Economic Impact Analysis

Borrett Park Specific

Moffett Park Economic Impact Analysis

Executive Summary

The purpose of this report is to describe the Moffett Park Specific Plan area's contributions to Sunnyvale's employment base, business base, and tax revenues in order to inform the City of Sunnyvale's considerations regarding how land use changes and development in the plan area may impact the plan area's contributions to Sunnyvale's economic diversity and public revenues.

Business Diversity Findings

- The Moffett Park plan area's approximately 35,000 jobs accounted for over 27 percent of Sunnyvale's total jobs as of November 2020. Jobs in the Moffett Park plan area are heavily concentrated in two industry sectors and a few large employers. As of December 2019, 87 percent of the Moffett Park plan area's jobs were at businesses in either the Information industry sector or the Professional, Scientific, and Technical Services industry sector. Jobs at businesses in the "Information" industry sector constituted 45 percent of all jobs in the Moffett Park plan area, with nearly all of these jobs located at a few large technology businesses including Google and Amazon. 42 percent of the plan area's jobs were in the Professional, Scientific, and Technical Services industry sector, with 80 percent of these jobs located at Juniper Networks, NetApp, and Lockheed Martin.
- Despite the Moffett Park plan area's high concentration of jobs at a few large employers, significant economic diversity exists among the area's smaller employers in a few different industry sectors. For example, as of December 2019, 60 smaller firms existed within the Professional, Scientific, and Technical Services industry sector; their activities ranged from professional services to research and development. The third largest industry sector in the Moffett Park plan area—representing six percent of jobs and 12 percent of businesses—consisted of "Manufacturing" businesses and jobs primarily associated with research and production activities related to the life science, medical device, semiconductor, and other computer hardware fields. Businesses in the "Wholesale Trade" and "Construction" industry sectors constituted four percent of the plan area's jobs. Businesses in "Accommodation and Food Services" (e.g., hotels and restaurants) constituted another 1.1 percent of the plan area's jobs.
- The overall number of businesses in the Moffett Park plan area declined between 2011 and December 2019, with the greatest losses among businesses in the Manufacturing industry sector. During this period, the total number of firms in the plan area fell from 240 to 167.¹ The greatest decline occurred in the Manufacturing industry sector, which fell from 55 establishments to 20 and accounted for 48 percent of the net loss in firms.
- Small businesses constitute the majority of employers in the Moffett Park plan area and are critical contributors to the area's economic diversity and entrepreneurial activity. Although businesses with less than 250 employees only accounted for about 13 percent of all jobs in the plan area, these businesses represent a relatively diverse mix of industry sectors and entrepreneurial activity. These businesses accounted for 153 out of 167 employers and over 4,400 jobs in the plan area as of December 2019.

¹ Note that these declines in business counts do not necessarily reflect a decline in number of jobs, but instead a process of consolidation of jobs within a few large employers. While comparable historic employment counts are not available via the City of Sunnyvale's business license data, total jobs have likely increased in the plan area over time as higher-intensity office projects have replaced lower-intensity light industrial and office uses.



Wage Diversity Findings

• The Moffett Park plan area's two technology-oriented and largest industry sectors—Information and Professional, Scientific, and Technical Services—are associated with very high average and median wages, but also high education, training, and skill requirements. In contrast, jobs in the smaller Manufacturing and Wholesale Trade sectors are associated with median annual wages meeting or exceeding annual countywide wages for all industries overall, while also representing a diverse variety of occupations that include middle-wage jobs with opportunities for upward mobility that, while requiring specialized skills and training, do not necessarily require advanced degrees. Several of the plan area's smallest industry sectors are associated with relatively low wages, such as jobs in stores, restaurants, and hotels.

Sunnyvale General Fund Property, Sales, and Transient Occupancy Tax Revenue Contributions

• Properties in the Moffett Park plan area generate: 1) over 20 percent Sunnyvale's property tax revenue, with this share increasing over time; 2) as of 2019, approximately seven to eight percent of Sunnyvale's total General Fund sales tax revenue; 3) in recent years, between 13 and 18 percent of citywide transient occupancy tax revenue.

Summary of Business Displacement Risks and Impacts

- As in much of Silicon Valley, real estate market pressures in the Moffett Park plan area are driving a transition away from longstanding lower-intensity industrial, flex, and office uses toward replacement with higher-intensity office and R&D uses that attract tenants who can afford higher rents or property sales prices. As a result, tenants in the Moffett Park plan area's existing lower-intensity industrial, flex, and office buildings must relocate as leases expire or owner-operators choose to sell their properties to developers, resulting in losses of existing business diversity over time.
- As this process continues to unfold in Moffett Park, the plan area is likely to gain jobs overall but lose
 economic diversity and middle-skill job opportunities as businesses and jobs become concentrated in
 largely office-based businesses in the Information and Professional, Scientific, and Technical Services
 sectors. The loss of business diversity in the plan area could make the local economy less resilient to
 economic shocks that specifically impact the increasingly dominant technology and professional services
 industries. Manufacturing and Wholesale Trade businesses requiring light industrial space are especially
 vulnerable to displacement. The share of small businesses in the plan area could also decline due to
 growth of large employers and the corresponding redevelopment of smaller and multi-tenant commercial
 and industrial properties in favor of single-tenant office properties. Loss of manufacturing businesses
 would further reduce the number of well-paying jobs with relatively low barriers to entry.
- Maintaining business diversity in the Moffett Park plan area would likely require public policy
 interventions to retain or provide affordable industrial/flex space that accommodates diverse economic
 activity and businesses. Examples of these public policies include zoning and land use restrictions and
 policies requiring or incentivizing developers to provide affordable industrial and flex/R&D spaces as part
 of their projects.
- The process of redevelopment within the Moffett Park plan area is likely to increase Sunnyvale's overall
 annual General Fund revenues. Continued redevelopment of properties in the Moffett Park plan area will
 generate an increase in annual property tax revenues for the City of Sunnyvale. Further declines in
 Manufacturing and Wholesale Trade businesses in the plan area will likely result in continued loss of
 business-to-business sales tax revenues for the City of Sunnyvale, but potential gains in other sales tax
 revenues if retail uses are added to the area.



