

Memorandum

TO: HONORABLE MAYOR FROM: Kim Walesh AND CITY COUNCIL

SUBJECT: COMMERCIAL LINKAGE FEE DATE: July 17, 2020

STATUS UPDATE

Approved	ed \ C	Date	
	D1039		7/17/20

INFORMATION

The purpose of this memorandum is to provide an update on the status of the Commercial Linkage Fee project. Since the information memo released in June 2020, Keyser Marston has continued to revise both reports to address the economic downturn caused by the COVID-19 pandemic. The nexus and feasibility studies were scheduled to be released Friday, July 17, 2020. While the City planned to release both reports on that date, the feasibility study is not yet complete. To ensure transparency and provide as much time as possible for the public and stakeholders to review the material, staff will release the completed nexus study in advance of the feasibility study. Staff is anticipating releasing the feasibility study on Friday, July 24.

A Commercial Linkage Fee is a fee assessed on new commercial development for the purpose of offsetting the need for affordable housing generated by that development. The nexus study prepared by Keyser Marston quantifies new non-residential buildings, the employees who work in them, and their demand for affordable housing, and calculates the maximum supported fee levels. The feasibility study will include the economic effects of linkage fees and consultant recommended fee amounts based on a real estate pro forma analysis.

Because maximum commercial linkage fees that can be supported by the nexus studies are typically very high, jurisdictions often set fees well below the maximums included in the nexus study based on a variety of public policy considerations. The accompanying feasibility report is being prepared to inform the selection of those fees at a level that is sustainable for new commercial development projects in San Jose. Based on the completion of both studies, an analysis of public policy considerations, and feedback from stakeholders, staff will formulate recommendations which will be released as part of the staff memorandum to Council on August 14.

Staff has revised the project schedule and remains on track to bring the Commercial Linkage Fee forward for Council consideration on August 25, 2020.

HONORABLE MAYOR AND CITY COUNCIL

July 17, 2020

Subject: Commercial Linkage Fee Status Update

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Milestone	Timeframe
Receive revised Nexus Study from KMA	June 26, 2020
Receive revised feasibility study from KMA	July 14, 2020
Release Nexus Study	July 17, 2020
Release Feasibility Study	July 24, 2020
Conduct Public Outreach	Weeks of July 27 and August 3, 2020
Staff Recommendation Released	August 14, 2020
City Council Meeting	August 25, 2020
Effective Date of Ordinance	October 15, 2020
Effective Date of Fee Resolution	November 14, 2020

Public outreach will include focus group meetings with stakeholders and a public meeting. The item will go before the City Council for action on August 25, 2020. To enact a fee, the Council will be asked to consider approving both an ordinance and a fee resolution. The ordinance would establish the fee while the resolution would set the fee amount.

/s/ KIM WALESH Deputy City Manager

For questions, please contact Karina Alvarez, Senior Executive Analyst, at (408) 535-8272 or karina.alvarez@sanjoseca.gov.

Attachment





KEYSER MARSTON ASSOCIATES

COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSÉ, CALIFORNIA

Prepared for City of San José

Prepared by: Keyser Marston Associates, Inc.

July 2020

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1.0 EXECUTIVE SUMMARY

This Commercial Linkage Fee Nexus Analysis ("Nexus Analysis") has been prepared by Keyser Marston Associates, Inc. ("KMA") for the City of San José ("City") in support of a proposed new commercial linkage fee program. Commercial linkage fees are a type of impact fee imposed on new non-residential development to mitigate the development's impact on the need for affordable housing.

This Nexus Analysis has been prepared for the limited purpose of determining nexus support for a potential new commercial linkage fee in San José. The Nexus Analysis quantifies the linkages between new non-residential buildings, the employees who work in them, and their demand for affordable housing, and calculates maximum supported fee levels based on the cost of mitigating the increased demand for affordable housing consistent with the requirements of the Mitigation Fee Act (Government Code Section 66000 et. seq.). Findings are <u>not</u> recommended fee levels. Fees may be set anywhere up to the maximums identified in this study.

Maximum Fee Conclusions of the Nexus Analysis

The maximum commercial linkage fee conclusions of the Nexus Analysis are summarized in Table 1-1. Findings reflect the cost of mitigating affordable housing impacts of new development as documented in the Nexus Analysis. Figures in Table 1-1 represent technical impact analysis findings only and are <u>not</u> recommended fee levels.

Table 1-1. Nexus Analysis Maximum Fee Conclusions				
	Maximum Fee			
Building Type	Per Square Foot ¹			
Office	\$137.70			
Office, High-Tech	\$151.30			
Retail	\$176.70			
Hotel	\$61.60			
Industrial	\$131.90			
Research and Development	\$108.80			
Warehouse	\$45.90			
Residential Care	\$44.60			

¹ Maximum fee level findings reflect the cost of mitigating affordable housing impacts of new development expressed per square foot of gross building area excluding parking.

The results of the Nexus Analysis are heavily driven by the density of employees within buildings in combination with the occupational make-up of the workforce. Retail has both high employment density and a high proportion of lower paying jobs, factors that in combination result in the highest affordable housing impacts and maximum fee level conclusions among the eight building types. The high cost of developing residential units in San José and the greater Bay Area, which is in part a function of the high cost and limited supply of suitable development sites, is also a key driver of high maximum fee levels.

Because maximum commercial linkage fees that can be supported by nexus studies are generally very high, jurisdictions typically set fees well below the maximums based on a variety of policy considerations. A companion report entitled "Feasibility Analysis of Proposed Commercial Linkage Fees" examines the economic feasibility of implementing new commercial linkage fees by building type and geographic area and provides context materials and recommendations to support selection of fee levels and other features of a new commercial linkage fee program for San José.

Measures to Address Potential Effects of Coronavirus Pandemic on Nexus Analysis

The Nexus Analysis was prepared during the coronavirus pandemic which has had widespread effects on business and society and caused a sharp economic downturn which, within the San José-Sunnyvale-Santa Clara Metropolitan Statistical Area (MSA)¹, resulted in the loss of approximately 133,000 jobs from February to May 2020 ⁽¹⁾ (numeric references in parentheses refer to sources listed in Appendix B). The recession created by the pandemic is expected to be a temporary condition from which the economy will eventually recover. As a temporary condition, the recession does not require an adjustment to the nexus technical analyses because the purpose of the Nexus Analysis is to establish impacts over a long time horizon that extends over the life of new commercial buildings². However, in addition to short-term economic damage, the pandemic is contemplated as a driver of possible long-term changes which are taken into consideration in the Nexus Analysis.

The coronavirus pandemic has resulted in a need for businesses to implement measures to protect the health and safety of workers. Among the changes being implemented or contemplated are modifications to office layouts that increase the distance and physical separation between employees ⁽²⁾. This has led to speculation that the density of employment within office buildings could be reduced on a more permanent basis. Interviews with local developers conducted by KMA in June 2020 confirmed a reduced density of employment within office buildings is currently being imagined as a possible longer-term outcome of the pandemic, especially with respect to high-tech tenants which tend to have open floor plan offices and a high density of employment. The experience adapting to remote working during the pandemic has led some businesses to plan for remote work as a larger part of their operations post-pandemic ^{(3; 4) (2)}. A trend toward remote work would be expected to reduce demand for new commercial buildings overall but does not necessarily reduce employment density within the commercial buildings that are built³. In consideration of the possibility that changes brought on by the pandemic could lead to reduced density of employment within new office buildings on a

¹ The MSA includes Santa Clara and San Benito counties.

² See also the discussion of economic cycles in Appendix A.

³ For example, density of employment can be increased through "hoteling," where workstations are shared rather than assigned to a specific employee ⁽⁴³⁾. An arrangement made possible when a share of employees regularly work remotely. An accounting firm with such an arrangement included in a KMA employment density survey had a density of 70 square feet per employee, the highest density of any tenant surveyed ⁽¹³⁾.

longer-term basis, employment estimates included in the Nexus Analysis are adjusted downward from pre-pandemic estimates, as described in Section 3.1, which results in conservative maximum fee conclusions that will tend to understate mitigation costs.

2.0 INTRODUCTION

This Commercial Linkage Fee Nexus Analysis ("Nexus Analysis") has been prepared by Keyser Marston Associates, Inc. ('KMA") in support of potential establishment of a new commercial linkage fee in the City of San José ("City"). The Nexus Analysis analyzes the linkages between non-residential development in the City and the need for additional affordable housing and calculates maximum commercial linkage fee levels consistent with the Mitigation Fee Act (Government Code Section 66000 et. seq.) which requires a reasonable relationship be established between the fee and impacts of new development addressed by the fee.

The purpose of the Nexus Analysis is to document and quantify the impacts of development of new non-residential buildings and the employees that work in them, on the demand for affordable housing. Because jobs in all buildings cover a range of compensation levels, there are housing needs at all affordability levels. This analysis quantifies the need for affordable housing created by eight categories of new workplace buildings and determines maximum supported fees based on the cost of mitigating the increased affordable housing demand.

2.1 Building Types Addressed

This analysis addresses the following eight types of workplace buildings, encompassing uses potentially subject to a new commercial linkage fee program in the City:

- Office encompasses the full range of office uses in San José from high tech firms to the financial and professional services sectors to medical and dental offices.
- Office, High-Tech represents a subcategory of office space for which occupancy is by a technology or "tech" sector businesses. Higher density of employment is characteristic of high-tech office space and the occupational profile of workers is distinct from other tenant types, as shown in Table 3-4 and Appendix C.
- **Retail** includes retail, restaurants, dry cleaners, health clubs and other personal care and service uses that commonly occupy retail space.
- Hotel covers the range from full service hotels to limited service accommodations.
- **Industrial** covers a broad range of manufacturing, auto repair and service, delivery services, and a range of other uses of an industrial or semi-industrial character.
- Research and Development (R&D) covers facilities for industrial or scientific research, product design, prototype production, development and testing.
- Warehouse, or large structures primarily devoted to storage and logistics activities, typically with a small amount of office space.
- Residential Care encompasses a range of residential facilities where care, personal
 services, protection, supervision, assistance, training, therapy, or treatment is provided to
 persons living in a community residential setting. This building type category includes

assisted living, skilled nursing, memory care, residential treatment centers, and similar facilities.

Appendix C Table 18 shows how building types addressed in the Nexus Analysis relate to a list of use classifications used by the City.

2.2 Affordability Levels Addressed

The Nexus Analysis addresses the following four income or affordability tiers:

- Extremely Low Income: households earning up to 30% of Area Median Income (AMI);
- Very Low Income: households earning over 30% up to 50% of AMI;
- Low Income: households earning over 50% AMI up to 80% of AMI; and,
- Moderate Income: households earning over 80% AMI up to 120% of AMI.

Households are categorized by income tier based on income limits published by the California Department of Housing and Community Development (HCD)⁽⁵⁾. For reference, the 2020 median income for a family of four in Santa Clara County is \$141,600. Table 2-1 identifies income limits for all applicable income categories and household sizes.

Table 2-1. Household Income Limits for Santa Clara County						
			Household S	ize (Persons)	
	1	2	3	4	5	6
Extr. Low (Under 30% AMI)	\$33,150	\$37,900	\$42,650	\$47,350	\$51,150	\$54,950
Very Low (30%-50% AMI)	\$55,300	\$63,200	\$71,100	\$78,950	\$85,300	\$91,600
Low (50%-80% AMI)	\$78,550	\$89,750	\$100,950	\$112,150	\$121,150	\$130,100
Moderate (80%-120% AMI)	\$118,950	\$135,900	\$152,900	\$169,900	\$183,500	\$197,100
Median (100% of Median)	\$99,100	\$113,300	\$127,450	\$141,600	\$152,950	\$164,250

Source: California Department of Housing and Community Development, 2020 Income Limits

2.3 Overview of Methodology

The Nexus Analysis links new non-residential buildings with new workers; these workers demand additional housing, a portion of which needs to be affordable to the workers in lower income households. Following is an overview of the analysis steps used in determining the maximum commercial linkage fee levels:

■ **Employment** – The number of employees is estimated for each building type using employment density ratios drawn from a variety of sources. Employment estimates account for potential effects of the coronavirus on employment densities as well as the portion of jobs estimated to be net new considering changes in the local economy over time that result in loss of some types of jobs even as other jobs are gained.

- Housing Units Required The number of housing units needed to house the new workforce is estimated based on the average number of workers per working household.
- Worker Household Incomes Household incomes of workers are estimated by combining data on worker occupations from the Bureau of Labor Statistics, local wage data from the California Employment Development Department (EDD) and local U.S.
 Census data relating individual worker income to total household income.
- Affordable Housing Need Worker household incomes are compared to income criteria from HCD to determine the number of housing units needed by affordability level.
- Mitigation Cost and Maximum Fees The cost of mitigating affordable housing impacts of new development are calculated based on the net subsidy required to deliver the needed affordable housing. Mitigation costs are expressed per square foot of building area for each non-residential building type, which establishes an upper limit on new commercial linkage fees proportionate to the impacts.

2.4 Report Organization

The report is organized into five sections and three appendices, as follows:

- Section 1.0 is the Executive Summary;
- Section 2.0 provides an introduction;
- Section 3.0 presents the Nexus Analysis for the eight workplace building types under study, concluding with the maximum supported affordable housing fee level per square foot of building area.
- Section 4.0 contains the affordability gap analysis representing the net cost of delivering each unit of housing affordable to households at the income levels under study.
- Section 5.0 provides draft findings language consistent with the Mitigation Fee Act.
- Appendix A provides a discussion of various specific factors and assumptions in relation to the nexus concept.
- Appendix B provides a comprehensive list of data sources and a summary of supporting information on employment densities. Sources are identified in the text by numeric reference to the bibliography provided in Appendix B.
- Appendix C provides supporting information on worker occupations and incomes.

3.0 NEXUS ANALYSIS

This section presents a summary of the analysis linking the development of the eight types of workplace buildings to the estimated number of lower income housing units required in each of four income categories. Then, the cost of providing affordable housing to the worker households is determined and expressed per square foot of building area. Findings represent the full mitigation cost for the affordable housing impacts of new development and the ceiling for any affordable housing fee that may be imposed.

3.1 Step-by-Step Narrative of Nexus Methodology

The Nexus Analysis is conducted using a methodology KMA developed for application in many jurisdictions for which the firm has conducted similar nexus analyses in support of affordable housing impact fee programs. Analysis inputs are all local data to the extent possible and are fully documented.

The analysis uses an assumed 100,000 square foot building size. Selection of this building size enables the number of jobs and housing units to be presented in whole numbers that can be more readily understood. At the conclusion of the analysis, findings are divided by the building size to express the linkages on a per square foot basis so that findings can be applied to buildings of any size.

Following is a description of each step of the analysis:

Step 1 – Estimated Number of Employees

The number of employees who will work in the building types being analyzed is estimated using employment density factors drawn from a variety of sources. Sources include local Environmental Impact Reports (EIRs), Institute of Transportation Engineers (ITE) and other sources as noted in the discussion below. A complete list of sources is provided in Appendix B. A downward adjustment to employment density is made for office uses, in consideration of potential effects of the coronavirus pandemic, as described below.

Employment estimates are summarized in Table 3-1 followed by a narrative discussion.

Table 3-1. Employment Estimate						
Per 100,000 Square Feet of Building Area.						
	Employment Density (Gross Square Feet	Number of Employees per 100,000 square feet of building area				
Building Type	Per Employee)	(=100,000 / Employment Density)				
Office	400	250				
Office, High-Tech	300	333				
Retail	500	200				
Hotel	1,500	67				
Industrial	500	200				
Research and Development	400	250				
Warehouse	2,000	50				
Residential Care	2,000	50				

- Office 400 square feet per employee. Prior to the coronavirus pandemic, employment density within office space was estimated at 300 square feet per employee based on recent Environmental Impact Reports ("EIRs") addressing office developments in San José (6) (7) (8) (9), as summarized in Appendix B Table 1. This estimate has been adjusted in response to the coronavirus pandemic to 400 square feet per employee, a one third increase in the square feet of office space per employee. The revised office employment density represents a conservative assumption that the amount of office space per employee will increase to provide increased space between employees and more physical separation (see below under Potential Effects of Coronavirus Pandemic on Employment Density). While such a large change in density may not occur, and to the extent it does occur, may not persist in the long term, a conservative assumption is made that employment densities will be significantly reduced, and reduced densities will endure beyond the end of the pandemic.
- Office, High-Tech 300 square feet per employee. Prior to the coronavirus pandemic, KMA estimated employment density within high-tech office space at 225 square feet per employee, an estimate that reflects the higher density of employment characteristic of high tech offices. The 225 square feet per employee estimate was based on sources summarized in Appendix B Table 1 which include recent EIRs for high-tech office developments in other jurisdictions (10) (11) (12) and an employment density study prepared by KMA for the City and County of San Francisco (13) that included examination of office employment densities by tenant type. As with general office space, a conservative assumption is made for purposes of the Nexus Analysis that the square feet of office space per employee may increase by as much as one third due to changes implemented in response to the coronavirus pandemic (see below under Potential Effects of Coronavirus Pandemic on Employment Density), which results in an adjusted estimate of 300 square feet per employee.
- Retail 500 square feet per employee. The employment density estimate for retail reflects consideration of a range of sources including the EIR for Santana Row (14), ITE (15), and

- restaurant employment densities derived from National Association of Restaurants data ⁽¹⁶⁾. The data sources are summarized in Appendix Table B-4. The density range within this category is wide, with some types of retail such as restaurant space as much as five times as dense as other types such as furniture or building material supply stores. The estimate used is at the low end of the range of sources considered and will tend to understate the number of employees relative to many types of retail.
- Hotel 1,500 square feet per employee. Hotels have a range of employment levels with higher service hotels with conference facilities being more employment intensive and minimal service extended stay hotels representing the lower end of the employment density range. The estimate of 1,500 square feet per employee is approximately equivalent to 0.4 employees per room based on an average of 600 square feet of building area per room. This estimate is at the lower end of the range of sources which included reported employment levels for local hotels ranging from 0.33 to 0.99 employees per room (17), an estimate incorporated into a Supplemental EIR for the San José Tribute Hotel (18) of 0.46 employees per room and an estimate from the U.S. Department of Energy of 0.53 employees per room (15). The data sources are summarized in Appendix Table B-2.
- Industrial 500 square feet per employee. This density covers flex space, light industrial, manufacturing and research and development activities such as prototype production and testing. The 500 square feet per employee average is based on ITE (15) and is consistent with parking ratios for a recent industrial project in San José called MidPoint@237 (19). The data sources are summarized in Appendix Table B-4.
- Research and Development (R&D) 400 square feet per employee. The estimated employment density is based on ITE (15) and is consistent with estimates for a planned R&D development in a nearby city (20). The data sources are summarized in Appendix Table B-4.
- Warehouse 2,000 square feet per employee. This reflects that the primary activity in the building is assumed to be storage or logistics. A small amount of office or administrative space is assumed within warehouse structures. Sources consulted include ITE ⁽¹⁵⁾, a Portland Metro Employment Density Study ⁽²¹⁾, U.S. Department of Energy (15), and parking ratios reflected in six pipeline warehouse projects in San José ^{(22) (23) (24) (25) (26) (27)}. The estimate at 2,000 square feet per employee represents around 60% of the number of employees as can be accommodated by parking ratios for pipeline warehouse developments in San José; therefore, the estimate provides a conservative estimate of employment that will tend to understate impacts. The data sources are summarized in Appendix Table B-4.
- Residential Care 2,000 square feet per employee. The employment density estimate is based on three residential care facilities in San José, including Belmont Village Union Avenue (28), Holden Assisted Living, South Bascom (29) (30) (31) (32), and Oakmont of

Evergreen ⁽³³⁾ as well as two examples from other Bay Area cities ⁽³⁴⁾ ⁽³⁵⁾. The data sources are summarized in Appendix Table B-3.

