TECHNICAL MEMORANDUM

To: Pat Angell, Ascent Environmental, Inc.

From: Darin Smith, Anisha Gade, and Luke Foelsch

Subject: Sunnyvale Lawrence Station Area Plan Update - Market

Research; EPS Project #181012

Date: February 5, 2020

Ascent Environmental, in coordination with the City of Sunnyvale (City), are currently exploring a potential update to the residential density of the Sunnyvale Lawrence Station Area Plan (LSAP) and potential expansion of the LSAP boundaries. As part of that process, Ascent Environmental engaged Economic & Planning Systems (EPS) to provide real estate advisory services. This memorandum provides the findings from EPS's preliminary market research, with the goal of providing Ascent Environmental and the City with market intelligence to inform zoning modifications and station area planning.

Background

The City adopted the Lawrence Station Area Plan (LSAP) in 2016 to guide future development of the area surrounding the Lawrence Caltrain Station in Sunnyvale, California. In prior years, EPS conducted economic analysis for the adopted LSAP, as well as advised the City on its affordable housing fees and policies in the Plan Area.

In mid-2018, the City decided to conduct studies for additional housing opportunities and an expansion of the western boundary of the LSAP to include three additional office/research and development (R&D) sites. This boundary expansion is meant to explore the implications of the presence and growth aspirations for Intuitive Surgical, a manufacturing company with a large presence in the station area and City.

EPS is now being engaged to advise the City on increasing the maximum density of residential parcels. EPS is charged with specifying population and employment trends so as to approximate potential housing demand as well as assessing the viability of converting allowable land uses to accommodate higher density housing.

The Economics of Land Use



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Key Findings

This memorandum summarizes local and regional real estate market conditions and highlights potential opportunities for housing and commercial/industrial development in the LSAP area. The following presents key findings, with further detail provided throughout this memorandum.

- Employment growth in Sunnyvale outpaced residential growth, resulting in strong demand for housing. Jobs in the City increased by more than 10,700 between 2010-2017 (the last year for which job data is available), representing a 14 percent increase in employment. During the same period, the City's housing supply increased by only about 2,600 units, or 10 percent growth. These trends of housing growth falling short of job growth are also found throughout Santa Clara County and contribute to the City's consideration of the reorientation of the LSAP to encourage greater housing density.
- The LSAP area is well poised to absorb several multifamily projects currently under construction or approved, plus more in the future. Rent growth in the portion of Sunnyvale encompassing the LSAP has been strong, even as the LSAP's ZIP code area (which extends beyond the LSAP boundaries) added roughly 1,000 new multifamily units, nearly half of all the units added in the City since 2010. At present, another 2,000 housing units are either under construction or approved within or immediately adjacent to the LSAP boundaries, but these units are expected to be absorbed very quickly given the very strong demand for housing in the city and region. Strong demographic growth spurring housing demand coupled with rising rents indicates a favorable market for continued higher density multifamily development, in line with the evolving vision of the LSAP.
- The LSAP area is somewhat less competitive for new commercial development than are other parts of the City. Recent office/R&D development in Sunnyvale is primarily grouped in the Peery Park and Moffett Park districts and substantial retail/entertainment space is set to come online in the CityLine development in Downtown Sunnyvale. The LSAP area has historically been zoned for industrial uses. As such, the LSAP has received less interest and achieves lower rent prices than other areas in the City for commercial office and retail development, but still is poised for future employment growth. The fact that only a small portion of the new development is being built on a speculative basis indicates strong demand from specific/individual users (such as Intuitive Surgical) and should translate into rapid absorption.
- Industrial space in the LSAP area is in high demand, but general trends show continued decline in the need for such space. The City and County have both had significant reductions in the total supply of industrial space, with most new industrial construction happening in less costly areas such as Gilroy or Milpitas. The already-adopted LSAP plans for virtually all existing industrial properties to be converted to higher density residential and office-oriented zoning, and the potential higher-density LSAP would include the same small amount of retained industrial space. Under either scenario, the industrial land uses, tenants, vendors, and services offered currently in the LSAP would have limited other viable spaces to relocate to in the City and may be displaced to other locations in the broader South Bay/Silicon Valley region, or even outside the region. These displacement impacts on the businesses and employees in light industrial/manufacturing industries should be balanced

against the important housing needs among residents and the real estate space needs of office/tech employers in the City.

- Mid- to longer-term market conditions are likely to support the Plan Area's more intensive office uses (including denser flex/R&D). Though much of the recent commercial development in Sunnyvale has been in other areas of the city, market conditions and tenant demand suggest that the Plan Area will be able to attract more intensive commercial uses well aligned to address the growing needs of an expanding tech industry. Given the historical zoning designation of the LSAP area for mixed-use and light industrial land uses, most of the existing buildings are relatively low density, and could be redeveloped for higher density workplaces. The LSAP area's accessibility and increasing vibrancy as a result of mixed-use development and 24-hour population should make the area competitive for additional workplaces, particularly as other areas of the City are built out.
- Current market conditions support the concept of allowing additional housing development in the LSAP, while still encouraging opportunities for the preservation and intensification of employment uses. The adopted LSAP and the currently considered revisions vary only in the amount of housing that would be allowed, as both scenarios have the same amount of office, flex/R&D, industrial, and retail uses allowed. As such, it is not expected that the ultimate buildout of the LSAP under either scenario would make a substantial difference in the employment base for the area. However, the higher-density allowance *could* increase the financial viability of housing, which may expedite though not fundamentally change the transition of lower-value employment uses to residential. EPS will continue to study financial opportunities and implications of such use conversion within the LSAP in separate fiscal analysis as well as more specific financial feasibility analysis to characterize the existing uses most likely to be subject to redevelopment pressure to create new housing.

Site Context

The local area of the LSAP lies in the eastern portion of the City. **Figure 1** shows the LSAP within the City's boundaries as well as the larger regional context of Silicon Valley. The City sits between the Cities of Santa Clara to its east, Mountain View to its west, and Cupertino to its south. The City's northern border abuts the San Francisco Bay. The City is connected to the broader region via major transportation hubs and corridors, including US Highway 101, Interstate 280, and State Route 82 (El Camino Real), San Jose International Airport, freight and commuter rail corridors, VTA bus routes and other transportation corridors.

