additional investment in the surrounding community.

Amazon sublets 177k SF from Ericsson within Irvine Company's Santa Clara Square development. Starting rent is approximately \$2.95/SF NNN.

North Korea launches its 6th nuclear test to the condemnation of the international community.

OCTOBER

A mass shooting at a Las Vegas outdoor music festival at the Mandalay Bay Resort and Casino on October 1 killed fifty-eight people and hundreds more were wounded, making it the deadliest mass shooting in modern U.S. history.

Fires rip across northern California wine country, destroying more than 200,000 acres.

Largest single transaction lease was signed by Dropbox totaling 736,000 SF in Kilroy Realty's The Exchange at 16th in San Francisco.

WeWork subleases 457k SF from LinkedIn within the Village at San Antonio development in downtown Mountain View. Rumored to be for WeWork's Enterprise division and the space was taken for undisclosed single tenant to occupy.

NOVEMBER

Sunnyvale Research Center is purchased by Applied Materials, Inc. from iStar Financial for \$100 million or \$445 per square foot. The 225,000 SF mix of office and R&D was 100% leased to Apple at the time of sale.

Montague Oaks Business Park, a multi-tenant flex project in North San Jose, sells for \$90 million or \$338/SF. Washington Holdings is the Buyer and PSAI is the seller.

Houston Astros win Game 7 of the World Series to claim first their title in the franchise's history. Viewership was down 30% from the prior year when the Cubs claimed their first series win in 108 years.

Marvell Technology buys rival chipmaker Cavium for \$6 billion.

DECEMBER

Federal Reserve raises overnight funds rate a third time in 2017 by 0.25% (1.25% - 1.50%).

The Thomas fire in Ventura County may become biggest wildfire in California history burning more than 270,000 acres.

Senate and House vote to pass tax reform legislation — the largest changes proposed since the early 80's.

Bitcoin breaks through the price of \$18,000 after starting the year at roughly \$1,000.

UN Security council votes 15-0 to increase sanctions on North Korea, thereby decreasing their oil imports by 90%.

River Park Towers, a 618,000 SF Class A office project in Downtown San Jose sells for \$283.5 million or \$457/SF. Steelwave is the seller and DivcoWest in a joint venture with Rockpoint are the buyers.

Towers @ 2nd, a 413,000 SF office project in Downtown San Jose sells for \$127.7 million or \$309/SF. Harvest Properties and Invesco are the sellers and Brookfield is the buyer.

Lane Partners purchases HQ@First, a 604,000 SF former owner/user site from Brocade for \$207.4 million.



2018 SILICON VALLEY MARKET FORECAST REPORT

THE SYNCHRONIZED ECONOMY - The NASDAQ Composite climbed 28% in 2017 and the Dow Jones Industrial Average grew 25.1% while posting 71 record closes – the most ever in a calendar year and the Dow’s best performance since 2013.

A rising tide still floats all boats, and as impressive as U.S. stocks performed in 2017, last year may well be remembered for the onset of a new phenomenon and the primary reason for stocks continued run-up as we entered 2018.

Welcome to the synchronized global economy.

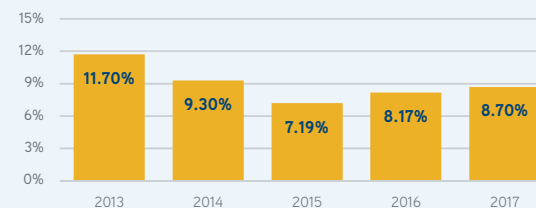
World manufacturing activity expanded to a 78-month high last October, reaching 53.5 (Bloomberg’s US. Global Investors scale) with faster rates recorded in new orders, exports, employment and input prices. That month worldwide business optimism also reached a three-year high, according to IHS Markit Global Business Outlook survey, with profit growth and continued hiring plans among the surveyed global companies. The survey by IHS Markit, a London-based information and analytics company traded on the NASDAQ under the symbol INFO, is based on responses from a panel of 12,000 companies.

Despite the exceptional gains U.S. stocks had in 2017, for the first time since 2012 international stocks taken as a whole outperformed the S&P 500 index, 24% to 19%, according to the MSCI ACQI ex-USA Index, which tracks non-U.S. companies across developed as well as emerging markets. The best performances in 2017 by top international indexes include Hong Kong’s Hang Seng (36.0%), Japan’s Nikkei Stock Average (19.1%), Germany’s DAX (12.5%), Euro Stoxx (10.1%) and the U.K.’s FTSE 100 (7.6%). The rise in stock markets around the world added roughly \$9 trillion in value to equity markets, the biggest one-year swell since the financial crisis, according to the S&P Global Broad Market Index, which includes most stocks from 48 countries.

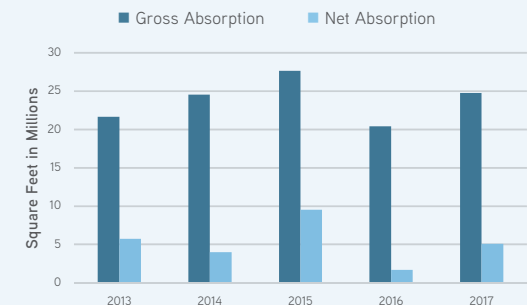
The holiday season stalled the rally briefly, yet stocks continued to surge with the onset of 2018. In the first week alone, the NASDAQ closed over 7000 for its first time, fueled largely by tech stocks and on the news that the PHLX Semiconductor Index added nearly 40% last year. The Dow, meanwhile, cracked the 25,000 mark January 4 this year – only a month after it raced by 24,000. One year ago on that same January day, the Dow closed at 19,942. The Dow then set its own record for the fastest 1,000-point climb during this run, or ever for that matter, when it crossed the 26,000 threshold 12 days later on January 16. As this issue of Trends was sent to the printer, the Dow was floating between 26,200 and 26,450.

Not everyone believes the stock market will rise in perpetuity and, to the contrary, Martin Fieldstein, Harvard Professor and former chairman of the Council of Economic Advisers under President Reagan, recently penned an opinion piece in the Wall Street Journal titled, Stocks Are Heading for a Fall. Fieldstein’s rationale to support his point of view includes interest rates that are not only low but artificially low because the Fed held onto its stimulus position for too long and started raising interest rates only recently; the high price of stocks reflects the very low returns available on fixed-income securities; stocks will lose some of its value when inflation returns and the price/earnings ratio for the S&P 500 is now 26.8, higher than at any time in the 100 years before 1998 and 70 percent above its historical average.

Silicon Valley Availability
All Product Types



Silicon Valley Absorption
All Product Types



Silicon Valley All Product

Office/R&D/Industrial/Warehouse Combined

Date	Available Vacant Direct	Available Occupied Direct	Available Sublease	Total Current Available	Vacancy Direct	Availability Rate	Available Under Construction	Current and Pending Availability
4Q 2017	18,301,652	6,273,965	6,167,196	30,742,813	6.22%	8.80%	2,108,862	32,851,675
3Q 2017	18,233,132	6,273,936	7,023,227	31,530,295	6.36%	9.08%	2,832,986	34,363,281
2Q 2017	17,632,680	4,985,065	6,502,114	29,119,859	6.08%	8.45%	3,835,021	32,954,880
1Q 2017	18,043,561	4,002,497	6,156,556	28,202,614	6.02%	8.26%	3,865,685	32,068,299
4Q 2016	17,299,884	4,585,230	5,785,041	27,670,155	5.68%	8.17%	4,825,309	32,495,464
3Q 2016	16,436,280	4,732,757	4,835,495	26,004,532	5.44%	7.67%	3,336,537	29,341,069
2Q 2016	16,960,551	4,439,547	4,173,932	25,574,030	5.55%	7.57%	2,637,731	28,211,761
1Q 2016	16,831,156	4,331,564	3,369,648	24,532,368	5.50%	7.32%	3,089,957	27,622,325

EMPLOYMENT OUTLOOK

Since the end of the Great Recession, Silicon Valley and San Francisco combined have generated approximately 700,000 new jobs net.

Silicon Valley's total nonfarm employment rose to 1.1 million between October 2016 and October 2017, a 1.5% increase, according to Beacon Economics. The professional science and technology sector experienced the largest net job growth with a gain of 6,500 net jobs during that 12-month period. Employment in leisure and hospitality sectors also grew in that time frame — by 6.3 percent, Beacon reported.

The unemployment rate dropped to 3% by the beginning of the fourth quarter last year — about the same for the region as San Francisco's and lower than the statewide average of 4.1%.

Nationally, in December the Labor Department reported employment gains for the year had reached 2.1 million, which was the seventh consecutive year of employment gains of 2 million or more per annum. It is only the second time on record—the other being in the 1990s—when the economy has produced jobs at the same pace for that long. Hiring now has risen for 87 straight months, the longest uninterrupted period of job expansion on record. The second longest run of job expansion was from 1986 to 1990 — about half as long as the current run.

Beacon Economics is expecting Silicon Valley's nonfarm employment to increase by 1.8 percent from the third quarter of 2017 to the third quarter of 2018,

and for unemployment to remain in the low 3% range over the next year.

It may be repeated elsewhere in this report but the biggest threats to the regional economy and for the foreseeable future will remain the lack of a quality workforce and the lack of moderately-priced housing to attract talented professionals from all types of industries — not just technology. The region is sorely undersupplied in every housing category except perhaps for “luxury” homes priced at \$5 million or more. To keep the regional economy growing, we simply have to add more housing stock that is affordable or at least moderately affordable for a much larger portion of our residents and workforce.

TAX CODE CHANGES AND THE IMPACT ON THE REGIONAL ECONOMY

Stockholders in local corporations can expect higher dividends as the new tax code takes effect, changing the top-line corporate income tax rate from 35 percent to 21%. While there are no guarantees that employees that work for these companies will receive new bonuses as corporations get to keep more of their revenue or, in the case of our regional tech companies, re-patriate profits from overseas, there are recent precedents by companies to give \$1,000 bonuses to the majority of their tenured employees. Will that happen here remains to be seen and on a broader level, will “trickle-down economics” work? Trickle-down economics worked in the 1980s after President Reagan's tax reforms. Will “trickle down” work this time around?

The International Monetary Fund thinks it will. Just as President Trump arrived in Davos, Switzerland, for the World Economic Forum in the fourth week of January, IMF forecast that world output, adjusted for inflation will grow 3.9% a year in 2018 and 2019, the strongest since 2011 and an upward increase of 0.2 percent from its October 2017 forecast. The reason for the bump, IMF stated, was the passage of the new U.S. tax code.

Apple wasted little time in jumping into the tax-code news cycle with its announcement that it would invest \$350 billion into the U.S. economy in the next five years as part of its repatriation of billions in overseas cash. The mobile device company said it would create 20,000 new jobs and open a second corporate campus somewhere in the U.S., but unlike Amazon, it would not pursue a public RFP process to do so.

JPMorgan Chase & Co., the largest U.S. bank by assets, chimed in with its late January announcement that it was unrolling a \$20 billion, five-year investment across its businesses based on benefits from recent tax-law changes, a softer regulatory environment and the bank's overall growth. The bank also stated that it would boost wages for 22,000 lower-paid, full and part-time U.S. employees while it works to open 400 new branches in multiple states. So Wall Street might get to Main Street, after all.

The greatest unknown to the changes in the tax code and our region in particular, is mostly personal. What is certain is that many of the professionals reading this report will face increases in SALT, state and local taxes that include property taxes. With the \$10,000 limit on state and local taxes, the changes to the tax code will cost many households several thousands of dollars in otherwise tax deductible benefits, yet will those increases be offset by the new pass-through income tax rate at 20%? It depends on how one's business income is structured, and a few other details, all of which are still unclear to most tax preparers. It will take several more months — perhaps into mid-2018, before there is a clearer picture on winners and losers in the GOP's recent tax reform measures.

Some of the key drivers to the Silicon Valley office market in 2018 will be a traditional source in terms of venture capital, yet also the emergence of high



According to Forbes 2017 World's Largest Tech Companies, eight of the top ten are U.S.-based companies: Apple, Microsoft, Alphabet (Google's parent company), IBM, Intel, Cisco Systems, Oracle and Facebook. Five of those are headquartered in Silicon Valley. As of late September, Apple, Google and Facebook were the #1, 2 and #4 most valuable companies in the U.S. by market capitalization with values of \$806.1 billion, \$656.5 billion and \$500 billion, respectively (as ranked by dogsofthedow.com)



-profile technologies in artificial intelligence (AI), robotics and driverless cars. Here's a look on how these sectors may impact Silicon Valley's economy this year and beyond.

VENTURE CAPITAL

Venture Capital, historically one of the biggest drivers of the Silicon Valley office market, has been soft in recent years as startups have grown with various rounds of private equity investments and shunned the public markets. Along the way, the moniker "unicorns" emerged as the label for "startups" with valuations around \$1 billion. Today there are approximately 100 still-private companies valued at \$1 billion or more.

One of the biggest Silicon Valley IPOs of last year was by 23andMe, in a deal valued at \$250 million. Yet only seven Silicon Valley tech and biotech companies that raised more than \$100 million went public in 2017 — which was one less than in 2016. Both were slow years, according to PitchBook Data. That was in sharp contrast to the 50% jump to 160 IPOs, with \$35 billion raised, around the world last year tallied by Renaissance Capital, which manages exchange traded funds made up of recent IPO stocks.

However, 2018 could be the year IPOs come roaring back in the valley.

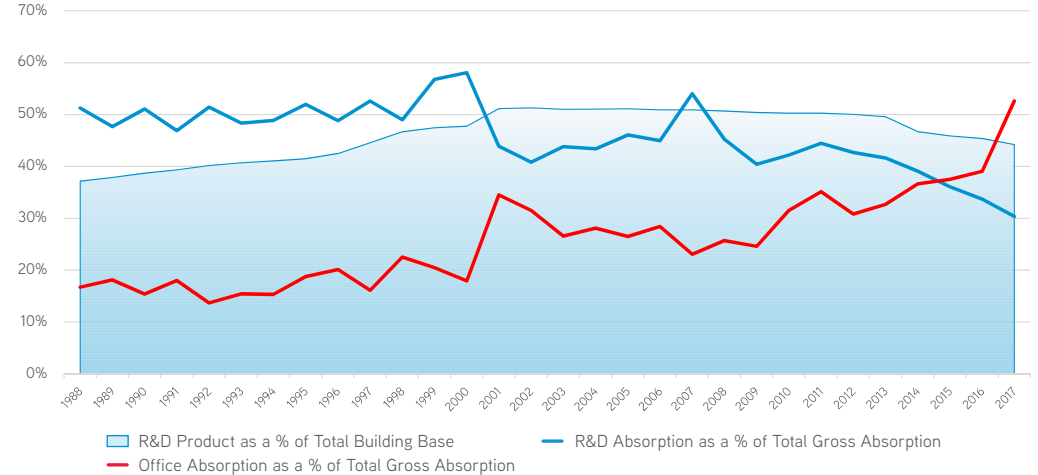
"We believe that 2018 could be a banner year for technology IPOs. There are a deep bench of unicorns that have had years to prepare offerings. Volatility is low, corporate taxes are on the way down and public market valuations are as good as they can hope for," Renaissance Capital said in its annual report.

Indeed, in early January San Francisco-based Dropbox, valued at \$10 billion, confidentially filed to go public with an IPO expected in the coming months.

Among some of the potential public offerings in 2018 are San Francisco-based Airbnb, valued at \$31 billion; Lyft, valued at \$11.5 billion; Nio, the U.S. unit of a Chinese electric car startup led by a former Cisco Chief Innovation Officer and based in San Jose (valued at \$5 billion); Quanergy Systems, the Sunnyvale-based self-driving car sensor business valued at \$1 billion; and Zscaler, a San Jose-based cybersecurity unicorn valued at \$1 billion.

Despite the exceptional gains U.S. stocks had in 2017, for the first time since 2012 international stocks taken as a whole outperformed the S&P 500 index, 24% to 19%, according to the MSCI ACQI ex-USA Index, which tracks non-U.S. companies across developed as well as emerging markets.

Office and R&D Absorption as a Percentage of Total



ROBOTICS AND AI

"Silicon Valley is the epicenter for all trends happening in AI and Robotics," said Andra Keay, Managing Director of Silicon Valley Robotics. "It used to be Boston in the early days, but that shifted five or six years ago. Right now and right here, Silicon Valley is the place to be."

One telling aspect of Silicon Valley's office market: Silicon Valley Robotics used to occupy co-working space in Mountain View, but got priced out. The startup advisory organization is mainly based now in co-working space in Oakland (at 8000 Edgewater Drive in which Circuit Launch is the master lessee) and also in San Francisco, in other co-working space.

Keay estimates there are 300 AI and robotic startups between Silicon Valley, San Francisco and to a lesser degree in Oakland, compared with about 100 of them two years ago. These are firms as small as a single person that don't have a company name yet to larger companies that have had Series A and perhaps Series B funding and employ more than 50 people. She cited Fetch Robotics Inc., currently located on Concourse Drive in San Jose as one of the more mature companies in the market.

Keay said she expects more AI and robotics companies to generate startups, be acquired and merge with larger tech companies because robotics have already reached into every industry vertical.

If there is a threat to AI and robotics growing in the South Bay, in addition to high occupancy costs, it is our neighbor to the north and west — San Francisco. San Francisco is getting more robotics startups than Silicon Valley is now and for reasons we've heard in other conversations — software talent is there, along with urban lifestyles and public transportation. Moreover, she said, there is venture capital funding in San Francisco that didn't exist a few years ago. It used to be that startups had to be close to Sand Hill and Page Mill roads, but no longer.