Potential Effects of Coronavirus Pandemic on Employment Density

This Nexus Analysis was prepared during the coronavirus pandemic, which is expected to have implications for the workplace that could alter the density of employment. Office buildings tend to be the focus of publications describing workplace changes in response to the coronavirus that have the potential to alter density of employment (36) (37) (38). Offices also tend to have higher density of employment than other building types, as shown in Table 3-1. Potential effects can be separated into short-term, during the pandemic, and longer-term, post-pandemic. As the Nexus Analysis determines mitigation costs over the life of new buildings, long-term effects are pertinent while short-term or temporary changes in response to the pandemic do not warrant an adjustment. Based on interviews with members of the development community conducted by KMA and described in the companion feasibility study report (39), few commercial buildings are expected to commence construction during the pandemic, another reason long-term post-pandemic effects are more pertinent than short-term effects.

Short-term effects of the pandemic on the workplace are driven by measures to protect health and safety of workers and reduce the risk of virus transmission. Measures being contemplated to support a return to work within offices include increasing distance between workstations, installation of physical barriers to protect workers, reduction in common amenities, limiting the number of workers present at any one time, modified cleaning protocols, providing protective equipment, and monitoring for virus symptoms (40) (37). According to a survey of Chief Financial Officers by PwC, 78% are planning to reconfigure office environments to promote physical distancing as employees return to work (2). In addition, many workers are expected to continue to work remotely while the threat of the virus remains (3) (2) (38). The July 2020 order of the Health Officer for the County of Santa Clara in response to the pandemic mandates that businesses maintain at least 250 gross square feet per worker and requires all employees who can do their jobs from home to work remotely (41).

Long term shifts in the workplace are also seen as possible outcomes of the pandemic. Longer term changes that are being imagined stem from changes in worker behavior, preferences and company policies brought on by the pandemic and the experience with remote working. Some companies have announced they will allow remote work for an extended period and a few have indicated they will allow remote working permanently ^{(3; 4) (2)}. With permanent remote working, an increasing share of the workforce may not require a physical workplace outside of their homes. This would tend to reduce the need for new commercial buildings overall and may alter decision making by companies about where offices are located ⁽⁴²⁾. New workplace buildings are built to house a workforce that is physically present; therefore, the shift toward remote work would not necessarily reduce the density of employment within newly-built buildings. In addition, a partial shift towards remote work, such as two to three days per week, could actually allow a greater density of employment in that the same office space could accommodate more employees if not

all workers are physically present at the same time and some workstations are shared rather than designated to a specific employee ⁽⁴³⁾.

Prior to the pandemic, there was a long running trend towards more open plan offices that accommodate a greater density of employment (42). One potential longer-term impact being contemplated is a move toward office layouts that provide more space between employees (4) as a reflection of changes in employee personal preferences which might endure beyond the end of the pandemic. Members of the development community interviewed by KMA indicated there is a view that local tech companies, which tend to have a high density of employment, may modify office layouts in ways that increase the square feet of office space per employee. However, not all experts agree that the effects of the pandemic will be durable, with some predicting preferences for physical distancing will fade after the pandemic is over and will not lead to a fundamental shift away from open plan offices or alter space requirements per employee (44).

At the time the Nexus Analysis was prepared, the pandemic is on-going and, while there is speculation regarding long-term changes, there is no data on how employment densities will be altered post-pandemic. Considering the unknowns and to provide a conservative analysis, the estimated square feet of office space per employee was increased by one third from estimates prepared prior to the pandemic. This factor is based on a statement in materials produced through the CoreNet Global⁴ "COVID-19 Hackathon" which states "if planning principles reverted to a world of primarily enclosed offices or high-paneled cubicles to give employees increased separation, square footage requirements per person would increase anywhere from 20 to 30 percent" (44). For office space, this one third increase results in an employment density of 400 square feet per employee, up from a pre-coronavirus estimate of 300 square feet per employee. For high-tech office, the assumed one third increase in square footage per employee results in an employment density of 300 square feet per employee versus a pre-coronavirus estimate of 225 square feet per employee. While a reduction in employment density of this magnitude may be unlikely (44), the adjustment is never-the-less made to ensure maximum fee levels identified in this Nexus Analysis represent conservative results that likely understate the mitigation costs.

Step 2 – Net New Employment After Adjustment for Changing Industries

This step makes an adjustment to employment estimates to take into account any declines, changes and shifts within all sectors of the economy and to recognize that new space is not always 100% equivalent to net new employees.

The local economy, like that of the U.S. as a whole, is constantly evolving, with job losses in some sectors and job growth in others. Over the past decade, employment declined in some

⁴ CoreNet Global is a non-profit association representing more than 11,000 executives with responsibility for the real estate assets of large corporations.

manufacturing sectors of the local economy as well as wholesale and retail trade, telecommunications, leisure and hospitality, and other services ⁽¹⁾. Jobs lost in these declining sectors were replaced by job growth in other industry sectors.

The analysis makes an adjustment to take these declines, changes and shifts within all sectors of the economy into account, recognizing that jobs added are not 100% net new in all cases. A 23% adjustment is utilized based on the long-term shifts in employment that have occurred in some sectors of the local economy over the last decade and the likelihood of continuing changes in the future. Long term declines in employment experienced in some sectors of the economy mean that some of the new jobs are being filled by workers that have been displaced from another industry and who are presumed to already have housing locally. The analysis makes the assumption that existing workers downsized from declining industries are available to fill a portion of jobs in new workplace buildings built in San José.

The 23% downward adjustment was derived from California Employment Development Department data on employment by industry in the San José-Sunnyvale-Santa Clara MSA ⁽¹⁾. Over the approximately ten-year period from January 2010 to May 2020⁵, approximately 44,700 jobs were lost in declining industry sectors. Over the same period, growing and stable industries added a total of 193,600 jobs. The figures are used to establish a ratio between jobs lost in declining industries to jobs gained in growing and stable industries at 23%. The assumption is that 23% of new jobs are filled by a worker down-sized from a declining industry who already lives locally.

The discount for changing industries represents a conservative assumption because many displaced workers may exit the workforce entirely by retiring. In addition, development of new workspace buildings will typically occur only to the extent there is positive net demand after reoccupancy of buildings vacated by businesses in declining sectors of the economy. To the extent existing buildings are re-occupied, the discount for changing industries is unnecessary because new buildings would represent net new growth in employment. The 23% adjustment is conservative in that it is mainly necessary to cover a special case in which buildings vacated by declining industries cannot be readily occupied by other users due to their special purpose nature, because of obsolescence, or because they are torn down or converted to residential.

Step two is illustrated in Table 3-2.

⁵ May 2020 was selected as the most recent monthly data available at the time this report was prepared while January 2010 was selected as the point of comparison based on having the same 11.2% unemployment rate ⁽¹⁾, which enables longer-term declines to be distinguished from the effects of shorter-term economic cycles.

Table 3-2. Net New Jobs after 23% Adjustment							
Per 100,000 Square Feet of Building Area							
Building Type	Number of Employees (from Table 3-1)	Net New Employees after 23% Adjustment					
Office	250	193					
Office, High-Tech	333	257					
Retail	200	154					
Hotel	67	51					
Industrial	200	154					
Research and Development	250	193					
Warehouse	50	39					
Residential Care	50	39					

Step 3 – Adjustment from Employees to Employee Households

This step converts the number of employees to the number of employee households, recognizing that that there is, on average, more than one worker per household, and thus the number of housing units needed for new workers is less than the number of new workers. The workers-per-worker-household ratio eliminates from the equation all non-working households, such as retired persons and students.

According to the 2013-2017 ACS ⁽⁴⁶⁾ ⁽⁴⁷⁾, the number of workers per worker household for the City of San José is 1.91 including full- and part-time workers⁶. For Santa Clara County outside of the City of San José, the ratio is 1.75 workers per worker household. Based on data from the 2013-2017 ACS ⁽⁴⁸⁾ ⁽⁴⁹⁾, workers who live in San José make up approximately 59% of the City's overall workforce while the remaining 41% of those who work in San José commute in from outside the city. These percentages are used to calculate a weighted average workers per worker household factor of 1.84 estimated to be representative for San José's workforce.

The total number of jobs created is divided by the 1.84 workers per worker household factor to determine the number of housing units that are needed to house the new workforce. Step three is illustrated in Table 3-3.

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⁶ Source data does not allow a breakout between full and part time workers; however, for purposes of compensation levels, full time work is assumed for all workers as described in Step 5.

Table 3-3. Housing Units Needed Per 100,000 Square Feet of Building Area						
	Net New Jobs per 100,000 Square Feet of Building Area	Total Number of Housing Units Needed (= net new jobs / 1.84 workers				
Building Type	(from Table 3-2)	per worker household)				
Office	193	104.5				
Office, High-Tech	257	139.3				
Retail	154	83.6				
Hotel	51	27.9				
Industrial	154	83.6				
Research and Development	193	104.5				
Warehouse	39	20.9				
Residential Care	39	20.9				

Step 4 – Occupational Distribution of Employees

Estimating the occupational breakdown of employees is the first step to arrive at income levels. The occupational make up of jobs by building type is estimated by combining two data sources: Bureau of Labor Statistics data ⁽⁵⁰⁾ on the distribution of occupations by industry category and data on employment by industry for San José from the Quarterly Census of Employment and Wages (QCEW) ⁽⁵¹⁾. Industry categories are weighted to reflect the mix of employers in San José.

- For office buildings, the mix of industries reflects a wide range of tech, financial, professional service, research and development and medical.
- For high tech office, tenants are assumed to be primarily tech related firms within sectors such as software publishing, computer system design, research and development, telecommunications, data processing, hosting, and related services, and other information services.
- For retail, a wide range of retail categories are included as well as restaurants and personal services.
- For hotels, the applicable industry sector is Traveler Accommodation. An adjustment is made to remove casino hotels.
- The Industrial category encompasses a range of manufacturing, research and development, and automotive and other maintenance and repair services.
- Research and development reflects the industry category for research and development in the physical, engineering and life sciences.
- For warehouse, the applicable industry category is Warehouse & Storage.
- For residential care, the industry category for continuing care retirement communities and assisted living facilities is used.

This step results in a distribution of workers by occupation category for the eight building types. Appendix C Table 17 identifies the specific industry codes utilized by building type. Table 3-4 indicates the percentage distribution by occupation.

Table 3-4. Estimated F	Percenta	ge Distribut	tion of W	orkers b	y Major Oc	cupation	n Category	
	Office	Office, High-Tech	Retail	Hotel	Industrial	R&D	Warehouse	Residential Care
Management Occupations	9.8%	12.0%	2.5%	4.4%	9.9%	14.6%	2.7%	3.3%
Business and Financial	14.8%	10.6%	0.6%	1.5%	6.9%	9.7%	2.0%	0.9%
Computer and Mathematical	20.3%	42.3%	0.1%	0.1%	6.9%	12.0%	0.6%	0.1%
Architecture and Engineering	4.4%	3.3%	0.0%	0.0%	12.1%	16.5%	0.4%	0.0%
Sciences	2.0%	2.8%	0.0%	0.0%	6.8%	25.7%	0.0%	0.0%
Community & Social Services	0.6%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	0.8%
Legal	2.4%	0.5%	0.0%	0.0%	0.2%	0.5%	0.0%	0.0%
Education, and Library	0.4%	1.2%	0.1%	0.1%	0.2%	0.4%	0.0%	0.0%
Arts, Design, Entertainment	2.1%	3.1%	0.5%	0.2%	0.9%	1.2%	0.1%	0.0%
Healthcare Practitioners	5.7%	0.4%	2.1%	0.0%	0.9%	3.0%	0.1%	10.6%
Healthcare Support	3.5%	0.1%	0.4%	0.5%	0.2%	0.8%	0.0%	27.0%
Protective Service	0.3%	0.1%	0.4%	1.5%	0.1%	0.4%	0.7%	0.6%
Food Prep and Serving	0.4%	0.0%	42.6%	24.9%	0.3%	0.1%	0.1%	17.9%
Building and Grounds	0.4%	0.2%	0.6%	31.0%	0.4%	0.4%	0.7%	6.0%
Personal Care and Service	0.8%	0.1%	5.1%	4.1%	0.1%	0.3%	0.0%	22.9%
Sales and Related	6.0%	8.4%	28.0%	2.5%	3.5%	1.4%	1.2%	0.5%
Office and Admin Support	22.8%	11.6%	8.1%	20.0%	9.9%	8.5%	22.5%	5.3%
Farming, Fishing, Forestry	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	0.0%
Construction and Extraction	0.4%	0.1%	0.1%	0.2%	0.5%	0.4%	0.1%	0.1%
Installation, Maint. and Repair	1.6%	2.6%	2.5%	5.5%	2.9%	1.4%	2.8%	2.5%
Production	0.7%	0.4%	1.7%	2.4%	33.8%	2.1%	2.4%	0.5%
Transportation	0.6%	0.2%	4.3%	1.0%	3.2%	0.4%	63.4%	1.0%
Totals	100%	100%	100%	100%	100%	100%	100%	100%

To determine the distribution of worker households by occupation category, the percentage distribution of worker occupations identified in Table 3-4 is multiplied by the total number of worker households from Table 3-3. The result is a distribution in the number of worker households by worker occupation category as shown in Table 3-5. As one example, the 104.5 estimated worker households with office (Table 3-3) is multiplied by the 9.8% share in management occupations (Table 3-4) to arrive at the 10.2 worker households in management occupations in Table 3-5.

Table 3-5. Number of Worker Households by Worker Occupation Category Per 100,000 Square Feet of Building Area Office, Residential R&D Office **High-Tech** Retail Industrial Warehouse Hotel Care Management 2.1 Occupations 10.2 16.8 1.2 8.3 15.2 0.6 0.7 Business and Financial 15.5 14.8 0.5 0.4 5.7 10.2 0.4 0.2 Computer and Mathematical 21.2 58.9 5.7 12.5 0.0 0.1 0.0 0.1 Architecture and 4.6 4.7 0.0 0.0 10.1 17.3 0.1 0.0 Engineering Sciences 2.0 3.9 0.0 0.0 5.7 26.9 0.0 0.0 Community & Social 0.2 Services 0.6 0.0 0.0 0.0 0.1 0.0 0.2 2.5 0.6 0.0 0.0 0.2 0.6 0.0 0.0 Legal Education, and Library 1.6 0.1 0.2 0.4 0.0 0.4 0.0 0.0 Arts, Design, Entertainment 2.2 4.3 0.4 0.1 8.0 1.2 0.0 0.0 Healthcare Practitioners 6.0 0.6 1.8 0.0 0.7 3.1 0.0 2.2 Healthcare Support 0.4 0.9 3.6 0.1 0.1 0.2 0.0 5.6 Protective Service 0.4 0.2 0.3 0.4 0.1 0.4 0.2 0.1 Food Prep and Serving 0.5 0.0 35.6 6.9 0.3 0.1 0.0 3.7 Building and Grounds. 0.3 1.3 0.4 0.5 0.4 0.4 0.2 8.6 Personal Care and 0.1 4.3 0.1 0.3 0.0 4.8 Service 8.0 1.1 Sales and Related 6.3 11.7 23.4 0.7 2.9 1.5 0.3 0.1 Office and Admin Support 23.8 16.1 6.8 5.6 8.3 8.8 4.7 1.1 Farming, Fishing, 0.0 Forestry 0.0 0.0 0.0 0.0 0.1 0.2 0.0 Construction and Extraction 0.4 0.1 0.1 0.0 0.4 0.4 0.0 0.0 Installation, Maint, and 1.6 3.6 2.1 1.5 2.4 1.4 0.6 0.5 Repair Production 8.0 0.6 1.4 0.7 28.2 2.1 0.5 0.1 Transportation 0.7 0.2 3.6 0.3 2.7 0.4 13.2 0.2 Totals 104.5 139.3 83.6 27.9 104.5 20.9 20.9 83.6

Step 5 - Estimate of Employee Household Incomes

Employee wage and salary distribution is based on the occupational distribution from Step 4 in combination with recent Santa Clara County wage and salary information from the California Employment Development Department (EDD) for the first quarter of 2020 (52).

For each occupational category shown in Tables 3-4 and 3-5, the OES data provides a distribution of specific occupations within the category. For example, within the Food Preparation and Serving Category, there are Supervisors, Cooks, Servers, Dishwashers, etc. Each of these individual categories has a different distribution of wages which was obtained

from EDD and is specific to workers in the San Jose-Sunnyvale-Santa Clara MSA as of 2020. This data is used because it includes the City of San Jose and comparable data isolating only those jobs within the City's boundaries is not available. EDD compensation data are adjusted upwards where applicable to reflect the City of San José's current minimum wage of \$15.25 per hour (53). Worker compensations used in the analysis assume full time employment (40 hours per week) based on EDD's convention for reporting annual compensation. The detailed occupation and salary data is provided in Appendix C.

Employee income is then translated into an estimate of household income using ratios between individual employee income and household income derived from U.S. Census data ⁽⁵⁴⁾ shown in Table 3-6. Ratios reflect an analysis of data for the workforce in Santa Clara County with household incomes under five hundred thousand. The data source does not allow ratios specific to San José's workforce to be determined; however, County data is representative for San José's workforce, which includes workers that live both inside and outside the city. Households with income of five hundred thousand or more are not included to avoid a disproportionate influence on averages⁷ by a small percentage of households with incomes well over levels addressed in the Nexus Analysis⁸.

Table 3-6. Ratio of Household Income to Individual Worker Income					
Individual Worker Income	One Worker Households	Two Worker Households	Three or More Workers		
\$30,000 to \$49,999	1.26	2.57	3.12		
\$50,000 to \$74,999	1.08	2.07	2.34		
\$75,000 to \$99,999	1.09	1.82	1.97		
\$100,000 to \$124,999	1.04	1.67	1.71		
\$125,000 to \$149,999	1.04	1.54	1.59		
\$150,000 to \$199,999	1.02	1.47	1.47		
\$200,000 to \$249,999	1.02	1.35	1.36		
\$250,000 or more	1.01	1.12	1.12		

Source: KMA analysis of 2013 to 2017 American Community Survey PUMS data.

A ratio of 1.0 in Table 3-6 indicates the household has no additional income beyond that of the individual worker. A ratio of 2.0 means total household income is twice what the individual worker earns. With a two-earner household, a ratio of 2.0 indicates each worker in the household earns about the same amount. A ratio above 2.0 would indicate the other worker in the household earns more, on average, while a ratio less than 2 indicates the other worker earned less. The ratio between worker income and overall household income decreases as

⁷ By way of illustration, a worker with an income of \$35,000 in a household with a total income of \$1,500,000 would have a ratio between worker income and household income of approximately 42. As an outlier many times the average of 2.57 for two-worker households calculated in Table 3-6, inclusion of the factor of 42 in calculation of the average would have an arithmetically disproportionate influence on the average.

⁸ An income of \$500,000 is approximately 2.94 times the maximum income to qualify as Moderate Income of \$169,900 for a four-person household.

worker pay increases. This is because workers with higher pay are more likely to represent the largest source of household income.

The ratios adjust employee incomes upward even for households with only one worker. This is in consideration of non-wage/salary income sources such as child support, disability, social security, investment income and others. Ratios for one-worker households at the lower end of the compensation range tend to be larger, an indication that these workers are more likely to derive a share of household income from non-employment sources such as social security.

For workers with compensations of \$100,000 or more, having a third worker in the household tends to result in little or no increase in overall household income compared to households with two earners (i.e. ratios for 3+ worker households are not much above ratios for two earner households). This is likely a reflection of the third worker being a teenager or young adult living with their parents who may hold a part time job but does not contribute significantly to household income. In contrast, for workers earning under \$50,000, a third worker tends to be associated with more of an increase to household income compared to two-earner households. This likely represents more of a range of circumstances such as multi-generational households, families doubling up in a unit, or unrelated roommates. It is likely that, in some cases, these are responses to high housing costs and households would not choose the same living arrangements if more affordable housing were available. The Nexus Analysis makes the conservative assumption that the existing pattern, which is likely partially a response to high housing costs, continues.