Introduction

This report describes the Moffett Park Specific Plan area's contributions to Sunnyvale's employment base, business base, and tax revenues. The City of Sunnyvale places a high priority on maintaining and expanding a diverse business mix that also generates revenues for the City's General Fund. These priorities are expressed in the policies of the "Sunnyvale General Plan" and were reiterated by the Sunnyvale City Council as part of its approval for undertaking the Moffett Park Specific Plan update. The purpose of this report is to assess current conditions in the Moffett Park plan area related to these policy priorities, and consider how changes in the plan area may impact these contributions to Sunnyvale's economic diversity and public revenues.

Strategic Economics completed this analysis as one of several technical studies that will inform revisions to the Moffett Park Specific Plan. The Moffett Park Specific Plan area, referred to as "the Moffett Park plan area" or "the plan area" in this report, is located within the City of Sunnyvale north of Highway 237 and south of the San Francisco Bay shoreline, as shown in Figure 1.

Note that this report primarily focuses on data that pre-dates the COVID-19 pandemic. The impacts of the COVID-19 pandemic are rapidly evolving, and the depth and length of their severity are not yet clear. However, the Moffett Park plan area's basic competitive assets—such as transportation access, a concentration of technology businesses, and a desirable location within Silicon Valley—are likely to remain fixed in place. As a result, many of the long-term trends in the business and industry mix in Moffett Park are likely to continue in the long-term as the economy emerges from the worst effects of the pandemic.

This report's sections and contents include:

- 1. Business Diversity: Describes the number and types of jobs by industry sector in the plan area, and describes the plan area's business mix by firm size
- 2. Wage Diversity: Describes the average wages of occupations associated with each of the plan area's major industry sectors
- 3. Property, Sales Tax, and Transient Occupancy Tax Revenues: Describes the City of Sunnyvale's sales tax and property tax revenues generated by the plan area's existing mix of businesses and land uses
- 4. Business Displacement Risks and Impacts: Describes potential future trends in businesses, jobs, and public revenues based on potential ongoing changes in land uses, development activity, and industry growth

Data Sources

The analysis assesses the Moffett Park plan area's total employment, industry composition, and firm sizes using business license data provided by the City of Sunnyvale. Wage diversity was measured based on Occupational Employment Statistics (OES) data for the San Jose-Sunnyvale-Santa Clara Metropolitan Statistical Area. The Moffett Park plan area's contributions to Sunnyvale's sales tax, property tax, and transient occupancy tax revenues were provided by the City of Sunnyvale. The analyses and findings are supplemented by other market and economic information available in the "Moffett Park Market Analysis" report developed for the specific plan update, and by data and findings from past economic analyses completed by the City of Sunnyvale.



FIGURE 1: MOFFETT PARK SPECIFIC PLAN AREA





Business Diversity

The composition of businesses found within the Moffett Park plan area reflects the area's historic economic strengths as well as recent trends in business growth and development activity. Analysis of the plan area's business mix provides insights into long-term changes that may continue in the future. The analysis also provides information about different types and sizes of businesses that may potentially be subject to different growth opportunities or challenges as a result of land use and policy changes.

The following findings describe the Moffett Park plan area's current unique mix of businesses. The findings are based on an analysis of businesses, employment, and business size by industry sector. The primary dataset used for the detailed analyses consists of establishment-level records from City of Sunnyvale business license data for December 2019, with additional cleaning and adjustments based in part on the City of Sunnyvale's "Community and Business Profiles" for the second quarter of 2019 and direct input from major employers in Moffett Park.

Industries in Moffett Park (by Number of Jobs and Businesses)

The Moffett Park plan area accounts for more than a quarter of Sunnyvale's total jobs. The City of Sunnyvale's business license data indicates that the Moffett Park plan area accounted for 27.4 percent of jobs in Sunnyvale as of November 2020. Detailed data for the Moffett Park plan area indicates there were approximately 35,212 jobs in the plan area as of December 2019, based on the City's business license records, Community and Business Profile records, and direct input from area employers.

Jobs at businesses in the "Information" industry sector constituted 45 percent of all jobs in the Moffett Park plan area as of December 2019, with nearly all of these jobs located at a few large technology businesses. As shown in Figure 2, the nearly 16,000 Information jobs in the plan area were located at just 12 firms that constituted seven percent of all businesses. The Information sector is one of the primary industries in which major Silicon Valley technology businesses are typically categorized. Within the Moffett Park plan area, for example, over 70 percent of Information jobs were at Google, with Amazon representing the next largest share of these jobs.