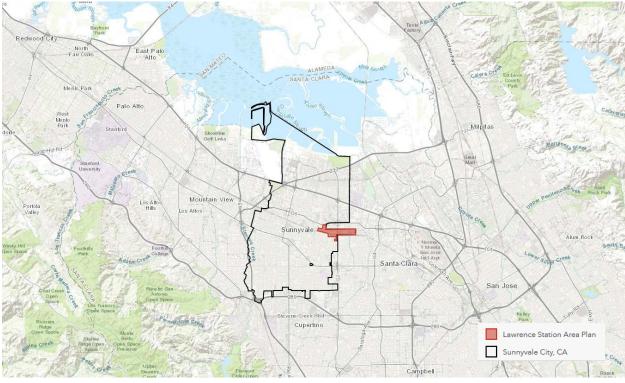


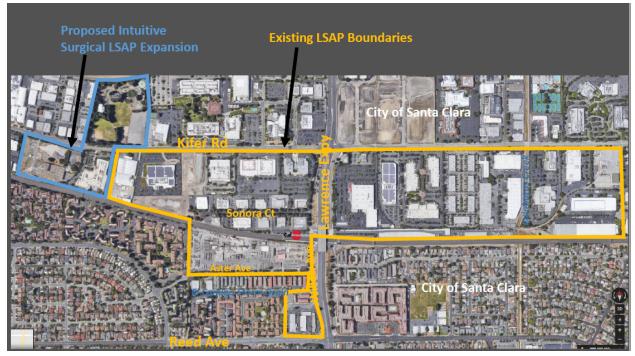
Figure 1 Regional Context of Lawrence Station Area Plan

Sources: ESRI Business Analyst; Economic & Planning Systems, Inc.

The LSAP is an irregularly shaped rectangular area anchored by the Lawrence Station stop along the Caltrain line, as shown in **Figure 2**. Given that Lawrence Station has historically been surrounded by relatively low-intensity land uses that do not optimize transit ridership, the LSAP is intended to transform the neighborhood by establishing a framework for future development of the area and improving the relationship between transit availability and land use for the long-term development for an economically, environmentally and socially vibrant mixed-use district in Sunnyvale.

In 2018, the Sunnyvale City Council decided to study the expansion of the Plan Area's western edge to include the Intuitive Surgical properties, also depicted in **Figure 2**. This market study compares the socio-economic and real estate characteristics of this potentially expanded Plan Area with the entire City of Sunnyvale and other surrounding cities as well as the broader regional context of Santa Clara County. While the Plan Area was primarily designated for mixed-use, commercial and light industrial land uses, the LSAP envisions transforming this region into a higher density of residential and commercial land uses that will enable multimodal access.

Figure 2 Local Context of Lawrence Station Area Plan



Source: City of Sunnyvale

Regional Socio-Economic Trends

The LSAP lies within the larger Silicon Valley region, one of the strongest regional economies in the country. While historically the region was known for its agricultural and rural character as well as the accompanying farming, ranching, orchard and canning industries, today, the area is better known for its contributions to technological innovation. Given the economic boom of this current business cycle, Silicon Valley and the greater Bay Area region have experienced high levels of in-migration and population growth.

With regards to population, Sunnyvale is the County's second largest city, behind San Jose, which is also the largest city in the nine-county San Francisco Bay Area. As shown in **Figure 3**, Sunnyvale had approximately 131,500 residents in 2000 and has since grown to roughly 153,400, as of 2018. This increase of nearly 22,000 new residents represents a 17 percent increase since 2000, which is a growth rate roughly on par with Sunnyvale's neighboring municipalities. Much of this population growth (approximately 13,300 residents) occurred since 2010, as job seekers flocked to the tech and innovation economies of Silicon Valley.

With San Jose accounting for more than half of the nearly two million residents in Santa Clara County, Sunnyvale and its surrounding cities of Santa Clara, Mountain View, Cupertino, and Palo Alto account for another one-quarter of the County's population. The remaining 21 percent of the County's population is located in small towns and unincorporated areas.

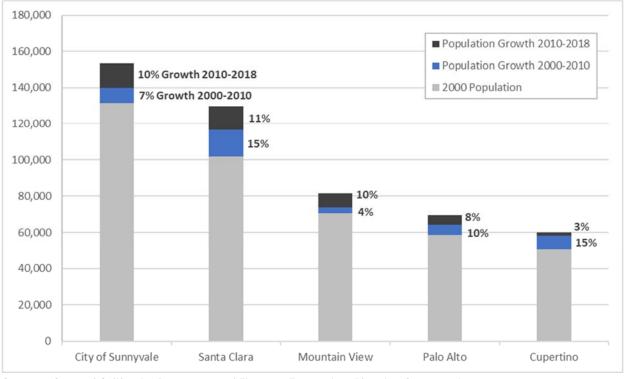


Figure 3 Population Trends in Surrounding Cities in Santa Clara County

Sources: State of California, Department of Finance; Economic & Planning Systems, Inc.

In terms of the overall employment trend in the area, it is noteworthy that most of the jobs in this area of Silicon Valley are concentrated in the northeastern portion of Santa Clara County, as shown in **Figure 4**. This is especially important when understanding the economic role of the City within the larger Silicon Valley environment. The City is located in the heart of this region and as such, has historically enjoyed a relatively high concentration of jobs, given the presence of Google, Apple, and Lockheed Martin Space Systems, among several others. However, the highest concentrations of employment in the County are located in areas of San Jose, Cupertino, and Palo Alto.

Going forward, it can be expected that Sunnyvale will continue to attract considerable interest from commercial developers. Within the very strong Silicon Valley sub-regional economy, Sunnyvale's centrality, transportation connectivity, and strong presence of industry-leading companies makes Sunnyvale appealing for future development. In particular, the LSAP area would be well poised to attract office and multifamily developers, as well as retail and service commercial developers because of its close proximity to commuter rail service, the intersection of the Lawrence and Central Expressways as well as being roughly one mile south of US Route 101.