Household income estimates for workers within each detailed occupation category are summarized in Appendix C. A separate estimate is provided for households with one, two, and three or more workers. Household income estimates are compared to HCD income criteria summarized in Table 2-1 to estimate the percent of worker households that would fall into each income category. This is done for each potential combination of household size and number of workers in the household.

Step 6 – Household Size Distribution

In this step, the household size distribution of workers is estimated using U.S. Census data ⁽⁴⁶⁾ ⁽⁵⁵⁾. In addition to the distribution in household sizes, the data also accounts for a range in the number of workers in households of various sizes. Table 3-7 indicates the percentage distribution utilized in the analysis. As with Step 3, data for the City of San José and the balance of Santa Clara County are combined using a weighted average that reflects the 59% share of San José's workforce that lives in the City per data from the 2013-2017 ACS ⁽⁴⁸⁾ ⁽⁴⁹⁾. Application of these percentage factors accounts for the following:

- Households have a range in size and a range in the number of workers.
- Large households generally have more workers than smaller households.

Table 3-7. Percent of Households by Size and No. of Workers						
No. of Persons in Household	No. of Workers in Household	Percent of Total Households				
1	1	14.4%				
2	1	12.9%				
	2	14.9%				
3	1	8.3%				
	2	9.5%				
	3+	3.2%				
4	1	5.9%				
	2	8.2%				
	3+	5.2%				
5	1	2.7%				
	2	3.7%				
	3+	2.5%				
6	1	2.6%				
	2	3.6%				
	3+	2.5%				
Total		100.0%				

Source: 2013-2017 American Community Survey data. Reflects weighted average for City of San José and balance of Santa Clara County outside of the City of San José, weighed based on the share of San José's workforce that lives in the City.

The result of Step 6 is a distribution of working households by number of workers and household size.

Step 7 - Estimate of Households that meet HCD Size and Income Criteria

Step 7 calculates the number of employee households that fall into each income category for each size household. This calculation is based on combining the household income distribution (Step 5) with the worker household size distribution (Step 6) to arrive at a distribution of worker households by income category. Table 3-13A at the end of this section shows the results by occupation category after completing Steps 5, 6 and 7 for the Extremely Low Income Tier. The methodology is repeated for each of the lower income tiers (Tables 3-13B, 3-13C, and 3-13D).

3.2 Housing Demand by Income Level

Table 3-8 indicates the results of the analysis for each of the eight building types. The table presents the number of households in each affordability category, the total number up to 120% of median, and the remaining households earning over 120% of median associated with a 100,000 square foot building.

Table 3-8. Number of Households by Income Category Per 100,000 Square Feet of Building										
	Office	Office, High-Tech	Retail	Hotel	Industrial	R&D	Warehouse	Residential Care		
Extremely Low	1.1	0.8	4.1	1.7	1.7	0.3	1.1	1.1		
Very Low Income	12.2	10.0	31.6	10.3	15.6	6.1	6.7	6.9		
Low Income	15.7	17.0	8.1	4.9	14.1	12.7	4.8	3.4		
Moderate Income	35.1	45.0	30.0	8.3	27.3	34.1	6.6	7.4		
Subtotal	64.1	72.8	73.7	25.2	58.7	53.2	19.2	18.8		
Above 120% AMI	40.4	66.5	9.9	2.7	24.9	51.3	1.7	2.1		
Total	104.5	139.3	83.6	27.9	83.6	104.5	20.9	20.9		

Table 3-9 summarizes the percentage of worker households that fall into each income category. As indicated, over 85% of Retail, Warehouse, Residential Care and Hotel worker households are below 120% of median income level. High Tech Office and R&D have the lowest percentage of workers under 120% of median at 52% and 51%, respectively.

	Office	Office, High-Tech	Retail	Hotel	Industrial	R&D	Warehouse	Residential Care
Extremely Low	1.1%	0.6%	4.9%	6.3%	2.1%	0.3%	5.1%	5.1%
Very Low Income	11.6%	7.2%	37.8%	36.9%	18.7%	5.9%	32.2%	33.2%
Low Income	15.1%	12.2%	9.6%	17.6%	16.9%	12.1%	23.1%	16.1%
Moderate Income	33.6%	32.3%	35.9%	29.7%	32.6%	32.6%	31.6%	35.4%
Subtotal	61.4%	52.2%	88.2%	90.4%	70.3%	50.9%	91.9%	89.8%
Above 120% AMI	38.6%	47.8%	11.8%	9.6%	29.7%	49.1%	8.1%	10.2%
Total	100%	100%	100%	100%	100%	100%	100%	100%

3.3 Housing Demand Per Square Foot of Building Area

The analysis thus far has used 100,000 square foot buildings. In this step, the conclusions are translated to affordable housing demand per square foot of building area (see Table 3-10).

Table 3-10	Table 3-10. Affordable Housing Demand Per Square Foot of Building Area ¹										
Income		Office,						Residential			
Category	Office	High-Tech	Retail	Hotel	Industrial	R&D	Warehouse	Care			
Extr. Low	0.0000110	0.0000081	0.0000413	0.0000175	0.0000173	0.0000030	0.0000106	0.0000107			
Very Low	0.0001215	0.0000999	0.0003157	0.0001027	0.0001561	0.0000613	0.0000672	0.0000694			
Low	0.0001574	0.0001699	0.0000806	0.0000491	0.0001412	0.0001270	0.0000483	0.0000337			
Moderate	0.0003514	0.0004500	0.0002998	0.0000827	0.0002728	0.0003406	0.0000659	0.0000739			
Total	0.0006414	0.0007278	0.0007374	0.0002520	0.0005874	0.0005318	0.0001921	0.0001877			

Calculated by dividing the findings from Table 3-8 by 100,000 square feet of building area.

This is the summary of the housing nexus analysis, or the linkage from buildings to employees to housing demand, by income level. Estimates are conservative and most likely understate the number of worker households within the four affordability categories.

3.4 Affordability Gap

A key component of the analysis is the affordability gap, which represents the subsidy required to deliver affordable units to households in each of the four affordability categories. Fees are anticipated to be used to provide financial assistance to affordable projects built by non-profit affordable housing developers. For Extremely Low, Very Low, and Low Income units, the affordability gap assumes that the City would assist affordable rental units financed with 4% tax credits. For Moderate Income, a for-sale unit is assumed to be assisted. While the City may assist some Moderate-Income households in rental units, the affordability gap for rentals was found to be greater than with for-sale units. The lower for-sale affordability gap calculation is selected as the more conservative assumption for the Nexus Analysis. The affordability gaps are summarized in Table 3-11. Supporting analysis is provided in Section 4.

Table 3-11. Affordability Gaps	
Extremely Low (Under 30% AMI)	\$383,000
Very Low (30% to 50% AMI)	\$279,000
Low (50% to 80% AMI)	\$228,000
Moderate (80% to 120% AMI)	\$181,300

AMI = Area Median Income

See Section 4. for supporting analysis.

3.5 Maximum Supported Fees Per Square Foot of Building Area

The last step in the Nexus Analysis calculates the cost of delivering affordable housing to workers in new non-residential buildings. The demand for affordable units within each income category per square foot of building area from Table 3-10 is multiplied by the affordability gaps from Table 3-11 to determine the cost to mitigate the affordable housing impacts.

Affordability Gap (Table 3-11)	Х	No. affordable units generated per square foot of building area.	=	Maximum Fee Per Square Foot of
(Table 3-11)		(from Table 3-10)		Building Area

The results of this calculation are presented in Table 3-12. The findings in Table 3-12 represent the maximum affordable housing impact fee that could be charged to new non-residential developments to mitigate the development's impacts on the need for affordable housing. These figures are <u>not</u> recommended fee levels; they represent only the maximums established by this analysis.

Table 3-12. Maxii	Table 3-12. Maximum Supported Fees Per Square Foot of Building Area.										
INCOME CATEGORY	Office	Office, High-Tech	Retail	Hotel	Industrial	R&D	Warehouse	Residential Care			
Extremely Low	\$4.20	\$3.10	\$15.80	\$6.70	\$6.60	\$1.10	\$4.10	\$4.10			
Very Low	\$33.90	\$27.90	\$88.10	\$28.70	\$43.60	\$17.10	\$18.80	\$19.40			
Low	\$35.90	\$38.70	\$18.40	\$11.20	\$32.20	\$28.90	\$11.00	\$7.70			
Moderate	\$63.70	\$81.60	\$54.40	\$15.00	\$49.50	\$61.70	\$12.00	\$13.40			
Total Nexus Cost / Maximum Supported Fee	\$137.70	\$151.30	\$176.70	\$61.60	\$131.90	\$108.80	\$45.90	\$44.60			

Note: Nexus findings are not recommended fee levels.

Total nexus or mitigation costs are high due to the low compensation levels of many jobs, coupled with the high cost of developing residential units. Higher employment densities also contribute to higher nexus costs. Retail has the highest nexus cost, driven by the combination of generally lower worker compensation levels and the density of employment. While hotel, warehouse and residential care have a similar percentage of their workforce at or below Moderate Income as retail, the lower density of employment results in a lower nexus cost compared to retail.

3.6 Conservative Assumptions

In establishing maximum fees, many conservative assumptions were employed in the analysis that result in a cost to mitigate affordable housing needs that may be considerably understated. These conservative assumptions include:

- Only direct employees are counted in the analysis. Many indirect employees are also associated with each new workspace. Indirect employees in an office building, for example, include security, delivery personnel, building cleaning and maintenance personnel, and a whole range of others. Hotels do have many of these workers on staff, but hotels also "contract out" a number of services that are not taken into account in the analysis. For simplicity and because the results using only direct employees are significantly higher than the fee levels typically considered for adoption, we limit it to direct employees only.
- A downward adjustment of 23% has been reflected in the analysis to account for declining industries and the potential that displaced workers from declining sectors of the economy will fill a portion of new jobs. This is a conservative assumption because many displaced workers may exit the workforce by retiring and the adjustment is only necessary to the extent vacated space is not re-occupied.
- Estimated office employment densities have been reduced to reflect the possibility that the coronavirus will have a long-term impact on employment density. This is a

conservative assumption that will tend to understate impacts given there is no evidence that measures taken to protect health and safety, such as increased physical separation between employees, will endure after the pandemic subsides.

 Annual incomes for workers reflect full time employment based upon EDD's convention for reporting the compensation information. In fact, many workers work less than full time; therefore, annual compensations for these workers is likely overstated.

In summary, less conservative assumptions could have been made that would justify higher maximum linkage fees.

TABLE 3-13A
ESTIMATE OF QUALIFYING HOUSEHOLDS - EXTREMELY LOW INCOME
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

Analysis for Households Earning up to 30% of Median

	Office	Office, High-Tech	Retail	Hotel	Industrial	Research and Development	Warehouse	Residential Care
Per 100,000 SF Building								
Households Earning up to 30% of Median (Step 5, 6,	& 7) ⁽¹⁾							
Management	-	-	-	-	-	-	-	-
Business and Financial Operations	0.10	0.01	-	-	0.00	0.00	0.00	-
Computer and Mathematical	0.00	0.00	-	-	0.00	0.00	-	-
Architecture and Engineering	0.00	0.00	-	-	0.01	0.01	-	-
Life, Physical and Social Science	-	0.00	-	-	0.01	0.01	-	-
Community and Social Services	-	-	-	-	-	-	-	-
Legal	0.00	-	-	-	-	-	-	-
Education Training and Library	-	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, and Media	0.02	0.01	-	-	-	-	-	-
Healthcare Practitioners and Technical	0.00	-	0.07	-	-	0.00	-	0.00
Healthcare Support	0.06	-	-	-	-	-	-	0.32
Protective Service	-	-	-	-	-	-	-	-
Food Preparation and Serving Related	-	-	2.13	0.39	-	-	-	0.22
Building Grounds and Maintenance	-	-	-	0.96	-	-	-	0.14
Personal Care and Service	-	-	0.23	0.08	-	-	-	0.28
Sales and Related	0.07	0.13	0.98	0.01	0.06	-	-	-
Office and Admin	0.77	0.59	0.28	0.17	0.28	0.18	0.20	0.05
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	-	0.02	0.04	0.01	0.03	-	0.00	0.00
Production	-	-	-	0.04	1.13	0.07	0.02	-
Transportation and Material Moving	-	-	0.23	-	0.15	-	0.79	-
HH earning up to 30% of Median - major occupations	1.01	0.78	3.95	1.66	1.66	0.28	1.02	1.02
HH earning up to 30% of Median - all other occupations	0.09	0.03	0.18	0.09	0.07	0.02	0.04	0.05
Total Households Earning up to 30% of Median	1.1	0.8	4.1	1.7	1.7	0.3	1.1	1.1

<u>Notes</u>

⁽¹⁾ Appendix C Tables 1 through 16 contain additional information on worker occupation categories, compensation levels and estimated household incomes.

TABLE 3-13B
ESTIMATE OF QUALIFYING HOUSEHOLDS - VERY LOW INCOME
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

Analysis for Households Earning 30% to 50% of Median

	Office	Office, High-Tech	Retail	Hotel	Industrial	Research and Development	Warehouse	Residential Care
Per 100,000 SF Building								
Households Earning 30% to 50% of Median (Step 5, 6, & 7	") ⁽¹⁾							
Management	0.01	0.02	0.08	0.09	0.01	0.01	0.00	0.01
Business and Financial Operations	1.04	0.94	-	-	0.37	0.61	0.03	-
Computer and Mathematical	0.41	1.12	-	-	80.0	0.13	-	-
Architecture and Engineering	0.14	0.08	-	-	0.31	0.34	-	-
Life, Physical and Social Science	-	0.22	-	-	0.40	1.47	-	-
Community and Social Services	-	-	-	-	-	-	-	-
Legal	0.08	-	-	-	-	-	-	-
Education Training and Library	-	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, and Media	0.30	0.44	-	-	-	-	-	-
Healthcare Practitioners and Technical	0.17	-	0.29	-	-	0.34	-	0.19
Healthcare Support	1.06	-	-	-	-	-	-	2.06
Protective Service	-	-	-	-	-	-	-	-
Food Preparation and Serving Related	-	-	14.53	2.81	-	-	-	1.46
Building Grounds and Maintenance	-	-	-	3.31	-	-	-	0.48
Personal Care and Service	-	-	1.58	0.45	-	-	-	1.93
Sales and Related	0.93	1.51	9.38	0.17	0.59	-	-	-
Office and Admin	7.01	4.72	2.50	2.21	2.47	2.14	1.68	0.35
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	-	0.62	0.52	0.42	0.52	-	0.14	0.14
Production	-	-	-	0.27	9.26	0.60	0.18	-
Transportation and Material Moving	-	-	1.32	-	0.97	-	4.42	-
HH earning 30% to 50% of Median - major occupations	11.16	9.66	30.20	9.73	14.97	5.64	6.44	6.62
HH earning 30% to 50% of Median - all other occupations	0.99	0.33	1.38	0.54	0.64	0.49	0.28	0.32
Total Households Earning 30% to 50% of Median	12.2	10.0	31.6	10.3	15.6	6.1	6.7	6.9

Notes

⁽¹⁾ Appendix C Tables 1 through 16 contain additional information on worker occupation categories, compensation levels and estimated household incomes.

TABLE 3-13C
ESTIMATE OF QUALIFYING HOUSEHOLDS - LOW INCOME
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

Analysis for Households Earning 50% to 80% of Median

	Office	Office, High- Tech	Retail	Hotel	Industrial	Research and Development	Warehouse	Residential Care
Per 100,000 SF Building								
Households Earning 50% to 80% of Median (Step 5, 6, &	7) (1)							
Management	0.25	0.34	0.21	0.16	0.23	0.31	0.03	0.05
Business and Financial Operations	2.52	2.14	-	-	0.94	1.58	0.07	-
Computer and Mathematical	1.77	4.81	-	-	0.39	0.84	-	-
Architecture and Engineering	0.49	0.30	-	-	0.91	1.34	-	-
Life, Physical and Social Science	-	0.61	-	-	0.89	4.23	-	-
Community and Social Services	-	-	-	-	-	-	-	-
Legal	0.18	-	-	-	-	-	-	-
Education Training and Library	-	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, and Media	0.44	0.80	-	-	-	-	-	-
Healthcare Practitioners and Technical	0.38	-	0.35	-	-	0.53	-	0.37
Healthcare Support	0.91	-	-	-	-	-	-	1.23
Protective Service	-	-	-	-	-	-	-	-
Food Preparation and Serving Related	-	-	2.84	0.66	-	-	-	0.39
Building Grounds and Maintenance	-	-	-	2.78	-	-	-	0.40
Personal Care and Service	-	-	0.49	0.14	-	-	-	0.35
Sales and Related	1.17	2.18	1.40	0.11	0.45	-	-	-
Office and Admin	6.33	4.38	1.18	0.44	2.14	2.32	0.85	0.31
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	-	0.87	0.51	0.36	0.56	-	0.14	0.12
Production	-	-	-	0.02	6.60	0.52	0.09	-
Transportation and Material Moving	-	-	0.73	-	0.43	-	3.45	-
HH earning 50% to 80% of Median - major occupations	14.45	16.43	7.71	4.65	13.54	11.68	4.63	3.22
HH earning 50% to 80% of Median - all other occupations	1.29	0.56	0.35	0.26	0.58	1.02	0.20	0.15
Total Households Earning 50% to 80% of Median	15.7	17.0	8.1	4.9	14.1	12.7	4.8	3.4

Notes:

⁽¹⁾ Appendix C Tables 1 through 16 contain additional information on worker occupation categories, compensation levels and estimated household incomes.

TABLE 3-13D
ESTIMATE OF QUALIFYING HOUSEHOLDS - MODERATE INCOME
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

Analysis for Households Earning 80% to 120% of Median

	Office	Office, High-Tech	Retail	Hotel	Industrial	Research and Development	Warehouse	Residential Care
Per 100,000 SF Building								
Households Earning 80% to 120% of Median (Step 5,	6, & 7) ⁽¹⁾							
Management	1.40	1.97	0.59	0.41	1.25	1.98	0.12	0.16
Business and Financial Operations	6.27	5.79	-	-	2.41	4.12	0.18	-
Computer and Mathematical	6.94	19.11	-	-	1.69	3.64	-	-
Architecture and Engineering	1.54	1.26	-	-	3.05	5.04	-	-
Life, Physical and Social Science	-	1.50	-	-	2.20	11.05	-	-
Community and Social Services	-	-	-	-	-	-	-	-
Legal	0.55	-	-	-	-	-	-	-
Education Training and Library	-	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, and Media	0.93	1.82	-	-	-	-	-	-
Healthcare Practitioners and Technical	1.70	-	0.43	-	-	1.22	-	0.85
Healthcare Support	1.53	-	-	-	-	-	-	1.71
Protective Service	-	-	-	-	-	-	-	-
Food Preparation and Serving Related	-	-	14.64	2.61	-	-	-	1.32
Building Grounds and Maintenance	-	-	-	1.58	-	-	-	0.23
Personal Care and Service	-	-	1.73	0.38	-	-	-	2.21
Sales and Related	2.57	4.73	7.16	0.28	1.00	-	-	-
Office and Admin	8.84	5.84	2.14	1.75	3.03	3.51	1.47	0.37
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	-	1.50	0.88	0.61	1.04	-	0.25	0.20
Production	-	-	-	0.23	9.67	0.78	0.17	-
Transportation and Material Moving	-	-	1.10	-	0.83	-	4.12	-
HH earning 80% to 120% of Median - major occupations	32.27	43.51	28.67	7.84	26.16	31.33	6.32	7.06
HH earning 80% to 120% of Median - all other occupation	2.88	1.48	1.31	0.43	1.12	2.73	0.27	0.34
Total Households Earning 80% to 120% of Median	35.1	45.0	30.0	8.3	27.3	34.1	6.6	7.4

Notes:

⁽¹⁾ Appendix C Tables 1 through 16 contain additional information on worker occupation categories, compensation levels and estimated household incomes.