CAR COMPANIES

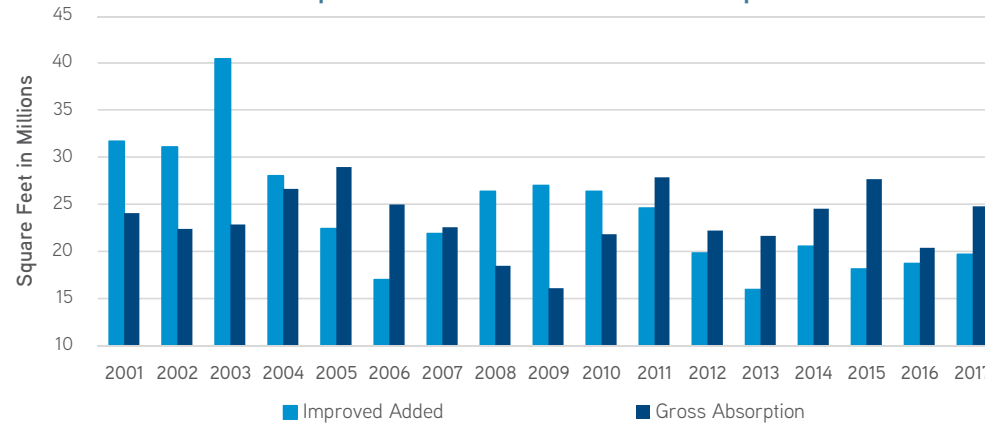
By some estimates there are more than 50 tech firms entering the car business or automotive companies that have leased Bay Area offices as automotive engineering has become a complex intersection of hardware, software, and traditional auto parts. Major auto brands with a regional presence include Ford Silicon Valley Lab, General Motors Advanced Technology (both in Palo Alto), Mercedes-Benz R&D,

Nissan Research Center (both in Sunnyvale), Volvo (Mountain View), Porsche Digital (Santa Clara) and Continental Tires, which occupied about 65,000 square feet on North First Street in San Jose in early 2017.

Additionally, the emergence of driverless cars is creating demand for office and R&D space. According to Quartz Media LLC, there are 26 Bay Area companies that possess a California Driverless Car Permit, among them Apple, Palo Alto-based AutoX, Sunnyvale-based Baudi USA, BMW Group Technology Office in Mountain View and Bosch Research and Technology Center North America, based in Palo Alto. NVIDIA has been supplying Uber its graphic chips for driverless cars since 2016 and recently formalized the relationship between the two companies, as well as a new partnership with Volkswagen. Uber launched its first fleet of self-driving cars in the fall of 2016 and then in early 2017, it launched the second pilot program in Phoenix.

How long will it be before the commuter lane on Highway 101 is reserved for driverless cars zipping along at 80 mph and separated by only three feet? Some say sooner than you think, and the technology and companies to make that happen are right here in Silicon Valley.

Silicon Valley All Product Improved Added vs. Gross Absorption



Absorption Breakdown - Silicon Valley

Office/R&D/Industrial/Warehouse Combined

	1Q 2016	2Q 2016	3Q 2016	4Q 2016	1Q 2017	2Q 2017	3Q 2017	4Q 2017
Building Inventory:	335,360,525	337,874,776	338,874,860	338,660,273	341,396,854	344,563,406	347,387,962	349,304,357
Availability:	24,532,368	25,574,030	26,004,532	27,670,155	28,202,614	29,119,859	31,530,295	30,742,813
Absorption:								
Gross	5,771,428	5,397,303	5,237,864	3,984,890	4,876,968	7,606,671	5,050,311	7,233,024
Net	(142,319)	1,537,624	494,423	(214,553)	243,116	2,701,157	846,249	1,300,034
Effective Net	1,495,382	1,436,825	588,713	665,948	1,402,831	2,544,654	560,143	3,911,633
Completed Construction:	1,266,486	2,237,420	405,694	785,665	2,278,424	3,447,606	2,337,391	1,728,351
# of Avails by Size:								
< 10K SF	1,059	1,117	1,183	1,210	1,222	1,213	1,292	1,286
10K to 29K SF	308	308	313	306	311	314	327	339
30K to 59 K SF	112	110	115	129	125	119	140	140
60K to 99K SF	73	71	83	80	76	79	76	71
100K SF +	35	38	35	45	48	52	60	56



Since the end of the Great Recession, Silicon Valley and San Francisco combined have generated approximately 700,000 new jobs net. Silicon Valley's total nonfarm employment rose to 1.1 million between October 2016 and October 2017, a 1.5% increase, according to Beacon Economics.

2018
SILICON VALLEY
MARKET FORECAST
REPORT

SILICON VALLEY'S OFFICE MARKET HITS 7TH CONSECUTIVE YEAR OF POSITIVE NET ABSORPTION - The best way to characterize the Silicon Valley office market of 2017 is to say that supply began to catch up with demand, with the operative word in that sentence "began."

More than twice the amount of new office space was delivered in 2017 compared with 2016, when 3.19 million square feet of office construction was completed from Redwood Shores to Morgan Hill and north to Fremont. For 2017, 8.59 million square feet of office space was delivered.

An alternative to describe the 2017 market is to say that we've been bouncing around at the top. Despite all the new construction, the office market experienced its seventh consecutive year with positive net absorption at 5.77 million square feet on a total of 13.03 million square feet of gross absorption.

Gross absorption in 2016 was 7.9 million square feet while net absorption was a little over 2 million square feet. Absorption — both gross and net, were even stronger in 2014 and 2015.

At the beginning of 2017 some 6.1 million square feet were under construction, with Apple accounting for about half of that. With Apple Park completed, that space is now considered absorbed into Silicon Valley's office inventory. Another pair of big projects that was delivered last year was The Irvine Companies' Santa Clara Square (1.1 million square feet in 2017, bringing its current total size to 1.7 million square feet) and NVIDIA's 500,000-square-foot headquarters, also in Santa Clara.

Irvine executed numerous leases at its new mixed-use Santa Clara Square project and then landed Hitachi Vantara at the beginning of 2018. The 220,156-square-foot lease by Hitachi is significant in that it is relocating from just two miles away to be in a smaller facility but connected to the many amenities that Santa Clara Square offers. As the Business Journal pointed out in a story announcing that deal, it wasn't much of a downsizing by Hitachi as its headquarters of nearly 25 years

has a large onsite gym and cafeteria — amenities that employees will still have at Santa Clara Square, though not exclusively their own.

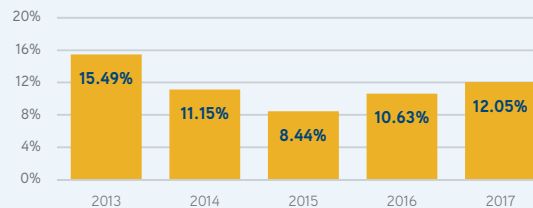
Since the recovery began in earnest in 2011, nearly 20 million square feet of office space (19,480,607) has been added to the total Silicon Valley office inventory, which now totals 82,902,643 square feet. That's a remarkable seven-year development run, considering that in the previous eight-year period, from 2002 through the end of 2010, only 5.63 million square feet of offices were built in Silicon Valley.

At the beginning of this year, Colliers is tracking nearly 64 million square feet of potential new office and R&D development among the key markets of Palo Alto, Mountain View, Sunnyvale, Santa Clara, West Valley and San Jose:

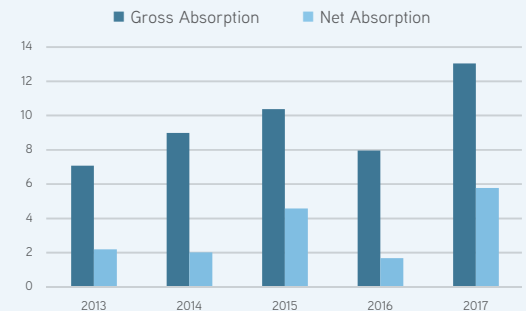
- Shell complete: 1,954,800 square feet
- Under construction (spec): 5,702,614 square feet
- Under construction (build-to-suit): 2,329,313 square feet
- Entitled: 33,667,554 square feet
- Seeking entitlement: 11,605,661 square feet
- Planning stages: 8,646,287 square feet

Among the largest projects are Trammell Crow/Google's potential 8 million square feet in the Diridon Station Area of Downtown San Jose (planning), Juniper Networks' headquarters facility in Sunnyvale (2.43 million square feet, shell complete), Jay Paul's Moffett Towers II in Sunnyvale (1.8 million square feet, under construction/spec), a 260,000-square-foot project by Four Corners, also in Sunnyvale (under construction/spec), and 1050 Page Mill Road in Palo Alto, a 201,375-square-foot build-to-suit by Sand Hill Properties.

Silicon Valley Availability
Office Product



Silicon Valley Absorption
Office Product



VACANCY AND AVAILABILITY RATES

Going into 2018 the overall Silicon Valley availability rate reached 12.05%, or nearly 200 basis points greater than at the beginning of 2017, when it was 10.06%. The availability rate is a combination of vacant space, sublease space that is occupied and space that is coming to the market in the next six months. The vacancy rate for office — currently around 9%, only includes actual available space and sublease space that is vacant.

The availability rate spiked on a year-over-year basis due to the delivery of new offices and a handful of notably large subleases that came to the market.

Santa Clara's availability rate jumped to 22.8% thanks to subleases by Palo Alto Networks, Citrix, Broadcom and EMC Squared, Stadium Tech Center and two full buildings at Santa Clara Square.

The San Jose Airport submarket availability rate is hovering just over 25%, primarily due to large blocks of sublease space offered by Atmel, Virident Systems and InvenSense. With Microchip Technology's acquisition of Atmel in 2016, company consolidation fueled the sublease attempt of the 198,033 square feet Atmel previously occupied at 1600 Skyport Drive. Invensense and Virident have also had surplus square footage available, with just the three subleases combining for the majority of available sublease space in the Airport market.

The San Jose Airport submarket, with 14.6% direct vacant space available, remains one of the most attractive submarkets in the valley, particularly for tenants requiring expansion space. Its central location, proximity to the airport and Downtown San Jose, as well as access to the valley's major roadways are just some of the reasons why Hudson Pacific Properties (HPP) made such a significant investment by acquiring a 2.6 million-square-foot portfolio from Equity Office. HPP has since invested millions in improvements to reposition the asset, rebranded as Airport Place. Airport Place is a collection of 17 Class A buildings with extensive on-site and nearby amenities and services.

For all the talk about downtown San Jose's blossoming star, at a statistical glance one could say that market conditions are merely average. That's not the case, however, as the availability rate has plummeted 10 full percentage points in the last seven years.

The availability rate stood at 14.36 percent at the beginning of this year. Out of that nearly 1.2 million square feet of available space, only about

480,000 square feet of that is Class A space, rendering the availability rate for Class A space down to 5.8%. Large blocks of space are non-existent, with nothing available over 30,000 square feet.

By comparison, at the beginning of 2011 downtown San Jose's overall office availability rate was 24.18% and Class A had an availability rate of nearly 30%. Besides, no one disputes the game changing nature of Diridon Station redevelopment as the biggest multimodal transportation center on the West Coast, as well as the aforementioned search company's plans to create a satellite base in the area and employ upwards of 20,000 people in the downtown.

Sublease space reached alarmingly high levels last year — as much as 30.24% of all available space but then several large blocks of space were signed and it brought sublease space down to normal levels, at 23.9% by year end. The deals involved WeWork (456,000 square feet), Amazon (176,000 square feet), Applied Materials (122,000 square feet) and Lyft (92,000 square feet), among others.

RENTAL RATES

Downtown Palo Alto and Sand Hill Road continue to command the highest rents in the region and in the country, for that matter. The Quadras Office Complex (owned by DivcoWest) is asking \$11.00 per foot (per-month, NNN) for space on Sand Hill Road yet if there were a comparable property in downtown Palo Alto the market might value the space at \$12.00 per foot (per month, NNN), simply because of the downtown's appeal for amenities along with the fact that P.A. gets about a dozen daily Baby Bullet train stops from Caltrain.

In terms of trends, office space near the Caltrain line has been getting the greatest amount of leasing activity and the highest rents. A lease last year for 33,567 square feet at 66,000-square-foot property called Castro Station at 200 W. Evelyn Avenue. in Mountain View went for an effective rent of \$8.16 per foot (NNN), whereas the overall average asking rate in Mountain View is \$6.94 per foot. Another lease, for 63,254 square feet at 10 Almaden in downtown San Jose went for \$4.13 per foot full service, whereas the overall average asking rate for downtown Class A office space in San Jose is \$3.38 per foot.

Averaging asking rates for Class A space in Palo Alto is \$8.40 per foot, it's \$5.64 per foot in Sunnyvale, \$4.03 per foot in Santa Clara, \$4.53 per foot in Cupertino, \$4.31 per foot in the West Valley market, \$3.53 per foot

at the San Jose Airport, \$3.55 per foot in North San Jose and \$2.21 per foot in Morgan Hill. Class B office space is typically discounted 12% to 20% and varies by submarket.

2018 EXPECTATIONS AND CHALLENGES

There was more activity in the final two quarters of 2017 than the first half of the year and with just a month into 2018, momentum seems to have carried over. Colliers expects 2018 will be another robust year for the office market, absent an unforeseen major change in the economy, geopolitical event or significant act of terrorism.

As of early 2018, Colliers was tracking 198 office requirements of tenant demand of 20,000 square feet or greater that totaled 20,989,800 million square feet.

Looking ahead, the prevailing and current trends should continue into 2018. Namely, tech occupiers' strong preference for quality, especially new space, the appeal of Caltrain and BART for locations and the requirement for amenity-rich environments and developments. As often as we've all heard the statements about the competition for talent, that will be especially true for 2018 and beyond. Today's workplace has to have a sense of place, and not just be a place to go to work.

In some respects Santa Clara Square has set a new benchmark for others to follow, and similarly, the mega-campus built by Google, Apple, LinkedIn, NVIDIA and others. Developers will endeavor to create similar spaces that are grounded in the sense of place concept — if they intend to remain competitive, anyway.

The valley will increasingly get denser, with vertical construction more commonplace and much higher floor-area-ratios (FARs). Twenty years ago it was typical for new projects to be designed with an FAR of 0.5 to 1 — or building coverage to be approximately half of a site. By contrast, there's a new project starting in Santa Clara with an FAR closer to 2:1. Stevens Creek Boulevard and the El Camino Real will have much of this vertical redevelopment.

With the onset of driverless cars and the expectation that parking requirements at office buildings and campuses will be greatly reduced in the future, parking structures will be being designed with higher floor-to-floor ceiling heights and flat floors. Developers call this "future proofing" their buildings, which essentially means to build a building with the intent to be converted to livable or workable space without needing to tear down the entire structure.



Last year Apple completed construction on its "spaceship" building in Cupertino, so named for its circular structure with a massive interior courtyard. Officially called Apple Park and located at 1 Apple Park Way, the 2.8-million-square-foot building will eventually hold 13,000 employees. Employees for Apple started moving in during August with an expectation that the company would move 500 employees in per week for the foreseeable future. The \$5 billion project is the fifth biggest construction project in world history.

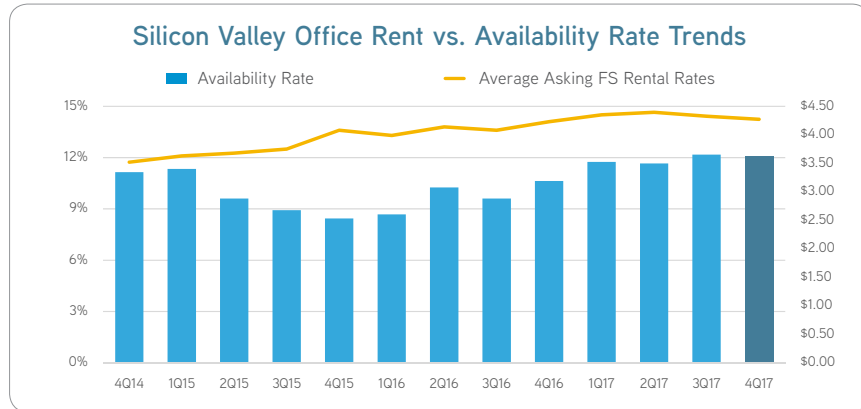


Rental rates for core markets like Palo Alto, Menlo Park, Mountain View and Sunnyvale will remain firm and likely increase. In other submarkets it will depend more on changes to the supply and demand equation. Investors will continue to be attracted to Downtown San Jose, with the aforementioned transformation to Diridon Station and Google's looming presence.

New supply may not be coming fast enough and with the type of supply today's tech tenants want, look for more and more conversions of R&D buildings into high quality office space (more about that in the R&D section of this report).

The shared space concept popularized by WeWork has become an accepted alternative to entering a market by signing a lease, or at the very least, a short-term solution for startups. We'll see more of that in 2018. For example, Mindspace, a WeWork competitor and Europe's leading co-working provider, recently announced its formal entry into the U.S. market by opening locations in San Francisco and Washington, D.C. Mindspace took three floors and about 36,000 square feet at 575 Market St. in San Francisco and plans to open in the second quarter this year. It would not surprise anyone if Mindspace inks a lease in Silicon Valley this year or next.

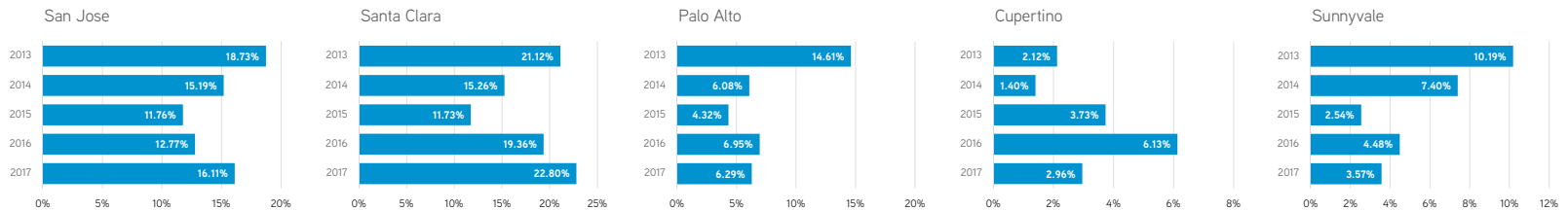
The cost of doing business in Silicon Valley will discourage some companies from expanding here and in San Francisco as well. Oakland is the likely beneficiary of this trend.