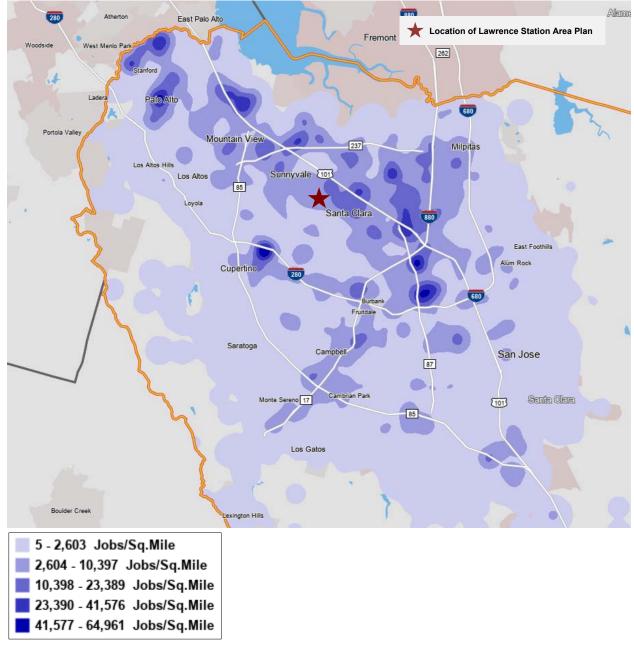


Figure 4 Map of Employment Concentration in Santa Clara County

Source: Census LEHD 2017 Dataset

Looking at employment trends over time, the total number of jobs in the City has grown significantly since the end of the Recession from approximately 78,000 in 2010 to roughly 95,760 in 2019, according to the City. Employment growth in the broader San Francisco Bay Area has been some of the strongest in the country during this business cycle, helped in large part by the boom in tech and innovation industries of Silicon Valley.

The number of jobs in Sunnyvale grew by 14 percent during the current business cycle between 2010 and 2017, the latest year for which data are publicly available at the city level. As shown in **Figure 5**, nearly 10,700 new jobs were added in the City, roughly in line with absolute employment growth in Palo Alto. Employment grew by roughly double this amount in the City of

Santa Clara. Meanwhile, the two smaller municipal economies in the County, Mountain View and Cupertino, grew at a robust pace, with total employment in Mountain View almost equaling that of Sunnyvale. All together, nearly 87,600 new jobs were added in this northeastern part of the County, accounting for 47 percent of job growth countywide during this time period.

25% Growth ■ 2010-2017 Employment Growth 120,000 2010-2017 (+22,207)■ 2010 Employment 13% (+11,118)100,000 14% 46% (+10,721)(+27,589)80,000 60,000 55% (+15,931)40,000 20,000 0 Santa Clara Palo Alto Sunnyvale Mountain View Cupertino

Figure 5 Employment Trends in Surrounding Cities in Santa Clara County

Source: U.S.Census Bureau, OnTheMap

As evidenced by the sector-level breakout of employment in **Figure 6**, of the twelve largest industry sectors in Sunnyvale, the "Professional, Scientific, and Technical Services" sector and the "Information" sector, the two sectors where tech and innovation economy jobs are categorized, added the most new jobs from 2010 to 2017. Information, the smaller of the two sectors, grew by roughly 4,500 jobs at an average rate of 8.4 percent annually during these seven years while the largest of all sectors, Professional, Scientific, and Technical Services, added roughly 7,000 jobs at an average rate of 6.2 percent annually. As of 2017, these two sectors accounted for almost 35,700 jobs, or slightly more than 40 percent of overall employment.

In addition to these two sectors, overall employment is also buoyed by growth in the administration and support, health care and social assistance, as well as the accommodation and food services sectors, which added approximately 5,300 jobs since 2010. Even as the manufacturing sector remained steady until 2014, there has been a loss of more than 8,400 jobs since 2002. Nonetheless, manufacturing remains the second largest employment sector, with nearly 17,000 jobs.

Between 2002 and 2017, the share of jobs in Sunnyvale belonging to the Manufacturing sector decreased by almost 14 percent. This shift in employing industries runs parallel with the changes observed in the real estate market, as discussed in the following section.

30,000 rofessional, Scientific, and Technical Services -Manufacturing 25,000 -Information Retail and Wholesale Trade 20,000 Administration & Support, Waste Management and Remediation Health Care and Social 15,000 Assistance Accommodation and Food -Educational Services 10,000 -Construction Other Services (excluding Public 5.000 Administration) Transportation and Warehousing Utilities 2004 2008 2010 2012 2015 2016 2017 2009 2011 2013 2014

Figure 6 Sunnyvale Employment Growth by Industry Sector

Source: U.S.Census Bureau, OnTheMap

Real Estate Market Assessment

The following section compares market conditions and trends for multifamily, office, industrial, and retail real estate in the LSAP with those of Sunnyvale, the surrounding cities, and Countywide. When there is not enough data for the LSAP in particular, EPS relied on trends for the ZIP code (94086) or submarket which encompasses the LSAP. Please also note that the subsequent data that are indicated as "Sunnyvale" pertain to the entire City of Sunnyvale. Based on the comparative market data and analysis presented, EPS has drawn conclusions concerning real estate development potential within the LSAP.

Existing Land Uses

To begin with an overarching picture of the composition of commercial real estate in the varying geographies of interest, **Figure 7** lists existing commercial square footages and multifamily units based on information from the real estate data source, CoStar. Please note that not all projects that were under construction as of May 2019 are included in this inventory as these projects had not yet become leasable (and as such, did not yet have vacancy and rent information). Due to the history of the LSAP Area being designated as primarily light industrial, much of the area remains in flex/R&D and industrial land use categories, but it is now zoned under the LSAP to allow a mix of land uses including residential, office/R&D, and retail.

Figure 7 Summary of Real Estate Inventory, 2019

	Commercial Property (Sq. Ft.)					
Geography	Office	Industrial	Flex/R&D	Retail	Other/ Specialty	Multifamily Units
LSAP As a Share of Citywide Total	291,726 2%	1,142,594 <i>19%</i>	1,365,436 <i>9%</i>	139,282 3%	192,000 <i>1</i> 2%	16 <i>0</i> %
Sunnyvale (Citywide) As a Share of County Total	18,782,882 <i>14%</i>	5,879,747 7%	15,883,409 <i>15%</i>	4,080,940 <i>6%</i>	1,561,410 <i>5%</i>	25,599 14%
Santa Clara County	129,662,321	88,635,477	104,004,860	73,920,139	34,188,441	185,653

Source: CoStar

According to CoStar data, the largest share of commercial space in the LSAP is the Flex/R&D category, which often includes flexible commercial space that can be used for a variety of uses such as office, R&D, light manufacturing, etc. This category of commercial space is commonplace in the City and sub-region, serving as the rapid prototyping and maker spaces necessary for many firms in the tech and innovation industries of Silicon Valley. According to CoStar, there is nearly 1.4 million square feet of flex/R&D space in the LSAP, representing 9 percent of all flex/R&D space in the City. CoStar indicates that there is an additional 1.1 million square feet of industrial space in the LSAP area, accounting for 19 percent of all industrial space in the City. Because the distinctions between "flex/R&D" buildings and "industrial" buildings can be vague, it can be useful to consider the two categories together. Combined the LSAP area's flex/R&D and industrial buildings sum to roughly 2.5 million square feet, and represent about 12 percent of the City's total supply of such buildings – much higher than the LSAP's share of Citywide office space and retail.