4.0 AFFORDABILITY GAP ANALYSIS

A key component of an impact analysis is the mitigation cost. In an affordable housing nexus analysis, the mitigation cost is the "affordability gap" - the financial gap between what lower income households can afford to pay and the cost of producing new housing. For Extremely Low, Very Low and Low Income units, the affordability gap analysis is based on the remaining financial gap after assistance available through Federal Low Income Housing Tax Credits (LIHTC). For Moderate Income units, the affordability gap is based on the gap between the estimated development costs of a moderate income for-sale unit and the affordable sales price.

4.1 **City Assisted Affordable Unit Prototypes**

For estimating the affordability gap, there is a need to match a household of each income level with a unit type and size according to governmental regulations and City practices and policies. The prototype affordable unit should reflect a modest unit consistent with what the City is likely to assist. The focus is on affordable projects developed for families as opposed to projects consisting of primarily studios or single room occupancy units too small to accommodate an average-size worker household.

For Low-, Very Low-, and Extremely Low-Income households, it is assumed that the City will assist in development of multi-family rental units averaging approximately 1.3 bedrooms⁹ per unit consistent with recent and proposed affordable rental projects being developed in San José.

For Moderate-Income households, it is assumed that the City would assist households in an ownership unit. The typical project assumed is a two-bedroom condominium unit with an average unit size of 1,150 square feet with wood frame construction over a concrete podium. The City may also assist Moderate-Income households in rental units. As discussed in Section 4.4, the affordability gap for rentals was found to be somewhat greater than with for-sale units. Consistent with the conservative approach taken throughout the analysis, the lower for-sale affordability gap is applied for purposes of maximum fee calculations. Use of rental findings in the calculation would have produced higher maximum fee conclusions.

4.2 **Development Costs**

KMA prepared an estimate of total development costs for the affordable housing prototypes described above (inclusive of land acquisition costs, direct construction costs, indirect costs of development and financing). The following table summarizes the per-unit development cost estimates.

⁹ For purposes of calculating the average bedroom size, studios are treated as having zero bedrooms.

Table 4-1. Affordability Unit Development Costs								
Income Group Unit Tenure / Type Development Cost								
Extremely Low (Under 30% AMI)	Rental	\$690,000						
Very Low (30% to 50% AMI)	Rental	\$690,000						
Low (50% to 80% AMI)	Rental	\$690,000						
Moderate (80% to 120% AMI)	Ownership	\$740,000						

For the multi-family rental prototype, costs reflect a review of development costs for six multi-family affordable rental projects in San José, listed below. Costs for each project are summarized in Table 4-5 and are derived from summary information from the County of Santa Clara Office of Supportive Housing and an analysis of affordable unit development costs prepared for the City (56) (57) (58). The six multi-family rental affordable projects have an average total development cost of \$726,000 per unit and an average of 1.3 bedrooms per unit. The total development cost estimate for the Nexus Analysis is consistent with the average without including the highest cost project (Quetzal Gardens), in the interest of providing a more conservative analysis.

Gallup and Mesa

Alum Rock Family

West San Carlos

Roosevelt Park

226 Balbach

Quetzal Gardens

For the moderate-income condominium prototype, development costs are based on a recent KMA pro forma analysis (59) (60) for market rate projects of comparable size, density, and construction type. Adjustments are made to reflect a moderate-income affordable project assisted by the City including removal of the inclusionary in-lieu fee which would not apply for an affordable project, prevailing wages and a developer fee. The analysis makes the conservative assumption that moderate income units are developed within lower land cost areas of the City. The estimated total development costs for a moderate-income condominium unit is \$740,000 including land, direct construction, indirect costs and financing. Additional detail on development cost estimates is presented in Table 4-6.

4.3 Unit Values

For the Extremely Low, Very Low, and Low-Income rental units, unit values are based upon the funding sources assumed to be available for the project. Funding sources include tax-exempt permanent debt financing supported by the project's operating income, a deferred developer fee, and equity generated by 4% federal low income housing tax credits. The highly competitive 9% federal tax credits are not assumed because of the limited number of projects that receive an allocation of 9% tax credits in any given year per geographic region. Other affordable housing subsidy sources such as CDBG, HOME, AHP, Section 8, and various Federal and State funding programs are also limited and difficult to obtain and therefore are not assumed in

this analysis as available to offset the cost of mitigating the affordable housing impacts of new development.

For affordable ownership units, unit values are based on an estimate of the restricted affordable purchase price for a qualifying Moderate-Income household calculated in Table 4-7.

The unit values are summarized in Table 4-2. Further detail is provided in Tables 4-4 and 4-6.

Table 4-2. Unit Values for Affordable Units									
Income Group Unit Tenure / Type Unit Value									
Extremely Low (Under 30% AMI)	Rental	\$307,000							
Very Low (30% to 50% AMI)	Rental	\$411,000							
Low (50% to 80% AMI)	Rental	\$462,000							
Moderate (80% to 120% AMI)	Ownership	\$558,700							

4.4 Affordability Gap

The affordability gap is the difference between the cost of developing the affordable units and the unit value based on the restricted affordable rent or sales price. The resulting affordability gaps are as presented in Table 4-3.

Table 4-3. Affordability Gap Calculation								
	Unit Value	Development Cost	Affordability Gap					
Affordable Rental Units								
Extremely Low (Under 30% AMI)	\$307,000	\$690,000	\$383,000					
Very Low (30% to 50% AMI)	\$411,000	\$690,000	\$279,000					
Low (50% to 80% AMI)	\$462,000	\$690,000	\$228,000					
Affordable Ownership Units								
Moderate (80% to 120% AMI)	\$558,700	\$740,000	\$181,300					

Detailed analysis supporting the affordability gap calculations is provided in Tables 4-4 to 4-7.

In addition to the findings summarized in Table 4-3, an affordability gap calculation for a Moderate-Income rental unit is included in Table 4-4. While Moderate Income rents are higher than Low Income rents, units over 80% AMI are not eligible for tax credits or a property tax exemption, resulting in an affordability gap similar to Low Income rentals and approximately \$30,000 more than the Moderate Income for-sale affordability gap calculation. As the Moderate Income for-sale affordability gap calculation was found to be less, it was applied for purposes of maximum fee calculations in Section 3.5 to provide a more conservative analysis.

Table 4-4
Affordability Gap Calculation, Rental Affordable Units
Commercial Linkage Fee Nexus Analysis
City of San Jose, CA

		Extremely Low	Very Low	Low Income	Moderate
I.	Affordable Prototype				
	Tenure Average Number of Bedrooms	Rental 1.3 Bedrooms			
II.	Development Costs [1]	Per Unit	Per Unit	Per Unit	Per Unit
	Land Acquisition	\$45,000	\$45,000	\$45,000	\$45,000
	Directs	\$440,000	\$440,000	\$440,000	\$440,000
	Indirects	\$165,000	\$165,000	\$165,000	\$165,000
	Financing	\$40,000	\$40,000	\$40,000	\$40,000
	Total Development Costs	\$690,000	\$690,000	\$690,000	\$690,000
III.	Supported Financing	Per Unit	Per Unit	Per Unit	Per Unit
	Affordable Rents				
	Maximum Rent [2]	\$941	\$1,570	\$1,884	\$3,232
	(Less) Utility Allowance [3]	(\$63)	(\$63)	(\$63)	(\$63)
	Maximum Monthly Rent	\$878	\$1,507	\$1,821	\$3,169
	Net Operating Income (NOI)				
	Gross Potential Income	Per Unit	Per Unit	Per Unit	Per Unit
	Monthly	\$878	\$1,507	\$1,821	\$3,169
	Annual	\$10,537	\$18,078	\$21,846	\$38,030
	Other Income (Less) Vacancy 5.0%	\$250 (\$530)	\$250	\$250 (\$4.405)	\$250 (\$4.044)
	(Less) Vacancy 5.0% Effective Gross Income (EGI)	(\$539) \$10,248	(\$916) \$17,412	(\$1,105) \$20,991	(\$1,914) \$36,366
	(Less) Operating Expense & Reserves [4]	(\$7,800)	(\$7,800)	(\$7,800)	(\$7,800)
	(Less) Property Taxes [5]	(\$7,500) \$0	(\$7,800) \$0	(\$7,800) \$0	(\$7,800)
	Net Operating Income (NOI)	\$2,448	\$9,612	\$13,191	\$22,866
	, ,	Ψ2,440	ψ0,012	Ψ10,101	Ψ22,000
	Permanent Financing Permanent Loan [6]	* 05.000	* 400.000	* 400.000	****
		\$35,000	\$139,000	\$190,000	\$330,000
	Deferred Developer Fee [7]	\$21,000	\$21,000	\$21,000	\$21,000
	4% Tax Credit Equity/Developer Equity ^[8]	\$251,000	\$251,000	\$251,000	\$127,000
	Total Sources	\$307,000	\$411,000	\$462,000	\$478,000
IV.	Affordability Gap	Per Unit	Per Unit	Per Unit	Per Unit
	Supported Permanent Financing	\$307,000	\$411,000	\$462,000	\$478,000
	(Less) Total Development Costs	(\$690,000)	(\$690,000)	(\$690,000)	(\$690,000)
	Affordability Gap	(\$383,000)	(\$279,000)	(\$228,000)	(\$212,000)

^[1] Development costs estimated by KMA based on costs for recent and pipeline affordable projects in San Jose summarized in Table 4-5.

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^[2] Maximum rents per Tax Credit Allocation Committee (TCAC) for projects utilizing Low Income Housing Tax Credits. Moderate Income rents at 110% AMI per City rent schedule.

^[3] Utility allowances from Santa Clara County Housing Authority (2019).

^[4] Based on median operating expense and replacement reserves for eight family affordable projects analyzed by KMA in a report entitled Review of Affordable Housing Development Costs, prepared by KMA for the City of San Jose in October 2019.

^[5] Assumes tax exemption for non-profit general partner for units under 80% AMI. Property taxes for Moderate Income based on capitalized value at 5% and a 1.25% tax rate.

^[6] Based on representative permanent loan terms including 5.25% interest rate, 1.15 debt service coverage and 40 year term.

^[7] Reflects the average deferred developer fee for the specific projects on which development costs are based.

^[8] Current tax credit underwriting assumptions drawn from Novogradac.com as of January 2020 and reflect tax credit yield of \$0.94 and applicable percentage of 3.19%. Tax credit equity estimate assumes high cost area adjustment and basis limit adjustments for prevailing wage, parking beneath units, and inclusion of Very Low or ELI units as part of the unit mix. Moderate Income units over 80% AMI are not eligible for tax credits. Supported equity for moderate income is estimated based on a capitalization rate of 5%, which reflects a 0.5% premium over a market rate cap rate of 4.5% less debt financing. A cap rate is used rather than a return on cost as the developer receives a return through a developer fee included in project costs.

Table 4-5
Development Costs for Recent Affordable Housing Projects in San Jose
Commercial Linkage Fee Nexus Analysis
City of San Jose, CA

-	Gallup & Mesa	West San Carlos	226 Balbach	Alum Rock Family	Roosevelt Park	Quetzal Gardens	Average	Average without Quetzal Gardens
Number of Units	46	80	87	87	80	71	75	76
Avg No. Bedrooms ⁽¹⁾	1.00	1.30	0.94	1.45	1.34	2.00	1.34	1.21
Cost Information Year	2019	2018	2019	2018	2018	2018		
Land	\$0	\$73,906	\$27,586	\$47,207	\$55,243	\$61,247	\$44,000	\$41,000
Direct Construction	\$438,261	\$376,544	\$427,488	\$421,862	\$559,056	\$611,972	\$472,000	\$444,000
Indirect Costs	\$227,672	\$171,220	\$104,665	\$127,284	\$192,367	\$170,027	\$166,000	\$165,000
Financing	\$17,679	<u>\$24,420</u>	<u>\$42,615</u>	<u>\$39,810</u>	<u>\$73,526</u>	<u>\$67,211</u>	<u>\$44,000</u>	<u>\$40,000</u>
Total Development Cost	\$683,612	\$646,091	\$602,354	\$636,163	\$880,191	\$910,456	\$726,000	\$690,000

⁽¹⁾ For purposes of average bedroom size calculations, studios are treated as having zero bedrooms.

Table 4-6
Affordability Gap Calculation, Moderate Income For-Sale
Commercial Linkage Fee Nexus Analysis
City of San Jose, CA

I.	Affordable Prototype		
	Tenure	For-Sale	
	Density	50 du/acre	
	Unit Size	1,150 SF	
	Bedrooms	2-Bedrooms	
	Construction Type	Condominiums (Type V over podiu	ım)
II.	Development Costs [1]	Per Unit	
	Land Acquisition	\$74,000	
	Directs	\$483,000	
	Indirects	\$148,000	
	Financing	\$35,000	
	Total Costs	\$740,000	
III.	Affordable Sales Price	Per Unit	
	Household Size	3 person HH	
	110% of Median Income ^[2]	\$140,195	
	Maximum Affordable Sales Price	\$558,700 ^[3]	
IV.	Affordability Gap	Per Unit	
	Affordable Sales Price	\$558,700	
	(Less) Development Costs	(\$740,000)	
	Affordability Gap - Moderate Income	(\$181,300)	

^[1] Costs based on recent KMA pro forma analysis with adjustments to reflect a City funded affordable project including removal of the affordable housing fee, prevailing wages and inclusion of an upfront developer fee as part of indirect costs. The prior analysis is available at

https://sanjose.legistar.com/LegislationDetail.aspx?ID=4200129&GUID=5E04A82B-8D9D-46D1-9FFD-5B80A82B565E&Options=&Search=

Prepared by: Keyser Marston Associates Filename: $\SF-FS2\wp\19\19081\017\Affordability Gaps 6.28.20.xlsx; For-Sale$

^[2] Per California Health and Safety Code Section 50052.5, the affordable sale price for a Moderate Income household is to be based on 110% of AMI, whereas qualifying income can be up to 120% of AMI.

^[3] See Table 4-7 for Moderate Income home price estimate.

Table 4-7
Affordable Sales Price Calculation
Commercial Linkage Fee Analysis
City of San Jose, CA

Unit Size (Bedroom) Household Size	2-Bedroom <u>3-person HH</u>
Santa Clara County 2020 Median Income	\$127,450
Home Price at 110% of AMI % for Housing Costs Available for Housing Costs (Less) Property Taxes (Less) HOA (Less) Maintenance (Less) Utilities (Less) Hazard Insurance (Less) Mortgage Insurance Income Available for Mortgage	\$140,195 35% \$49,068 (\$6,976) (\$4,800) (\$300) (\$1,440) (\$900) (\$4,242) \$30,410
Supported Mortgage Down Payment @5% Home Price @110% AMI	\$530,800 \$27,900 \$558,700
Expense Assumptions - HOA (1) - Utilities (2) - Maintenance (3)	\$400 \$120 \$25
Common Assumptions - Mortgage Interest Rate (6) - Down Payment - Property Taxes (% of sales price) - Mortgage Insurance (4)	4.00% 5.00% 1.25% 0.80%

Notes

- (1) Estimated based on data reported by Redfin.com on HOA dues applicable to homes built since 2000 and sold from July through September 2019.
- (2) Utility allowances per Santa Clara County Housing Authority (2019).
- (3) Per City of San Jose affordable sales price calculations.
- (4) Based on FHA mortgage insurance premium schedule.
- (5) Calculated consistent with City of San Jose inclusionary housing guidelines. For attached units, reflects a "walls-in" policy.
- (5) Reflects average for calendar year 2019 based on Freddie Mac PMMS. Historically low interest rates available as of the time this Nexus Study was prepared are not reflected as interest rates have been driven down by the effects of the pandemic and are unlikely to endure after.

5.0 MITIGATION FEE ACT FINDINGS

This section provides findings language consistent with the requirements of the Mitigation Fee Act as set forth in Government Code § 66000 et seq.

(1) Identify the purpose of the fee (66001(a)(1)).

The purpose of the commercial linkage fee is to fund construction of affordable housing to mitigate the increased demand for affordable housing from workers in newly developed workplace buildings.

(2) Identify the use to which the fee is to be put (66001(a)(2)).

Commercial linkage fees are used to increase the supply of housing affordable to qualifying Extremely Low, Very Low, Low and Moderate-Income households earning from 0% through 120% of median income.

(3) Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed (66001(a)(3)).

The foregoing Nexus Analysis has demonstrated that there is a reasonable relationship between the use of the fee, which is to increase the supply of affordable housing in San José, and the development of new non-residential buildings which increases the need for affordable housing. Development of new non-residential buildings increases the number of jobs in San José. A share of the new workers in these new jobs will have household incomes that qualify as Extremely Low, Very Low, Low and Moderate Income and result in an increased need for affordable housing.

(4) Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed (66001(a)(4)).

The analysis has demonstrated that there is a reasonable relationship between the development of non-residential workspace buildings in San José and the need for additional affordable units. Development of new workspace buildings accommodates additional jobs in San José. Eight different non-residential development types were analyzed (Office, Office High-Tech, Retail, Hotel, Industrial, R&D, Warehouse, and Residential Care). The number of jobs added in various types of new non-residential buildings is documented on page 7. Based on household income levels for the new workers in these new jobs, a significant share of the need is for housing affordable to Extremely Low, Very Low, Low and Moderate Income levels. The Nexus Analysis concludes that for every 100,000 square feet of new office space, 64.1 incremental

affordable units are needed. For High-Tech Office, 72.8 affordable units are needed per 100,000 square feet of space developed, 73.7 for Retail, 25.2 for Hotel, 58.7 for Industrial, 53.2 for R&D, 19.2 for Warehouse and 18.8 for Residential Care.

(5) Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed. (66001(b)).

There is a reasonable relationship between the amount of the fee and the cost of the needed affordable housing attributable to the new non-residential development. The Nexus Analysis has quantified the increased need for affordable units in relation to each type of new non-residential use being developed and determined maximum fee levels based on the cost of providing the needed affordable housing. Costs reflect the net subsidy required to produce the affordable units based on recent cost information for development of affordable housing in San José. Commercial Linkage fees do not exceed the cost of providing the affordable housing that is attributable to the new development.

(6) A fee shall not include the costs attributable to existing deficiencies in public facilities (66001(g)).

The Nexus Analysis quantifies only the net new affordable housing needs generated by new non-residential development in San José. Existing deficiencies with respect to housing conditions in San José are not considered nor in any way included in the analysis.

APPENDIX A: DI	SCUSSION OF V	ARIOUS FACTOR	RS IN RELATION T	O NEXUS CONCEPT
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This appendix includes a discussion of various factors and assumptions in relation to the Nexus Analysis and provides a description of the validity of certain assumptions in the San José market.