The biggest threats to the region's economy are the lack of new and reasonably priced housing, attracting skilled labor and the unbearable commute times and patterns. High housing costs and income inequality are making it increasingly difficult for basic service providers to live here. The City of San Jose, under the leadership of Mayor Sam Liccardo, has taken notice and has initiated plans to address the housing shortage. That's a positive first step, yet adding sufficient housing supply will require a sustained and collective effort by all South Bay municipalities to radically alter the course we've been on for so long now.

The San Jose Airport submarket, with 14.6% direct vacant space available, remains one of the most attractive submarkets in the valley, particularly for tenants requiring expansion space. Its central location, proximity to the airport and Downtown San Jose, as well as access to the valley's major roadways are just some of the reasons why Hudson Pacific Properties (HPP) made such a significant investment by acquiring a 2.6 million-square-foot portfolio from Equity Office.

Selected Cities Historical Availability Rate Trends - Office



Office Leasing & User Sale Activity

Selected Colliers International Transactions - 2017

PROPERTY ADDRESS	SQUARE FEET	LANDLORD/SELLER	TENANT/BUYER	TYPE
391-401 San Antonio Road, Mountain View	456,760	LinkedIn	WeWork	Sublease
237 Moffett Park Drive, Sunnyvale	266,316	Rockwood Capital/Four Corners	Google	User Sale
1140 Arques Avenue, Sunnyvale	128,154	Herman & Raymond Christensen	Applied Materials	Direct Lease
4655 Great America Parkway, Santa Clara	54,635	Prudential Real Estate Investors	TeleNav	Lease Renewal
3250 Olcott Street, Santa Clara	45,896	American National Insurance	Gigamon Systems	Direct Lease

2018
SILICON VALLEY
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R&D MARKET REFLECTS SHIFT TO AN OFFICE-CENTRIC ECONOMY - Sometime during this cycle and the current economic expansion, Silicon Valley became an office-centric real estate market, as opposed to one equally weighted between office and R&D. The valley has always had its distinctive office product in downtowns like Palo Alto and San Jose, yet for industry practitioners, saying “office/R&D” in one breath became as common as combining the words “ice cream” and “sundae” – they were essentially inseparable.

The trend started during the dot.com run up. Some may recall the East Coast REITs that were aggressive buyers from 1998 to 2001, and at a time when there was not much new office product to buy. Speculative developers, snake-bit hard by the early 1990s recession, were just returning to the market about then. The East Coast acquisitions guys would go out on tour, see a portfolio of concrete tilt-up R&D buildings and say, “poke some holes in those concrete walls, put windows in, call it office product and I can buy it.”

In the office section of this trends report, it states that since 2011 nearly 20 million square feet of office space has been constructed and delivered to the market. By contrast, during the same period less than 1.1 million square feet of (purely) R&D product has been constructed. And R&D development continues to diminish. In 2017, about 405,000 square feet of R&D was delivered – of which 55% was owner/occupied (by Apple), whereas in 2016 there was only 198,000 square feet of new R&D construction. The only new R&D project to break ground in 2017 was for a 36,000-square-foot building at 2747 Park Boulevard in Palo Alto.

There are still Silicon Valley companies that require lab space and that need room and functionality to test product and build prototypes. There are companies in the market that need either R&D space or blended industrial/flex/R&D space.

Some companies still need roll-up doors and have bigger power requirements, yet they are just becoming less prevalent.

That’s not so say that down is completely out. Currently, Colliers is tracking more than 11 million square feet of tenant demand for office/R&D space spread across 96 tenants with space requirements of 20,000 square feet or greater.

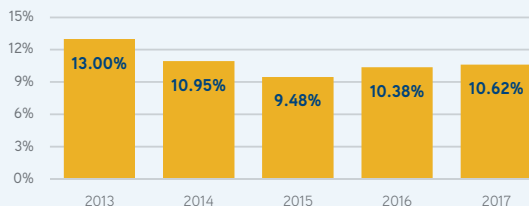
The space occupiers, of course, have driven the shift to office product.

For today’s tech economy, developing software-as-a-service, creating cloud-based data storage tools, launching social media platforms and making YouTube videos only requires a desktop computer, a desk, chair and about 100 square feet per person in an office setting. As noted in the economic outlook of this trends report, AI and Robotics are swiftly becoming a regional market driver and those types of companies may require traditional R&D space for portions of their respective operations, but for the most part, occupiers want office space and mostly brand new, amenity-rich office space.

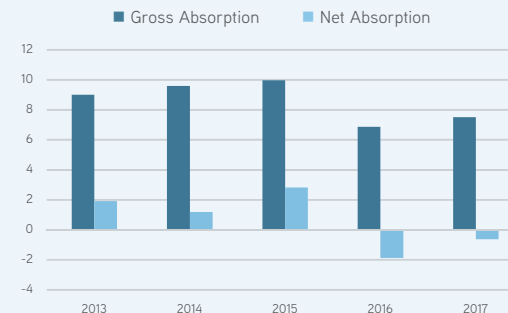
That’s why it’s not easy to pre-lease speculative, build-to-suit office buildings. Occupiers want to see the product, walk through it, and have a near-term move-in date that matches their sense of urgency.

However, five years of escalating office rents are driving some office users into R&D properties. Last year there was a slight uptick in gross absorption of R&D space, to 7.52 million square feet, or about 700,000 square feet more

Silicon Valley Availability
R&D Product



Silicon Valley Absorption
R&D Product



than in 2016. This is particularly true in North San Jose, which had 1.89 million square feet of gross absorption in 2017, compared with 1.38 million square feet in the submarket in 2016.

The key to office users taking down R&D space is renovation — similar to what has occurred on “renovation row,” aka the Orchard Parkway area where in recent years TMG, Lane Partners, Ridge Capital, MWest/Divco West, Bixby Land Company and others swooped in to buy discounted R&D buildings for value-add projects and performed fairly high-level renovation in leasing the space out to willing tenants.

Last summer, for example, an ownership entity comprised of ProspectHill Group, SKS Partners and Invesco Real Estate started construction to renovate the former 27-acre LAM Research campus on North First Street near Highway 237. The partnership is doing the renovation in two phases: the first of which will feature about 300,000 square feet in three buildings that feature large floorplates, which are appealing to tech tenants. The new campus will have a sizeable gym with full locker rooms, outdoor amenity space, including a nearly one-acre park with an outdoor pizza oven, and a definitive “main street” entrance with pull-out curbside areas for food trucks to visit during lunch hours. Phase I should be available for occupancy in late summer this year while there is no time table for the start of the second phase, which currently has about 200,000 square feet of vacant buildings. The second phase could be a more vertical buildout, as that portion of the property is entitled for up to 1.3 million square feet.

More of this type of activity is expected for this year and the foreseeable future.

A month ago, in fact, Washington Holdings, a Seattle-based investor, paid seller TA Realty more than \$55 million to buy an existing 15-acre park with 222,593 square feet of low-slung R&D buildings at the southwest corner of Montague Expressway and North First Street. That property is known as Montague Square. The deal brings the company’s North San Jose portfolio to more than 750,000 square feet, which is in addition to the 560,000-square-foot multi-tenanted office park the company owns in Santa Clara across the street

from Intel Corporation’s headquarters on Mission College Boulevard. TA Realty made a tidy profit in the sale to Washington Holdings. The Business Journal reported that TA Realty bought Montague Square in 2013 from Embarcadero Capital Partners for \$39.44 million.

Over in Sunnyvale, meanwhile, the Irvine Company is close to starting the second phase of its Pathline Park Project in Peery Park by removing older generation R&D buildings and building a new office park. This is a good example of R&D space being converted to purely office development. Irvine plans to build 12 “individually styled mid-century modern buildings” offering 1.5 million square feet of brand new office space. There will be considerable outdoor common areas threaded throughout the 50-acre campus. The company recently preleased the first phase of the project comprised of 350,000 square feet in three buildings to Synopsys. The second phase is scheduled to commence in May with plans for another three buildings with warm shells totaling 330,000 square feet expected to be delivered by September of 2019.

In an outlier sort of deal, Facebook’s lease of 190,206 square feet in two of Sobrato’s Fremont buildings at 6500-6530 Paseo Padre Parkway demonstrated that the tech titans are not immune from 1) going further afield from their respective headquarters and 2) competing to acquire space to satisfy growth and expansion plans.

There were 17 user sales associated with R&D properties in 2017 totaling 661,951 square feet, which was not significant nor exceptional. However, a closer look at some of the transactions reveals that product quality and capital improvements do matter. The Yard, a 128,026-square-foot property in two buildings — at 75 West Plumeria and 2820 Orchard Parkway — sold for \$344 per-square-foot while mostly unimproved older product at 3860 North First Street in San Jose, with 101,582 square feet, traded for \$208 per foot, despite being in the same submarket.

AVAILABILITY AND RENTS

Blended asking rents for all R&D product ended last year at \$2.12 NNN, an increase over the end of 2016 perhaps because of completed renovations

and lease ups. That’s off a pretty big range — from a low of \$0.48 per foot in North San Jose to a high of \$8.50 per foot in Palo Alto.

North San Jose currently has the most R&D space available, at 19.89%, with an average asking rate of \$2.24 per foot. Fremont’s availability rate is 13.04% while its average asking rent was \$1.56 per foot at the beginning of the year.

LOOKING AHEAD

Quality is paramount in today’s market and will continue to be a central theme in 2018. Tenants generally don’t care if the rent is a \$1 or more per foot, as long as it’s quality space and there are plenty of amenities. Santa Clara’s core market has a considerable amount of available space, including the still-empty (after two years) and shell complete Stadium Tech (about 220,000 square feet) on Great America Parkway at Highway 237. It’s a great location for the product type therefore a little perplexing that it remains available. When some of the existing sublease space burns off — and now that Santa Clara Square is primarily leased, projects like Stadium Tech will likely be absorbed.

New construction starts should taper down while value-add deals, with a particularly strong appetite for renovating existing space fills that void.

Companies are looking further north for space, which bodes well for the North First Street corridor and Fremont, the latter of which is poised for growth with the addition of BART service from downtown Fremont to Berryessa. Colliers expects blended average rents for R&D to continue climbing as the quality of space improves with each completed renovation and the office sector continues its growth yet with more and more companies taking R&D space for various reasons — among them, necessity.



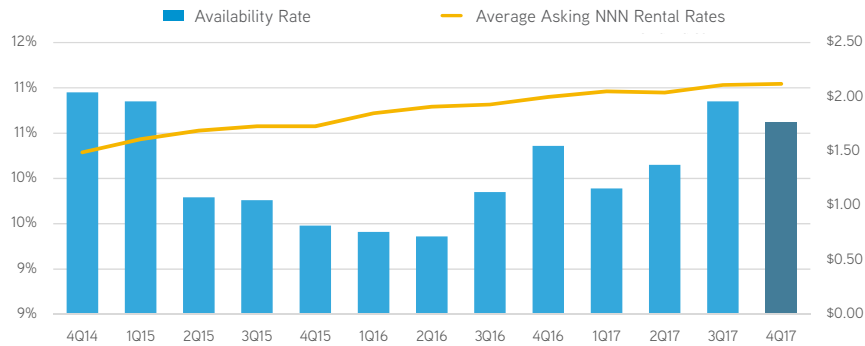
In 2017, about 405,000 square feet of R&D was delivered — of which 55% was owner/occupied (by Apple), whereas in 2016 there was only 198,000 square feet of new R&D construction. The only new R&D project to break ground in 2017 was for a 36,000-square-foot building at 2747 Park Boulevard in Palo Alto.



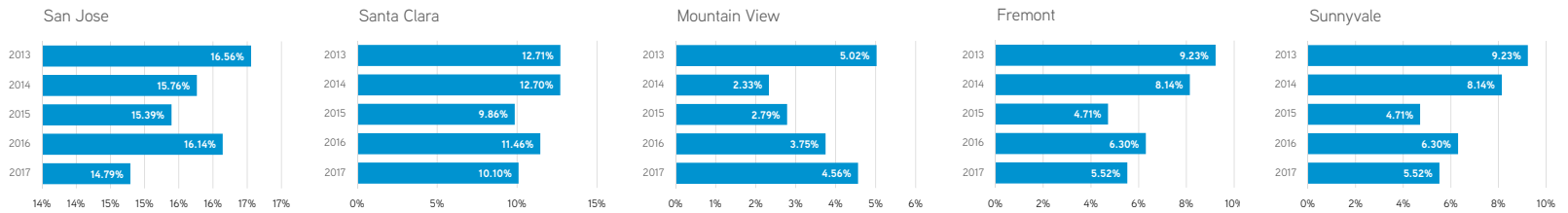
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The space occupiers, of course, have driven the shift to office product.

Silicon Valley R&D Rent vs. Availability Rate Trends



Selected Cities Historical Availability Rate Trends - R&D



R&D Leasing & User Sale Activity

Selected Colliers International Transactions - 2017

PROPERTY ADDRESS	SQUARE FEET	LANDLORD/SELLER	TENANT/BUYER	TYPE
2801-2881 Scott Boulevard, Santa Clara	312,167	Rockpoint Group & Presidio	Roche Molecular Systems	Renewal/Expansion
935 Stewart Drive, Sunnyvale	136,874	RREEF Funds	Trimble Navigation	Lease Renewal
1565 Barber Lane, Milpitas	102,668	iStar Financial	NuvoSun	Lease Renewal
1704 Automation Parkway, San Jose	84,208	Soma Realty Partners/Atlas RP	Quantenna Communications	Direct Lease
18705 Madrone Parkway, Morgan Hill	64,936	CSREF2 Newton LLC	Harris Corporation	Direct Lease

2018
SILICON VALLEY
MARKET FORECAST
REPORT

NEW SUPPLY AND ECOMMERCE ARE THE MAJOR TRENDS FOR INDUSTRIAL AND WAREHOUSE IN 2018

- At a commercial real estate conference a few months ago, Andy McCulloch, Managing Director for Newport Beach-based Green Street Advisors, said that of all the commercial real estate verticals, industrial is doing the best (nationwide) while retail is faring the poorest as it relates to rental growth. Overall, Green Street is forecasting five more years of rental growth for most commercial real estate sectors, led by industrial (4.1%) and Senior Housing (3.0%).

That makes sense, given that consumer confidence is higher than it has been in a decade and discretionary spending is up. Just as “rooftops drive retail,” consumer spending drives demand for industrial space in the form of light manufacturing and assembly, warehouse and distribution facilities. As a nation, we’re importing more goods than ever and the supply chain is full. Industrial vacancy rates near the nation’s five largest ports are in low, record-setting territory.

Similarly, the availability rate for industrial space in Silicon Valley has been hovering in the low-single digits in recent years in all of the major submarkets. At the beginning of this year, it was 1.3% in San Jose, 3.6% in Fremont, 2.8% in Milpitas and 1.8% in Santa Clara.

The availability rates for warehouse product is similarly low with 1.1% for Fremont, 2.9% for San Jose, 11.8% for Milpitas and 3.1% for Santa Clara. The relatively high availability rate in Milpitas is because of its small building base and a couple of large vacancies at the moment.

In 2017, most of the larger industrial and warehouse leases for new space were completed by the “usual suspects” of technology companies and 3PLs, including Apple for 149,758 square feet in Fremont, DGA Services for 120,835 square feet also in Fremont, and CEVA Logistics for 212,840 square feet in Central San Jose.

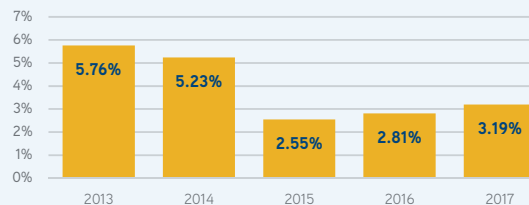
A year ago in this report we used the headline for the this section, Industrial Crickets, because there had been 40% less activity in 2016 than there had been in 2015 — which was a strong year, it should be noted. The market improved somewhat in 2017 with gross absorption approximately 3.9 million square feet, yet net absorption was essentially flat and mostly due to the lack of new construction.

Generally speaking, the prohibitive cost of land and lack of appropriately zoned sites for industrial are the main reasons for limited development and construction activity. Moreover, the land deals that are being done lack consistency in pricing because of all the usual variables, such as location, size and intended use, particularly when there are specific business plans for certain land parcels.

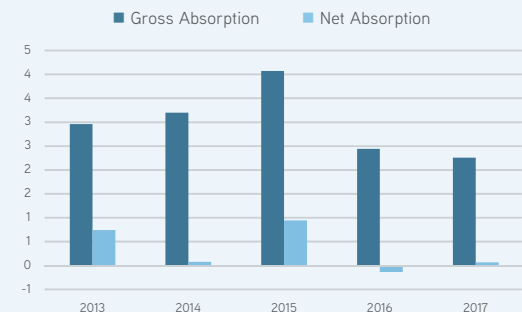
In 2017, the largest industrial land transaction was Overton Moore’s purchase of 124 acres in Fremont, near the auto mall and Pacific Commons Shopping Center. The site has now been entitled for 1.7 million square feet of advanced manufacturing and warehouse buildings with construction of the first phase commencing in Q1 of this year.

Other land purchases by developers eager to deliver new speculative industrial product to Silicon Valley users include a 9.6 acre site on Hellyer Avenue in South San Jose which Industrial Property Trust closed at the end of 2016 and a 4.8 acre site purchased by Panattoni Development on Oakland Road in North San Jose during early 2017.

Silicon Valley Availability
Industrial Product



Silicon Valley Absorption
Industrial Product



PIPELINE OF NEW SUPPLY

Even though some supply is in the pipeline for delivery in 2018 and 2019, consensus from Colliers International brokers serving the Silicon Valley industrial and warehouse markets is don't expect the availability rate numbers to change much or anytime soon.

In Fremont, some 2.64 million square feet of industrial buildings are planned or under construction, led by Overton Moore's Pacific Commons South project, which is slated to produce 1.7 million square feet in a mix of distribution space and advanced manufacturing buildings — the latter of which will have more power and more parking. The company has started construction on just under 1 million square feet while Conor Commercial Real Estate has started moving dirt on more than 800,000 square feet with its Pacific Commons Industrial Center project.