Sunnyvale on the whole contains a comparatively larger share of the County's office, flex/R&D, and multifamily development, and relatively little of the County's industrial and retail development. The City's share of industrial and retail development approximately reflects its proportion of the County's population (around 7 percent), while the office and flex concentrations indicate a comparatively strong cluster of such uses in Sunnyvale.

Intuitive Surgical is the primary employer in the LSAP area and one of the City's largest, with an estimated 1,526 employees in 2019 according to the City's "Community and Business Profiles" document. Additionally, Fortinet, Inc., a cybersecurity firm which recently expanded its headquarters, lies just outside the LSAP boundary and employs 800 in its Sunnyvale location.

According to 2019 CoStar data, Intuitive Surgical owns 134.8 total acres of land in the expanded LSAP area and currently occupies roughly 1.0 million square feet of industrial and flex/R&D space. In addition, approximately 192,000 square feet of space in the LSAP falls in the Specialty category, which encompasses religious structures, parking facilities, and other specialty commercial uses. Within the boundaries of the LSAP, there is a 127,000 square foot self-storage facility, and 65,000 square feet occupied by two stone masonry retailers.

Apart from commercial spaces, there is a small inventory of 16 existing townhomes in the southern portion of the LSAP area at Buttercup Terrace, located at 1171 Willow Avenue.

Multifamily

Given that there are so few residential units existing in the LSAP (though there are several on parcels adjacent to the irregularly shaped LSAP boundaries), EPS relied on a broader dataset by summarizing trends for the ZIP code in which most of the LSAP geography lies. This information is compared to the overall performance of multifamily buildings throughout the City (which is indicated in the following graphs as "Sunnyvale") and other surrounding cities as well as the County. **Figure 8** illustrates how the monthly average effective rent per unit across various geographies has grown steeply since the end of the Recession. The average rent in the LSAP ZIP code grew relatively in line with that of the City as a whole as well as the City of Santa Clara, rising from nearly \$1,600 in 2010 to approximately \$2,700 by April 2019. This trend is also fairly close to that of the average rent throughout Santa Clara County, which grew from \$1,600 in 2010 to \$2,500 by April 2019. Rents in Mountain View and Cupertino remained consistently above that of the LSAP ZIP code, Sunnyvale, Santa Clara, and the County throughout this time period. Note that these figures represent the full stock of apartments in each jurisdiction; the newer stock typically achieves higher rents than those indicated in this comparison.

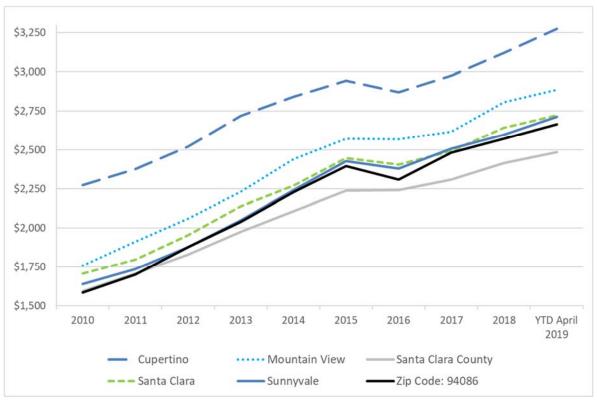


Figure 8 Multifamily Rents (Effective Monthly Average, Per Unit)

Source: CoStar

In particular, when comparing newly built apartments in the current business cycle since 2010, the effective monthly rents in buildings within a 2-mile radius of the LSAP range from \$2,767 for studios to \$4,926 for three-bedroom units, as of May 2019, as shown in **Figure 9**. This translates to a range of rents per square foot of \$3.71 for the three-bedroom units to \$4.03 for studio apartments. The nearest newly built project to the LSAP is the Monticello Apartment Homes mid-rise apartment complex (located just southeast of Lawrence Station adjacent to the LSAP at 3555 Monroe Street, but in the City of Santa Clara.). This 825-unit complex owned by

the Irvine Companies was constructed in 2016. As of October 2019, asking rents at the Monticello range widely, from \$2.99 per square foot for some two-bedroom units to \$4.69 per square foot for some one-bedroom apartments, but the average asking price among 43 available units averaging 1,009 square feet is \$3,598 per month or \$3.57 per square foot. It is expected that the rezoning of the LSAP to allow for higher density housing would command similar rent levels, or perhaps even a slightly higher premium, given that future developments would constitute newer product. The range of rents in the 94086 ZIP code area as well as the Citywide average are slightly higher than the range of rents in projects in close proximity to the LSAP area.

Figure 9 Comparison of Rent by Unit Type in Apartments Built Since 2010

Geography / Item	Studio	One Bedroom Units	Two Bedroom Units	Three Bedroom Units
2-Mile Radius Around LSAP (roughly	y 50% in City of San	ita Clara)		
Effective Rent per Unit	\$2,767	\$3,053	\$3,944	\$4,926
Average Unit Size (Sq. Ft.)	686	788	1,143	1,328
Rent per Square Foot	\$4.03	\$3.87	\$3.45	\$3.71
94086 ZIP Code Area				
Effective Rent per Unit	\$3,121	\$2,967	\$4,184	\$5,326
Average Unit Size (Sq. Ft.)	626	762	1,134	1,438
Rent per Square Foot	\$4.99	\$3.89	\$3.69	\$3.70
Sunnyvale, CA				
Effective Rent per Unit	\$2,804	\$3,048	\$4,127	\$5,256
Average Unit Size (Sq. Ft.)	619	763	1,110	1,406
Rent per Square Foot	\$4.53	\$3.99	\$3.72	\$3.74

Source: CoStar

The supply of new multifamily deliveries, among all Santa Clara County cities, was greatest in San Jose. More than 15,300 units came online in San Jose from 2011 through early 2019, as shown in **Figure 10**, accounting for nearly 60 percent of all units delivered throughout the County. There were 2,827 new apartment units built in the City of Sunnyvale during this time period, the second highest among the cities in the County. The 1,025 new units that came online in ZIP code 94086 accounted for almost 40 percent of the City total.