Over 40 percent of the Moffett Park plan area's jobs were at businesses in the "Professional, Scientific, and Technical Services" industry sector as of December 2019. As shown in Figure 3, plan area businesses in the Professional, Scientific, and Technical Services sector engage in a wide range of activities. These include computer, medical, and aerospace research and development, along with providers of other technical and professional business services. The largest plan area businesses in this sector include computer technology companies such as Juniper Networks and NetApp, and the aerospace company Lockheed Martin; together, these three companies constituted nearly 80 percent of jobs in the industry sector as of December 2019.

The third largest industry sector in the Moffett Park plan area consists of "Manufacturing" businesses and jobs that are primarily associated with research and production activities related to the life science, medical device, semiconductor, and other computer hardware fields. As of December 2019, approximately six percent of Moffett Park's jobs were at Manufacturing businesses, which included high-tech, advanced manufacturing and biotechnology firms. For example, Figure 4 shows that two of the four largest Manufacturing sub-sectors in the plan area, by number of jobs, included manufacturers of electromedical instruments and medical equipment and supplies. The other top two sectors included businesses engaged in computer and electronic equipment manufacturing. Overall, the five largest manufacturing employers in Moffett Park included the medical research and device companies Cepheid (with over half the plan area's manufacturing jobs), Accuray, and Molecular Devices, along with the computer technology companies Fairchild Semiconductor and Microsemi Storage Solutions.

Businesses in the "Wholesale Trade" and "Construction" industry sectors constituted four percent of the plan area's jobs in December 2019. As shown in Figure 2, there were only 11 businesses in these sectors. Most of these



businesses were still directly connected to the high-tech Silicon Valley economy, including research and development, manufacturing, and deployment of technologies such as optical communications equipment, robotics, and audio equipment.

The Moffett Park plan area includes few jobs in the "Accommodation and Food Services," "Retail Trade," and "Arts, Entertainment, and Recreation" industry sectors since the plan area includes few retail, restaurant, and personal services businesses. As of December 2019, jobs at businesses in these industry sectors constituted 1.5 percent of all jobs in the plan area, as shown in Figure 2. These jobs were located at the plan area's three hotels and its few retail, restaurant, and personal services businesses.

Since 2011, the overall number of businesses in the Moffett Park plan area has declined, with the greatest losses among businesses in the Manufacturing industry sector. As shown in Figure 5, the number of establishments in the Moffett Park plan area declined in nearly every industry sector between 2011 and December 2019. During this period, the total number of firms fell from 240 to 167 (note, however, that these declines do not necessarily correspond to a decline in number of jobs; historic job counts were unavailable in the business license data). The greatest decline occurred in the Manufacturing industry sector, which fell from 55 establishments to 20 and accounted for 48 percent of the net loss in firms. The overall decline in the plan area's number of businesses occurred during a period of expansion by several of the largest plan area employers, such as Google.

Business Size

The following findings describe the Moffett Park plan area's small businesses and the industry sectors in which those businesses are found. Given the long-term decline in the total number of businesses in the Moffett Park plan area and the presence of several growing large employers, small businesses have likely already undergone significant displacement due to rising rents, losses of affordable multi-tenant spaces, and non-renewal of leases in preparation for sale or redevelopment of buildings by property owners. The following findings explore the current distribution of businesses by size as a gauge of business diversity and to help inform an understanding of the businesses at risk of displacement if demand for space from large employers results in further redevelopment of smaller or multitenant properties.

Small businesses constitute the majority of employers in the Moffett Park plan area and are critical contributors to the area's economic diversity and entrepreneurial activity. As shown in Figure 6, just over 60 percent of the plan area's businesses had fewer than 20 employees as of December 2019. Businesses with between 20 and 249 employees accounted for another 31 percent of businesses. Although businesses with fewer than 250 employees together only accounted for about 13 percent of all jobs in the plan area, these businesses represent a relatively diverse mix of industry sectors and entrepreneurial activity. These businesses accounted for 153 out of 167 employers in the plan area, and over 4,400 jobs.

Only 14 businesses in the Moffett Park plan area employed 250 or more people as of December 2019. These businesses constituted just over eight percent of establishments, as shown in Figure 6, but employed approximately 87 percent of workers in the area. These large businesses are all classified in the Information and Professional, Scientific, and Technical Services industry sectors. Examples of the area's largest businesses include Google, Lockheed Martin, Juniper Networks, Amazon, and NetApp.

While the Information sector is dominated by a few large businesses, the Professional, Scientific, and Technical Services sector also includes numerous small businesses. The Professional, Scientific, and Technical Services sector includes businesses in a diverse variety of sizes. 60 percent of businesses in this sector had fewer than 20 employees in December 2019 (as shown in Figure 2), with these businesses including smaller research and development and professional and technical consulting firms.