The total building base has been relatively unchanged since 2013, when the building base (inventory) of industrial product in Fremont stood at 9.1 million square feet compared with a current base of 9.9 million square feet. The same holds true with the warehouse building base that stood at 7.6 million square feet in 2013 and today stands at 8.4 million square feet.

Between the two projects mentioned above, more industrial product is coming to Fremont in the next 18 months than in the previous three years, which will add almost 10% to the current industrial building base in Fremont.

Fremont's industrial market has been the beneficiary of Tesla Motor Inc.'s decision to establish its manufacturing plant there as it ramps up capacity to build the Model 3 sedan. Tesla's presence has spurred some of its suppliers to also ink deals in Fremont, such as SAS Automotive System's 142,188-square-foot lease of OMP Eureka Landing. SAS moved into its new facility in early 2017. Apple, meanwhile, leased 150,000 square feet of warehouse space in Fremont last year.

Fremont's growth can be attributed to the availability of land combined with a very active pro-business community and municipal leadership. As a result many tech-related OEM's and other manufacturers have invested heavily in Fremont in particular firms that may mass manufacture overseas in China but call Silicon Valley their headquarters. Companies expanding in Fremont include: Quanta Manufacturing Inc., LAM Research, Synnex Corporation, Delta Products, Fisher Scientific and many others.

Tesla's growth is not limited to Fremont's industrial market. In 2016 the innovative car company leased 1.3 million square feet at Oaks Logistics Center, a 72.6-acre Livermore project developed by Trammel Crow Co. and Bentall Kennedy. It is believed to be the largest industrial lease ever for the East Bay.

In Milpitas, the McCarthy family (McCarthy Ranch) is currently under construction with the first phase of McCarthy Creekside Industrial Center and expects to deliver (shell complete) nearly 450,000 square feet in two buildings in the first quarter this year. The total project is 804,106-square feet. Meanwhile in San Jose, Trammel Crow Co. has completed building

shells for Midpoint @237 and its 563,211 square feet, with leasing activity expected to occur on the buildings soon.

Including smaller projects by Barry Swenson Builder, Sobrato Development Companies, Panattoni Development Company and Industrial Property Trust, there is 4.1 million square feet of industrial product that could be produced and delivered at various stages of 2018, 2019 and in early 2020.

As such, for 2018 Colliers anticipates that approximately 1 million square feet of industrial product will be net absorbed during the course of the year in a combination of new space and existing space.

Rents, which spiked tremendously over 24 months in 2015-2016 (35.2 percent) leveled off in 2017 by increasing between 6% and 10% on a blended basis for warehouse and industrial buildings. For 2018 and early 2019, Colliers expects rental growth to be somewhere between flat and 5%.

Even as rental rate increases level out, Colliers believes that industrial and warehouse occupiers will continue to evaluate their locations and whether it makes business sense to stay in the Bay Area proper or relocate to Livermore, Tracy and other parts of the Central Valley -- but only if the lower cost of occupancy and labor sufficiently offsets the increased transportation costs associated with operating further afield. That equation was further complicated in the fourth quarter last year when California raised the state gas tax by 12 cents per gallon, from 29.7 cents per gallon to 41.7 cents per gallon. For the trucking industry it's even worse, with the excise tax on diesel fuel increasing 20 cents per gallon — from 16 cents to 36 cents per gallon, and there was also a bump on the sales tax rate for diesel, from 9% to 13%.

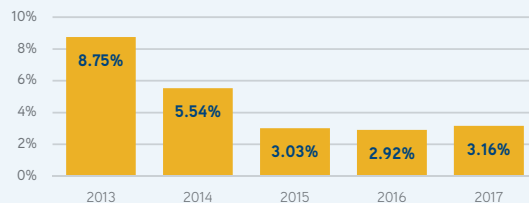
THE LAST MILE BATTLEGROUND TAKES SHAPE

The South Bay's tech companies, led by Apple and Google, are among the key drivers of the current industrial market. While neither of those firms or companies like them disclose the reason for leasing or buying industrial buildings, they do occupy them and so do some of their suppliers, contract manufacturing companies and 3PL operators. Back-end fulfillment -- even office furniture and

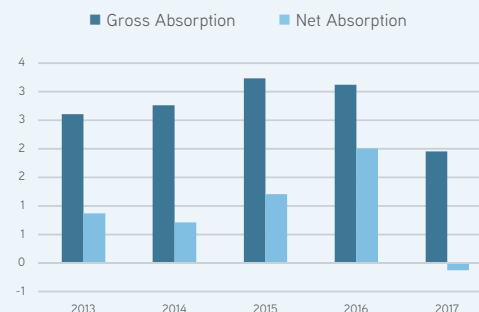


The availability rate for industrial space in Silicon Valley has been hovering in the low-single digits in recent years in all of the major submarkets. At the beginning of this year, it was 1.3% in San Jose, 3.6% in Fremont, 2.8% in Milpitas and 1.8% in Santa Clara. The availability rates for warehouse product is similarly low with 1.1% for Fremont, 2.9% for San Jose, 11.8% for Milpitas and 3.1% for Santa Clara.

Silicon Valley Availability
Warehouse Product



Silicon Valley Absorption
Warehouse Product

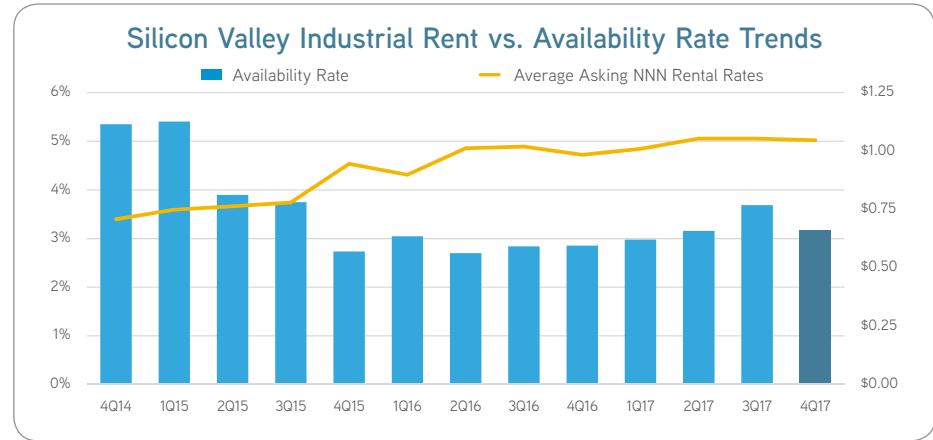




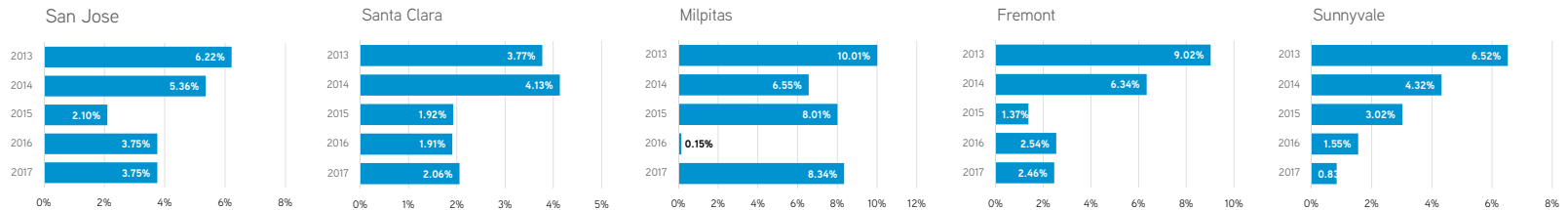
workplace stations, are filling industrial buildings to accommodate the growth of the valley's tech titans, in an effort to swiftly fulfill demand. Often, these occupiers have a dedicated customer and provide hardware-related support for tech gear, including mobile devices and phones.

Yet it is the disruptor known as eCommerce that is driving demand for industrial space more than any other factor. A few years ago when Amazon took down 575,000 square feet in Newark, the industry figured that was the company's delivery center for Silicon Valley. However, Amazon recently leased about 60,000 square feet at International Business Park in North San Jose. And the company has also leased a few smaller, 20,000-30,000-square-foot buildings in multiple South Bay cities. One suspects these moves are related to the Seattle behemoth's last mile strategy of getting packages delivered on the same day in which items are purchased. A Wall Street Journal tech reporter recently offered the analogy that if Amazon were an animal, it would be an octopus, with its tentacles reaching into every aspect of American commerce. Indeed.

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Selected Cities Historical Availability Rate Trends - Industrial/Warehouse



Industrial/Warehouse Leasing & User Sale Activity

Selected Colliers International Transactions - 2017

PROPERTY ADDRESS	SQUARE FEET	LANDLORD/SELLER	TENANT/BUYER	TYPE
41707 Christy Street, Fremont	190,080	PNC Realty Investors	RK Logistics Group	Lease Renewal
1201 Walsh Avenue, Santa Clara	150,480	PS Business Parks	Applied Materials	Lease Renewal
1185 Campbell Avenue, San Jose	130,381	Santa Clara University	Custom Spaces	Direct Lease
1991 Senter Road, San Jose	129,269	D&D Ranch	Legacy Transportation Services	Lease Renewal
44400 Osgood Road, Fremont	120,835	Deutsche Asset & Wealth Mgmt	DGA Services	Direct Lease

2018
SILICON VALLEY
MARKET FORECAST
REPORT

TORRID MULTIFAMILY MARKET KEEPS REACHING NEW HIGHS - Since the recession ended, Silicon Valley and San Francisco combined have added some 700,000 net new jobs. The unemployment rate in San Jose fell to 3.0 percent in mid-2017, one of the lowest in the country for a major metro area. Naturally, population growth has driven demand for housing of all types to historic highs in Silicon Valley.

Since the recession ended, Silicon Valley and San Francisco combined have added some 700,000 net new jobs. The unemployment rate in San Jose fell to 3.0% in mid-2017, one of the lowest in the country for a major metro area. Naturally, population growth has driven demand for housing of all types to historic highs in Silicon Valley.

According to CoreLogic, the median sales price for a previously owned homes in Santa Clara County has remained above the \$1 million mark for nearly a year now – it was recently pegged at \$1,050,500. The heat in the market is suppressing sales. DataQuick reported that 6.5% fewer homes sold in Santa Clara County in November of 2017 (1,551) compared with November of 2016 (1,659).

The rental market has been torrid since 2013, with average rents rising 5%-10% annually in most submarkets. Rising rents have spurred calls for rent control in many Bay Area communities and forced renters-by-necessity to move to more affordable communities – often to different counties. The five-year rental rate growth was 34.1% in Santa Clara County, 34.6% in San Mateo County and 34.8% in Alameda County, according to data company Costar.

Rental rate increases moderated in the South Bay in 2017, with the exception of Central San Jose, where rents climbed year-over-year (YOY) by 13.3%, to an average of \$1,888 per unit, according to Yardi Matrix. In pricier west side communities, YOY rents increased 5.8% in Sunnyvale (to \$3,232 per), 4.3% in West San Jose (to \$3,506 per), 4% in Mountain View/Los Altos

(to \$3,771 per) and 2.2% in Palo Alto-Stanford (to \$3,471 per). Occupancy rates remained high in all submarkets – from a “low” of 95.4 percent in Far South San Jose to the high of 98.8% in Central San Jose. Yardi figures encompass all apartment sizes and styles, including studios, one-bedroom, two-bedroom and three-bedroom apartment homes.

NEW SUPPLY

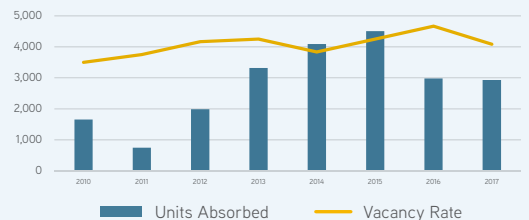
Most of the new supply in recent years has been amenity-rich Class A product that tech workers making \$100K+ a year can easily afford.

From November 2016 through October 2017, Yardi reports that 3,756 apartment units were delivered in Santa Clara County, or 3.1% of existing inventory that approaches 200,000 units. West San Jose had the most apartment completions with 1,023 units while Central San Jose was second with 538 and Sunnyvale third with 497 new apartments. Yardi also stated there were 5,470 apartments under construction in the region and another 17,776 in various stages of planning.

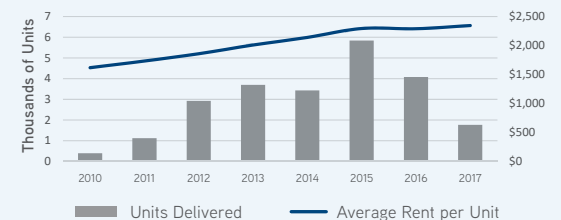
The largest communities under construction are Anton Development’s 582 units in Milpitas, Essex Property Trust’s Gateway Village in Santa Clara (476), The Hanover Company’s San Jose project on Taylor Street (403) and Roem Development’s Lexington Avenue community in San Jose (387).

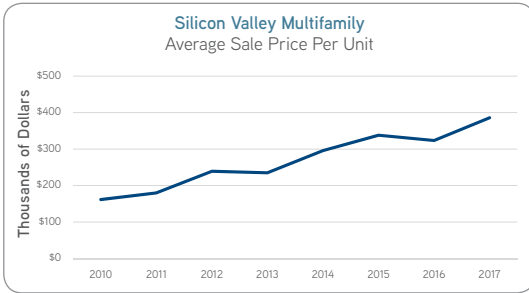
Class B and C apartments owners have taken notice of the development and rental trends in the Class A market and have been investing in improvements to attract a segment of the market that can afford rent increases of a few hundred dollars a month but not \$1,000 or more. As such, they are undertaking renovations to enhance curbside appeal with new landscaping and upgrading interiors with varying degrees of new appliances and fixtures. For \$15,000 or so

Historical Silicon Valley
Multifamily Absorption vs. Vacancy



Historical Silicon Valley
Multifamily Deliveries vs. Asking Rents





a unit, apartment owners can replace some appliances, put in new flooring, paint and resurface cabinets. For \$25,000 per unit or a little more, owners are updating all appliances, lighting and plumbing fixtures, cabinets, counters, flooring and painting all interiors.

DESPITE ONGOING STRONG DEMAND DEVELOPMENT PIPELINE MAY SOFTEN

Regionally speaking, San Francisco and Oakland are among the top metro areas in the country for the most planned apartment units. Among the five U.S. metros with the most planned units are San Francisco, with 12,100 units; Miami (11,700 units) and Los Angeles (10,200), according to RealPage. At the end of the third quarter last year, Oakland had roughly 6,200 units under construction and 12,500 apartments planned, in part because of the lower cost for land and even construction there versus San Francisco and Silicon Valley. Other top 10 cities in the U.S. with significant apartment construction include Columbus and Cleveland, Ohio, and Fort Lauderdale and West Palm Beach in Florida.

Silicon Valley land prices combined with escalating construction costs — in both labor and materials, are making the development of new multifamily (rental) projects increasingly prohibitive with the exception of a handful of players, such as local firms Sares-Regis

Group, Sobrato Development Companies and U.K.-owned Grosvenor Americas. These companies have the financial resources and long-term (20+ years) investment horizons for ownership that they can afford low-yield returns in the early years of their property investments. Publicly funded REITs, like Essex Property Trust, are also in stronger positions to initiate new multifamily projects because of their access to capital in public markets.

However, while the current market makes it difficult for many multifamily projects to pencil, the high cost of Silicon Valley housing supports the development of high-priced attached homes in the form of condos and townhomes. For example, Colliers is involved in the Mountain View offering of a \$10 million existing apartment building on about one acre. At \$500,000 to \$600,000 per unit plus capital improvement costs post-acquisition, the deal doesn't make sense to most apartment buyers. Yet taking down the existing building and putting up 15 to 20 condos or townhomes and selling them for an average of \$1.4 million each would generate a multi-million return for a buyer/developer.

SALES OVERVIEW

Through mid-2017 and regionally, Costar tracked 370 apartment community sales which is off pace compared with previous years' sales with five units or more. In 2016, 817 apartment communities were sold, 805 traded hands in 2015 and 797 multifamily/rental communities sold in 2014. Every property that comes to market gets multiple offers, whether the offer is priced or unpriced.

The average price per unit was \$435,005 in San Mateo County, \$324,452 in Santa Clara County and \$232,452 in Alameda County. On a price per square foot basis, sales of San Mateo County apartments was \$492.36 while it was \$413.06 in San Clara County and \$296.68 in Alameda County. Average capitalization rates were

3.7%, 4.0% and 5.1% in those counties, respectively.

San Francisco topped the region with the highest price per foot (\$544) and per unit (\$447,526). These are all-time high-water marks and have topped previous market peaks in 2000 and 2007.

The market for apartment sales ranging from 5 to 50 units is just as competitive as larger apartment community sales. There is also limited supply in this category, as owners are getting top dollar on rents and cash flows are positive. In most cases replacing that predictable and low-risk income is difficult to do for both Mom & Pop investors and high-net worth owners.

Looking ahead, there is cause for optimism for more supply to come to our housing-constrained region and particularly, more affordable housing.

Last year the California state legislature passed Senate Bill 35, which is intended to streamline housing approvals and make it more difficult for local NIMBYs to kill projects or cause inordinate delays by demanding ever-changing requirements and conditions on a one-off basis during the approval process. Affordable housing developers are particularly vulnerable to delays because they operate under such tight funding constraints and timelines. Under SB 35, communities are protected because development must be consistent with existing (local) zoning, density and design standards. If the bill is successful and enforced, more housing supply is likely to be built.

For 2018, the Colliers' teams that specialize in multifamily sales expects prices to rise as sales volume declines due to lack of inventory and competition for every apartment community that goes on the market. And as long as the regional economy continues to hold up and add jobs, demand for housing will outpace supply for both apartment units and apartment investors.