200,000 14% Growth since 2010 (26,554 units) 180,000 160,000 140,000 120,000 17% 100,000 (15,331 units) 80,000 11% 60,000 (2,827 units) 11% (2,457 units) 40,000 10% 9% (1,705 units) 6% 20,000 (1,025 units) (324 units) 0 Santa Clara Santa Clara Zip Code: Cupertino San Jose Sunnyvale Mountain View 94086 County 2010 ■ New Units Added (2011 - YTD April 2019)

Figure 10 New Multifamily Units Added 2011 - YTD April 2019

Source: CoStar

Looking forward, the LSAP is beginning to see more, higher density multifamily development. There is currently one multifamily project under construction at 1130 Kifer Road. Greystar Real Estate Partners is constructing 520 new mid-rise apartment units, which are set to deliver in the next six to twelve months. Most recently, another 741-unit residential project was approved in February 2019 for the CalStone/Pacific Building Materials site at 1155-1175 Aster Avenue. In addition, along the northern boundary of the LSAP, north of Kifer Road and east of the Lawrence Expressway in the City of Santa Clara, two projects are currently under construction that will add another 537 apartments and nearly 500 condos.

The multifamily vacancy rate reflects the impact of this new supply of multifamily units. Leasing trends and housing demand remained strong during this business cycle, driven by a large in-flux of new residents working in jobs in the robust, tech-driven industries of Silicon Valley. Therefore, even as a substantial number of new units came online, these units were absorbed by market demand. The vacancy rate in many cities in the region fluctuated slightly but remained low, as shown in **Figure 11**. At times when a large number of units were delivered, such as in 2016, when multiple projects throughout the region came online, the vacancy rate increased in the City of Sunnyvale and its neighboring comparable cities of Cupertino, Mountain View, and Santa Clara. A similar trend was prevalent at the ZIP code level as well as at the County level. However, as the units were absorbed by market demand, the vacancy rate generally decreased across the board.

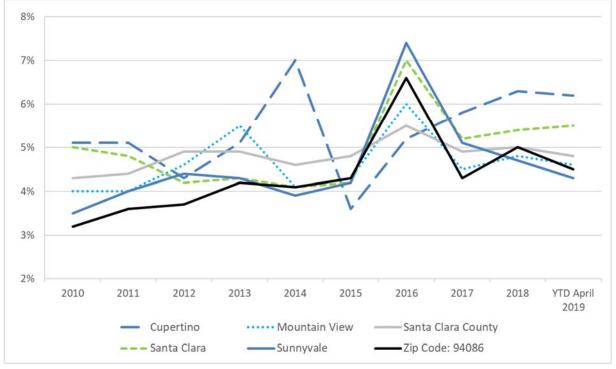


Figure 11 Comparison of Multifamily Vacancy Rates

Source: CoStar

The imbalance of employment growth compared to housing supply is another indication of the need for more housing. Between 2010 and 2015, the number of primary jobs located in the City grew by roughly 9,000. During this period, only 1,456 multifamily units along with approximately 444 new single-family units were added. While jobs grew by 12 percent during this period, the total number of housing units grew by only 3 percent. The pace of new housing production has not kept pace with job growth, creating great market pressure to consider rezoning efforts such as the LSAP amendments that would allow for higher density housing.

Moreover, market trends, stemming from strong job and population growth among a younger, working-age cohort in the region, indicate that there is strong demand for apartments. Many recent apartment complexes in the competitive market area are built as mid-rise (i.e. five stories with structured or podium parking) and include lifestyle amenities to appeal to millennials and working professionals, such as gyms, recreational/outdoor spaces, and bicycle facilities/storage, etc. These trends are largely in support of rezoning plans such as the LSAP. Current and expected demand for housing is likely to support low vacancies and rent growth that can enable the redevelopment of flex/R&D and industrial properties to accommodate higher density housing.

¹ Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics

² Data on single-family units are from the California Department of Finance's Population and Housing Estimates for single-family detached and attached units.

Indeed, such redevelopment of industrial properties for residential use has been prominent in Sunnyvale in recent years. The City has created an "Industrial to Residential (ITR)" combining district³ in several locations allowing former industrial and commercial properties to convert to residential use. Five such areas were identified, including one in the LSAP area referred to as "Housing Site 4b," now more commonly known as the Calstone site, and nearby properties south of the Caltrain tracks (and already approved for 741 new housing units). Other examples include the Tasman Crossing area, which has added many residential units including the Tamarind Square, Encasa, and Anton 1101 apartment complexes, and the Fair Oaks Junction area which has added the Onizuka Crossing apartments and many townhomes. As a City that is largely urbanized already, ITR sites such as these have been among relatively few where large-scale residential projects have been achievable. However, these projects have also resulted in a loss of industrial space in the City of Sunnyvale, which according to CoStar has diminished from 9.27 million square feet in 1999, to 7.73 million square feet in 2010, to only 5.88 million square feet in 2019.

Office

The last decade has seen a significant increase in the total pool of office square footage in Santa Clara County, with a large portion of that attributable to Sunnyvale. Of the 20 million square feet of office space brought online in Santa Clara County since 2010, about a third is located in Sunnyvale. Only a small fraction of this office space is located in the LSAP currently, about 300,000 square feet, which accounts for approximately 10 percent of all commercial real estate in the Plan Area.

Given the small size of the local office market and the fact that there were no new office deliveries or major building demolitions since 2010, changes in a few occupants' tenancy became a significant factor in the operating metrics of the plan area. The sharp fluctuation in the office market vacancy rate in the LSAP is highly correlated to individual tenants' leasing activity. As shown in **Figure 12**, as a result of roughly 90,000 square feet of space being vacated in 2013 at 1390 Kifer Road, the vacancy rate spiked to 32.2 percent. When Intuitive Surgical began occupying this space in early 2019, the office vacancy rate decreased suddenly from 34.2 percent to 1.2 percent. Despite the sudden shift in the vacancy rate based on a few tenants' leasing activity, it is worth noting that not all of the office space in the Plan Area is taken up by larger firms occupying a large office footprint. Many of the current lease holders of office space in the LSAP are small and mid-sized professional services firms and medical offices.