The plan area's smaller industry sectors (by employment) include a relatively high number of small businesses and contribute to an outsized share of the plan area's economic diversity. As shown in Figure 2, many of the



industry sectors with a relatively small share of the Moffett Park plan area's total jobs constituted an outsized share of the area's small businesses. For example, businesses in the Accommodation and Food Services sector represented one percent of plan area jobs, yet made up nearly 13 percent of businesses with fewer than 20 employees. Other notable sectors include Retail Trade and "Real Estate Rental and Leasing." Although these smaller industry sectors do not contribute a high share of the plan area's jobs, they do contribute to the area's economic diversity in terms of both industry mix and business size.



FIGURE 2: EMPLOYMENT AND FIRMS BY INDUSTRY, MOFFETT PARK, DECEMBER 2019

Industry (2-digit NAICS code categories)	Number of Jobs	% Total Jobs	Number of Firms	% of Total Firms	Number of Small Firms (a)	% of Total Small Firms
Information (b)	15,855	45.0%	12	7.2%	2	2.0%
Professional, Scientific, & Technical Services (b)	14,787	42.0%	63	37.7%	38	37.6%
Manufacturing	2,224	6.3%	20	12.0%	10	9.9%
Wholesale Trade	1,057	3.0%	6	3.6%	1	1.0%
Accommodation & Food Services	397	1.1%	20	12.0%	13	12.9%
Construction	347	1.0%	5	3.0%	3	3.0%
Finance and Insurance	225	0.6%	3	1.8%	2	2.0%
Retail Trade	83	0.2%	6	3.6%	4	4.0%
Real Estate & Rental & Leasing	73	0.2%	13	7.8%	12	11.9%
Administrative & Waste Management	62	0.2%	5	3.0%	4	4.0%
Arts, Entertainment, and Recreation	45	0.1%	3	1.8%	2	2.0%
Other (c)	57	0.2%	11	6.6%	10	9.9%
Total	35,212	100.0%	167	100.0%	101	100.0%

(a) Small firms include at least 1 employee and less than 20.

(b) Employment numbers from the City's business license data for the Moffett Park plan area were supplemented by data available in the City of Sunnyvale's "Community and Business Profiles" for the second quarter of 2019, and direct input from area employers.

(c) "Other" includes: Utilities; Other Services (except Public Administration); Public Administration; Educational Services; Health Care and Social Assistance. Source: City of Sunnyvale Business License Data, 2019; Strategic Economics, 2021.



FIGURE 3: PROFESSIONAL, SCIENTIFIC, & TECHNICAL SERVICES INDUSTRY SUBSECTORS IN MOFFETT PARK PLAN AREA, DECEMBER 2019

Industry (4-digit NAICS code categories)	Number of Jobs	% Total Jobs	Number of Firms	% of Total Firms	Number of Small Firms	% of Total Small Firms
Computer Systems Design & Related Services	8,939	60%	22	35%	8	21%
Management, Scientific, & Technical Consulting Services*	5,129	35%	7	11%	5	13%
Scientific Research & Development Services	509	3%	20	32%	13	34%
Specialized Design Services	98	1%	2	3%	1	3%
Architectural, Engineering, & Related Services	89	1%	7	11%	6	16%
Advertising, Public Relations, & Related Services	15	0%	1	2%	1	3%
Other Professional, Scientific, & Technical Services	7	0%	3	5%	3	8%
Accounting, Tax Preparation, Bookkeeping, & Payroll Services	1	0%	1	2%	1	3%
Total Professional, Scientific, & Technical Services	14,787	100%	63	100%	38	100%

*Employment numbers from the City's business license data for the Moffett Park plan area were supplemented by data available in the City of Sunnyvale's "Community and Business Profiles" for the second guarter of 2019, and direct input from area employers.

Note: Small firms include at least 1 employee and less than 20.

Source: City of Sunnyvale Business License Data, 2019; Strategic Economics, 2021.

FIGURE 4: MANUFACTURING INDUSTRY SUBSECTORS IN MOFFETT PARK PLAN AREA, DECEMBER 2019

Industry (4-digit NAICS code categories)	Number of Jobs	% of Total Jobs	Number of Firms	% of Total Firms	Number of Small Firms	% of Total Small Firms
Navigational, Measuring, Electromedical, & Control Instruments Mfg.	1,380	62%	3	15%	1	10%
Semiconductor & Other Electronic Component Manufacturing	410	18%	8	40%	5	50%
Medical Equipment & Supplies Manufacturing	193	9%	1	5%	0	0%
Manufacturing & Reproducing Magnetic & Optical Media	80	4%	1	5%	0	0%
Motor Vehicle Manufacturing	65	3%	1	5%	0	0%
Communications Equipment Manufacturing	43	2%	2	10%	1	10%
Commercial & Service Industry Machinery Manufacturing	32	1%	1	5%	0	0%
Bakeries & Tortilla Manufacturing	5	0%	1	5%	1	10%
Other Miscellaneous Manufacturing	1	0%	1	5%	1	10%
Manufacturing Industries, Not Elsewhere Classified	15	1%	1	5%	1	10%
Total Manufacturing	2,224	100%	20	100%	10	100%

Note: Small firms include at least 1 employee and less than 20.

Source: City of Sunnyvale Business License Data, 2019; Strategic Economics, 2021.