The rental market has been torrid since 2013, with average rents rising 5%-10% annually in most submarkets. Rising rents have spurred calls for rent control in many Bay Area communities and forced renters-by-necessity to move to more affordable communities — often to different counties. The five-year rental rate growth was 34.1% in Santa Clara County, 34.6% in San Mateo County and 34.8% in Alameda County.

Multifamily Sale Activity				
Significant Silicon Valley Transactions - 2017				
PROPERTY ADDRESS	UNITS	SELLER	BUYER	\$ PER UNIT
350-360 S Market Street, San Jose	213	Capri Investment Group	Essex Property Trust	\$626,761
4740-4758 El Camino Real, Los Altos	167	Sares-Regist Group	Stanford University	\$781,437
1725 S Bascom Avenue, Campbell	168	Bay West Development	Land and Houses USA, Inc.	\$707,723
355 N Wolfe Road, Sunnyvale	192	AvalonBay Communities	Greystar Real Estate	\$557,292
150 S Taffe Street, Sunnyvale	133	Carmel Partners	Shorenstein Properties	\$781,955

2018 SILICON VALLEY MARKET FORECAST REPORT

HOTEL INVESTMENT MARKET BOOMS WITH THE REST OF SILICON VALLEY - Sometime this year or early next, approximately 4,000 hotel rooms spread across 25 or so new hotels that are being built in Silicon Valley will be added to the region's hotel inventory. That's about 10% of the current supply of some 420 hotels with an estimated total of 46,800 hotel rooms, according to Smith Travel Research. These are hotel projects that have already broken ground and the new rooms are likely to be quickly absorbed based on the region's ongoing economic strength and strong demand for hotel rooms, especially during the week and increasingly in downtown San Jose.

On week days, check out the parking lots of any limited service hotel, extended stay or motel property in the lower-end of the nightly room-rate range and the lots are full of construction trucks. Workers and entire crews are coming in from the Central Valley, Sacramento Valley, as far north as Redding and Eureka, and across state lines in Nevada and Arizona to keep up with the labor supply for construction. They stay the week, go home on weekends. The San Jose/Silicon Valley Business Journal's Crane Watch — updated in mid-November last year had 83 projects in San Jose alone, each of which is 100,000 square feet or more of construction.

On a Tuesday or Wednesday evening, walk through the lobby bar of any mid-range or upscale hotel in Mountain View, Sunnyvale, San Jose — you name the city, and they are filled with mostly men in casual business attire. Those business men and women are drawn here as tech-driven business travelers. The world's technology epicenter puts a lot of "heads in beds," as the hospitality marketing slogan goes.

Travelers that try to book a business-class hotel room on short notice are likely to be pushed south to Morgan Hill or to the East Bay, because Silicon Valley hotels are sold out during the week.

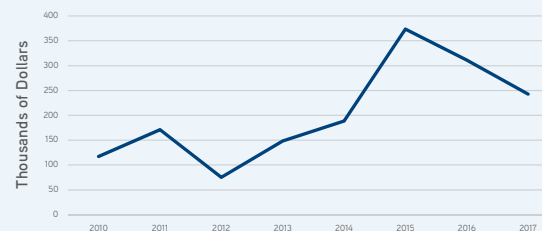
According to a May, 2017 press release issued by Mineta San Jose International Airport, more

than a million more passengers passed through the airport in a 12-month period from April 1, 2016 to March 31, 2017, or 11.03 million passengers during the most recent annual count versus 9,997 million during the 2015 to 2016 time period. In the past year the airport has added four new carriers — Air Canada, Air China, British Airways and Lufthansa, as well as gained additional destinations on American, Alaska and Southwest airlines. In terms of percentage of added seats, San Jose International is the fastest growing in the 50 busiest U.S. Airports.

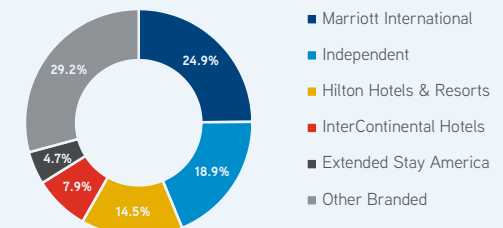
Downtown San Jose currently has about 2,800 hotel rooms, nestled among an inventory of some 8 million square feet of office space. If Google doubles the amount of office inventory to the downtown — as currently expected to do, it stands to reason demand for new hotel construction will follow. Currently, there are approximately over 1,000 hotel rooms in various stages of proposals for downtown San Jose.

In a new bet on Google's plans, Kade Development has recently closed on a parcel at Stockton and Julian to build a 10-story hotel and mixed-use development. Kade paid nearly twice what other prominent downtown San Jose development companies had bid for the land. They plan on building a 250-room Courtyard/Residence by Marriott dual-branded hotel and 10 residential condos. This is a big bet on the future of the Diridon transit village and Google Complex as the site today is not an obvious hotel site. However, if all the plans come to fruition the property would be in the center of the area's transformation.

Silicon Valley Hotel
Average Sale Price per Unit



Silicon Valley Hotel Supply
Market Share



COLLIERS INTERNATIONAL
HOTELS

HOTEL OCCUPANCY AND RATE AVERAGES AND NEW SUPPLY

While not inclusive of the entire South Bay, the Monthly Hotel Occupancy Report compiled by the San Jose Convention and Visitors Bureau (SJCVB) provides a solid trend line on core occupancy, average daily rate and RevPar (revenue per available room). These reports cover 12 hotels within walking distance of the San Jose McEnery Convention Center and a few hotels that are slightly beyond walking distance to the center.

12 Reporting Convention Hotels - 2017 vs 2016 - YTD through November (2017)

Year	Occupancy	Avg Daily Rate	RevPAR
2016	79.3%	\$207.35	\$164.36
2017	77.9%	\$211.87	\$164.98
YOY%	-1.8%	2.2%	0.4%

By comparison, in August 2012, the report stated that the downtown hotels averaged an occupancy rate of 71.7%, which was up almost 10 points from the previous seven-month average of 61.01%. The Average Daily Room Rate (ADR) for all of the downtown and uptown hotels jumped from \$128.65 at the beginning of 2012 to \$139.51 by August of that year. By January 2014, the occupancy rate settled at 66.05% yet the ADR kept climbing, to \$153.38. The average daily rate increased again in a year's time, hitting \$178.67 in January of 2015, even when average occupancy went up to 69.06%, according SJCVB.

While the average daily room rate has obviously increased in recent years as the regional economy boomed, it's worth remembering that these are average daily rates. Call any of the downtown hotels now for a mid-week rate and expect quotes from the low \$300s for a night to high \$400s, and perhaps more.

On a broader scale and valley wide, there are 85 proposed new hotel projects and if all of them were built, it would deliver over 13,000 hotel rooms to the market. Could all of them be absorbed by 2020? It depends on the economy.

The biggest players in the market are Marriott, which represents 25% of the market across its 30 or so brands, and Hilton, which has 15% of the Silicon Valley market with its assorted brands owned and operated by various franchisees. Independent hotel operators make up nearly 20% of the hotel property owners in Silicon Valley.

SALE PRICES ARE ESTABLISHING NEW HIGH-WATER MARKS

Given the strength of the market, it's no surprise that sale and construction costs are topping previous highs. Bidding is heavy for good sites, with smart sellers looking for the most qualified buyers — buyers with the capital, experience and reputations for solid execution with their business plans.

Construction costs for mid-tier and select service hotels, like an AC Hotel or Starwood's Aloft brand, for example, are running between \$225,000 and \$275,000 per room — excluding land. Land prices vary widely, from \$80,000 per unit to more than \$100,000 per unit for the most desirable locations, such as on the El Camino Real.

Local hotel owners — typically high net worth individuals and families that own or control a couple or a handful of hotels, are currently enjoying strong cash flows at their properties and are eager to expand their portfolios if the right opportunities come along.

In terms of recent sales, the Domain Hotel in Sunnyvale is reflective of the huge leaps in valuations that hotel assets have taken in the last 10 years.

The Domain Hotel was originally built in the mid-80s and operated as a 136-unit full service Radisson Hotel until 2007, when a new buyer converted the property to a boutique hotel. The new operator at the time of that sale became Joie de Vivre Hotels. The sale was for an undisclosed amount though rumored to be under \$20 million with a \$3 million renovation cost. That ownership group turned around and sold it in December of 2014 for \$42 million. It then sold again in October 2017 to a Singaporean group for roughly \$62 million, or about \$455,000 per key,

which is a huge number for an older existing asset in need of renovation.

The new high-water mark for a hotel sale in Sunnyvale occurred in October 2016, when Newport Beach-based T2 Hospitality sold the hotel they had built for Courtyard by Marriott at 660 West El Camino for \$517,000 per room, or \$75 million for the hotel. The buyer was Hersha Hospitality Trust, a New York Stock Exchange-traded REIT. The Hersha acquisition is reflective of another trend in the Silicon Valley hospitality property industry: hotel investors from outside of the region have earmarked the valley as a place they want a presence. Hersha is based in Harrisburg, PA.

In other noteworthy and recent sales, in June of last year a Korean resorts operator, Aju Hotels and Resorts, paid \$64 million for the downtown Westin Hotel, which originally was the Sainte Claire Hotel. Located at the corner of Market Street and West San Carlos Street, the deal pegged the sale per room at roughly \$376,000 for the 171-room hotel that also has an Il Fornaio restaurant on the ground floor. The seller was an entity controlled by the Wolff family.

And as the Business Journal reported in mid-December, San Jose's iconic Fairmont Hotel was slated to sell and it did, closing during the first week of this year. The hotel was originally built in 1987 (the first, 20-story building) with public funding from the then San Jose Redevelopment Agency along with the Swig Family and local developer Kimball Small. In many ways the Fairmont set in motion what is happening today in downtown San Jose, with its seemingly bright future. With the hindsight of 30 years now, that was a visionary and bold development play that struggled to survive as a hotel entity in its early days. After all, the 1990 recession was nearly as brutal as the recent Great Recession. San Ramon-based Eagle Canyon Capital agreed to pay roughly \$250 million, or \$310,559 per room for the 805-room hotel at 170 South Market Street, buying the asset from longtime owner Maritz, Wolff & Co.



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NATIONAL TRENDS

In October 2017, there were 4,869 hotels in the development pipeline in the U.S., according to Statista, The Statistics Portal. The number of new hotels has been steadily increasing on a monthly basis from a five-year low of 2,711 recorded by Statista in May 2012.

Hotels have been one of the top performing real estate asset classes in the last five years, according to Lazard Asset Management's July 2017 report. In US Real Estate Indicators Report, Lazard stated that in the last five years hotels have cumulatively returned 71.7%, which is third among other asset classes. Industrials, not surprisingly, were at the top of the heap and returned 118.6% while self-storage produced the second-best returns in the period, at 81.6%. In the last 12 months hotels were the best performing property type and returned 10.4%, according to Lazard. In the one-year category, industrials were second at 9.0% while multifamily was third at 8.8%.

Operationally speaking, RevPAR (revenue per available room) growth through the middle of 2017 remained stable compared with a year earlier -- \$83.21 versus \$81.18 in mid-2016, and are forecast to rise to \$85.28

and \$87.67 in 2018 and 2019, respectively, or 2.49% next year and 2.8% in 2019. Both numbers are in line with current and projected inflation rates. Operating income increased moderately above the rate of inflation and cap rates rose modestly, according to HVS Market Report. Cap rates for select service hotels have bumped up to 8.5% from 8.25%. HVS Global Hospitality Services is a consulting firm based in Mineola, New York that specializes in providing information services to the hospitality industry.

Hotel/Hospitality Sale Activity

Significant Silicon Valley Transactions - 2017

PROPERTY ADDRESS	UNITS	SELLER	BUYER	\$ PER UNIT
Fairmont San Jose - 170 S Market Street, San Jose	805	Maritz, Wolff & Co	Eagle Canyon Capital	\$275,342
Hilton San Jose - 300 Almaden Boulevard, San Jose	353	DiNapoli Capital Partners	Han's Holding Group	\$262,040
Hyatt Place - 282 Almaden Bouelvard, San Jose	236	Ultima Hospitality	Blackstone Group	\$276,784
Westin San Jose - 302 S Market Street, San Jose	171	Wolff Urban Development	Aju Hotels & Resorts	\$374,269
Holiday Inn San Jose - 1350 N First Street, San Jose	355	Aju Hotels & Resorts	Dow Hotel Company	\$173,944

2018
SILICON VALLEY
MARKET FORECAST
REPORT

AMAZON AND ECOMMERCE ARE CHANGING RETAIL BUT NOT KILLING IT -

In retail, regardless of the year or presence of any “disruptors,” there are always winners and losers. Tastes, fashions, and “likes” change with the times. So do discretionary spending budgets by consumers. Yet even there, one cannot assume that in a good economy, luxury goods sell well enough for those retailers to open more stores. In recent years in Silicon Valley and other markets across the U.S., discount brands such as Ross Dress for Less, T.J. Maxx, Nordstrom Rack and Gap’s value-oriented brand, Old Navy, have opened more locations than their upscale competitors.

As such, the winners and losers (ins and outs) include:

OUT: Department stores (some of them, anyway)

IN: Upscale burgers and Hawaiian poke

OUT: Apparel brands and stores (probably the category with more bankruptcy filings than any other)

IN: “Experienced retail”

OUT: Any retailer without an online, eCommerce strategy and marketplace presence

IN: Fitness centers and athletic clubs in grocery-anchored neighborhood serving shopping centers

DEPENDS: Malls!

Retail watchers and analysts are saying that of the approximately 1,200 malls in the U.S., some 300 of them will be shuttered in the next 24 months. That sounds terrible, but then think about it, isn’t a 25% failure rate common in most any other industry? Here in Silicon Valley, more tech companies fail than succeed every year.

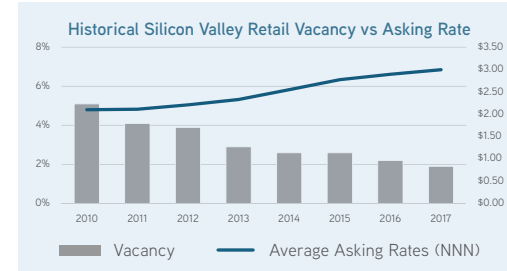
The winners in retail adapt and continue to

adapt. That’s why they are winners.

Real estate remains a “highest and best land use” industry. Colliers was recently involved in the Mountain View sale of an older shopping center that had traditional, single-story retail property with surface parking and a very low 27% floor-area-ratio (FAR). The buyer is putting in four and five story multifamily housing with a 400% FAR. This scenario will continue to play out as the valley changes from a purely urban environment to a semi-urban environment with greater development density. Much of the land that will provide the future housing stock for people here will have been shopping centers at one point in its history.

Amazon bought Whole Foods and caused a lot of head scratching. The first change we see in the integrated company is a slight shift from “whole paycheck” to a smattering of value-oriented offerings and products. But isn’t it plausible that Amazon’s strategy in buying the Austin-based upscale grocer was to address the most costly and challenging aspect of the delivered packages industry — “the last mile”? Yes, it is. Could Whole Foods be a pick-up destination for your online purchases in the near future? Why not.

In fact, Amazon.com said during the holidays it has expanded options for in-person returns with



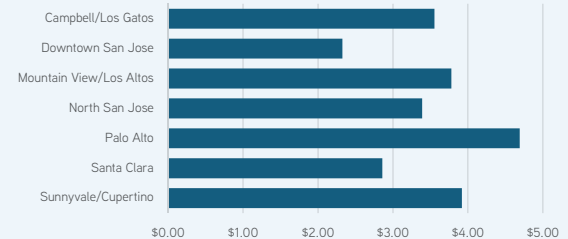
a network of 2,000 “locker” locations, including 400 at its Whole Foods stores, where customers can drop off items to be returned. It’s a brilliant strategy in that it’s guaranteed to generate grocery or prepared take-out food sales from dropping off packages to be returned.

There’s a reason why Best Buy, which is arguably the best “showrooming” retailer out there, has one of its biggest stores in Silicon Valley at the epicenter of the valley for retail — at the intersection of Stevens Creek and Winchester boulevards. Their sales strategy at that location is the same as it is in other locations — a blend of brick and mortar and online. So why pay the extra rent for the San Jose store? It’s cheap advertising.

The vertical integration of traditional retailing and eCommerce is on, and in spades. Walmart’s digital strategy is nothing less than to compete with Amazon. Amazon, as previously mentioned, appears poised to have a physical presence to support its core business. Even “online stores only,” like men’s apparel retailer, Untuckit, is opening stores in major U.S. cities, and for the same reason that Best Buy has that Stevens Creek and Winchester store; or, for that matter, the sheer reason for Madison and 5th Avenues to exist in New York — as advertising venues that connect with more customers.

Retail Market Vacancy Rates

Retail Market Asking Rates



The CVS purchase of Aetna Inc. is another example of blending product with services and will change the nature of retail centers going forward. Getting to the consumer is key, and it's driving the evolution of retail.

Experiential retail is replacing some of the apparel space in malls and shopping centers. Mall operators nationwide are reducing their exposure to apparel-focused retail tenants by as much as 25% per center.

Eli Reinhard's Almaden Ranch shopping center at Highway 85 and Almaden Expressway in San Jose is probably the last single-story, surface-park shopping to be built in Silicon Valley, but it's also an example of experiential retail —there's a bowling alley inside anchor tenant Bass Pro Shop's Uncle Buck's, which is adjacent to the Missouri-based outdoor outfitter new South Bay store. Further, multiple South Bay shopping centers including Valley Fair and Town Center in Sunnyvale are adding upscale theaters that offer table service via iPads with beer, wine, quality food and reclining chairs, to enhance the theater experience for adults.

In terms of broader trends, retail footprints are getting smaller, with retailers shifting to smaller in-store inventories and restocking their shelves with better online ordering systems. Drug stores are 15,000 square feet with drive-thru pick-up windows, versus 30,000-foot, walk-up stores of yesteryear. Recreational fitness is filling in "shop spaces" and are good fits for grocery-anchored centers next to nail salons — these are the yoga, Pilates and martial arts studios. Twenty years ago landlords prohibited fitness centers as tenants, such as 24 Hour Fitness, ClubSport, LA Fitness, because the gym users would tie up valuable parking spots for hours. No longer. Fitness centers are not only good paying tenants, landlords have realized, but they are (foot) traffic generators, too.