³ https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23604

120,000 40% 100,000 35% 80,000 30% 60,000 25% 40,000 20,000 20% 0 15% (20,000)10% (40,000)5% (60,000)0% (80,000)YTD 2010 2011 2012 2013 2014 2015 2016 2017 2018 April 2019 Deliveries (Sq. Ft.) Net Absorption (Sq. Ft.) -Vacancy Rate

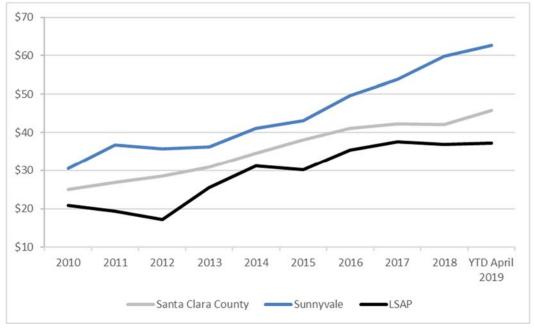
Figure 12 LSAP Office New Supply, Absorption, and Vacancy Rate

Source: CoStar

As is to be expected, given that most of the office space in the LSAP is in the Class B category, even as lease rates have grown throughout the region, the pace of rent growth has been less dramatic in the local area. As seen in Figure 13, the average office full-service lease rate has grown most dramatically in the City overall (more than doubling from \$30.48 per square foot in 2010 to \$62.67 by the first quarter of 2019.) The average lease rate for office space in the County grew from about \$25 per square foot to nearly \$46 during this time period. Meanwhile, the average asking rate in the LSAP went from nearly \$21 per square foot in 2010 to \$37 by 2019. These rent data indicate that the LSAP's office space is not as highly in demand as it is in other parts of the City and County. This is true of newer office product as well. According to CoStar data, office projects within a two-mile radius of the LSAP that came online during the current business cycle since 2010, had annual asking rents of \$46.14 per square foot while those of new offices in the 94086 ZIP code as well as the City overall had annual asking rents of \$75.00 per square foot.4 New office projects in the LSAP would be expected to command asking rents similar to those projects that are within the two-mile radius of the LSAP, though again premiums might be expected for new buildings and perhaps for the LSAP area's proximity to the Caltrain station.

⁴ Data are from CoStar, as of May 2019.

Figure 13 Office Rent Trends



Source: CoStar

As for the development pipeline, Intuitive Surgical is proposing a 1.213 million square foot office/R&D/manufacturing campus on the three parcels assumed to be included in the LSAP expansion. The status of their project is pending, and City staff indicate that its approval will be contingent on the LSAP amendments. Other than that major project, there are no office projects currently underway in the LSAP. However, within a two-mile radius, in the western corner of the City of Santa Clara, there is a 260,000 square foot office project set to come online in December 2019. The project is being built on a speculative basis and therefore currently being marketed to prospective tenants. Adjacent to the LSAP area, the Fortinet office building has been recently approved at 901 Kifer Road. The 172,000 square foot project is currently undergoing building permit plan check. Furthermore, in the northwestern corner of the City of Sunnyvale, there are several office projects underway in the Peery Park and Moffett Park districts. It is also worth noting that while there is some speculative office construction throughout Sunnyvale, much of the new development is tied to campus-style expansions by large/established tech companies.

The current concept for an amended LSAP would maintain the amount of office envisioned in the adopted LSAP (1.2 million square feet). While recent trends indicate that office space in the LSAP area has not performed at the same high levels found elsewhere in Sunnyvale, the growth in office uses in the City and region, and the LSAP area's advantages for accessibility, suggest that the LSAP should continue to provide opportunities for future office uses.

Flex/R&D

The largest share of the LSAP properties is categorized as flex/R&D space, a building type that can accommodate many tenant types ranging from offices to research labs and prototyping studios, etc. These sorts of spaces have been common for many necessary functions of technology and innovation industries, but in recent years Silicon Valley technology companies have increasingly used more traditional office building configurations.

Contrasting the substantial growth seen in office space over the last decade, the amount of square footage classified as flex/R&D space has experienced a steady decline in the broader region. Since 2010, the total pool of flex/R&D space has dropped by 10 percent across Santa Clara County (116 MSF to 104 MSF) and by 16 percent in Sunnyvale (19 MSF to 16 MSF). Still, given the robust pace of expansion since the end of the Great Recession in these economic sectors throughout this region, demand for available flex/R&D space remained very strong in this time period, with flex/R&D vacancies declining Countywide from 15.3 percent to 8.3 percent in 2019 while the City's flex/R&D vacancies fell from 15.2 percent to 3.6 percent in the same period.

Flex/R&D space in the LSAP area has been very stable over the past five years. Intuitive Surgical constructed a new 155,000 square foot flex/R&D building in 2013, which was immediately occupied. Despite this increase in supply, as seen in **Figure 14**, the overall flex/R&D vacancy rate in the LSAP has remained below 2 percent since 2016, well below the Countywide average of 8.3 percent.

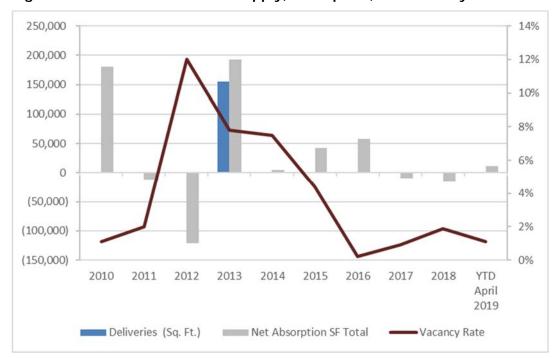


Figure 14 LSAP Flex/R&D New Supply, Absorption, and Vacancy Rate⁵

Source: CoStar

As a result of this demand, the average asking rent for flex/R&D space in the LSAP has generally remained above that of flex/R&D space in the City and County, as shown in **Figure 15**. As of April 2019, the average asking rent in the LSAP reached \$36.21, a 140 percent increase from the rate of \$15.08 in 2010. Moreover, this rate is nearly \$4 higher than the average flex/R&D asking

⁵ Figure 14 shows net absorption, meaning how much space was newly occupied versus newly vacated in a given year. For example, in 2010 there was no new construction, but roughly 180,000 more square feet of space was occupied than in the previous year. By contrast, in 2012, LSAP tenants in aggregate occupied 120,000 fewer square feet than was occupied in 2011.

rate of the City and more than \$8 higher than that of the County. Thus, while the local office supply appears to be in less demand than in other parts of the competitive market area, the LSAP's flex/R&D space is in a very strong competitive position.

\$40 \$35 \$30 \$25 \$20 \$15 \$10 \$5 \$0 2010 2011 2012 2014 2015 2013 2018 YTD April 2019 Santa Clara County Sunnyvale

Figure 15 Flex/R&D Rent Trends

Source: CoStar

However, it should be noted that of the handful of new flex/R&D projects that came online since 2010 within a two-mile radius of the LSAP, or in the 94086 ZIP code, or Citywide, almost none were built speculatively. Because almost all of this new flex/R&D space was built with the needs of particular tenants in mind, almost none of this space was made available on the market and therefore, rent data on this newly available flex/R&D space are not representative of the potential rent that future speculative flex/R&D space may command.