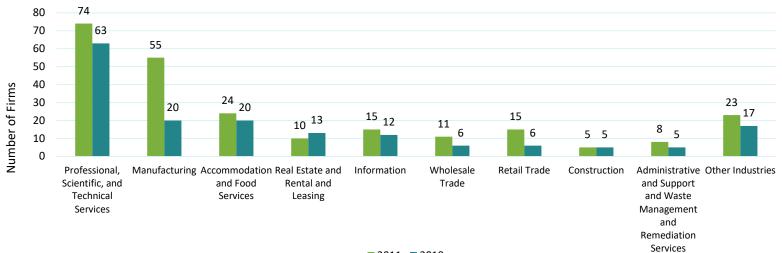


FIGURE 5: CHANGE IN NUMBER OF FIRMS BY INDUSTRY SECTOR, MOFFETT PARK PLAN AREA, 2011 AND 2019

2011 2019

Source: City of Sunnyvale Business License Data, 2019; Strategic Economics, 2020.

FIGURE 6: DISTRIBUTION OF FIRMS BY NUMBER OF EMPLOYEES, MOFFETT PARK PLAN AREA, DECEMBER 2019

Firm Size by Number of Employees	Number of Firms	% of Total Firms	Number of Jobs	% Total Jobs
1 to 9	82	49.1%	264	0.7%
10 to 19	19	11.4%	245	0.7%
20 to 49	22	13.2%	620	1.8%
50 to 249	30	18.0%	3,314	9.4%
250 or More*	14	8.4%	30,769	87.4%
Total	167	100.0%	35,212	100.0%

*Employment numbers from the City's business license data for the Moffett Park plan area were supplemented by data available in the City of Sunnyvale's "Community and Business Profiles" for the second quarter of 2019, and direct input from area employers.

Source: City of Sunnyvale Business License Data, 2019; Strategic Economics, 2020.



Wage Diversity

Jobs at businesses within an industry sector constitute a unique mix of occupations and the wages associated with those occupations. The following findings examine the overall regional average and median wages of occupations within industry sectors found in the Moffett Park plan area. The wage data analysis covers all jobs by industry sector in the San Jose-Sunnyvale-Santa Clara Metropolitan Statistical Area (MSA), based on data from the U.S. Bureau of Labor Statistics Occupational Employment Statistics program.

The Moffett Park plan area's two technology-oriented and largest industry sectors are associated with very high average and median wages. Moffett Park's top employment industries (Information and Professional, Scientific, and Technical Services) offer among the highest wages of all industry sectors, as shown in Figure 7. In 2019, annual median wages in the San Jose-Sunnyvale-Santa Clara MSA for Professional, Scientific, and Technical Services jobs and Information sector jobs were \$111,550 and \$100,526 respectively, compared to an overall countywide median wage of \$61,464. As with all industry sectors, these sectors do include jobs at a wide range of income levels; however, the sectors' average and median wages are relatively high due to these sectors' high shares of workers in well-compensated occupations requiring advanced degrees and technical skills.

Jobs in the Manufacturing and Wholesale Trade sectors are associated with median annual wages meeting or exceeding annual countywide wages for all industries overall, with many of these occupations not requiring advanced degrees. These sectors constituted the third and fourth largest industries in the Moffett Park plan area by number of employees in December 2019. As shown in Figure 7, median annual wages for Manufacturing jobs in the San Jose-Sunnyvale-Santa Clara MSA in 2019 were nearly \$90,000, and were \$63,000 for Wholesale Trade jobs. The Manufacturing sector typically includes a diverse variety of occupations that include middle-wage jobs with opportunities for upward mobility that, while requiring specialized skills and training, do not necessarily require advanced degrees.

Several of the plan area's smallest industry sectors are associated with relatively low wages. The

Accommodation and Food Services, Retail Trade, Real Estate and Rental and Leasing, Administrative and Waste Management, and Arts, Entertainment, and Recreation industry sectors are all associated with median and average wages that are significantly lower than for all industries overall, as shown in Figure 7. Although these sectors together constitute 1.9 percent of the plan area's jobs, businesses in these industries do play an important role in supporting the area's workers and major businesses.



Industry	% of Plan Area Jobs	% of Plan Area Firms	Average Annual Wage	Median Annual Wage
Information	45.0%	7.2%	\$112,403	\$100,526
Professional, Scientific, & Technical Services	42.0%	37.7%	\$123,261	\$111,550
Manufacturing	6.3%	12.0%	\$103,688	\$89,669
Wholesale Trade	3.0%	3.6%	\$83,637	\$62,878
Accommodation & Food Services	1.1%	12.0%	\$33,280	\$28,517
Construction	1.0%	3.0%	\$75,296	\$64,854
Finance & Insurance	0.6%	1.8%	\$106,787	\$74,672
Retail Trade	0.2%	3.6%	\$43,763	\$32,427
Real Estate & Rental & Leasing	0.2%	7.8%	\$65,021	\$49,754
Administrative & Waste Management	0.2%	3.0%	\$52,915	\$40,269
Arts, Entertainment, & Recreation	0.1%	1.8%	\$44,429	\$31,283
Other Industries	0.2%	6.6%	N/A	N/A
All Industries	N/A	N/A	\$82,285	\$61,464

FIGURE 7: AVERAGE AND MEDIAN WAGES BY INDUSTRY, SAN JOSE-SUNNYVALE-SANTA CLARA MSA, Q1 2019

Note: Wages are based on the mean and median hourly wages for the San Jose-Sunnyvale-Santa Clara MSA, Q1 2019, and assumes that employees work 2,080 hours a year.