The final trend worth noting concerns restaurants, with rising labor costs associated with the lack of a sufficient labor pool. Immigration policy is hurting restaurant

labor as much as it is hurting the construction industry. This chain of events is causing some restaurants to consider technology solutions, such as adding tablets for ordering at tables versus table-side service.

As for rental rates and vacancy data, a year ago in this report Colliers stated that the blended Class A and Class B vacancy rate was near 3.5% -- the lowest it had been in the 10 years since Colliers began tracking retail data in the region's major shopping centers and malls. That rate didn't change much in the past 12 months. Most vacancies are reflective of obsolete space.

Retail rents, which have escalated annually in recent years, are beginning to flatten out, though restaurants and Class A shopping centers still fetch premiums over older locations and non-food retail. Rents for quality space range from \$4 to high-\$4s, while mom and pop rents vary from under \$2 a foot in older strip centers to \$3 per foot in better areas.

Online retail sales in the U.S. accounted for 13.9 percent of all transactions in 2016, however only one-third of those online sales are from retailers with no brick and mortar presence, according to the Center for Retail Research. Colliers' retail brokers estimate that Amazon alone may have accounted for 200 of those basis points. Someday eCommerce may go to 20% or even 30%, but it's not going to take over the world.

THE EVOLUTION OF ECOMMERCE

Omnichannel is a cross-channel business model that companies use to improve their customer experience, and eCommerce is a subset of omnichannel shopping. Given the preponderance of this word's usage of late (eCommerce), we offer a brief history of it. After all, omnichannel shopping is reaching almost every sector of our economy, and not just retail. Healthcare, finance, government and contact centers are other sectors that feature omnichannel user experiences these days.

"Omnis" is Latin for "every/all" and here suggests the integration of all physical channels (offline) and digital channels (online) to offer a unified customer experience. According to Frost & Sullivan, omnichannel is defined as "seamless and effortless, high-quality customer experiences that occur within and between contact channels."

Until the early 1990s, retail was either a physical brick-and-mortar store or catalog sales where an order was placed by mail or via telephone. Sale by mail order dates back to when British entrepreneur Pryce Pryce-Jones set up the first modern mail order in 1861, selling Welsh flannel. Catalog sales for an assortment of general goods started in the late 1800s when Sears & Roebuck issued its first catalog in 1896. In the early 1900s, L.L. Bean started its catalog business in United States.

AOL, CompuServe and Prodigy experimented with selling through their proprietary online services in the early 1990s. These companies started sales channel expansion, while general merchants had evolved to department stores and big-box store electronic ordering. In August 1994, NetMarket processed the first Internet sale where the credit card was encrypted. Shortly thereafter, Amazon.com was founded and the eCommerce sales channel was established. Mobile commerce arrived in 1997, and multichannel retailing really took off.

Omnichannel's origins date back to Best Buy's use of customer centricity to compete with Walmart's electronic department in 2003. The company created an approach that centered around the customer both in-store and online, while providing post-sales support. Omnichannel was coined as a form of "assembled commerce" and spread into the healthcare and financial services industries.



Omnichannel is a cross-channel business model that companies use to improve their customer experience, and eCommerce is a subset of omnichannel shopping. Healthcare, finance, government and contact centers are other sectors that feature omnichannel user experiences these days.

Retail Leasing & User Sale Activity				
Selected Colliers International Transactions - 2017				
PROPERTY ADDRESS	SQUARE FEET	LANDLORD/SELLER	TENANT/BUYER	TYPE
15700 Monterey Road, Morgan Hill	27,937	Associates of Sutter Hill	Mike Atkar	User Sale
850 E Dunne Avenue, Morgan Hill	26,324	Longs Drugs of California	Ostrich, Inc.	User Sale
4050 Stevens Creek Boulevard, San Jose	22,630	John Morgan	Asian Pacific Industries	Direct Lease
4355 Stevens Creek Boulevard, Santa Clara	20,000	Hersley & Marchette Family	DGDG 17	Direct Lease
6004 La Madrona Drive, Scotts Valley	8,993	Polsefam LLC	Morgan Stanley Smith Barney	Lease Renewal

2018
SILICON VALLEY
MARKET FORECAST
REPORT

ANOTHER YEAR IN WHICH INVESTOR AND USER APPETITES FOR SILICON VALLEY PROPERTY DOES NOT LET UP -

Entering the 10th year of an economic expansion that is largely powered by technology firms, the Silicon Valley investment market for commercial property has reached a level of maturity and perhaps exclusivity that is mostly reserved for stalwart investment firms with extensive experience and deep pockets.

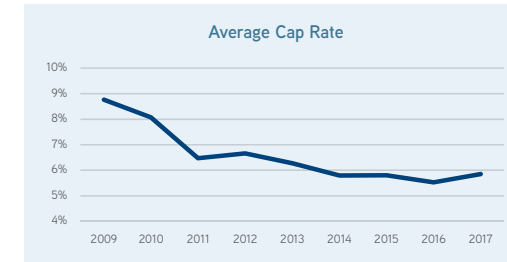
Witness Tristar Capital's \$290 million purchase of a 15-acre office in Sunnyvale from Rockwood Capital, which worked out to an enviable \$831.15 per foot for the 350,000 square feet of office space that is leased long term to Apple. Given the tenant, it clearly is a low-risk investment for the New York-based firm but it's also a statement about Silicon Valley's long-range viability as an investment target. At the time of the sale, Tristar's President David Edelstein said the investment marked the firm's first investment in Silicon Valley, "but it won't likely be the last."

Another trend that the Tristar deal points to is the emphasis on core and core+ investing, as the market for value add was pretty much absorbed in recent years. The Bay Area's tech driven, strong economy and underlying real estate fundamentals with both high occupancy rates and high rental rates are the primary reasons for the emphasis on core and core+ assets.

The Tristar acquisition wasn't the only deal last year in which Apple was a tenant. In a user sale, Applied Materials bought Sunnyvale Research Center on East Arques from iStar (unrelated company to Tristar), and Apple leases 100 percent of the property through 2023. The four-building, 225,000-square-foot campus on 14 acres has development potential of about one million square feet. Applied is located near its recently acquired property so the transaction likely reflects the firm's interest in securing its future growth in the region.

Core by definition is safety and the valley remains attractive to California-based investors as well as firms from outside the market and foreign buyers.

San Francisco-based DivcoWest late last year picked up Riverpark Towers for a combined \$283.45 million (along with financial partner Rockpoint Group), or \$470 per foot for the Class A buildings. Divco is no stranger to downtown San Jose investing and the takeaway by Colliers is that prudent investors do not believe we are at the top of the market. Yet even if we are close to it, with Google's intent to build 6 million to 8 million square feet in Downtown San Jose combined with the planned transformation of Diridon Station into the West Coast's largest multimodal transportation hub, it makes San Jose's urban core one of the most attractive investment venues in the region.

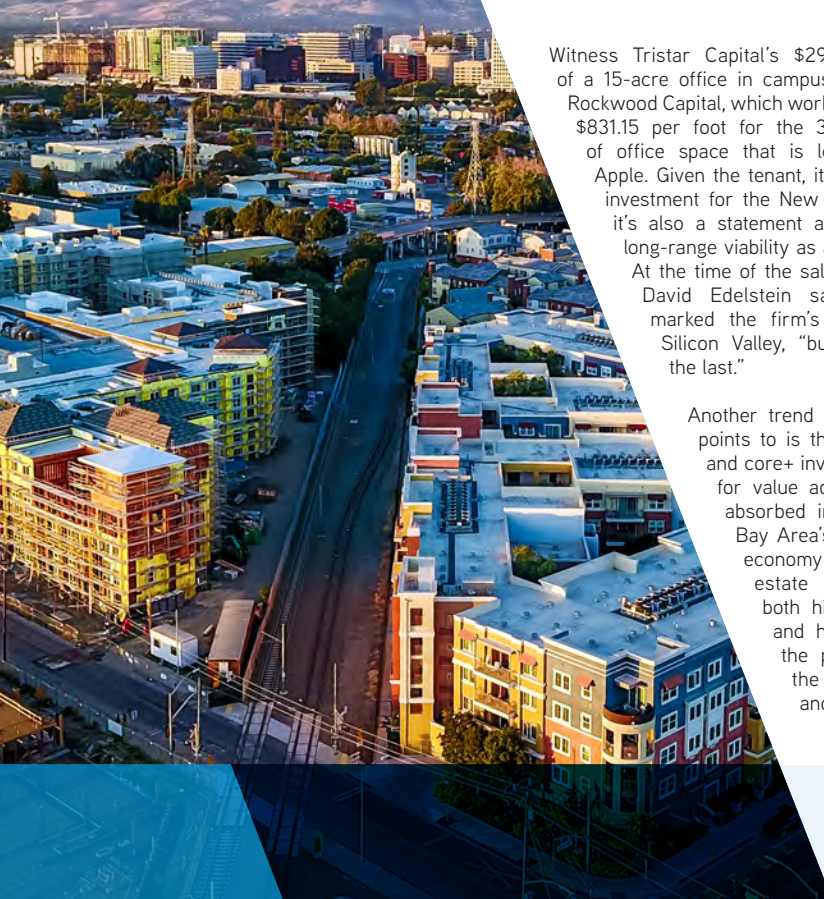


Foreign buyers from almost all corners of the globe are part of Silicon Valley's investment mix.

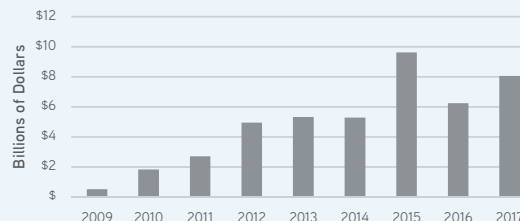
Canada and Singapore were among the most active nations in 2017 to buy U.S. commercial real estate, while Chinese investor activity waned compared with levels from previous years. China's U.S. transactions dipped by 55% through the third quarter last year, according to Real Capital Analytics (RCA). In 2016, Chinese players were the largest investor group in the U.S. Overall, cross-border capital fell to an 11% share of total U.S. market activity last year and was off the steepest — by 15 percent, in the six major U.S. metros RCA tracks, including San Francisco and Silicon Valley. On a year-over-year basis and through the third quarter last year, foreign investment in U.S. real estate dipped 2%, RCA reported.

That stated, German, Middle Eastern and South Korean capital remains active in the marketplace.

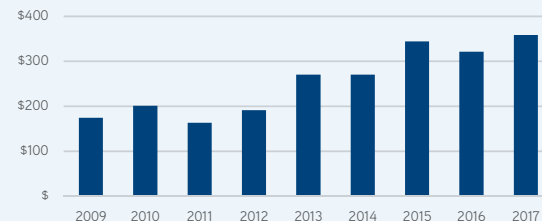
As for 2018, the Association of Foreign Investment Professionals (AFIRE) annual survey to global investors found that for the second year in a row, foreign investors preferred industrial properties over all other sectors. In prior years multifamily was the preferred investment choice for global investors. The growth of eCommerce, omnichannel



Transaction Volume



Average Price Per Foot



retail and the legalization of marijuana were market drivers cited by AFIRE as prime reasons for the switch to industrial properties.

Other noteworthy patterns that emerged in 2017 include an uptick in sales activity in the region's secondary and tertiary markets of Fremont, Milpitas, North San Jose, Downtown San Jose and South San Jose. In the vein of "a rising tide floats all boats," each submarket picked up where Santa Clara, Sunnyvale and Mountain View were the previous three years.

Related, and this has been an ongoing trend in recent years, any property for sale within walkable distance to a Caltrain or BART station gets numerous offers.

The biggest shift to investment activity in the market in recent years, however, is the new phenomenon of tech titans becoming some of the market's biggest landlords.

In recent years, Google and Apple have dominated Silicon Valley's real estate market with each firm assembling approximately 14 million square feet of leased and increasingly owned properties.

Last July Google took ownership of 52 Sunnyvale parcels from CBRE Global Investors for more than \$820 million, for example. As 2017 wound down, hardly a week passed in which Google was not in the news for another land acquisition.

By way of perspective, Prologis owns 10.81 million square feet in Silicon Valley (mostly in Fremont), The Sobrato Organization owns 8.03 million square feet of commercial property locally (not counting apartments), Hudson Pacific Properties Inc. has 7.3 million feet, Irvine Company owns 6.5 million square feet and DivcoWest has about 6 million square feet in the valley, according to an April/May 2017 list of the biggest property owners in Silicon

Valley that was published by the San Jose/Silicon Valley Business Journal.

In addition to the big tech companies buying real estate, there were a number of deals last year involving tech and non-tech companies that determined owning versus leasing is best for their occupancy strategies.

For example, Align Technologies purchased a 130,000-square-foot office/R&D building in North San Jose from LBA Realty for \$44 million, Silicon Valley Mechanical bought a 72,000-square-foot industrial/R&D building near the I-680 and I-880 interchange for \$11 million and Comotomo Inc. paid nearly \$8 million for an 18,000-square-foot office/R&D building in Sunnyvale's Moffett Park.

Historically speaking owning versus leasing is uncommon for tech companies, most of which prefer to be nimble and flexible regarding their occupancy needs. For the tech companies that choose to own Silicon Valley real estate, Colliers suspects it has more to do with their business plans and in terms of potential expansion, these companies would likely lease additional facilities locally or open new satellite locations in cities such as Seattle, Salt Lake, Denver and Austin — if they have not already.

One of the remarkable aspects about this investment cycle is the amount of discipline to it — by banks, insurance company lenders, developers and investors themselves. There's more equity in every deal than in previous cycles, with leverage typically ranging from 50% to 75%, unlike the 80% and 85% the market experienced pre-2007.

While the perception may be that only Class A assets are getting investor attention at the moment, there's a buyer for every deal if the properties are priced appropriately and realistically. There are some value add opportunities in Class B offices, R&D facilities and industrial properties, but if the properties are occupied at the time of

sale, buyers can immediately enjoy positive cash flow with only limited capital investment or management responsibilities.

In summary, the investment sales market in 2017 looked a lot like 2016, and 2016 looked a lot like 2015. Last year's transaction volume was good yet unexceptional, while price appreciation moderated and capitalization rates and yields remained steady.

By the numbers, Colliers International tracked 360 sale transactions (office, R&D, industrial) with pricing information on 320 of those deals. Volume was \$6.61 billion — meaning well in excess of \$7 billion if one factors in all available data. That's a slight increase in the \$6.5 billion in sales volume during 2016. In total, some 19.4 billion square feet of commercial property was transferred from one ownership entity to another. The high watermark for property sales in this cycle occurred in 2015, when \$9.9 billion worth of commercial property sold in the valley.

The 2017 average per-square-foot sale price for blended office, R&D and industrial properties was \$350.77 a foot, compared with \$306 a foot in 2016. Generally speaking capitalization rates have stabilized after steep annual declines from the depth of the recession when the blended cap rate was 8.1% (in 2010). In recent trades, cap rates for office properties ranged from 4% to 5%, hovered around 5% for R&D properties and were close to 4% for industrial assets — and even sub-4 for core, Class A industrial product.

For 2018 Colliers does not foresee any wholesale changes to the investment market in Silicon Valley. If anything, local tech companies may take the pedal off the gas to buy real estate for their own occupancy while outside investors will continue to look for Silicon Valley commercial property assets to add to their respective portfolios.



The biggest shift to investment activity in the market in recent years, however, is the new phenomenon of tech titans becoming some of the market's biggest landlords.

In recent years, Google and Apple have dominated Silicon Valley's real estate market with each firm assembling approximately 14 million square feet of leased and increasingly owned properties.