1. No Excess Supply of Affordable Housing

An assumption of this Nexus Analysis is that there is no excess supply of affordable housing available to absorb or offset new demand; therefore, new affordable units are needed to mitigate the new affordable housing demand generated by new non-residential development. Based on a review of San José's Housing Element, recent Census information for the City of San José, and other sources, conditions in San José are consistent with the underlying assumption that no excess supply of housing affordable to Extremely Low, Very Low, Low and Moderate Income households exists, as evidenced by the following:

- Census data for San José (from the 2013 to 2017 American Community Survey) shows 39% of all households in the City are paying thirty percent or more of their income on housing ⁽⁶¹⁾.
- For households earning less than \$75,000 per year, a group that includes 38% of all households in the City, 73% are paying thirty percent or more of their income on housing according the U.S. Census 2013 to 2017 American Community Survey (61).
- San José's Housing Element ⁽⁶²⁾ states that "…approximately 50% of owners (those with a mortgage) and an even higher percentage (53.4%) of renters experiencing housing burden in 2010, this analysis concludes that the existing housing need in San José is substantial. In fact, these results suggest that needs are not confined to lower-income residents, but extend to middle class households as well…"
- San José's Annual Housing Element Progress Report for 2018 (63) indicates approximately 13% of the 20,849 Very Low, Low, and Moderate income unit production target for the 2014 to 2023 Regional Housing Needs Allocation Period have been permitted, a pace that would result in only 30% of the needed Very Low, Low and Moderate Income units being built over the entire nine year planning period.
- Vacancy is approximately 5.6% for rental housing in San José as of 2019 according to real estate data provider Costar ⁽⁶⁴⁾, a level generally considered normal to accommodate regular turnover of units. However, vacancy is skewed toward newer and higher rent units, classified as 4 and 5-star properties by Costar, which have a vacancy rate of 9.2%. Among older and lower rent properties that receive a one or two-star rating by Costar, vacancy is just 4.1%, indicating a tighter housing market among more affordable properties ⁽⁶⁴⁾.

- According to mortgage provider HSH (65), an income of approximately \$229,000 is needed to afford the median price home in the San José metro area as of the third quarter 2019, which is 1.62 times the area median income for a four-person household (5)
- Development of new rental units affordable to Extremely Low, Very Low, Low, and Moderate Income is unlikely to occur without a subsidy as rents affordable to these income groups are not sufficient to support the high cost of construction (66).

2. Addressing the Housing Needs of a New Population vs. the Existing Population

This Nexus Analysis assumes there is no excess supply of affordable housing available to absorb or offset new demand; therefore, new affordable units are needed to mitigate the new affordable housing demand generated by development of new workplace buildings.

This nexus study does not address the housing needs of the existing population. Rather, the study focuses exclusively on documenting and quantifying the housing needs created by development of new workplace buildings.

3. Substitution Factor

Any given new building may be occupied partly, or even perhaps totally, by employees relocating from elsewhere in the region. Buildings are often leased entirely to firms relocating from other buildings in the same jurisdiction. However, when a firm relocates to a new building from elsewhere in the region, there is a space in an existing building that is vacated and occupied by another firm. That building in turn may be filled by some combination of newcomers to the area and existing workers. Somewhere in the chain there are jobs new to the region. The net effect is that new workplace buildings accommodate new employees, although not necessarily inside the new buildings themselves.

4. Relationship Between Construction of Employment Space and Job Growth Holds on Macro Scale

The Nexus Analysis relates square feet of new non-residential development to added jobs in San José on an individual building basis. While the analysis is conducted at the level of the individual building, the underlying relationships hold on a larger County-level scale. KMA reviewed published data on employment in Santa Clara County in relationship to the absorption of new office, R&D and industrial space. As summarized in Table A-1 below, employment has grown in proportion to new building area. Relationships between building area and jobs has been relatively consistent over time with a modest trend toward increasing density of employment. As shown in the table below, over the 10-year period from 2008 to 2018, an average of one new job was added for every 303 square feet of added office, R&D, and industrial space.

Table A-1. Relationship Between Added Jobs and Added Employment Space in Santa Clara County						
	2008	2018	Incremental			
			Growth			
Jobs in sectors relevant to Office/	680,700	868,200	187,500			
R&D/Industrial Space 12	Jobs	Jobs	Jobs			
Office, R&D, and Industrial Space,	249,629,088	306,369,983	56,740,895			
Santa Clara County 3	Square Feet	Square Feet	Square Feet			
Ratio: Added Jobs to Square Feet	1 job per 367 square feet of office / R&D / industrial	1 job per 353 square feet of office / R&D / industrial	1 added job for every 303 square feet office / R&D / Industrial space added			

¹ Employment data is from the California Employment Development Department and is for Santa Clara County ⁽⁴⁵⁾.

5. Indirect Employment and Multiplier Effects

The multiplier effect refers to the concept that the income generated by a new job recycles through the economy and results in additional jobs. The total number of jobs generated is broken down into three categories – direct, indirect and induced. In the case of this Nexus Analysis, the direct jobs are those located in the new workspace buildings that would be subject to the linkage fee. Multiplier effects encompass indirect and induced employment. Indirect jobs are generated by suppliers to the businesses located in the new workspace buildings. Induced jobs are generated by local spending on goods and services by employees.

Multiplier effects vary by industry. Industries that draw heavily on a network of local suppliers tend to generate larger multiplier effects. Industries that are labor intensive also tend to have larger multiplier effects as a result of the induced effects of employee spending.

Theoretically, a jobs-housing nexus analysis could consider multiplier effects although the potential for double-counting exists to the extent indirect and induced jobs are added in other new buildings in jurisdictions that have linkage fees. KMA chose to omit the multiplier effects (the indirect and induced employment impacts) to avoid potential double-counting and make the analysis more conservative.

In addition, the Nexus Analysis addresses direct "inside" employment only. In the case of an office building, for example, direct employment covers the various managerial, professional and clerical people that work in the building; it does not include delivery services, landscape maintenance workers, janitorial contractors and many others that are associated with the normal functioning of an office building. In other words, any analysis that ties lower income housing to the number of workers inside buildings will continue to understate the demand. Thus, confining

² Does not include employment in industry sectors less likely to be primarily located in private office / R&D and industrial buildings. jobs in governmental, farm, construction, retail, transportation, warehouse and utilities totaling 237,700 and 245,800 in 2008 and 2018, respectively, were removed from the indicated employment totals to provide for a more consistent comparison.

³ NAI/BT Commercial ⁽⁶⁷⁾ for 2008 building area totals; Colliers International ⁽⁶⁸⁾ for 2018 building area totals (uses 4th quarter figures).

the analysis to the direct employees does not address all the lower income workers associated with each type of building and understates the impacts.

6. Jobs Housing Balance and Commuting

San José is a part of the broader Silicon Valley and Bay Area economies and many workers commute into and out of San José for work on a daily or regular basis. San José has been a net "exporter" of workers in that more workers live in San José than work in San José. As of the 2013 to 2017 American Community Survey, approximately 21% more workers were living in San José than there are jobs (48) (49). Around half of workers who reside in the City commute out to work in another city while the other half hold jobs in San José. Overall, San José residents hold approximately 59% of the jobs that are located in San José and workers that reside elsewhere hold the other 41% of jobs (48) (49). The City has long had policy goals around jobs housing balance and increasing the level of employment in the City.

The fact that San José is a net "exporter" of workers is not a material consideration from the standpoint of the nexus technical analyses. The methodology and assumptions do not rely upon a particular commute share or balance of jobs to housing. The important factor is that the San José market is consistent with the key underlying assumption that there is no excess supply of affordable housing available to meet the needs of new workers, as discussed above. In addition, the fact that many workers commute out of the City for work is not an indication of an excess capacity in the labor force available to absorb new job growth. Job growth in the City of San José and in the broader region necessitates corresponding growth in housing opportunities at a range of affordability levels to avoid exacerbating adverse effects already being experienced such as overcrowding, overpaying for housing, displacement and long commutes.

7. Economic Cycles

An impact analysis of this nature is intended to support a one-time impact requirement to address impacts generated over the life of a project (generally 40 years or more). Short-term conditions, such as a recession or a vigorous boom period, are not an appropriate basis for estimating impacts over the life of the building. These cycles can produce impacts that are higher or lower on a temporary basis.

Development of new workspace buildings tends to be minimal during a recession and generally remains minimal until conditions improve or there is confidence that improved conditions are imminent. When this occurs, the improved economic condition will absorb existing vacant space and underutilized capacity of existing workers, employed and unemployed. By the time new buildings become occupied, conditions will have likely improved.

To the limited extent that new workspace buildings are built during a recession, housing impacts from these new buildings may not be fully experienced immediately, but the impacts will be experienced at some point. New buildings delivered during a recession can sometimes sit

vacant for a period after completion. Even if new buildings are immediately occupied, overall absorption of space can still be zero or negative if other buildings are vacated in the process. Jobs added may also be filled in part by unemployed or underemployed workers who are already housed locally. As the economy recovers, firms will begin to expand and hire again filling unoccupied space as unemployment is reduced. New space delivered during the recession still adds to the total supply of employment space in the region. Though the jobs are not realized immediately, as the economy recovers and vacant space is filled, this new employment space absorbs or accommodates job growth. Although there may be a delay in experiencing the impacts, the fundamental relationship between new buildings, added jobs, and housing needs remains over the long term.

In contrast, during a vigorous economic boom period, conditions exist in which elevated impacts are experienced on a temporary basis. As an example, compression of employment densities can occur as firms add employees while making do with existing space. Compressed employment densities mean more jobs added for a given amount of building area. The employment density data used in the Nexus Analysis are reflective of longer-term averages and in many cases are based on selection of estimates at the lower end of the range of sources considered. For office, a conservative assumption is made that employment density will decrease in the future. While rising construction costs in the Bay Area have also impacted development costs for the affordable projects which form the basis of the affordability gap analysis in the Nexus Analysis, the costliest project was removed from the average applied in the mitigation cost calculations. These conservative assumptions, among others, result in a Nexus Analysis that provides a conservative result and will tend to understate mitigation costs.

While the economic cycles can produce impacts that are temporarily higher or lower than normal, an impact fee is designed to be collected once, during the development of the project. Over the lifetime of the project, the impacts of the development on the demand for affordable housing will be realized, despite short-term booms and recessions.

8. Non-Duplication of Residential and Non-Residential Affordable Housing Mitigations

The City of San Jose has an existing Affordable Housing Impact Fee (AHIF) program that helps mitigate the impacts of new rental residential development on the demand for affordable housing. The City has been transitioning away from the AHIF program; however, it is expected to apply to some future rental residential developments. A separate Residential Nexus Analysis prepared in 2014 provides nexus support to the AHIF program (69). This section evaluates the potential for overlap between the affordable housing impacts being mitigated by the City's existing AHIF program and a proposed new commercial linkage fee. The analysis demonstrates that no duplication in affordable housing mitigations will occur.

To briefly summarize the Commercial Linkage Fee Nexus Analysis, the logic begins with jobs located in new workplace buildings including office buildings, retail spaces, hotels and others.

The Nexus Analysis then identifies the compensation structure of the new jobs depending on the building type, the income of the new worker households, and the housing affordability level of the new worker households, concluding with the number of new worker households in the lower income affordability categories.

In the Residential Nexus Analysis, the logic begins with households who rent new market rate units. The nexus analysis quantifies the number of jobs created in services to the new households and then identifies the compensation structure of the new jobs, the income of the new worker households, and the housing affordability level of the new worker households, concluding with the number of new worker households in the lower income affordability categories.

Some of the jobs that are counted in the Commercial Linkage Fee Nexus Analysis may also be counted in the Residential Nexus Analysis. The overlap potential exists in jobs generated by the expenditures of residents of new rental residential units, such as expenditures for food, personal services, restaurant meals and entertainment. However, many jobs counted in the Commercial Linkage Fee Nexus Analysis are not addressed in the Residential Nexus Analysis at all. Firms in office, industrial, warehouse and hotel buildings often serve a much broader, sometimes international, market and are generally not focused on providing services to local residents. These non-local serving jobs are not counted in the Residential Nexus Analysis. Retail, which typically is primarily local serving, is the building type that has the greatest potential for overlap between the jobs counted in the Residential and Commercial Linkage Fee Nexus Analyses.

Theoretically, there is a set of conditions in which 100% of the jobs counted for purposes of the Commercial Linkage Fee Nexus Analysis are also counted for purposes of the Residential Nexus Analysis. For example, a small retail store or restaurant might be located on the ground floor of a new apartment building and entirely dependent upon customers from the apartments in the floors above. The commercial space on the ground floor may be subject to a commercial linkage fee while the apartments above may pay a residential affordable housing impact fee. In this special case, the two programs mitigate the affordable housing demand of the very same workers. Therefore, in this special case, the combined requirements of the two programs to fund construction of affordable units must not exceed 100% of the demand for affordable units generated by employees in the new commercial space.

Complete overlap between jobs counted in the Commercial Linkage Fee Nexus Analysis and jobs counted in the Residential Nexus Analysis could occur only in a very narrow set of theoretical circumstances. The following analysis demonstrates that combined mitigation requirements would not exceed the nexus even if the jobs counted in the Residential Nexus Analysis are also counted in the Commercial Linkage Fee Nexus Analysis. As discussed, the theoretical possibility of 100% overlap exists mainly with retail jobs that serve residents of new rental housing in San Jose; therefore, the overlap analysis is focused on the retail land use.

Proposed Commercial Linkage Fee as Percent of Nexus Maximum

The Commercial Linkage Fee Nexus Analysis calculates the maximum fee supported by the analysis of \$176.70 per square foot of retail. KMA's recommendation is to exempt retail uses from the proposed commercial linkage fee or to consider a fee up to \$3 to \$5 per square foot with an exemption for retail within mixed use projects¹⁰. Therefore, recommended fee levels would mitigate between 0% and 3% of the total affordable housing impacts for retail as shown in Table A-2.

Table A-2. Recommended Fee as a Percent of Nexus Maximum						
Building Type	Nexus Maximum	Recommended Fee	Percent of Nexus			
Retail	\$176.70	Exempt or \$3-\$5/SF	0% to 3%			

AHIF as Percent of Nexus Maximum

The Residential Nexus Analysis identifies the affordable unit demand impacts of new market rate rental residential development and calculates maximum affordable housing impact fees based on the cost of mitigating these impacts. In Table A-3, KMA combines affordable unit demand impact findings of the 2014 Residential Nexus Analysis with the updated affordability gaps that are calculated in Section 4 to determine updated maximum supported affordable housing impact fees per square foot. Based on current mitigation costs, the updated maximum affordable housing impact fee for rental residential developments is \$42.30 per square foot.

Table A-3 Update to Resid	dential Nexus Analys	sis Findings to	Reflect Current Affo	rdability Gap.
	A.	B.	C.	D.
	Affordable Unit		Updated Mitigation	Updated Mitigation
	Demand Per 100	Affordability	Cost Per	Cost
	Market Rate Units	Gap	Residential Unit	Per Square Foot
	Residential Nexus Analysis, Page 3	Section 4	=A x B./100	= C. / 990 SF market rate unit size
Extr. Low (Under 30% AMI)	2.5	\$383,000	\$9,600	\$9.70
Very Low (30% - 50% AMI)	5.1	\$279,000	\$14,200	\$14.30
Low (50%-80% AMI)	5.3	\$228,000	\$12,100	\$12.20
Moderate (80%-120% AMI)	<u>3.3</u>	\$181,300	<u>\$6,000</u>	<u>\$6.10</u>
Total	16.2		\$41,900	\$42.30

Source: 2014 Residential Nexus Analysis prepared by KMA for the City of San Jose.

The AHIF is currently \$18.70/SF and applies only to rental projects between 3 and 19 units as well as certain pipeline rental projects with 20 or more units that submitted a planning application and affordable housing compliance plan prior to June 30, 2018. The AHIF is

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¹⁰ Recommendations are presented in the companion report entitled "Feasibility Analysis of Proposed Commercial Linkage Fees."

proposed to be phased out in favor of applying the City's Inclusionary Housing Ordinance (IHO) to all residential development projects with five or more units; however, the AHIF will continue to apply to some projects until the phase out is complete.

As shown in Table A-4, the current AHIF rate of \$18.70/SF represents approximately 44% of the \$42.30/SF updated nexus maximum identified in Table A-3. Therefore, the AHIF mitigates approximately 44% of the affordable housing impacts associated with new market rate rental developments. While the Residential Nexus Analysis also included separate nexus findings for high-rise apartments, the current AHIF rate for applicable high-rise developments is zero.

TableA-4. Percent of Nexus Maximum Mitigated by AHIF					
Nexus Maximum Per Square Foot ¹	\$42.30/SF				
Current AHIF	\$18.70/SF				
Percent of Nexus Maximum Mitigated	44%				

¹Table A-3

Combined Affordable Housing Mitigations Do Not Exceed Nexus Maximums

As recommended commercial linkage fees for retail mitigate between 0% and 3% of the maximum supported by the nexus and residential fees mitigate an estimated 44% of the maximum supported by the nexus, combined residential and non-residential affordable housing mitigations would mitigate no more than 47% of the impacts (3% + 44% = 47%) even under the theoretical circumstance of 100% overlap in the jobs counted in the two nexus analyses. Therefore, no duplication in affordable housing mitigations will occur.

Inclusionary Housing Ordinance (IHO) is Compatible with Proposed Commercial Linkage Fee

As noted above, the City has been transitioning away from the AHIF toward implementation of the IHO for all residential development projects. In contrast to the AHIF, the IHO is not limited in purpose or extent to mitigation of impacts of new development. Findings made by the City Council at adoption indicate the purpose of the IHO is to "enhance the public welfare by establishing policies which require the development of housing affordable to households of very low, lower, and moderate incomes, meet the City's regional share of housing needs, and implement the housing element's goals and objectives."

The IHO is not, and is not required to be, supported by a nexus study, as confirmed by the ruling in *California Building Industry Association v. City of San Jose* (2015) 61 Cal.4th 435, cert. denied 138 S.Ct. 928 (2016). Therefore, a similar test regarding potential overlapping mitigations is not performed with respect to the IHO because it is not focused on or limited to mitigation of impacts. So long as the San José housing market is consistent with the underlying assumption described in Appendix A, No. 1, that there is no excess supply of affordable housing available to meet the needs of new workers, which includes consideration of units produced through the IHO, proposed commercial linkage fees applicable to non-residential development

remain a valid requirement fully compatible with implementation of the IHO for residential developments.

This section may require updating if residential requirements are modified or if the proposed commercial linkage fees are adopted at levels that exceed recommended levels.

APPENDIX B: LIST OF DATA SOURCES	
AFFENDIX B. LIST OF DATA SOURCES	

This appendix lists data sources used in preparation of the Nexus Analysis. Numbering corresponds to the citations in the report text. Following the list of sources, a series of tables provides a summary of the employment density information from the sources consulted.

- 1. Employment Development Department, Labor Market Information Division. Industry Employment & Labor Force by MONTH, San Jose, Sunnyvale, Santa Clara MSA (San Benito and Santa Clara Counties). June 19, 2020.
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While we believe these sources are sufficiently accurate for purposes of the analyses, we cannot guarantee their accuracy. KMA assumes no liability for information derived from these or any other source.

Appendix B Tables 1 through 4 provide a summary of the employment density information derived from sources listed above.

APPENDIX B TABLE 1 OFFICE EMPLOYMENT DENSITY COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

OFFICE AND HIGH-TECH OFFICE

Source	SF Per Employee	Employees Per 1,000 SF
San Jose EIRs		
Santana West Redevelopment EIR, San Jose	300	3.33
200 Park Avenue Office Project, Initial Study, San Jose	300	3.33
Adobe North Tower, supplement to EIR, San Jose	300	3.33
America Center EIR, San Jose	300	3.33
Estimates for other cities (focus on tech)		
North Bay Shore Precise Plan EIR, Mountain View	250	4.00
Apple Campus 2.0 EIR, Cupertino	241	4.15
Facebook Campus Expansion Project EIR, Menlo Park	150	6.65
KMA office employment density estimate, San Francisco - blend of tenant t	238	4.20
- tech tenants only ⁽²⁾	207	4.83
Institute of Transportation Engineers, Trip Generation (1)		
General Office	304	3.29
Single Tenant Office	295	3.39
Medical-Dental Office	207	4.83
Office park	278	3.60
Business park	332	3.01
Estimate for Nexus Study		
Office employment density estimate pre-coronavirus	300	3.33
With assumed 1/3 post-coronavirus increase in SF per employee	400	2.50
High-Tech Office employment density estimate pre-coronavirus	225	4.44
With assumed 1/3 post-coronavirus increase in SF per employee	300	3.33

⁽¹⁾ Drawn from summary prepared by U.S. Green Building Council.