Source: Occupational Employment Statistics, U.S. Bureau of Labor Statistics, Q1 2019; Strategic Economics, 2020.



Property, Sales Tax, and Transient Occupancy Tax Revenues

The Moffett Park plan area's existing mix of land uses and businesses generate a variety of tax revenues for the City of Sunnyvale's General Fund. The General Fund is the City of Sunnyvale's primary unrestricted fund for providing City services. The following findings describe the Moffett Park plan area's contributions to Sunnyvale's property tax, sales tax, and transient occupancy revenues, including factors that influence these revenues. This information illustrates the role the plan area currently plays in funding the City of Sunnyvale's services for the City's businesses and residents, and provides a baseline for understanding how future changes in the plan area could potentially impact the City of Sunnyvale's future General Fund revenues.

Property Tax

Property taxes are the largest source of tax revenue for the City of Sunnyvale's General Fund and recently grew rapidly due to sales of major properties, rising property values, and development activity. During Sunnyvale's 2018/19 fiscal year (July 2018 through June 2019), the City collected a total of \$185.6 million in General Fund tax revenues. Figure 8 shows that \$84.8 million (46 percent of total revenues) was generated by all types of property tax revenue. Sunnyvale's total General Fund property tax revenue increased by nearly 55 percent between fiscal year 2014/15 and 2018/19, with growth driven by development activity, rising property values, and reassessment of major properties due to ownership changes. Property tax revenue is tied to both land use type and development density. Both residential and commercial uses contribute to property taxes, and new development or redevelopment often provide an increase in property tax revenue because these changes trigger a reassessment of property value—along with sales and reassessment of properties in general. Denser development concentrates more property value on a given site, and therefore also provides a higher assessed value relative to comparable lower density development.

Properties in the Moffett Park plan area generate over 20 percent Sunnyvale's property tax revenue, with this share increasing over time. Figure 9 compares the Moffett Park plan area and the remainder of Sunnyvale's contributions to the City of Sunnyvale's share of revenue received from the base one percent property tax. During the period from fiscal year 2016/17 to 2018/19, the Moffett Park plan area's contributions increased from 20 percent to 22 percent of citywide base property tax revenue. Properties in the Moffett Park plan area constitute a similar percentage of citywide assessed value, and therefore likely contribute a similar share of citywide revenues from other property tax-related sources such as "property tax in-lieu of vehicle license fees."

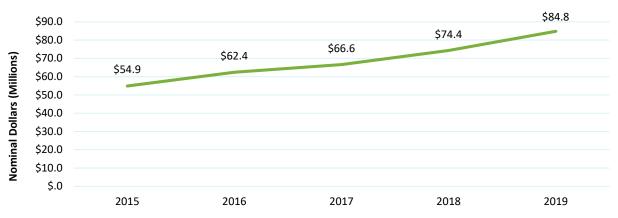


FIGURE 8: CITY OF SUNNYVALE PROPERTY TAX REVENUES*, FY 2014/15 THROUGH FY 2018/19

*Data reflects all property tax revenue sources, including Sunnyvale's share of the base 1% property tax rate and property tax in-lieu of vehicle license fee revenue.

Note: Dates reflect Sunnyvale's fiscal calendar which ends on June 30th.

Source: City of Sunnyvale budget documents, 2017-2020; Strategic Economics, 2020.



FIGURE 9: COMPARISON OF "1%" PROPERTY TAX REVENUES*, SUNNYVALE CITYWIDE VERSUS MOFFETT PARK, FY 2016/17 THROUGH FY 2018/19



*Reflects only the City's share of revenues received from the base 1% property tax rate for purposes of comparing Moffett Park's contributions to citywide revenues. Data does not include other sources of property tax revenue such as property tax in lieu of vehicle license fee revenue. Note: Dates reflect Sunnyvale's fiscal calendar which ends on June 30th.

Source: HdL Coren & Cone via the City of Sunnyvale, "Sunnyvale Property Tax Summary 2020-21"; Strategic Economics, 2021.

Sales Tax

As of 2019, sales tax revenue generated within the Moffett Park plan area accounted for approximately seven to eight percent of Sunnyvale's total General Fund sales tax revenue—sales tax revenue is the General Fund's second largest source of revenue overall. Figure 10 shows that in the 2019 calendar year, Moffett Park generated \$2.4 million in sales tax revenues, versus \$34 million in citywide General Fund sales tax revenue in fiscal year 2018/19. Sales tax is the second largest General Fund revenue source in Sunnyvale, with sales tax revenues accounted for approximately \$34 million in General Fund revenues in the 2018/19 fiscal year (as shown in Figure 11), representing 18 percent of total revenues. Figure 11 also shows that from fiscal year 2011/12 to 2018/19, Sunnyvale's General Fund sales tax revenues have gradually increased, averaging one percent growth each fiscal year.