There is currently one flex project of roughly 326,000 square feet under construction within the boundaries of the LSAP. This project is the only flex project under construction throughout the City and County. This project is being built by Intuitive Surgical, a medical devices manufacturer, to expand its campus in the LSAP. Moreover, given the physical characteristics of this project, it is more in line with office projects elsewhere in the City, illustrating the blurry line between flex/R&D and more traditional office space.

These indicators suggest that flex/R&D space in the LSAP area has been well-utilized and competitive in the broader market area, and should continue to be incorporated as potential uses in the LSAP. Indeed, the City envisions that the amount of flex space will increase from the current 1.4 million to 2.4 million square feet, under both the adopted LSAP and the scenario with higher density housing. However, EPS anticipates that existing, relatively low-intensity flex/R&D uses in the LSAP area will be subject to continued pressure to redevelop for higher-density, higher-value uses such as residential and more traditional office space. Many (though not all) flex/R&D activities can be effectively accommodated in office buildings, particularly as office buildings move toward larger and more open floorplate designs.

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Industrial

Given the zoning designation of the LSAP, along with Flex/R&D space, industrial space accounts for a substantial share of the commercial real estate in the Plan Area. Moreover, a high concentration (19 percent) of all industrial space in the City is located in the LSAP. As discussed above, in recent years there has been a trend of converting industrial space into much-needed housing and office space, despite the continuing need to preserve certain types of industrial uses and zoning. These market pressures have resulted in a reduction of the City's industrial building supply from 7.73 million square feet in 2010 to only 5.88 million square feet in 2019 – a 24 percent decrease in the City while the County's industrial supply has decreased by only about six percent in the same period. According to the adopted 2016 LSAP and continuing into the currently envisioned higher-density scenario, the total amount of industrial space in the LSAP is anticipated to decrease by another million square feet by plan buildout, leaving only 26,500 square feet of industrial space in the LSAP area.

The vacancy rate for industrial space in the Plan Area is around 5 percent and indicative of well-utilized industrial space. Despite the need for particular types of industrial space, there were no new deliveries or major site demolitions during this business cycle, as shown in **Figure 16**. Still, there has been significant activity in the industrial real estate market in Sunnyvale, as buildings have been repositioned and turned over for new tenants. "Gross absorption" of industrial space in the City – the amount of space that has been re-tenanted even if it does not increase the overall occupied space— has equaled 1.92 million square feet between 2010 and 2019, meaning that a full third of the city's current industrial space has been re-tenanted during that period. The County has also had significant industrial re-tenanting with roughly 40 percent of its industrial space turning over since 2010.

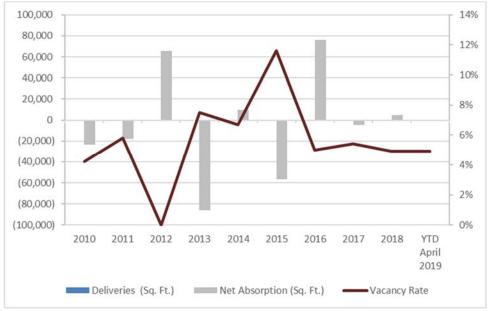
As a result of this high demand and limited supply of industrial space, asking rents have escalated rapidly in both the LSAP and the City and County overall, more than doubling in all areas since 2010. The average asking rent of industrial space in the LSAP has fluctuated between being higher and lower than that of the City, but generally higher than that of the County, as shown in **Figure 17**. However, much of this industrial product is older than 2010 since no new industrial buildings were built anywhere in Sunnyvale during the current business cycle. It is reasonable to assume that future new industrial space in the LSAP could command at least modest price premiums over the rates achieved in the existing supply.

In terms of new industrial space, there are no such projects under construction in the LSAP nor the City. And in fact, there are only four industrial projects under construction in the County; three manufacturing sites in northern Milpitas and one warehouse site in Gilroy to the south.

These indicators suggest that industrial space in the LSAP has been well-utilized, but still commands rents that are well below what might be achievable for office or more intensive flex/R&D uses. Thus, EPS anticipates that existing industrial uses in the LSAP area will be subject to continued pressure to redevelop for higher-density, higher-value uses. The adopted LSAP reflects this pressure by assuming a major reduction in the amount of industrial space that will remain in the LSAP, which is consistent with long-term trends in the total amount of industrial space in the City and County. The potential LSAP scenario with higher residential density maintains the same small amount of industrial space.

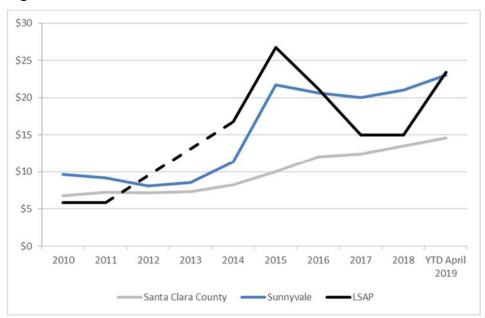
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Figure 16 LSAP Industrial New Supply, Absorption, and Vacancy Rate⁶



Source: CoStar

Figure 17 Industrial Rent Trends



Note: No industrial rent data were available for the LSAP during 2012-2013; the dashed line is intended to show a linear rate of growth between the two known data points in 2011 and 2014. Source: CoStar

⁶ Figure 16 shows net absorption, meaning how much space was newly occupied versus newly vacated in a given year. For example, in 2012 roughly 65,000 more square feet of space was occupied than in the previous year. By contrast, in 2013, LSAP tenants in aggregate occupied 85,000 fewer square feet than was occupied in 2012. Specific details regarding which businesses expanded or contracted in a given year is not available.

In either scenario, a significant portion of the City's industrial building supply is expected to be redeveloped for more intensive uses in the future, which will affect the ability of the City to maintain industrial uses within its diverse employment base. However, the alternative – to use regulations to effectively protect a larger portion of the industrial properties in the LSAP – would likely limit the amount of housing and more intensive workplaces to be developed, thus adversely affecting landowners' property values, contradicting evident market trends and pressures, and limiting the City's ability to effectively respond to demand for housing near transit.

Retail

Given the small size of the retail market in the LSAP, there is not sufficient data to compare operating metrics. Therefore, EPS compared the performance of the retail space of the larger 94086 ZIP code with that of the City and County. As shown in **Figure 18**, the retail vacancy rate in the ZIP code area has been below 1 percent for several years, well below that of the City and County. Reflective of this high demand for retail space in the 94086 ZIP code area, the average asking triple-net retail rent in the ZIP code area exceeded that of the City and County beginning in 2014, as shown in **Figure 19**. However, with regards to new retail developments that came online since 2010, the triple-net asking rent per square foot was \$48.00 for retail space within a two-mile radius of the LSAP, as well as the 94086 ZIP code, and Citywide. Therefore, it is expected that future retail space within the LSAP could reasonably command rents similar to retail space elsewhere in the City.