⁽²⁾ Based on one of the three methodologies used in the study adjusted for 10% vacancy.

APPENDIX B TABLE 2 HOTEL EMPLOYMENT DENSITY COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

HOTEL

Source	Number of Rooms	No. of Employees	Employees Per Room
Silicon Valley Book of Lists, 2010			_
Fairmont San Jose	805	430	0.53
Santa Clara Marriott	759	300	0.40
Hilton San Jose	353	200	0.57
Crowne Plaza San Jose	239	100	0.42
San Jose Tribute Hotel EIR	274	125	0.46
U.S. Department of Energy (1) (2)			0.53
Estimate for Nexus Study	emplo	yees per room	0.4
	SF	per employee ⁽²⁾	1,500

⁽¹⁾ Drawn from summary prepared by U.S. Green Building Council.

⁽²⁾ Translations between per room and per square foot figures are based on an average of 600 square feet per room.

APPENDIX B TABLE 3 RESIDENTIAL CARE EMPLOYMENT DENSITY COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

RESIDENTIAL CARE

				Square	Estimated	SF/
Name	City	Beds	Units	Footage	Employees	Employee
Belmont Village Union Avenue	San Jose	198	152	125,303	47	2,666
Holden Assisted Living, South Basco	San Jose	192	165	147,789	85	1,739
Oakmont of Evergreen Assisted Livi	ıSan Jose	109	94	91,714	55	1,668
Oakmont	Concord	76	76	100,000	38	2,632
Oakmont Emerald Isle	Santa Rosa	71	49	68,114	50	<u>1,362</u>
					Average	2,013

Estimate for Nexus Study	2,000
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Sources: Staff reports for applicable jurisdictions, EIRs and other sources. In some cases, the number of employees has been estimated by KMA based on the project description.

APPENDIX B TABLE 4 EMPLOYMENT DENSITY - RETAIL, R&D, INDUSTRIAL, WAREHOUSE COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

Source	SF Per Employee	Employees Per 1,000 SF
RETAIL		
Institute of Transportation Engineers, Trip Generation (1)		
Specialty Retail Store	549	1.82
Discount Store	654	1.53
Quality Restaurant	134	7.46
High Turnover Restaurant	100	10.0
Restaurants, National Restaurant Association (2)	140	7.14
Portland Metro Employment Density Study (3)	470	2.13
Santana ROW EIR	400	2.50
Estimate for Nexus Study	500	2.00
RESEARCH AND DEVELOPMENT		
Institute of Transportation Engineers, Trip Generation ⁽¹⁾	400	2.50
Life Science R&D, estimate for 1350 Adams, Menlo Park	400	2.50
Estimate for Nexus Study	400	2.50
INDUSTRIAL		
Institute of Transportation Engineers, Trip Generation (3)		
Light Industrial	463	2.16
Heavy Industrial	549	1.82
Industrial Park	500	2.00
Manufacturing	535	1.87
San Jose Midpoint @237 Parking Ratio	500	2.00
Estimate for Nexus Study	500	2.00

APPENDIX B TABLE 4 EMPLOYMENT DENSITY - RETAIL, R&D, INDUSTRIAL, WAREHOUSE COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

Source	SF Per Employee	Employees Per 1,000 SF
WAREHOUSE		
Institute of Transportation Engineers, Trip Generation ⁽¹⁾	781	1.28
Portland Metro Employment Density Study (3)		
Wholesale Trade	1,390	0.72
Transportation and Warehousing	3,290	0.30
U.S. Department of Energy ⁽¹⁾		
Warehousing	2,114	0.47
San Jose Pipeline Warehouse Projects, average parking ratio for six pipeline projects	1,146	0.87
Estimate for Nexus Study	2,000	0.50

Notes:

⁽¹⁾ Drawn from summary of ITE data prepared by U.S. Green Building Council.

⁽²⁾ Calculated by KMA from data presented in 2009-10 national restaurant industry operations report. Based on limited service and full service restaurants with average check per person of \$15.

⁽³⁾ Technical Report 1999 Employment Density Study. Prepared by Portland Metro. 1999. Consideration of a range of data sources for employment density provides useful points of reference to inform the analysis even if not all sources are local

APPENDIX C: SUPPORTING TECHNICAL ANALYSIS TABLES
Addressing: worker occupation, compensation, and household incomes, industry categories, and use categories.

APPENDIX C TABLE 1 ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2018 OFFICE WORKERS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	Worker Occupation Distribution Office
Major Occupations (2% or more)	• moo
Management Occupations	9.8%
Business and Financial Operations Occupations	14.8%
Computer and Mathematical Occupations	20.3%
Architecture and Engineering Occupations	4.4%
Legal Occupations	2.4%
Arts, Design, Entertainment, Sports, and Media Occupations	2.1%
Healthcare Practitioners and Technical Occupations	5.7%
Healthcare Support Occupations	3.5%
Sales and Related Occupations	6.0%
Office and Administrative Support Occupations	22.8%
All Other Worker Occupations - Office	<u>8.2%</u>
TOTAL	100.0%

APPENDIX C TABLE 2

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020

OFFICE WORKER OCCUPATIONS

COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

SAN JOSE, CA

	2020 Avg.	Househo	ld Income E	stimate 4	% of Total	% of Total	
	Worker	One	Two	Three+	Occupation	Office	
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	Workers	Group ²	Workers	
Page 1 of 4							
Management Occupations							
Chief Executives	\$253,400	\$255,000	\$283,000	\$284,000	3.1%	0.3%	
General and Operations Managers	\$165,700	\$169,000	\$243,000	\$243,000	25.0%	2.4%	
Marketing Managers	\$203,300	\$207,000	\$275,000	\$276,000	6.5%	0.6%	
Sales Managers	\$177,700	\$181,000	\$260,000	\$260,000	6.1%	0.6%	
Administrative Services Managers	\$145,000	\$151,000	\$224,000	\$231,000	3.6%	0.3%	
Computer and Information Systems Managers	\$219,000	\$223,000	\$296,000	\$297,000	17.2%	1.7%	
Financial Managers	\$181,200	\$184,000	\$266,000	\$266,000	13.7%	1.3%	
Human Resources Managers	\$177,600	\$181,000	\$260,000	\$260,000	2.5%	0.2%	
Architectural and Engineering Managers	\$207,000	\$211,000	\$280,000	\$281,000	3.7%	0.4%	
Medical and Health Services Managers	\$147,200	\$153,000	\$227,000	\$235,000	2.2%	0.2%	
Managers, All Other	\$174,500	\$178,000	\$256,000	\$256,000	6.8%	0.7%	
Other Management Occupations	<u>\$186,100</u>	\$189,000	\$273,000	\$273,000	9.5%	0.9%	
Weighted Mean Annual Wage	\$186,100	\$190,000	\$264,000	\$265,000	100.0%	9.8%	
Business and Financial Operations Occupations							
Buyers and Purchasing Agents	\$84,000	\$92,000	\$153,000	\$165,000	2.1%	0.3%	
Claims Adjusters, Examiners, and Investigators	\$83,500	\$91,000	\$152,000	\$164,000	2.1%	0.3%	
Compliance Officers	\$95,400	\$104,000	\$174,000	\$188,000	2.1%	0.3%	
Human Resources Specialists	\$86,300	\$94,000	\$157,000	\$170,000	5.5%	0.8%	
Management Analysts	\$122,900	\$128,000	\$205,000	\$210,000	11.7%	1.7%	
Training and Development Specialists	\$93,600	\$102,000	\$171,000	\$184,000	3.4%	0.5%	
Market Research Analysts and Marketing Specialists	\$100,400	\$105,000	\$167,000	\$172,000	10.7%	1.6%	
Business Operations Specialists, All Other	\$102,500	\$107,000	\$171,000	\$176,000	10.5%	1.6%	
Accountants and Auditors	\$92,400	\$101,000	\$168,000	\$182,000	26.3%	3.9%	
Financial Analysts	\$119,400	\$124,000	\$199,000	\$204,000	4.1%	0.6%	
Loan Officers	\$85,100	\$93,000	\$155,000	\$167,000	5.4%	0.8%	
Tax Preparers	\$80,000	\$87,000	\$146,000	\$157,000	3.6%	0.5%	
Other Business and Financial Operations Occupations	\$98,300	\$107,000	\$179,000	\$193,000	12.7%	<u>1.9%</u>	
Weighted Mean Annual Wage	\$98,300	\$105,000	\$173,000	\$183,000	100.0%	14.8%	
Computer and Mathematical Occupations							
Computer Systems Analysts	\$122,500	\$128,000	\$204,000	\$210,000	12.9%	2.6%	
Information Security Analysts	\$123,400	\$129,000	\$206,000	\$211,000	2.4%	0.5%	
Computer Programmers	\$108,000	\$113,000	\$180,000	\$185,000	6.9%	1.4%	
Software Developers, Applications	\$134,000	\$139,000	\$207,000	\$214,000	28.4%	5.8%	
Software Developers, Systems Software	\$150,100	\$153,000	\$220,000	\$220,000	10.3%	2.1%	
Web Developers	\$99,600	\$109,000	\$181,000	\$196,000	2.6%	0.5%	
Network and Computer Systems Administrators	\$117,700	\$123,000	\$196,000	\$202,000	5.9%	1.2%	
Computer Network Architects	\$148,300	\$154,000	\$229,000	\$236,000	3.4%	0.7%	
Computer Verwork Admiceds Computer User Support Specialists	\$84,400	\$92,000	\$154,000	\$166,000	12.2%	2.5%	
Computer Oser Support Specialists Computer Network Support Specialists	\$85,800	\$94,000	\$156,000	\$169,000	3.2%	0.7%	
Computer Occupations, All Other	\$138,900	\$144,000	\$130,000	\$221,000	7.2%	1.5%	
Other Computer and Mathematical Occupations	\$123,00 <u>0</u>	\$144,000 \$128,000	\$215,000 \$205,000	\$221,000 \$211,000	4.6%	0.9%	
·	<u></u>		\$198,000	· ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Weighted Mean Annual Wage	\$123,000	\$128,000	φ 130,000	\$205,000	100.0%	20.3%	

APPENDIX C TABLE 2

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020

OFFICE WORKER OCCUPATIONS

COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

SAN JOSE, CA

	2020 Avg.	Household Income Estimate ⁴			% of Total	% of Total
	Worker	One	Two	Three+	Occupation	Office
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	Workers	Group 2	Workers
Page 2 of 4						
Architecture and Engineering Occupations						
Architects, Except Landscape and Naval	\$124,200	\$129,000	\$207,000	\$213,000	7.4%	0.3%
Surveyors	\$92,900	\$101,000	\$169,000	\$183,000	2.8%	0.1%
Aerospace Engineers	\$142,600	\$148,000	\$220,000	\$227,000	2.2%	0.1%
Civil Engineers	\$116,100	\$121,000	\$194,000	\$199,000	14.6%	0.6%
Computer Hardware Engineers	\$164,700	\$168,000	\$241,000	\$241,000	5.9%	0.3%
Electrical Engineers	\$141,400	\$147,000	\$218,000	\$225,000	7.6%	0.3%
Electronics Engineers, Except Computer	\$144,700	\$150,000	\$224,000	\$231,000	5.9%	0.3%
Environmental Engineers	\$107,300	\$112,000	\$179,000	\$184,000	2.3%	0.1%
Industrial Engineers	\$124,600	\$130,000	\$208,000	\$213,000	5.4%	0.2%
Mechanical Engineers	\$128,300	\$133,000	\$198,000	\$204,000	9.3%	0.4%
Engineers, All Other	\$130,100	\$135,000	\$201,000	\$207,000	4.7%	0.2%
Architectural and Civil Drafters	\$66,500	\$72,000	\$138,000	\$156,000	6.0%	0.3%
Civil Engineering Technicians	\$77,400	\$84,000	\$141,000	\$152,000	2.9%	0.1%
Electrical and Electronics Engineering Technicians	\$73,500	\$80,000	\$152,000	\$172,000	4.2%	0.2%
Engineering Technicians, Except Drafters, All Other	\$78,200	\$85,000	\$142,000	\$154,000	2.6%	0.1%
Surveying and Mapping Technicians	\$73,300	\$79,000	\$152,000	\$172,000	3.0%	0.1%
Other Architecture and Engineering Occupations	<u>\$117,100</u>	\$122,000	\$195,000	\$201,000	<u>13.1%</u>	0.6%
Weighted Mean Annual Wage	\$117,100	\$122,000	\$193,000	\$201,000	100.0%	4.4%
Legal Occupations						
Lawyers	\$223,100	\$227,000	\$301,000	\$303,000	60.7%	1.5%
Paralegals and Legal Assistants	\$88,500	\$96,000	\$161,000	\$174,000	32.9%	0.8%
Title Examiners, Abstractors, and Searchers	\$69,700	\$76,000	\$144,000	\$163,000	4.0%	0.1%
Other Legal Occupations	<u>\$171,500</u>	\$175,000	\$251,000	\$251,000	2.4%	0.1%
Weighted Mean Annual Wage	\$171,500	\$177,000	\$248,000	\$254,000	100.0%	2.4%
Arts, Design, Entertainment, Sports, and Media Occupations						
Art Directors	\$123,200	\$128,000	\$206,000	\$211,000	4.1%	0.1%
Multimedia Artists and Animators	\$96,200	\$105,000	\$175,000	\$189,000	5.8%	0.1%
Graphic Designers	\$72,000	\$78,000	\$149,000	\$169,000	17.7%	0.4%
Interior Designers	\$72,500	\$79,000	\$150,000	\$170,000	5.1%	0.1%
Merchandise Displayers and Window Trimmers	\$42,700	\$54,000	\$110,000	\$133,000	4.0%	0.1%
Producers and Directors	\$108,200	\$113,000	\$180,000	\$185,000	3.8%	0.1%
Public Relations Specialists	\$85,700	\$93,000	\$156,000	\$168,000	20.0%	0.4%
Editors	\$78,700	\$86,000	\$143,000	\$155,000	5.7%	0.1%
Technical Writers	\$115,000	\$120,000	\$192,000	\$197,000	8.7%	0.2%
Writers and Authors	\$89,600	\$98,000	\$163,000	\$176,000	4.1%	0.1%
Interpreters and Translators	\$62,400	\$68,000	\$129,000	\$146,000	2.5%	0.1%
Audio and Video Equipment Technicians	\$64,000	\$69,000	\$132,000	\$150,000	2.2%	0.0%
Photographers	\$47,600	\$60,000	\$122,000	\$149,000	2.8%	0.1%
Other Arts, Design, Entertainment, Sports, and Media Occupation		\$91,000	\$153,000	\$165,000	13.3%	0.3%
Weighted Mean Annual Wage		\$91,000	\$157,000	\$171,000	100.0%	2.1%

APPENDIX C TABLE 2

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020

OFFICE WORKER OCCUPATIONS

COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

SAN JOSE, CA

	Househo	ld Income E	stimate 4	% of Total	% of Total	
	Worker	One	Two	Three+	Occupation	Office
Occupation ³	Compensation ¹	Worker	Workers	Workers	Group ²	Workers
Page 3 of 4						
Healthcare Practitioners and Technical Occupations						
Dentists, General	\$202,700	\$206,000	\$274,000	\$275,000	10.1%	0.6%
Family and General Practitioners	\$216,400	\$220,000	\$292,000	\$293,000	2.6%	0.1%
Physicians and Surgeons, All Other	\$250,000	\$252,000	\$279,000	\$280,000	6.5%	0.4%
Physician Assistants	\$133,900	\$139,000	\$207,000	\$213,000	2.3%	0.1%
Physical Therapists	\$104,700	\$109,000	\$175,000	\$179,000	4.3%	0.2%
Veterinarians	\$105,500	\$110,000	\$176,000	\$181,000	2.1%	0.1%
Registered Nurses	\$143,800	\$150,000	\$222,000	\$229,000	9.7%	0.6%
Nurse Practitioners	\$139,600	\$145,000	\$216,000	\$222,000	3.2%	0.2%
Clinical Laboratory Technologists and Technicians	\$66,100	\$72,000	\$137,000	\$155,000	2.3%	0.1%
Dental Hygienists	\$114,200	\$119,000	\$190,000	\$196,000	20.1%	1.2%
Veterinary Technologists and Technicians	\$50,400	\$55,000	\$104,000	\$118,000	3.2%	0.2%
Licensed Practical and Licensed Vocational Nurses	\$69,600	\$75,000	\$144,000	\$163,000	3.4%	0.2%
Medical Records and Health Information Technicians	\$61,000	\$66,000	\$126,000	\$143,000	4.1%	0.2%
Other Healthcare Practitioners and Technical Occupations	<u>\$137,400</u>	\$143,000	\$212,000	\$219,000	<u>26.0%</u>	<u>1.5%</u>
Weighted Mean Annual Wage	\$137,400	\$142,000	\$208,000	\$215,000	100.0%	5.7%
Healthcare Support Occupations						
Physical Therapist Assistants	\$72,400	\$78,000	\$150,000	\$170,000	3.7%	0.1%
Physical Therapist Aides	\$33,400	\$42,000	\$86,000	\$104,000	2.3%	0.1%
Massage Therapists	\$44,600	\$56,000	\$115,000	\$139,000	2.7%	0.1%
Dental Assistants	\$54,000	\$59,000	\$112,000	\$127,000	50.8%	1.8%
Medical Assistants	\$47,800	\$60,000	\$123,000	\$149,000	26.9%	0.9%
Veterinary Assistants and Laboratory Animal Caretakers	\$45,200	\$57,000	\$116,000	\$141,000	4.7%	0.2%
Other Healthcare Support Occupations	<u>\$51,700</u>	\$56,000	\$107,000	\$121,000	8.9%	0.3%
Weighted Mean Annual Wage	\$51,700	\$59,000	\$116,000	\$134,000	100.0%	3.5%
Sales and Related Occupations						
First-Line Supervisors of Non-Retail Sales Workers	\$88,000	\$96,000	\$160,000	\$173,000	5.2%	0.3%
Retail Salespersons	\$40,000	\$51,000	\$103,000	\$125,000	2.0%	0.1%
Advertising Sales Agents	\$77,600	\$85,000	\$141,000	\$153,000	3.6%	0.2%
Insurance Sales Agents	\$93,400	\$102,000	\$170,000	\$184,000	9.9%	0.6%
Securities, Commodities, and Financial Services Sales Agents	\$82,100	\$89,000	\$150,000	\$161,000	13.3%	0.8%
Sales Representatives, Services, All Other	\$83,400	\$91,000	\$152,000	\$164,000	34.9%	2.1%
Sales Representatives, Wholesale and Manufacturing, Technica		\$118,000	\$188,000	\$193,000	11.4%	0.7%
Sales Representatives, Wholesale and Manufacturing, Except T		\$97,000	\$163,000	\$176,000	5.8%	0.3%
Sales Engineers	\$142,600	\$148,000	\$220,000	\$227,000	3.7%	0.2%
Other Sales and Related Occupations	\$89,900	\$98,000	\$164,000	\$177,000	10.3%	0.6%
Weighted Mean Annual Wage	\$89,900	\$97,000	\$161,000	\$173,000	100.0%	6.0%

APPENDIX C TABLE 2 AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020 OFFICE WORKER OCCUPATIONS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	2020 Avg.	Househo	ld Income E	stimate 4	% of Total Occupation	% of Total Office <u>Workers</u>
	Worker	One	Two	Three+		
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	Workers	Group ²	
Page 4 of 4						
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Work	\$71,800	\$78,000	\$149,000	\$168,000	8.1%	1.8%
Billing and Posting Clerks	\$52,900	\$57,000	\$109,000	\$124,000	3.8%	0.9%
Bookkeeping, Accounting, and Auditing Clerks	\$55,200	\$60,000	\$114,000	\$129,000	9.3%	2.1%
Tellers	\$41,400	\$52,000	\$106,000	\$129,000	7.8%	1.8%
Customer Service Representatives	\$48,900	\$62,000	\$126,000	\$153,000	16.6%	3.8%
Loan Interviewers and Clerks	\$51,400	\$56,000	\$106,000	\$120,000	2.4%	0.5%
Receptionists and Information Clerks	\$39,200	\$50,000	\$101,000	\$122,000	6.9%	1.6%
Executive Secretaries and Executive Administrative Assistants	\$84,200	\$92,000	\$153,000	\$166,000	3.3%	0.8%
Legal Secretaries	\$77,400	\$84,000	\$141,000	\$152,000	2.0%	0.5%
Medical Secretaries	\$55,600	\$60,000	\$115,000	\$130,000	4.4%	1.0%
Secretaries and Administrative Assistants, Except Legal, Medica	\$49,900	\$63,000	\$128,000	\$156,000	8.5%	1.9%
Office Clerks, General	\$47,800	\$60,000	\$123,000	\$149,000	10.6%	2.4%
Other Office and Administrative Support Occupations	\$53,000	\$57,000	\$110,000	\$124,000	<u>16.2%</u>	3.7%
Weighted Mean Annual Wage	\$53,000	\$62,000	\$120,000	\$141,000	100.0%	22.8%

91.8%

¹ The methodology utilized by the California Employment Development Department (EDD) assumes hourly paid employees are employed full-time. EDD data is adjusted by KMA to reflect San Jose minimum wage. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2018 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to Santa Clara County as of 2019 and are adjusted by EDD to the first quarter of 2020.