An unusually high share of Sunnyvale's General Fund sales tax revenue is generated by business-to-business sales—although these sales are also undergoing a long-term decline. Taxable sales classified as "business and industry" account for approximately 33 percent of total taxable sales in the City. Businesses in this category are typically engaged in business-to-business transactions (such as manufacturing and wholesale trade) rather than retail customer-oriented transactions. While the share of taxable sales generated by business-to-business transactions are still unusually high in Sunnyvale, business-to-business taxable sales fell by 45 percent between fiscal years 2010/11 and 2018/19. This decline was largely caused by the decline of businesses in the Wholesale Trade and Manufacturing sectors in Sunnyvale.²

Based on the mix of businesses in the Moffett Park plan area, it is likely that a large share of sales tax revenue generated in the plan area comes from business-to-business sales. Detailed breakdowns of sales tax revenue by business category are not available for the Moffett Park plan area due to confidentiality restrictions. However, the Moffett Park plan area contains a very limited number of retail and restaurant businesses that would generate retail sales tax revenues. As a result, Moffett Park's sales tax revenues are primarily generated by business-to-business sales, and therefore contribute to this significant source of citywide sales tax revenue.

Matching citywide trends for business-to-business sales tax revenue, sales tax revenue generated within Moffett Park has been historically volatile from year to year, but has generally declined since peaking in 2012. At its peak at the end of the 2012 calendar year, the Moffett Park plan area generated approximately \$5.6 million in sales tax

² Findings are based on data analysis for the City of Sunnyvale by BAE Urban Economics, February 14, 2020.



revenues for the City (Figure 10). By 2019, this number dropped by more than half to \$2.4 million. This decline is similar to the citywide trend in declining business-to-business sales tax revenues, suggesting that the plan area is contributing to this revenue source's overall volatility and decline.

The decline of business-to-business sales tax revenues in the Moffett Park plan area mirrors the area's loss of Wholesale Trade and Manufacturing businesses. As noted earlier, the decline of business-to-business taxable sales in Sunnyvale overall is being driven by the loss of businesses in the Wholesale Trade and Manufacturing sectors. This pattern matches trends in the Moffett Park plan area. The loss of sales tax revenue generated by businesses in the plan area since 2012 coincided with the loss of 40 Manufacturing and Wholesale Trade industry sector businesses between 2011 and 2019, as shown in Figure 5.



FIGURE 10: MOFFETT PARK SALES TAX REVENUE, CALENDAR YEAR 2009 THROUGH 2019

Note: Dates reflect calendar years.

Source: Economic Development Department, City of Sunnyvale, 2019; Strategic Economics, 2020.



FIGURE 11: CITY OF SUNNYVALE GENERAL FUND SALES TAX REVENUES, FY 2009/10 THROUGH 2018/19

Note: Dates reflect Sunnyvale's fiscal calendar which ends on June 30th. Source: City of Sunnyvale budget documents, 2019; Strategic Economics, 2020.



Transient Occupancy Tax

In recent years, the Moffett Park plan area's hotels contributed between 13 and 18 percent of citywide transient occupancy tax revenue. Transient occupancy tax (TOT) is charged to guests in transient accommodations such as hotels, motels, and short-term rentals. TOT revenue is typically the third largest revenue source for the City of Sunnyvale's General Fund. The TOT rate is currently 12.5 percent, increased from 10.5 percent as of January 1, 2019. As shown in Figure 12, the Moffett Park plan area's hotels contributed between \$2.6 million and \$2.9 million in annual transient occupancy tax revenue during the years 2015 through 2019. The hotels in the Moffett Park plan area contributed between 13 and 18 percent of citywide revenue during those years, or 15 percent overall for the 2015 to 2019 period. The plan area's TOT revenue contributions depend on the performance of existing hotels and the number of hotels operating in the area.

FIGURE 12: COMPARISON OF TRANSIENT OCCUPANCY TAX REVENUES, SUNNYVALE CITYWIDE VERSUS MOFFETT PARK PLAN AREA, 2015 THROUGH 2019



Source: Economic Development Department, City of Sunnyvale, 2021; Strategic Economics, 2021.



Business Displacement Risks and Impacts

The following findings evaluate potential risk of displacement for existing businesses in the Moffett Park plan area and describe the potential economic and fiscal impacts of this displacement. The findings describe the process and causes of displacement, the types and sizes of businesses that are most vulnerable to displacement based on recent trends, and the potential impacts of this displacement on the plan area's economic diversity. The findings also describe potential impacts on wage diversity and fiscal contributions to the City.

As in much of Silicon Valley, real estate market pressures in Moffett Park are driving a transition away from longstanding lower-intensity industrial, flex, and office uses toward replacement with higher-intensity office and R&D uses that can attract tenants who can afford higher rents or property sales prices. As shown in Figure 13, office properties command significantly higher rents than flex/R&D and industrial properties in Sunnyvale, consistent with patterns throughout Silicon Valley. Modern and higher-intensity office properties also command correspondingly higher sales prices. The high achievable rents and property values for higher-intensity modern office and R&D space—such as multistory buildings with high floor area ratios (i.e., built space relative to land area)—have incentivized developers and property owners in the Moffett Park plan area to pursue redevelopment of existing low-rise, lower-intensity, and older industrial, flex/R&D, and office uses. Brokers interviewed for the Moffett Park Market Analysis³ noted that this process has been underway in earnest in the plan area for at least the last seven to eight years.