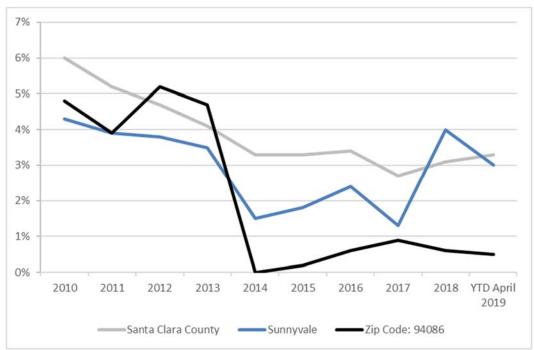
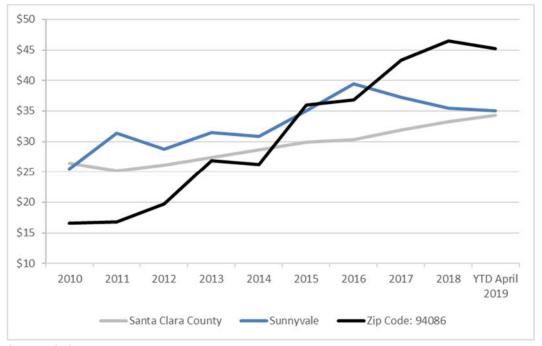


Figure 18 Retail Vacancy Trends

Source: CoStar

⁷ Data are from CoStar, as of May 2019.

Figure 19 Retail Rent Trends



Source: CoStar

Despite the strong operating conditions of the retail space market in the larger ZIP code area, there is currently no stand-alone retail project under construction in the Plan Area. However, there are approximately 7,400 square feet of retail planned in the Greystar multifamily project as well as another 1,500 square feet in the recently approved residential project at the Calstone/Pacific Building Materials site. Additionally, within a two-mile radius of the LSAP area, the SummerHill multifamily project also contains a retail component (40,000 square feet) as well as three stand-alone retail projects slated to add another 132,000 square feet by the end of the year.

These indicators suggest that the LSAP area has performed well as a retail location, though the supply of retail space is relatively small. As the LSAP area adds housing and jobs in the future, additional support for retail can be expected in the area, and such retail use may be incorporated as small components of mixed-use office or residential buildings.

Development Pipeline

In assessing the commercial and residential property markets in the LSAP, its surrounding vicinity, and comparing to the City at large, EPS has also compiled information on several projects currently in the pipeline. The map in **Figure 20** calls out the larger, multi-phase residential and commercial projects that have either been approved and/or broken ground as well as highlights all other projects currently under construction.

Many of the residential projects currently under construction are concentrated in the eastern portion of the City. The majority of the residential construction will be mid-rise multifamily product, which would be consistent with the reorientation of the Plan Area to accommodate higher density housing. Within the boundaries of the LSAP approximately 520 units are currently under construction in the Greystar project and as of February 2019, another 741 units have been

approved for the Calstone/Pacific Building Materials site at 1155-1175 Aster Avenue. In addition, there are a number of projects underway within a two-mile radius of the Plan Area that are slated to bring roughly 2,700 more units on the market within the next 12 to 18 months. These projects include SummerHill's development of 537 apartments and 450 condos along the northern edge of Kifer Road, just north of the LSAP in the City of Santa Clara as well as The

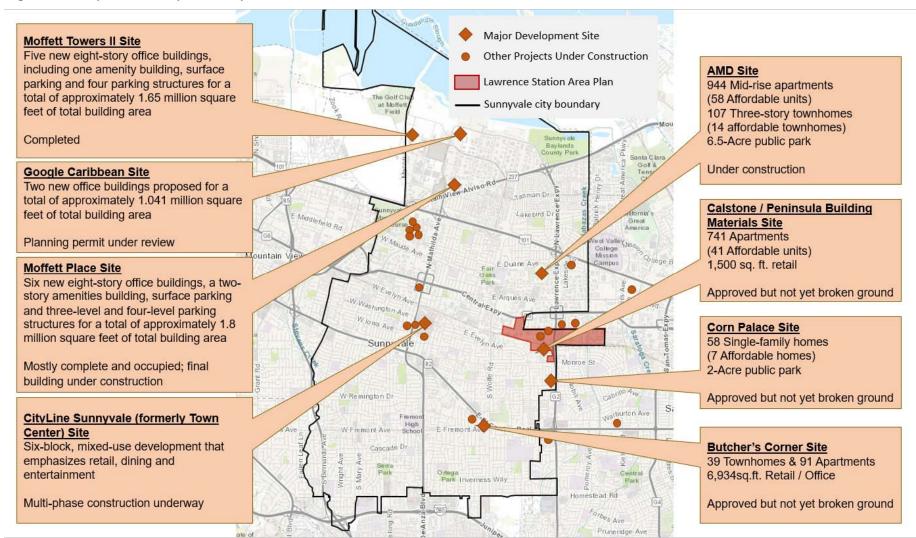
Irvine Company's development of nearly 1,400 units near the intersection of El Camino Real and Lawrence Expressway, among others.

Meanwhile, the northwestern corner of the City is more heavily weighted towards office properties, especially those projects concentrated in and around the Peery Park and Moffett Park developments. Slightly more than four million square feet of new office space should come online in the next 12 to 18 months while another 2.5 million square feet of new office projects are being proposed.

There is less new construction of other commercial property types such as flex/R&D, industrial, or retail, but it is to be expected that some office and residential projects will likely build in retail components on site. There is also a strong concentration of six blocks of retail, dining, and entertainment space in the CityLine Sunnyvale development, which is in the first phase of construction. In addition, two smaller, retail-only projects (totaling roughly 30,000 square feet) have been proposed for Peery Park and South Sunnyvale.

With strong population and employment growth leading to sustained housing demand, market trends have supported new residential developments. Robust employment growth throughout the region has also signaled the need for more intensive office uses. Given that positive market trends are already showing support for these types of land uses, the conversion of flex, R&D, light manufacturing/industrial, logistics and storage uses to accommodate higher density housing and more intensive office use should be absorbed relatively quickly by the market. EPS will continue to study these market conditions and the impact of rezoning in the LSAP in an upcoming fiscal analysis.

Figure 20 Map of Development Pipeline (as of November 2019)



Sources: City of Sunnyvale; CoStar; ESRI Business Analyst; Economic & Planning Systems, Inc.