Investment Sale Activity

Selected Colliers International Transactions - 2017

PROPERTY ADDRESS	SQUARE FEET	LANDLORD/SELLER	TENANT/BUYER	PROPERTY TYPE
3000-3200 Tannery Way, Santa Clara	940,564	Menlo Equities	CalSTRS	Office
5215-5225 Hellyer Ave, San Jose	351,902	Professors Capital	Vertical Ventures LLC	R&D/Office
611-695 River Oaks Pkwy, San Jose	271,582	PSAI Realty Partners	Washington Holdings	R&D/Office
3335 Scott Blvd, Santa Clara	245,830	Menlo Equities/Beacon Capital	CalSTRS	Office
1050-1090 Arques Avenue, Sunnyvale	224,548	iStar Financial	Applied Materials, Inc.	R&D/Office

Silicon Valley	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	11,068,700	12.05%	16,398,481	10.62%	2,021,159	3.19%	1,254,473	3.16%	30,742,813	8.80%
New Construction	1,728,351		0		0		0		1,728,351	
Net Absorption	1,473,550		-412,339		83,267		155,556		1,300,034	
Gross Absorption	3,634,423		2,388,555		534,147		675,899		7,233,024	
3Q17										
Total Available	10,944,769	12.17%	16,795,279	10.85%	2,178,726	3.45%	1,611,521	4.08%	31,530,295	9.08%
New Construction	2,236,017		101,374		0		0		2,337,391	
Net Absorption	1,468,728		-482,959		-79,146		-60,374		846,249	
Gross Absorption	3,002,926		1,088,278		480,953		478,154		5,050,311	
2Q17										
Total Available	10,218,525	11.67%	15,661,009	10.15%	1,969,281	3.13%	1,271,044	3.20%	29,119,859	8.45%
New Construction	3,447,606		0		0		0		3,447,606	
Net Absorption	2,666,093		300,221		9,383		-274,540		2,701,157	
Gross Absorption	4,663,414		2,088,549		579,008		275,700		7,606,671	
1Q17										
Total Available	9,883,960	11.75%	15,246,997	9.89%	2,086,399	3.31%	985,258	2.46%	28,202,614	8.26%
New Construction	1,133,270		296,000		674,254		174,900		2,278,424	
Net Absorption	164,090		-24,991		53,661		50,356		243,116	
Gross Absorption	1,732,689		1,955,068		664,792		524,419		4,876,968	
TOTALS										
Total Available	8,545,244		397,374		674,254		174,900		9,791,772	4.43%
New Construction	5,772,461		-620,068		67,165		-129,002		5,090,556	
Net Absorption	13,033,452		7,520,450		2,258,900		1,954,172		24,766,974	

Campbell	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	532,222	20.94%	121,630	8.83%	9,815	0.99%	0	0.00%	663,667	13.25%
New Construction	177,815		0		0		0		177,815	
Net Absorption	9,061		-7,111		15,501		0		17,451	
Gross Absorption	34,732		28,911		18,501		0		82,144	
3Q17										
Total Available	355,616	15.10%	150,541	10.92%	25,316	2.54%	0	0.00%	531,473	11.02%
New Construction	0		0		0		0		0	
Net Absorption	-40,367		0		0		0		-40,367	
Gross Absorption	48,185		32,397		11,649		0		92,231	
2Q17										
Total Available	324,886	13.79%	126,212	9.16%	34,735	3.49%	0	0.00%	485,833	10.08%
New Construction	0		0		0		0		0	
Net Absorption	-10,800		30,519		8,143		0		27,862	
Gross Absorption	20,335		30,680		37,211		0		88,226	
1Q17										
Total Available	305,003	12.95%	131,731	9.56%	63,379	6.37%	0	0.00%	500,113	10.37%
New Construction	0		0		0		0		0	
Net Absorption	-45,035		-2,903		-27,205		0		-75,143	
Gross Absorption	40,215		19,377		7,842		0		67,434	

Cupertino	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	2.96%	26,416	0.85%	0	0.00%	0	0.00%	239,428	2.32%	8.80%
New Construction		0		0		0		0		
Net Absorption		0		0		0		14,367		
Gross Absorption		0		0		0		45,591		
3Q17										
Total Available	3.61%	26,416	0.85%	0	0.00%	0	0.00%	286,131	2.78%	9.08%
New Construction		0		0		0		0		
Net Absorption		-9,926		0		0		-11,034		
Gross Absorption		0		0		0		18,169		
2Q17										
Total Available	3.30%	16,490	0.53%	0	0.00%	0	0.00%	253,535	2.46%	8.45%
New Construction		0		0		0		3,090,500		
Net Absorption		-12,868		0		0		3,079,965		
Gross Absorption		3,622		0		0		3,103,640		
1Q17										
Total Available	5.87%	16,842	0.53%	0	0.00%	0	0.00%	257,694	3.54%	8.26%
New Construction		296,000		0		0		296,000		
Net Absorption		296,000		0		0		299,823		
Gross Absorption		296,000		0		0		312,310		
Fremont										
Fremont	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	10.62%	2,682,709	13.04%	358,383	3.61%	93,379	1.11%	3,342,630	8.17%	13.25%
New Construction		0		0		0		0		
Net Absorption		-240,856		60,215		0		-184,116		
Gross Absorption		592,833		72,393		71,312		749,803		
3Q17										
Total Available	10.25%	2,759,217	13.27%	407,391	4.10%	27,000	0.32%	3,401,261	8.26%	11.02%
New Construction		0		0		0		0		
Net Absorption		-12,005		-63,434		149,758		86,156		
Gross Absorption		257,672		27,695		331,395		649,055		
2Q17										
Total Available	11.01%	2,706,719	13.21%	221,041	2.23%	221,361	2.62%	3,372,279	8.25%	10.08%
New Construction		0		0		0		0		
Net Absorption		-33,603		-42,644		0		-38,605		
Gross Absorption		381,168		52,352		43,200		540,173		
1Q17										
Total Available	12.78%	2,590,932	12.74%	230,695	2.32%	291,561	3.45%	3,372,294	8.28%	10.37%
New Construction		0		0		0		0		
Net Absorption		59,352		41,106		-140,808		-38,127		
Gross Absorption		198,467		216,206		37,374		465,384		

Gilroy	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	1.77%	116,205	31.23%	28,019	1.55%	0	0.00%	150,419	2.37%	8.80%
New Construction		0		0		0		0		
Net Absorption		0		-12,282		0		-12,282		
Gross Absorption		0		9,700		102,466		113,666		
3Q17										
Total Available	2.20%	116,205	31.23%	15,737	0.87%	102,466	2.69%	242,103	3.81%	9.08%
New Construction		0		0		0		0		
Net Absorption		-8,221		-2,400		0		-10,053		
Gross Absorption		0		0		0		1,300		
2Q17										
Total Available	2.14%	116,205	31.23%	13,337	0.81%	0	0.00%	137,037	2.21%	
New Construction		0		0		0		0		
Net Absorption		0		4,200		0		4,200		
Gross Absorption		0		34,909		0		36,417		
1Q17										
Total Available	1.93%	27,042	7.27%	28,037	1.73%	0	0.00%	61,842	1.00%	8.26%
New Construction		0		0		0		0		
Net Absorption		2,110		-1,200		0		980		
Gross Absorption		2,110		13,987		0		18,194		
Los Altos	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	10.11%	0	0.00%	0	0.00%	0	0.00%	120,212	10.11%	13.25%
New Construction		0		0		0		0		
Net Absorption		0		0		0		-22,526		
Gross Absorption		0		0		0		23,601		
3Q17										
Total Available	8.70%	0	0.00%	0	0.00%	0	0.00%	103,476	8.70%	11.02%
New Construction		0		0		0		0		
Net Absorption		0		0		0		2,215		
Gross Absorption		0		0		0		46,772		
2Q17										
Total Available	9.91%	0	0.00%	0	0.00%	0	0.00%	118,110	9.91%	10.08%
New Construction		0		0		0		0		
Net Absorption		0		0		0		-8,448		
Gross Absorption		0		0		0		14,886		
1Q17										
Total Available	7.90%	0	0.00%	0	0.00%	0	0.00%	94,161	7.90%	10.37%
New Construction		0		0		0		0		
Net Absorption		0		0		0		-2,787		
Gross Absorption		0		0		0		23,978		

Los Gatos	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	4.80%	0	0.00%	0	0.00%	0	0.00%	92,143	3.95%	8.80%
New Construction		0		0		0		0		
Net Absorption		0		0		0		-15,396		
Gross Absorption		0		9,487		0		52,519		
3Q17										
Total Available	4.55%	0	0.00%	13,244	27.27%	0	0.00%	97,814	4.32%	9.08%
New Construction		0		0		0		0		
Net Absorption		0		0		0		-413		
Gross Absorption		0		0		0		14,315		
2Q17										
Total Available	2.35%	0	0.00%	13,244	27.27%	0	0.00%	57,052	2.52%	8.45%
New Construction		0		0		0		0		
Net Absorption		1,400		0		0		1,606		
Gross Absorption		1,400		0		0		13,929		
1Q17										
Total Available	2.85%	1,400	0.42%	13,244	27.27%	0	0.00%	68,099	2.99%	8.26%
New Construction		0		0		0		258,750		
Net Absorption		0		1,500		0		267,960		
Gross Absorption		0		1,500		0		272,523		
Milpitas	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	8.61%	2,642,481	19.11%	82,611	2.81%	556,299	11.80%	3,385,340	14.92%	13.25%
New Construction		0		0		0		0		
Net Absorption		-501,066		-10,018		33,820		-499,556		
Gross Absorption		10,075		0		86,698		117,897		
3Q17										
Total Available	8.18%	2,669,462	19.42%	64,827	2.20%	606,997	12.87%	3,440,056	15.21%	11.02%
New Construction		0		0		0		0		
Net Absorption		-43,070		0		-115,999		-150,382		
Gross Absorption		198,538		15,878		0		229,748		
2Q17										
Total Available	8.10%	2,195,061	15.97%	61,527	2.09%	401,901	8.52%	2,756,247	12.19%	10.08%
New Construction		0		0		0		0		
Net Absorption		98,348		0		0		154,501		
Gross Absorption		241,299		4,680		0		305,510		
1Q17										
Total Available	12.27%	1,604,584	11.75%	8,949	0.30%	33,820	0.72%	1,795,540	7.97%	10.37%
New Construction		0		0		0		0		
Net Absorption		-9,283		10,018		0		-4,663		
Gross Absorption		106,198		11,890		48,000		178,540		

Morgan Hill	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	4.85%	110,491	3.84%	51,653	2.18%	0	0.00%	200,620	3.07%	8.80%
New Construction		0		0		0		0		
Net Absorption		0		30		0		1,470		
Gross Absorption		0		6,712		0		8,152		
3Q17										
Total Available	5.28%	90,491	3.15%	55,787	2.35%	0	0.00%	186,194	2.87%	9.08%
New Construction		0		0		0		0		
Net Absorption		15,998		-6,958		0		8,207		
Gross Absorption		17,518		0		0		17,518		
2Q17										
Total Available	4.50%	106,489	3.70%	48,829	2.06%	0	0.00%	189,370	2.92%	
New Construction		0		0		0		0		
Net Absorption		-3,498		-15,859		0		-19,357		
Gross Absorption		4,200		2,901		0		8,068		
1Q17										
Total Available	4.43%	102,991	3.58%	45,751	1.93%	0	0.00%	182,279	2.81%	8.26%
New Construction		0		0		0		0		
Net Absorption		-24,487		69,007		0		44,766		
Gross Absorption		4,200		134,139		0		141,779		
Mountain View	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	7.17%	636,257	4.56%	106,379	6.11%	0	0.00%	1,195,446	5.43%	13.25%
New Construction		0		0		0		0		
Net Absorption		69,633		-17,178		0		391,186		
Gross Absorption		290,093		18,872		0		858,287		
3Q17										
Total Available	14.59%	727,088	5.21%	106,051	6.09%	0	0.00%	1,754,716	7.97%	11.02%
New Construction		0		0		0		589,720		
Net Absorption		-107,297		-31,516		0		-28,371		
Gross Absorption		138,248		54,590		0		383,401		
2Q17										
Total Available	6.90%	562,452	4.04%	95,387	5.57%	0	0.00%	1,052,790	4.93%	10.08%
New Construction		0		0		0		0		
Net Absorption		44,075		9,336		0		91,138		
Gross Absorption		141,823		16,040		0		256,444		
1Q17										
Total Available	7.62%	640,218	4.60%	70,694	4.13%	0	0.00%	1,146,909	5.37%	10.37%
New Construction		0		0		0		0		
Net Absorption		-68,212		-1,989		0		-81,448		
Gross Absorption		91,512		32,953		0		150,282		

Palo Alto	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	6.29%	563,825	4.10%	46,854	4.11%	0	0.00%	1,278,501	5.00%	8.80%
New Construction		0		0		0		0		
Net Absorption		-94,460		19,900		0		-104,104		
Gross Absorption		94,994		27,400		0		320,137		
3Q17										
Total Available	6.09%	537,971	3.92%	48,729	4.31%	0	0.00%	1,233,782	4.83%	9.08%
New Construction		0		0		0		0		
Net Absorption		-18,885		94,570		0		63,308		
Gross Absorption		17,300		96,370		0		397,038		
2Q17										
Total Available	6.84%	427,118	3.11%	146,899	12.98%	0	0.00%	1,299,063	5.09%	8.45%
New Construction		0		0		0		0		
Net Absorption		6,515		-26,000		0		996		
Gross Absorption		27,310		0		0		204,878		
1Q17										
Total Available	7.22%	319,191	2.32%	157,899	13.74%	0	0.00%	1,238,488	4.81%	8.26%
New Construction		0		0		0		214,052		
Net Absorption		-77,634		10,240		0		163,129		
Gross Absorption		3,860		10,240		0		424,343		
San Jose	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	16.11%	6,340,943	14.79%	1,071,377	4.31%	501,733	2.95%	12,558,617	11.06%	13.25%
New Construction		0		0		0		574,338		
Net Absorption		475,156		20,046		119,236		383,979		
Gross Absorption		869,626		281,312		393,423		2,049,341		
3Q17										
Total Available	13.65%	5,980,363	14.08%	1,176,168	4.77%	786,696	4.67%	11,799,628	10.51%	11.02%
New Construction		101,374		0		0		101,374		
Net Absorption		-287,289		-59,314		-94,133		-601,850		
Gross Absorption		195,260		173,391		146,759		976,767		
2Q17										
Total Available	13.37%	5,841,795	13.79%	1,088,792	4.43%	545,620	3.23%	11,246,179	10.04%	10.08%
New Construction		0		0		0		357,106		
Net Absorption		81,687		90,680		-252,540		-105,110		
Gross Absorption		619,481		274,219		163,313		1,662,558		
1Q17										
Total Available	12.74%	6,022,086	14.26%	1,239,554	5.06%	555,923	3.28%	11,364,259	10.19%	10.37%
New Construction		0		674,254		174,900		849,154		
Net Absorption		112,562		-26,515		153,360		277,443		
Gross Absorption		1,078,305		141,530		354,841		2,070,718		

Santa Clara	Office	% Available	R&D	% Available	Industrial	% Available	Warehouse	% Available	Total	% Available
4Q17										
Total Available	22.80%	1,927,692	10.10%	201,661	1.76%	103,062	3.07%	5,697,604	11.60%	8.80%
New Construction		0		0		0		525,444		
Net Absorption		-23,652		5,908		2,500		705,404		
Gross Absorption		417,960		71,212		22,000		1,743,159		
3Q17										
Total Available	24.77%	2,386,192	12.47%	182,218	1.59%	88,362	2.63%	6,287,917	12.94%	9.08%
New Construction		0		0		0		1,379,981		
Net Absorption		-12,815		-5,263		0		1,255,860		
Gross Absorption		73,790		88,932		0		1,734,891		
2Q17										
Total Available	27.31%	2,282,166	11.92%	178,489	1.57%	102,162	2.91%	6,188,594	13.08%	
New Construction		0		0		0		0		
Net Absorption		75,609		-6,189		-22,000		-469,854		
Gross Absorption		307,957		142,028		69,187		818,352		
1Q17										
Total Available	24.44%	2,219,112	11.54%	162,736	1.40%	103,954	2.97%	5,739,355	12.05%	8.26%
New Construction		0		0		0		660,468		
Net Absorption		-186,799		-19,429		-18,969		-510,588		
Gross Absorption		107,587		94,505		27,431		450,703		
Sunnyvale										
4Q17										
Total Available	3.57%	1,229,832	5.52%	64,407	1.06%	0	0.00%	1,772,838	4.08%	13.25%
New Construction		0		0		0		450,754		
Net Absorption		-89,983		1,145		0		630,384		
Gross Absorption		84,063		18,558		0		1,067,679		
3Q17										
Total Available	5.39%	1,351,333	5.92%	83,258	1.35%	0	0.00%	2,125,618	4.89%	11.02%
New Construction		0		0		0		266,316		
Net Absorption		551		-4,831		0		264,265		
Gross Absorption		157,555		12,448		0		478,166		
2Q17										
Total Available	4.43%	1,280,302	5.60%	67,001	1.09%	0	0.00%	1,904,399	4.40%	10.08%
New Construction		0		0		0		0		
Net Absorption		12,037		-12,284		0		-30,915		
Gross Absorption		329,609		14,668		0		531,841		
1Q17										
Total Available	5.36%	1,570,868	6.87%	65,461	1.06%	0	0.00%	2,310,142	5.34%	10.37%
New Construction		0		0		0		0		
Net Absorption		-125,697		-1,872		56,773		-103,497		
Gross Absorption		47,452		0		56,773		292,322		

2018
SILICON VALLEY
MARKET FORECAST
REPORT

GENERAL TERMS

Availability: Vacant or occupied space that is offered for lease, sublease or sale (to an owner-occupant).

Build-to-Suit: A developable parcel that an owner will improve to suit the needs of a particular tenant. Construction does not begin until a tenant has committed to the property.

Building Base: Total square footage developed. Colliers tracks office buildings from 3,000 square feet, R&D from 5,000 square feet, industrial buildings from 7,500 square feet, and warehouse buildings from 10,000 square feet.

CBD: Central Business District, generally the downtown area of a major city.

Completed Construction: Construction which is completed during the period.

Direct Space: Space available through a landlord/owner.

Effective Net Absorption: Effective net absorption is a Colliers measurement of the net change in available space during a given period of time after adjustments for space taken off the market. Effective net absorption utilizes the same formula to measure change of occupancy as net absorption except that it treats any newly available space, whether available direct or for sublease, *as if it is coming onto the market vacant*.

Gross Absorption: The total square footage sold (to owner-occupants) or leased during a given time period.

Net Absorption: The net change in occupied space during a given period of time.

PSF: Per square foot.

PSF/MO: Per square foot per month.

SF: Square foot or square feet.

Silicon Valley: Colliers International defines Silicon Valley as all of Santa Clara County plus Fremont for the purposes of its market reports.

Speculative Construction: Construction that will commence without any prior commitment from a tenant.

Sublease Space: Space available through a sublessor to a third party.

T.I.s: Tenant Improvements are a dollar amount offered by

the lessor generally for the construction or modification of the premises.

Total Available: The sum of available direct and available sublease space.

Vacancy: Percentage of vacant inventory available including both vacant direct, and vacant sublease space.

PRODUCT

Class A Office: Modern, steel-framed low-, mid- or high-rise structures used exclusively for office tenants.

Class B Office: Wood and steel mix framed low-to mid-rise structures and older brick or concrete structures used predominately for office.

Industrial/Light Industrial: Buildings with drive-in and/or dock-high truck capabilities, clear heights of less than 20 feet and parking ratios of 2.0/1,000 or less.

Research and Development (R&D): One- to three-story structures with extensive glass, heavy office buildout and 3.5/1,000 parking ratio. Buildings may include high-end production facilities, laboratory space and grade-level truck doors.

Warehouse/Distribution: Buildings with a minimum 20-foot clear height, dock-high truck loading and parking ratios of 2.0/1,000 or less.

RENTAL TERMS

CAM: Common area maintenance charge. Generally used in Industrial Gross and NNN leases where the tenant pays a share of the costs associated with the maintenance of the common areas.