As a result of this redevelopment process, tenants in the Moffett Park plan area's existing lower-intensity industrial, flex, and office buildings must relocate as leases expire or owner-operators choose to sell their properties to developers, resulting in losses of existing business diversity over time. Property owners seeking to sell or redevelop their older commercial and industrial properties will typically choose not to renew tenants' leases or may buy out tenant leases. Alternately, businesses that own their own properties may sell and relocate their operations to allow for redevelopment. These displaced businesses must then seek alternative affordable flex/R&D or industrial space. The total inventory of these spaces is in a long-term decline in the Moffett Park plan area, Sunnyvale, and surrounding communities, while rents for available space have been increasing. As a result, brokers interviewed for the Moffett Park Market Analysis⁴ noted that competition for flex/R&D and industrial space is strong, leading to many businesses relocating outside of the Silicon Valley area.

As this process continues to unfold in Moffett Park, the plan area is likely to continue gaining jobs overall, but losing economic diversity as businesses and jobs become concentrated in largely office-based businesses in the Information and Professional, Scientific, and Technical Services sectors; Manufacturing and Wholesale Trade businesses are especially vulnerable to displacement. Businesses in the Manufacturing and Wholesale Trade industry sectors remain most at risk of loss, continuing the significant declines between 2011 and 2019 shown in Figure 5. Area commercial and industrial real estate brokers interviewed during completion of the Moffett Park Market Analysis⁵ also noted an ongoing trend of technology companies growing in the plan area, while manufacturing and R&D firms have declined since the "Great Recession" of 2008 to 2009. The loss of business diversity in the plan area could make the local economy less resilient to economic shocks that specifically impact the increasingly dominant technology and professional services industry.

The share of small businesses in the Moffett Park plan area could potentially decline as a result of growth by large employers and the resulting redevelopment of smaller and multi-tenant commercial and industrial properties in favor of single-tenant office properties. As noted earlier, businesses with over 250 employees constituted just over eight percent of establishments in the plan area as of December 2019, but these businesses employed about 87 percent of workers in the area. Continued expansion of the plan area's largest employers will

⁵ ibid.



³ "Moffett Park Market Analysis," completed for the Moffett Park Specific Plan Update, released April 2021.

⁴ Ibid.

require redevelopment of additional properties. Since many properties vulnerable to redevelopment are less densely developed and/or include multi-tenant buildings, redevelopment of these properties for single-tenant larger office buildings will likely drive a decline in the number of small businesses in the plan area.

Loss of manufacturing businesses would also reduce the number of high paying jobs with relatively low barriers to entry. Jobs in the Manufacturing industry sector are relatively diverse and often do not require a college degree, yet they offer relatively high median wages. Figure 7 shows that in 2019 the annual median wage for Manufacturing industry jobs in the San Jose-Sunnyvale-Santa Clara MSA was \$89,669. This is more than double the median wages of restaurant and hotel workers, and only around \$11,000 to \$22,000 less than jobs in the Professional, Scientific, and Technical Services and Information industry sectors. Businesses in the Wholesale Trade sector also provide a notable number of jobs in the Moffett Park plan area (1,050 jobs) and offer middle-wage incomes (annual median wage of \$62,878). These Manufacturing and Wholesale Trade companies are more likely to be associated with light industrial and flex/R&D spaces that could potentially undergo redevelopment in the plan area due to demand for office space.

Maintaining business diversity in the Moffett Park plan area would likely require public policy interventions to retain affordable industrial/flex space that accommodates diverse economic activity and businesses. Given immense market pressure favoring higher-intensity office and R&D space in the plan area—along with housing to accommodate the area's workforce—the plan area is likely to continue losing lower-cost flex/R&D and industrial space and associated economic diversity without public policy intervention. Examples of these public policies include zoning and land use restrictions and policies requiring or incentivizing developers to provide affordable industrial and flex/R&D spaces as part of their projects.

Continued redevelopment of properties in the Moffett Park plan area will generate increased annual property tax revenues for the City of Sunnyvale. Replacing lower-intensity uses—such as older, low-rise office, R&D and industrial buildings—with higher-intensity uses such as multi-story office, housing, or hotel properties will be accompanied by higher assessed values at these redeveloped properties. As a result, continued development activity in the Moffett Park plan area will increase total property tax revenues for the City of Sunnyvale over time, with each new project adding to the City's annual property tax revenue.

Further declines in Manufacturing and Wholesale Trade businesses in the plan area will likely result in continued loss of business-to-business sales tax revenues for the City of Sunnyvale, but also potential gains in other sales tax revenues if retail uses are added to the area. Since most sales taxes in the Moffett Park plan area are likely generated by business-to-business sales, a further loss of businesses in the Manufacturing and Wholesale Trade industry sectors may result in a continued decline in sales tax revenues. However, growth of retail uses in the Moffett Park plan area could potentially offset some or all of these business-to-business sales tax losses.

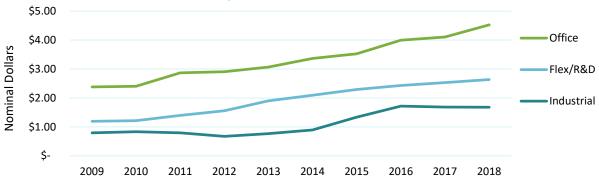


FIGURE 13: OFFICE, INDUSTRIAL, AND FLEX/R&D RENTS PER SQUARE FOOT, SUNNYVALE, 2009-2018

Source: Costar, 2019; Strategic Economics, 2020.