³ Including occupations representing 2% or more of the major occupation group.

⁴ Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 3-6.

APPENDIX C TABLE 3 ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2018 TECH OFFICE WORKERS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	Worker Occupation Distribution Tech Office
Major Occupations (2% or more)	
Management Occupations	12.0%
Business and Financial Operations Occupations	10.6%
Computer and Mathematical Occupations	42.3%
Architecture and Engineering Occupations	3.3%
Life, Physical, and Social Science Occupations	2.8%
Arts, Design, Entertainment, Sports, and Media Occupations	3.1%
Sales and Related Occupations	8.4%
Office and Administrative Support Occupations	11.6%
Installation, Maintenance, and Repair Occupations	2.6%
All Other Worker Occupations - Tech Office	<u>3.3%</u>
TOTAL	100.0%

APPENDIX C TABLE 4

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
TECH OFFICE WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

	2020 Avg.	Househo	ld Income E	come Estimate ⁴ % of Total % o		% of Total
	Worker	One	Two	Three+	Occupation	Tech Office
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	Workers	Group 2	Workers
Page 1 of 3						
Management Occupations						
Chief Executives	\$253,400	\$255,000	\$283,000	\$284,000	2.7%	0.3%
General and Operations Managers	\$165,700	\$169,000	\$243,000	\$243,000	22.0%	2.6%
Marketing Managers	\$203,300	\$207,000	\$275,000	\$276,000	8.6%	1.0%
Sales Managers	\$177,700	\$181,000	\$260,000	\$260,000	9.0%	1.1%
Administrative Services Managers	\$145,000	\$151,000	\$224,000	\$231,000	2.8%	0.3%
Computer and Information Systems Managers	\$219,000	\$223,000	\$296,000	\$297,000	28.8%	3.5%
Financial Managers	\$181,200	\$184,000	\$266,000	\$266,000	5.9%	0.7%
Human Resources Managers	\$177,600	\$181,000	\$260,000	\$260,000	2.3%	0.3%
Architectural and Engineering Managers	\$207,000	\$211,000	\$280,000	\$281,000	2.9%	0.4%
Natural Sciences Managers	\$200,200	\$204,000	\$270,000	\$272,000	2.5%	0.3%
Managers, All Other	\$174,500	\$178,000	\$256,000	\$256,000	7.4%	0.9%
Other Management Occupations	\$192,400	\$196,000	\$282,000	\$282,000	<u>5.1%</u>	0.6%
Weighted Mean Annual Wage	\$192,400	\$196,000	\$270,000	\$270,000	100.0%	12.0%
Business and Financial Operations Occupations						
Buyers and Purchasing Agents	\$84,000	\$92,000	\$153,000	\$165,000	3.1%	0.3%
Compliance Officers	\$95,400	\$104,000	\$174,000	\$188,000	2.4%	0.3%
Human Resources Specialists	\$86,300	\$94,000	\$157,000	\$170,000	9.1%	1.0%
Logisticians	\$98,900	\$108,000	\$180,000	\$194,000	2.0%	0.2%
Management Analysts	\$122,900	\$128,000	\$205,000	\$210,000	15.1%	1.6%
Training and Development Specialists	\$93,600	\$102,000	\$171,000	\$184,000	6.3%	0.7%
Market Research Analysts and Marketing Specialists	\$100,400	\$105,000	\$167,000	\$172,000	22.1%	2.3%
Business Operations Specialists, All Other	\$102,500	\$107,000	\$171,000	\$176,000	16.8%	1.8%
Accountants and Auditors	\$92,400	\$101,000	\$168,000	\$182,000	12.1%	1.3%
Financial Analysts	\$119,400	\$124,000	\$199,000	\$204,000	4.7%	0.5%
Other Business and Financial Operations Occupations	\$101,800	\$106,000	\$170,000	\$174,000	6.5%	0.7%
Weighted Mean Annual Wage	\$101,800	\$108,000	\$175,000	\$182,000	100.0%	10.6%
Computer and Mathematical Occupations						
Computer Systems Analysts	\$122,500	\$128,000	\$204,000	\$210,000	12.0%	5.1%
Computer Programmers	\$108,000	\$113,000	\$180,000	\$185,000	7.0%	2.9%
Software Developers, Applications	\$134,000	\$139,000	\$207,000	\$214,000	31.4%	13.3%
Software Developers, Systems Software	\$150,100	\$153,000	\$220,000	\$220,000	10.5%	4.4%
Web Developers	\$99,600	\$109,000	\$181,000	\$196,000	3.2%	1.4%
Network and Computer Systems Administrators	\$117,700	\$123,000	\$196,000	\$202,000	5.2%	2.2%
Computer Network Architects	\$148,300	\$154,000	\$229,000	\$236,000	3.3%	1.4%
Computer User Support Specialists	\$84,400	\$92,000	\$154,000	\$166,000	11.8%	5.0%
Computer Network Support Specialists	\$85,800	\$94,000	\$156,000	\$169,000	3.0%	1.3%
Computer Occupations, All Other	\$138,900	\$144,000	\$215,000	\$221,000	6.9%	2.9%
Other Computer and Mathematical Occupations	\$123,500	\$129,000	\$206,000	\$211,000	5.7%	2.4%
Weighted Mean Annual Wage	\$123,500	\$129,000	\$198,000	\$205,000	100.0%	42.3%

APPENDIX C TABLE 4

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
TECH OFFICE WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

	2020 Avg. Household Income Estimate ⁴				% of Total	% of Total
	Worker	One	Two	Three+	Occupation	Tech Office
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	<u>Workers</u>	Group ²	Workers
Page 2 of 3						
Architecture and Engineering Occupations						
Aerospace Engineers	\$142,600	\$148,000	\$220,000	\$227,000	3.8%	0.1%
Computer Hardware Engineers	\$164,700	\$168,000	\$241,000	\$241,000	15.8%	0.5%
Electrical Engineers	\$141,400	\$147,000	\$218,000	\$225,000	11.2%	0.4%
Electronics Engineers, Except Computer	\$144,700	\$150,000	\$224,000	\$231,000	13.8%	0.5%
Industrial Engineers	\$124,600	\$130,000	\$208,000	\$213,000	8.6%	0.3%
Mechanical Engineers	\$128,300	\$133,000	\$198,000	\$204,000	10.6%	0.4%
Engineers, All Other	\$130,100	\$135,000	\$201,000	\$207,000	7.5%	0.2%
Electrical and Electronics Engineering Technicians	\$73,500	\$80,000	\$152,000	\$172,000	7.2%	0.2%
Engineering Technicians, Except Drafters, All Other	\$78,200	\$85,000	\$142,000	\$154,000	3.9%	0.1%
Other Architecture and Engineering Occupations	\$133,100	\$138,000	\$206,000	\$212,000	<u>17.8%</u>	0.6%
Weighted Mean Annual Wage	\$133,100	\$138,000	\$208,000	\$215,000	100.0%	3.3%
Life, Physical, and Social Science Occupations						
Biological Scientists, All Other	\$112,400	\$117,000	\$187,000	\$192,000	5.8%	0.2%
Medical Scientists, Except Epidemiologists	\$115,700	\$121,000	\$193,000	\$198,000	26.7%	0.7%
Physicists	\$131,800	\$137,000	\$204,000	\$210,000	4.0%	0.1%
Chemists	\$117,000	\$122,000	\$195,000	\$200,000	7.8%	0.2%
Biological Technicians	\$66,400	\$72,000	\$137,000	\$156,000	14.9%	0.4%
Social Science Research Assistants	\$61,000	\$66,000	\$126,000	\$143,000	3.4%	0.1%
Life, Physical, and Social Science Technicians, All Other	\$72,000	\$78,000	\$149,000	\$169,000	4.6%	0.1%
Other Life, Physical, and Social Science Occupations	\$99,800	\$109,000	\$182,000	\$196,000	32.8%	0.9%
Weighted Mean Annual Wage	\$99,800	\$106,000	\$177,000	\$188,000	100.0%	2.8%
Arts, Design, Entertainment, Sports, and Media Occupations						
Art Directors	\$123,200	\$128,000	\$206,000	\$211,000	3.9%	0.1%
Multimedia Artists and Animators	\$96,200	\$105,000	\$175,000	\$189,000	9.3%	0.3%
Graphic Designers	\$72,000	\$78,000	\$149,000	\$169,000	13.3%	0.4%
Producers and Directors	\$108,200	\$113,000	\$180,000	\$185,000	7.0%	0.2%
Public Relations Specialists	\$85,700	\$93,000	\$156,000	\$168,000	10.2%	0.3%
Editors	\$78,700	\$86,000	\$143,000	\$155,000	17.9%	0.6%
Technical Writers	\$115,000	\$120,000	\$192,000	\$197,000	11.2%	0.3%
Writers and Authors	\$89,600	\$98,000	\$163,000	\$176,000	6.6%	0.2%
Audio and Video Equipment Technicians	\$64,000	\$69,000	\$132,000	\$150,000	2.3%	0.1%
Other Arts, Design, Entertainment, Sports, and Media Occupa		\$99,000	\$165,000	\$178,000	18.2%	0.6%
Weighted Mean Annual Wage	\$90,600	\$98,000	\$164,000	\$176,000	100.0%	3.1%

APPENDIX C TABLE 4

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
TECH OFFICE WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

2020 Avg.	Household Income Estimate ⁴			% of Total	% of Total
Worker	One	Two	Three+	Occupation	Tech Office
Compensation ¹	<u>Worker</u>	<u>Workers</u>	<u>Workers</u>	Group 2	Workers
\$88,000	\$96,000	\$160,000	\$173,000	4.8%	0.4%
\$77,600	\$85,000	\$141,000	\$153,000	7.9%	0.7%
\$83,400	\$91,000	\$152,000	\$164,000	51.8%	4.3%
i \$112,900	\$118,000	\$188,000	\$193,000	17.2%	1.4%
t \$89,300	\$97,000	\$163,000	\$176,000	6.6%	0.6%
\$142,600	\$148,000	\$220,000	\$227,000	5.4%	0.5%
\$92,400	\$101,000	\$168,000	\$182,000	6.2%	0.5%
\$92,400	\$100,000	\$163,000	\$174,000	100.0%	8.4%
\$71,800	\$78,000	\$149,000	\$168,000	7.6%	0.9%
\$55,200	\$60,000	\$114,000	\$129,000	7.0%	0.8%
\$48,900	\$62,000	\$126,000	\$153,000	31.1%	3.6%
\$42,900	\$54,000	\$110,000	\$134,000	4.0%	0.5%
s \$84,200	\$92,000	\$153,000	\$166,000	6.0%	0.7%
i \$49,900	\$63,000	\$128,000	\$156,000	8.4%	1.0%
\$39,400	\$50,000	\$101,000	\$123,000	3.6%	0.4%
\$47,800	\$60,000	\$123,000	\$149,000	12.4%	1.4%
<u>\$53,500</u>	\$58,000	\$111,000	\$125,000	<u>19.8%</u>	2.3%
\$53,500	\$63,000	\$124,000	\$146,000	100.0%	11.6%
\$96,300	\$105,000	\$175,000	\$189,000	5.3%	0.1%
				5.8%	0.1%
				50.5%	1.3%
\$82,400	\$90,000	\$150,000	\$162,000	21.2%	0.5%
\$56,000	\$61,000	\$116,000	\$131,000	7.4%	0.2%
<u>\$66,800</u>	\$72,000	\$138,000	\$157,000	9.8%	0.3%
	\$73,000	\$134,000	\$150,000	100.0%	2.6%
,	\$88,000 \$77,600 \$83,400 \$112,900 \$112,900 \$92,400 \$92,400 \$92,400 \$92,400 \$92,400 \$142,600 \$92,400 \$142,600 \$92,400 \$142,900 \$48,900 \$442,900 \$442,900 \$442,900 \$53,500 \$53,500 \$53,500 \$53,500 \$53,500 \$53,500 \$53,500 \$53,500 \$53,500 \$53,500 \$53,500 \$53,500	Worker One Worker	Worker One Two Worker Workers	Worker Compensation¹ One Worker Two Workers Three+ Workers \$88,000 \$96,000 \$160,000 \$173,000 \$77,600 \$85,000 \$141,000 \$153,000 \$83,400 \$91,000 \$152,000 \$164,000 \$89,300 \$97,000 \$163,000 \$176,000 \$142,600 \$148,000 \$220,000 \$227,000 \$92,400 \$101,000 \$168,000 \$182,000 \$92,400 \$100,000 \$163,000 \$174,000 \$71,800 \$78,000 \$149,000 \$168,000 \$55,200 \$60,000 \$114,000 \$129,000 \$48,900 \$62,000 \$126,000 \$153,000 \$44,900 \$54,000 \$110,000 \$156,000 \$39,400 \$50,000 \$113,000 \$126,000 \$47,800 \$60,000 \$123,000 \$149,000 \$53,500 \$58,000 \$111,000 \$125,000 \$64,900 \$59,000 \$120,000 \$146,000 \$61,100 \$66,000 \$120,000	Worker One Two Workers Workers Group 2

96.7%

¹ The methodology utilized by the California Employment Development Department (EDD) assumes hourly paid employees are employed full-time. EDD data is adjusted by KMA to reflect San Jose minimum wage. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2018 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to Santa Clara County as of 2019 and are adjusted by EDD to the first quarter of 2020.

³ Including occupations representing 2% or more of the major occupation group.

⁴ Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 3-6.

APPENDIX C TABLE 5 ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2018 RETAIL WORKERS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	Worker Occupation Distribution Retail
Major Occupations (2% or more)	roun
Management Occupations	2.5%
Healthcare Practitioners and Technical Occupations	2.1%
Food Preparation and Serving Related Occupations	42.6%
Personal Care and Service Occupations	5.1%
Sales and Related Occupations	28.0%
Office and Administrative Support Occupations	8.1%
Installation, Maintenance, and Repair Occupations	2.5%
Transportation and Material Moving Occupations	4.3%
All Other Worker Occupations - Retail	<u>4.7%</u>
TOTAL	100.0%

APPENDIX C TABLE 6
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
RETAIL WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

	2020 Avg.	lvg. Household Income Estimate ⁴			% of Total	% of Total
	Worker	One	Two	Three+	Occupation	Retail
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	Workers	Group ²	Workers
Page 1 of 2						
Management Occupations						
General and Operations Managers	\$165,700	\$169,000	\$243,000	\$243,000	52.8%	1.3%
Sales Managers	\$177,700	\$181,000	\$260,000	\$260,000	9.4%	0.2%
Food Service Managers	\$87,400	\$95,000	\$159,000	\$172,000	27.2%	0.7%
Other Management Occupations	\$143,200	\$149,000	\$221,000	\$228,000	<u>10.6%</u>	0.3%
Weighted Mean Annual Wage	\$143,200	\$148,000	\$219,000	\$224,000	100.0%	2.5%
Healthcare Practitioners and Technical Occupations						
Pharmacists	\$156,100	\$159,000	\$229,000	\$229,000	33.4%	0.7%
Pharmacy Technicians	\$49,600	\$63,000	\$127,000	\$155,000	53.8%	1.1%
Opticians, Dispensing	\$49,900	\$63,000	\$128,000	\$156,000	4.8%	0.1%
Other Healthcare Practitioners and Technical Occupations	\$88,300	\$96,000	\$161,000	\$174,000	8.0%	0.2%
Weighted Mean Annual Wage	\$88,300	\$98,000	\$164,000	\$181,000	100.0%	2.1%
Food Preparation and Serving Related Occupations						
First-Line Supervisors of Food Preparation and Serving Workers	\$48,500	\$61,000	\$125,000	\$151,000	7.3%	3.1%
Cooks, Fast Food	\$31,700	\$40,000	\$81,000	\$99,000	4.2%	1.8%
Cooks, Restaurant	\$35,500	\$45,000	\$91,000	\$111,000	10.6%	4.5%
Food Preparation Workers	\$32,700	\$41,000	\$84,000	\$102,000	5.9%	2.5%
Bartenders	\$35,300	\$45,000	\$91,000	\$110,000	4.2%	1.8%
Combined Food Preparation and Serving Workers, Including Fast		\$40,000	\$81,000	\$99,000	29.8%	12.7%
Counter Attendants, Cafeteria, Food Concession, and Coffee Sho		\$41,000	\$83,000	\$101,000	3.5%	1.5%
Waiters and Waitresses	\$32,600	\$41,000	\$84,000	\$102,000	20.1%	8.6%
Dining Room and Cafeteria Attendants and Bartender Helpers	\$31,700	\$40,000	\$81,000	\$99,000	3.0%	1.3%
Dishwashers	\$31,700	\$40,000	\$81,000	\$99,000	3.9%	1.7%
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$31,700	\$40,000	\$81,000	\$99,000	3.3%	1.4%
Other Food Preparation and Serving Related Occupations	\$33,800	\$43,000	\$87,000	\$106,000	4.3%	1.8%
Weighted Mean Annual Wage		\$43,000	\$87,000	\$106,000	100.0%	42.6%
Personal Care and Service Occupations						
First-Line Supervisors of Personal Service Workers	\$46,200	\$58,000	\$119,000	\$144,000	5.1%	0.3%
Nonfarm Animal Caretakers	\$38,900	\$49,000	\$100,000	\$121,000	5.6%	0.3%
Amusement and Recreation Attendants	\$31,700	\$40,000	\$81,000	\$99,000	5.0%	0.3%
Funeral Attendants	\$38,700	\$49,000	\$99,000	\$121,000	2.5%	0.1%
Hairdressers, Hairstylists, and Cosmetologists	\$33,400	\$42,000	\$86,000	\$104,000	32.9%	1.7%
Manicurists and Pedicurists	\$31,700	\$40,000	\$81,000	\$99,000	10.8%	0.6%
Skincare Specialists	\$38,800	\$49,000	\$100,000	\$121,000	3.9%	0.2%
Childcare Workers	\$33,900	\$43,000	\$87,000	\$106,000	3.1%	0.2%
Fitness Trainers and Aerobics Instructors	\$64,800	\$70,000	\$134,000	\$152,000	16.6%	0.9%
Other Personal Care and Service Occupations	\$40,700	\$51,000	\$104,000	\$127,000	<u>14.5%</u>	0.7%
Weighted Mean Annual Wage	\$40,700	\$49,000	\$99,000	\$119,000	100.0%	5.1%
Sales and Related Occupations						
First-Line Supervisors of Retail Sales Workers	\$53,700	\$58,000	\$111,000	\$126,000	11.6%	3.3%
Cashiers	\$34,000	\$43,000	\$87,000	\$106,000	31.2%	8.7%
Counter and Rental Clerks	\$44,300	\$56,000	\$114,000	\$138,000	2.8%	0.8%
Retail Salespersons	\$40,000	\$51,000	\$103,000	\$125,000	48.1%	13.5%
Sales Representatives, Services, All Other	\$83,400	\$91,000	\$152,000	\$164,000	2.4%	0.7%
Other Sales and Related Occupations	\$40,900	\$52,000	\$105,000	\$128,000	3.8%	<u>1.1%</u>
Weighted Mean Annual Wage	\$40,900	\$50,000	\$101,000	\$121,000	100.0%	28.0%