Full Service: Rental type generally used in office product where the landlord's rental rate contains all costs associated with occupying the premises inclusive of taxes, insurance, maintenance, janitorial, and utilities.

Industrial Gross: Rental type generally used in industrial product where the landlord's rental rate contains all costs associated with occupying the premises inclusive of taxes, insurance, and maintenance.

Rental Rates: All rental rates for office space are calculated on a full-service basis unless otherwise noted. All rental rates for R&D, industrial and warehouse space are calculated on a NNN basis unless otherwise noted.

Triple Net (NNN): Rental type where the tenant pays rent to the landlord and additionally assumes all costs regarding the operation, taxes and maintenance of the premises and building.

UNDERSTANDING ABSORPTION

Colliers uses several measurements to track market conditions and deal flow. While related, the formulas to arrive at these measurements differ. Using the results of the most recent quarter, here is how Colliers measures change in availability, net absorption and effective net absorption.

CHANGE IN AVAILABILITY: This measurement is simply the difference between the amounts of space available at the end of one period to the next. The table below shows that total available space decreased by 1,321,380 square feet in the year's third quarter. Note that "change in availability" includes adjustments for space that is "taken off the market". Space "taken off the market" is not a factor in net absorption measurements.

Total Available end of 3Q17	31,530,295
Plus: Vacant & Occupied Space that came available in 4Q17	3,321,391
Plus: New Shell added in 4Q17	1,728,351
2Q17 Available + Newly Available in 4Q17	36,580,037
Less: 4Q17 Gross Absorption	-7,233,024
Less: 4Q17 Adjustments/Taken off Market	3,504,662
Total Available end of 4Q17	32,851,675

NET ABSORPTION: Net absorption measures the change in *occupied* space from one period to the next. In this measurement, it is important to distinguish that a building may be "available" but not vacant (often the case in a sublease situation, for example). Therefore, occupancy is not reduced (negative net absorption) until the space is vacated, and sometimes that does not happen until the space is leased, creating a net absorption "wash" for the deal and for that particular period.

New Vacant Space that came available 4Q17	-1,040,955
Previously Available Space that was vacated in 4Q17	-4,892,035
4Q17 Total Vacant added (Occupancy Loss)	-5,932,990
4Q17 Gross Absorption (occupancy gain)	7,233,024
4Q17 Net Absorption (change in Occupancy)	1,300,034

EFFECTIVE NET ABSORPTION: In 2003, Colliers created a measurement of "effective net absorption". Effective net absorption uses the same formula as the net absorption formula, except that it treats any space that comes available as if it is vacant, whether it is or it is not. The purpose of the measurement is to get a better "real time" gauge of occupancy flow in and out of the market, acknowledging that space that is available for lease is likely to be vacated shortly and underutilized presently.

New Vacant Space that came available 4Q17	-1,040,955
Occupied Space that came available 4Q17	-2,280,436
4Q17 Total Available added	-3,321,391
4Q17 Gross Absorption	7,233,024
4Q17 Effective Net Absorption	3,911,633

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Mountain View Chamber of Commerce
 San Carlos Chamber of Commerce
 Redwood City Chamber of Commerce
 German American Business Association

German American Chamber of Commerce
 Gilroy Chamber of Commerce
 Morgan Hill Chamber of Commerce
 Silicon Valley Capital Club

Asia America MultiTechnology Association (AAMA)
 Rotary International
 Kiwanis International
 China Silicon Valley

Asian Business Association
 Bay Area Mortgage Association
 Royal Institution of Chartered Surveyors

SAN JOSE

James R. Abarta
+1 925 227 6228
jim.abarta@colliers.com

Matt Arya
+1 408 282 3835
matt.arya@colliers.com

Terry Bell, SIOR
+1 408 282 3923
terry.bell@colliers.com

Howard Berry
+1 408 282 3809
howard.berry@colliers.com

David Buchholz
+1 408 282 3843
david.buchholz@colliers.com

Samuel E. Burnett
+1 408 978 1916
samuel.burnett@colliers.com

Dion Campisi, SIOR
+1 408 282 3875
dion.campisi@colliers.com

Jim Castignani
+1 408 282 3893
jim.castignani@colliers.com

Mike Covell
+1 408 282 3917
mike.covell@colliers.com

Duffy D'Angelo, SIOR
+1 408 282 3950
duffy.dangelo@colliers.com

Scott Daugherty
+1 408 282 3830
scott.daugherty@colliers.com

Tom de Jong
+1 408 282 3829
tom.dejong@colliers.com

Brent Dressen
+1 408 282 3979
brent.dressen@colliers.com

Joe Elliott, SIOR
+1 408 282 3922
joe.elliott@colliers.com

David N. Evans
+1 408 282 3825
david.evans@colliers.com

Greg Evans
+1 408 282 3839
greg.evans@colliers.com

Craig L. Fordyce, SIOR, CCIM
+1 408 282 3911
craig.fordyce@colliers.com

Jack Fordyce, SIOR, CCIM
+1 408 282 3905
jack.fordyce@colliers.com

Frank Friedrich
+1 408 282 3813
frank.friedrich@colliers.com

Greg Galasso, SIOR
+1 408 282 3816
greg.galasso@colliers.com

Paige Gammon
+1 408 282 3918
paige.gammon@colliers.com

Stephen J. Gibson, SIOR
+1 408 282 3890
steve.gibson@colliers.com

Mark Giovanzana
+1 408 282 3861
mark.giovanzana@colliers.com

Nick Goddard, CCIM, MRICS
+1 408 282 3858
nick.goddard@colliers.com

Susan Gregory
+1 408 282 3940
susan.gregory@colliers.com

Joan S. Haynes
+1 408 282 3920
joan.haynes@colliers.com

Terry Healy
+1 408 282 3826
terry.healy@colliers.com

H. L. (Bing) Heckman
+1 408 282 3805
bing.heckman@colliers.com

Jere Hench, SIOR
+1 408 282 3832
jere.hench@colliers.com

Edward M. Hofer, SIOR
+1 408 282 3819
ed.hofer@colliers.com

Bruce Horton
+1 408 282 3831
bruce.horton@colliers.com

Steve Hunt
+1 408 282 3846
steve.hunt@colliers.com

Michael R. Johnson, SIOR
+1 408 282 3852
m.johnson@colliers.com

Clay Jubran
+1 408 282 3883
clay.jubran@colliers.com

John Kovaleski
+1 408 282 3844
john.kovaleski@colliers.com

Mark R. Kuiper
+1 408 282 3850
mark.kuiper@colliers.com

Carla Lindorff, MBA
+1 408 282 3908
carla.lindorff@colliers.com

John Machado, JD, MBA
+1 408 282 3862
john.machado@colliers.com

Kristen Macken, SIOR
+1 408 282 3878
kristen.macken@colliers.com

John McMahon
+1 408 282 3944
john.mcmahon@colliers.com

Sean McMahon
+1 408 282 33853
sean.mcmahon@colliers.com

Jim McPhee
+1 408 282 3993
Jim.McPhee@colliers.com

David C. Mein
+1 408 282 3828
david.mein@colliers.com

Marne Michaels
+1 408 282 3838
marne.michaels@colliers.com

Mike Miller
+1 408 282 3842
mike.miller@colliers.com

Shane Minnis, LEED AP
+1 408 282 3901
shane.minnis@colliers.com

Matt Morales
+1 408 282 3194
matt.morales@colliers.com

Martin A. Morici, SIOR
+1 408 282 3921
marty.morici@colliers.com

Joe Morici
+1 408 282 3924
joe.morici@colliers.com

Kevin Moul
+1 408 282 3873
kevin.moul@colliers.com

Tom Nelson
+1 408 282 3960
tom.nelson@colliers.com

Jeffry S. Nochimson, SIOR
+1 408 282 3941
jeffry.nochimson@colliers.com

Dharmesh Patel
+1 408 282 3990
dharmesh.patel@colliers.com

M. Steven Prehm
+1 408 282 3936
steve.prehm@colliers.com

George Quinn
+1 408 282 3912
george.quinn@colliers.com

Justin Reilly
+1 408 282 3929
justin.reilly@colliers.com

Donald H. Reimann, SIOR
+1 408 282 3888
don.reimann@colliers.com

Michael L. Rosendin, SIOR, CCIM
+1 408 282 3900
michael.rosendin@colliers.com

Ryan Rosendin
+1 408 282 3902
ryan.rosendin@colliers.com

Cynthia Rotwein
+1 408 282 3856
cynthia.rotwein@colliers.com

Robert Rowland
+1 408 282 3880
robert.rowland@colliers.com

David R. Sandlin, SIOR
+1 408 282 3988
david.sandlin@colliers.com

David V. Schmidt, SIOR
+1 408 282 3814
david.schmidt@colliers.com

John Serex
+1 408 282 3803
john.serex@colliers.com

Bob Shepherd
+1 408 282 3855
bob.shepherd@colliers.com

Hitoshi Takahashi
+1 408 282 3933
hitoshi.takahashi@colliers.com

Sean Toomey
+1 408 282 3864
sean.toomey@colliers.com

Kenneth D. Tsukahara
+1 408 282 3934
ken.tsukahara@colliers.com

Chris Twardus
+1 408 282 3836
chris.twardus@colliers.com

James Yoder
+1 408 282 3863
james.yoder@colliers.com

Joel C. Yungen
+1 408 282 3854
joel.yungen@colliers.com

Blake Zamudio
+1 408 282 3906
blake.zamudio@colliers.com

Mark P. Zamudio, CCIM
+1 408 282 3824
mark.zamudio@colliers.com

Steve Zamudio, CCIM
+1 408 282 3824
steve.zamudio@colliers.com

GILROY

Jeffrey A. Barnes
+1 408 842 7000
jeff.barnes@colliers.com

Mark Sanchez
+1 408 842 7000
mark.sanchez@colliers.com

Matt van Keulen
+1 408 842 7000
matt.vankeulen@colliers.com

MOUNTAIN VIEW

Diane Armstrong
+1 408 282 3848
diane.armstrong@colliers.com

Alexandra Caldwell
+1 650 492 5223
alexandra.caldwell@colliers.com

Mike Cobb
+1 650 486 2251
mike.cobb@colliers.com

John Colyar
+1 408 282 3949
john.colyar@colliers.com

Teddy Enfantino
+1 650 486 2209
teddy.enfantino@colliers.com

Eric Gunderson
+1 650 492 5201
eric.gunderson@colliers.com

David Katz
+1 408 282 3834
david.katz@colliers.com

Eric Katz
+1 408 282 3833
eric.katz@colliers.com

Paul McManus
+1 408 282 3963
paul.mcmanus@colliers.com

Kyle Portal
+1 408 383 3954
kyle.portal@colliers.com

Jake Smart
+1 408 282 3909
jake.smart@colliers.com

Brett Taylor
+1 408 282 3889
brett.taylor@colliers.com

Will Tharp
+1 650 492 5230
will.tharp@colliers.com

Romy Zeid
+1 408 282 3818
romy.zeid@colliers.com

REDWOOD CITY

Philip Arnautou, Jr., CPA
+1 650 486 2213
phillip.arnautou@colliers.com

JP Custodio
+1 650 486 2218
jp.custodio@colliers.com

Mike Davis
+1 650 486 2219
mike.davis@colliers.com

Steve Divney
+1 650 638 4331
steve.divney@colliers.com

Michael Draeger
+1 650 486 2221
michael.draeger@colliers.com

Stephanie Elkins
+1 650 486 2272
stephanie.elkins@colliers.com

David Gray, IFMA, R.E.C.
+1 650 486 2262
david.gray@colliers.com

Mac Hart
+1 650 486 2217
mac.hart@colliers.com

Douglas Marks, MBA
+1 650 486 2222
doug.marks@colliers.com

John McLellan
+1 650 486 2223
john.mclellan@colliers.com

Gary Nichols
+1 650 486 2250
gw.nichols@colliers.com

Tom Schmidt, CCIM
+1 650 486 2226
tom.schmidt@colliers.com

Robert Schwartz
+1 650 486 2286
rob.schwartz@colliers.com

Don Sung
+1 408 282 3889
don.sung@colliers.com

Anthony Tuso
+1 650 486 2288
anthony.tuso@colliers.com

Craig Walsh
+1 650 486 2230
craig.walsh@colliers.com

Cory Waxman
+1 650 486 2207
cory.waxman@colliers.com

Brett Weber
+1 650 486 2233
brett.weber@colliers.com

Luke Wilson
+1 650 486 2212
luke.wilson@colliers.com

Ryan Young
+1 650 486 2229
ryan.young@colliers.com

Grant Zamudio
+1 650 486 2231
grant.zamudio@colliers.com

**Executive Managing Director
San Jose/Silicon Valley**

André R. Walewski
+1 408 282 3837
andre.walewski@colliers.com

**Executive Managing Director
Peninsula**

Rick Knauf
+1 650 486 2244
rick.knauf@colliers.com

SAN JOSE/SILICON VALLEY
450 West Santa Clara Street
San Jose, CA 95113
+1 408 282 3800

GILROY/SOUTH COUNTY
8070 Santa Teresa Boulevard
Suite 220
Gilroy, CA 95020
+1 408 842 7000

MOUNTAIN VIEW
2570 West El Camino Real
Suite 222
Mountain View, CA 94040
+1 408 282 3800

SAN FRANCISCO PENINSULA
203 Redwood Shores Parkway
Suite 125
Redwood City, CA 94065
+1 650 486 2200

SAN FRANCISCO
50 California Street
Suite 1900
San Francisco, CA 94111
+1 415 788 3100

OAKLAND/EAST BAY
1999 Harrison Street
Suite 1750
Oakland, CA 94612
+1 510 986 6770

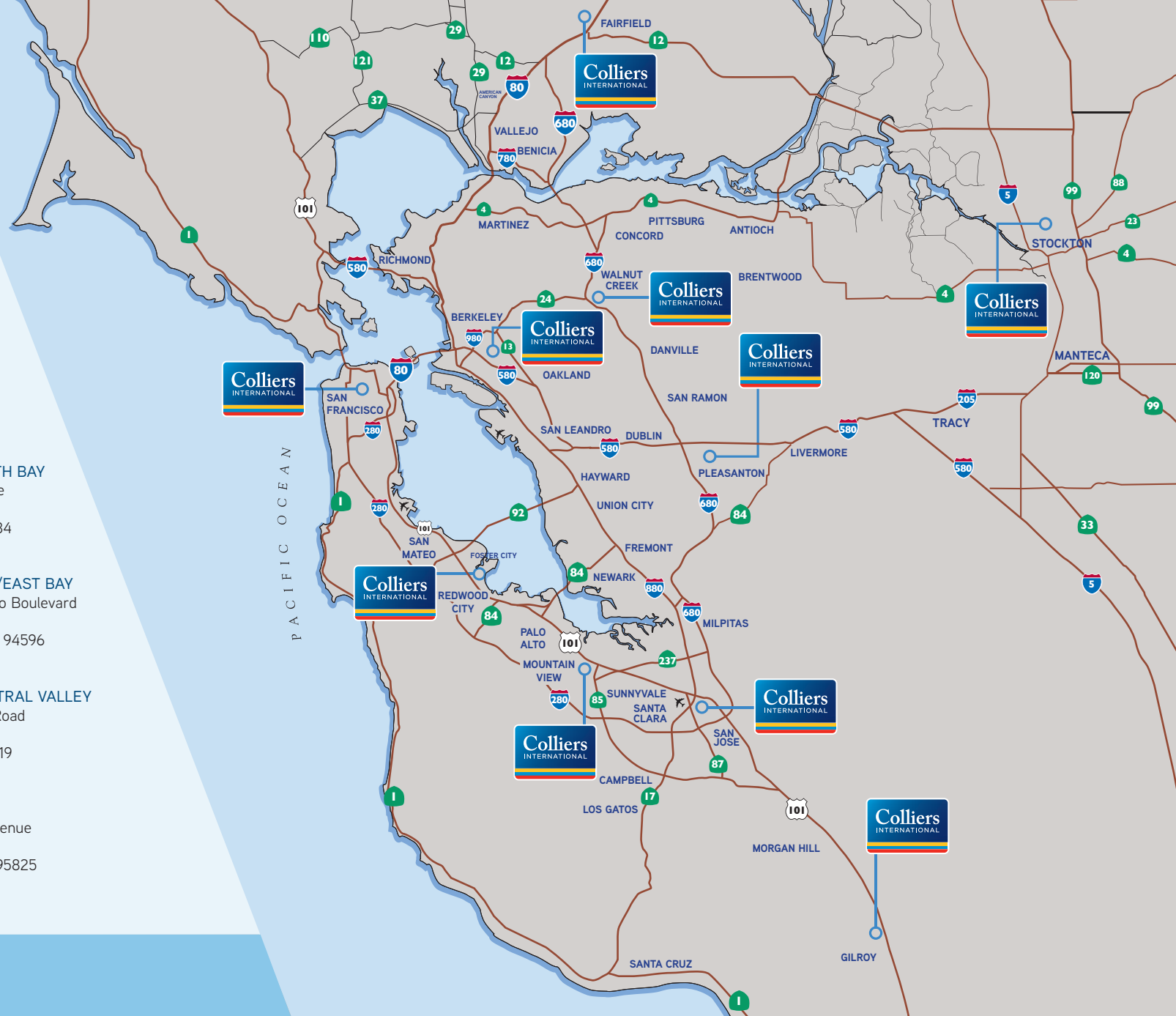
PLEASANTON/EAST BAY
3825 Hopyard Road
Suite 195
Pleasanton, CA 94588
+1 925 463 2300

FAIRFIELD/NORTH BAY
360 Campus Lane
Suite 101
Fairfield, CA 94534
+1 707 863 0188

WALNUT CREEK/EAST BAY
1850 Mount Diablo Boulevard
Suite 200
Walnut Creek, CA 94596
+1 925 279 0120

STOCKTON/CENTRAL VALLEY
3439 Brookside Road
Suite 108
Stockton, CA 95219
+1 209 475 5100

SACRAMENTO
301 University Avenue
Suite 100
Sacramento, CA 95825
+1 916 929 5999



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