APPENDIX C TABLE 6

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
RETAIL WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

SAN JOSE, CA	2020 Avg.	Househo	ld Income E	stimate 4	% of Total	% of Total
	Worker	One	Two	Three+	Occupation	Retail
Occupation ³	Compensation ¹	Worker	Workers	Workers	Group ²	Workers
Page 2 of 2						
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Worke	\$71,800	\$78,000	\$149,000	\$168,000	5.5%	0.4%
Bookkeeping, Accounting, and Auditing Clerks	\$55,200	\$60,000	\$114,000	\$129,000	6.8%	0.6%
Customer Service Representatives	\$48,900	\$62,000	\$126,000	\$153,000	14.6%	1.2%
Receptionists and Information Clerks	\$39,200	\$50,000	\$101,000	\$122,000	8.5%	0.7%
Stock Clerks and Order Fillers	\$33,700	\$43,000	\$87,000	\$105,000	39.4%	3.2%
Secretaries and Administrative Assistants, Except Legal, Medical,	\$49,900	\$63,000	\$128,000	\$156,000	4.5%	0.4%
Office Clerks, General	\$47,800	\$60,000	\$123,000	\$149,000	10.1%	0.8%
Other Office and Administrative Support Occupations	<u>\$43,100</u>	<u>\$54,000</u>	<u>\$111,000</u>	<u>\$135,000</u>	<u>10.5%</u>	0.9%
Weighted Mean Annual Wage	\$43,100	\$53,000	\$107,000	\$128,000	100.0%	8.1%
Installation, Maintenance, and Repair Occupations						
First-Line Supervisors of Mechanics, Installers, and Repairers	\$96,300	\$105,000	\$175,000	\$189,000	7.7%	0.2%
Computer, Automated Teller, and Office Machine Repairers	\$46,900	\$59,000	\$120,000	\$146,000	4.7%	0.1%
Automotive Body and Related Repairers	\$56,800	\$62,000	\$118,000	\$133,000	3.7%	0.1%
Automotive Service Technicians and Mechanics	\$60,300	\$65,000	\$125,000	\$141,000	40.0%	1.0%
Bus and Truck Mechanics and Diesel Engine Specialists	\$69,400	\$75,000	\$144,000	\$163,000	3.4%	0.1%
Tire Repairers and Changers	\$41,200	\$52,000	\$106,000	\$129,000	10.9%	0.3%
Home Appliance Repairers	\$55,200	\$60,000	\$114,000	\$129,000	2.1%	0.1%
Maintenance and Repair Workers, General	\$56,000	\$61,000	\$116,000	\$131,000	9.6%	0.2%
Installation, Maintenance, and Repair Workers, All Other	\$63,100	\$68,000	\$131,000	\$148,000	3.0%	0.1%
Other Installation, Maintenance, and Repair Occupations	<u>\$60,100</u>	\$65,000	\$124,000	<u>\$141,000</u>	<u>14.8%</u>	0.4%
Weighted Mean Annual Wage	\$60,100	\$66,000	\$126,000	\$143,000	100.0%	2.5%
Transportation and Material Moving Occupations						
First-Line Supervisors of Transportation and Material Moving Worl	\$67,800	\$74,000	\$140,000	\$159,000	2.5%	0.1%
Driver/Sales Workers	\$39,000	\$49,000	\$100,000	\$122,000	20.5%	0.9%
Heavy and Tractor-Trailer Truck Drivers	\$55,400	\$60,000	\$115,000	\$130,000	3.3%	0.1%
Light Truck or Delivery Services Drivers	\$50,400	\$55,000	\$104,000	\$118,000	21.1%	0.9%
Taxi Drivers and Chauffeurs	\$31,900	\$40,000	\$82,000	\$100,000	3.4%	0.1%
Parking Lot Attendants	\$33,000	\$42,000	\$85,000	\$103,000	5.8%	0.3%
Cleaners of Vehicles and Equipment	\$35,600	\$45,000	\$91,000	\$111,000	9.3%	0.4%
Laborers and Freight, Stock, and Material Movers, Hand	\$41,200	\$52,000	\$106,000	\$129,000	15.4%	0.7%
Packers and Packagers, Hand	\$33,200	\$42,000	\$85,000	\$104,000	11.4%	0.5%
Other Transportation and Material Moving Occupations	<u>\$41,600</u>	\$53,000	\$107,000	<u>\$130,000</u>	<u>7.4%</u>	0.3%
Weighted Mean Annual Wage	\$41,600	\$50,000	\$100,000	\$119,000	100.0%	4.3%

^{95.3%}

¹ The methodology utilized by the California Employment Development Department (EDD) assumes hourly paid employees are employed full-time. EDD data is adjusted by KMA to reflect San Jose minimum wage. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2018 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to Santa Clara County as of 2019 and are adjusted by EDD to the first quarter of 2020.

³ Including occupations representing 2% or more of the major occupation group.

⁴ Household income estimated based average worker compensation and ratios between employee income and household income for the San Francicsco Bay Area identified in Table 3-6.

APPENDIX C TABLE 7 ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2018 HOTEL WORKERS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	Worker Occupation Distribution Hotel
Major Occupations (2% or more)	
Management Occupations	4.4%
Food Preparation and Serving Related Occupations	24.9%
Building and Grounds Cleaning and Maintenance Occupations	31.0%
Personal Care and Service Occupations	4.1%
Sales and Related Occupations	2.5%
Office and Administrative Support Occupations	20.0%
Installation, Maintenance, and Repair Occupations	5.5%
Production Occupations	2.4%
All Other Worker Occupations - Hotel	<u>5.2%</u>
TOTAL	100.0%

APPENDIX C TABLE 8

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
HOTEL WORKER OCCUPATIONS

COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

Two Workers 00 \$243,000 00 \$260,000 00 \$224,000 00 \$266,000 00 \$260,000 00 \$159,000 00 \$256,000 00 \$256,000 00 \$199,000	\$243,000 \$260,000 \$231,000 \$266,000 \$260,000 \$172,000	21.0% 7.4% 4.2% 4.2% 2.2%	0.9% 0.3% 0.2%
\$243,000 \$260,000 \$224,000 \$266,000 \$260,000 \$159,000 \$145,000 \$256,000 \$256,000 \$199,000	\$243,000 \$260,000 \$231,000 \$266,000 \$260,000	21.0% 7.4% 4.2% 4.2%	0.9% 0.3% 0.2%
\$260,000 \$224,000 00 \$266,000 00 \$260,000 00 \$159,000 00 \$145,000 00 \$256,000 00 \$199,000	\$260,000 \$231,000 \$266,000 \$260,000	7.4% 4.2% 4.2%	0.3% 0.2%
\$260,000 \$224,000 00 \$266,000 00 \$260,000 00 \$159,000 00 \$145,000 00 \$256,000 00 \$199,000	\$260,000 \$231,000 \$266,000 \$260,000	7.4% 4.2% 4.2%	0.3% 0.2%
\$260,000 \$224,000 00 \$266,000 00 \$260,000 00 \$159,000 00 \$145,000 00 \$256,000 00 \$199,000	\$260,000 \$231,000 \$266,000 \$260,000	7.4% 4.2% 4.2%	0.3% 0.2%
\$224,000 \$266,000 \$260,000 \$159,000 \$145,000 \$256,000 \$199,000	\$231,000 \$266,000 \$260,000	4.2% 4.2%	0.2%
\$266,000 \$260,000 \$159,000 \$145,000 \$256,000 \$199,000	\$266,000 \$260,000	4.2%	
\$260,000 \$159,000 00 \$145,000 00 \$256,000 00 \$199,000	\$260,000		0.2%
\$159,000 \$145,000 \$256,000 \$199,000	. ,	2.2%	
\$145,000 00 \$256,000 00 \$199,000	\$172,000		0.1%
00 \$256,000 00 \$199,000		9.6%	0.4%
<u>00</u> <u>\$199,000</u>	\$156,000	44.4%	1.9%
	\$256,000	3.3%	0.1%
	\$204,000	3.7%	0.2%
00 \$192,000	\$199,000	100.0%	4.4%
00 \$157,000	\$169,000	2.6%	0.7%
00 \$125,000	\$151,000	5.8%	1.4%
00 \$91,000	\$111,000	15.7%	3.9%
00 \$84,000	\$102,000	2.2%	0.5%
00 \$91,000	\$110,000	7.8%	1.9%
00 \$81,000	\$99,000	3.1%	0.8%
00 \$83,000	\$101,000	2.1%	0.5%
00 \$84,000	\$102,000	31.2%	7.8%
00 \$96,000	\$116,000	6.4%	1.6%
00 \$81,000	\$99,000	11.5%	2.9%
00 \$81,000	\$99,000	5.8%	1.5%
00 \$81,000	\$99,000	3.5%	0.9%
<u>\$92,000</u>	\$111,000	<u>2.4%</u>	0.6%
00 \$90,000	\$109,000	100.0%	24.9%
00 \$109,000	\$124,000	6.1%	1.9%
00 \$99,000	\$120,000	5.4%	1.7%
96,000	\$117,000	86.0%	26.7%
<u>\$99,000</u>	\$120,000	<u>2.4%</u>	<u>0.8%</u>
00 \$97,000	\$118,000	100.0%	31.0%
00 \$119,000	\$144,000	5.6%	0.2%
00 \$81,000	\$99,000	2.1%	0.1%
			0.7%
			0.2%
			0.1%
			1.2%
			0.7%
00 \$88,000			0.2%
\$88,000 00 \$97,000			0.1%
\$88,000 \$97,000 \$107,000			0.4%
\$88,000 \$97,000 \$107,000 \$81,000		· · · · · · · · · · · · · · · · · · ·	4.1%
	00 \$81,000 00 \$102,000 00 \$100,000 00 \$88,000 00 \$97,000 00 \$107,000 00 \$81,000 00 \$93,000	00 \$81,000 \$99,000 00 \$102,000 \$124,000 00 \$100,000 \$121,000 00 \$88,000 \$107,000 00 \$97,000 \$118,000 00 \$107,000 \$99,000 00 \$93,000 \$113,000	00 \$81,000 \$99,000 17.4% 00 \$102,000 \$124,000 4.9% 00 \$100,000 \$121,000 3.0% 00 \$88,000 \$107,000 29.4% 00 \$97,000 \$118,000 18.1% 00 \$107,000 \$130,000 6.0% 00 \$81,000 \$99,000 2.9%

APPENDIX C TABLE 8 AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020 HOTEL WORKER OCCUPATIONS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	2020 Avg.	g. Household Income Estimate ⁴			% of Total	% of Total
	Worker	One	Two	Three+	Occupation	Hotel
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	<u>Workers</u>	Group ²	Workers
Page 2 of 2						
Sales and Related Occupations						
First-Line Supervisors of Retail Sales Workers	\$53,700	\$58,000	\$111,000	\$126,000	3.7%	0.1%
First-Line Supervisors of Non-Retail Sales Workers	\$88,000	\$96,000	\$160,000	\$173,000	3.1%	0.1%
Cashiers	\$34,000	\$43,000	\$87,000	\$106,000	18.1%	0.4%
Retail Salespersons	\$40,000	\$51,000	\$103,000	\$125,000	12.2%	0.3%
Sales Representatives, Services, All Other	\$83,400	\$91,000	\$152,000	\$164,000	56.1%	1.4%
Other Sales and Related Occupations	<u>\$67,100</u>	\$73,000	<u>\$139,000</u>	\$157,000	<u>6.9%</u>	0.2%
Weighted Mean Annual Wage	\$67,100	\$75,000	\$132,000	\$147,000	100.0%	2.5%
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Workers	\$71,800	\$78,000	\$149,000	\$168,000	8.9%	1.8%
Bookkeeping, Accounting, and Auditing Clerks	\$55,200	\$60,000	\$114,000	\$129,000	5.6%	1.1%
Hotel, Motel, and Resort Desk Clerks	\$32,300	\$41,000	\$83,000	\$101,000	71.6%	14.3%
Secretaries and Administrative Assistants, Except Legal, Medical, a	\$49,900	\$63,000	\$128,000	\$156,000	2.3%	0.5%
Office Clerks, General	\$47,800	\$60,000	\$123,000	\$149,000	2.3%	0.5%
Other Office and Administrative Support Occupations	<u>\$38,400</u>	\$49,000	\$99,000	\$120,000	9.4%	<u>1.9%</u>
Weighted Mean Annual Wage	\$38,400	\$47,000	\$94,000	\$113,000	100.0%	20.0%
Installation, Maintenance, and Repair Occupations						
First-Line Supervisors of Mechanics, Installers, and Repairers	\$96,300	\$105,000	\$175,000	\$189,000	7.4%	0.4%
Maintenance and Repair Workers, General	\$56,000	\$61,000	\$116,000	\$131,000	89.8%	5.0%
Other Installation, Maintenance, and Repair Occupations	\$59,100	\$64,000	\$122,000	\$139,000	2.7%	0.1%
Weighted Mean Annual Wage	\$59,100	\$64,000	\$121,000	\$136,000	100.0%	5.5%
Production Occupations						
First-Line Supervisors of Production and Operating Workers	\$76,200	\$83,000	\$139,000	\$150,000	2.2%	0.1%
Bakers	\$38,300	\$48,000	\$98,000	\$120,000	7.0%	0.2%
Laundry and Dry-Cleaning Workers	\$33,800	\$43,000	\$87,000	\$106,000	85.9%	2.1%
Other Production Occupations	<u>\$35,100</u>	\$44,000	\$90,000	\$110,000	4.9%	0.1%
Weighted Mean Annual Wage	\$35,100	\$44,000	\$89,000	\$108,000	100.0%	2.4%

94.8%

¹ The methodology utilized by the California Employment Development Department (EDD) assumes hourly paid employees are employed full-time. EDD data is adjusted by KMA to reflect San Jose minimum wage. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2018 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to Santa Clara County as of 2019 and are adjusted by EDD to the first quarter of 2020.

³ Including occupations representing 2% or more of the major occupation group.

⁴ Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 3-6.

APPENDIX C TABLE 9 ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2018 INDUSTRIAL WORKERS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	Worker Occupation Distribution Industrial
Major Occupations (2% or more)	,
Management Occupations	8.6%
Business and Financial Operations Occupations	5.9%
Computer and Mathematical Occupations	6.1%
Architecture and Engineering Occupations	10.4%
Life, Physical, and Social Science Occupations	5.7%
Sales and Related Occupations	3.8%
Office and Administrative Support Occupations	10.5%
Installation, Maintenance, and Repair Occupations	10.6%
Production Occupations	29.0%
Transportation and Material Moving Occupations	5.8%
All Other Worker Occupations - Industrial	<u>3.6%</u>
тота	AL 100.0%

APPENDIX C TABLE 10
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
INDUSTRIAL WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

	JOSE	

	2020 Avg.	2020 Avg. Household Income Estimate ⁴			% of Total	% of Total
	Worker	One	Two	Three+	Occupation	Industrial
Occupation ³	Compensation ¹	Worker	Workers	Workers	Group ²	Workers
Page 1 of 3						
Management Occupations						
Chief Executives	\$253,400	\$255,000	\$283,000	\$284,000	2.6%	0.2%
General and Operations Managers	\$165,700	\$169,000	\$243,000	\$243,000	27.9%	2.4%
Marketing Managers	\$203,300	\$207,000	\$275,000	\$276,000	4.5%	0.4%
Sales Managers	\$177,700	\$181,000	\$260,000	\$260,000	5.0%	0.4%
Administrative Services Managers	\$145,000	\$151,000	\$224,000	\$231,000	3.1%	0.3%
Computer and Information Systems Managers	\$219,000	\$223,000	\$296,000	\$297,000	6.7%	0.6%
Financial Managers	\$181,200	\$184,000	\$266,000	\$266,000	5.7%	0.5%
Industrial Production Managers	\$152,100	\$155,000	\$223,000	\$223,000	9.3%	0.8%
Purchasing Managers	\$155,200	\$158,000	\$227,000	\$227,000	2.5%	0.2%
Human Resources Managers	\$177,600	\$181,000	\$260,000	\$260,000	2.1%	0.2%
Architectural and Engineering Managers	\$207,000	\$211,000	\$280,000	\$281,000	11.9%	1.0%
Natural Sciences Managers	\$200,200	\$204,000	\$270,000	\$272,000	6.6%	0.6%
Managers, All Other	\$174,500	\$178,000	\$256,000	\$256,000	7.3%	0.6%
Other Management Occupations	\$181,400	\$185,000	\$266,000	\$266,000	4.9%	0.4%
Weighted Mean Annual Wage	\$181,400	\$185,000	\$257,000	\$258,000	100.0%	8.6%
Business and Financial Operations Occupations						
Buyers and Purchasing Agents	\$84,000	\$92,000	\$153,000	\$165,000	15.2%	0.9%
Compliance Officers	\$95,400	\$104,000	\$174,000	\$188,000	6.1%	0.4%
Cost Estimators	\$93,100	\$104,000	\$174,000	\$183,000	5.3%	0.4%
Human Resources Specialists	\$86,300	\$94,000	\$170,000	\$170,000	7.3%	0.4%
Logisticians	\$98,900	\$108,000	\$180,000	\$170,000	5.9%	0.4%
Management Analysts	\$122,900	\$128,000	\$205,000	\$210,000	6.9%	0.4%
Training and Development Specialists	\$93,600	\$102,000	\$171,000	\$184,000	3.5%	0.4%
Market Research Analysts and Marketing Specialists	\$100,400	\$105,000	\$167,000	\$172,000	9.4%	0.6%
Business Operations Specialists, All Other	\$102,500	\$107,000	\$171,000	\$176,000	16.0%	0.9%
Accountants and Auditors	\$92,400	\$101,000	\$168,000	\$182,000	14.4%	0.8%
Budget Analysts	\$105,800	\$110,000	\$176,000	\$181,000	2.1%	0.1%
Financial Analysts	\$119,400	\$124,000	\$199,000	\$204,000	4.7%	0.3%
Other Business and Financial Operations Occupations	\$97,500	\$106,000	\$178,000	\$192,000	3.0%	0.2%
Weighted Mean Annual Wage	\$97,500	\$104,000	\$171,000	\$181,000	100.0%	5.9%
	,,	*****	*********	*****		
Computer and Mathematical Occupations Computer and Information Research Scientists	¢170 000	¢174 000	¢250 000	¢250 000	2.8%	0.2%
•	\$170,900 \$122,500	\$174,000	\$250,000	\$250,000		
Computer Systems Analysts Information Security Analysts	\$122,500 \$123,400	\$128,000	\$204,000 \$206,000	\$210,000	9.2% 2.4%	0.6% 0.1%
Computer Programmers	\$123,400 \$108,000	\$129,000 \$113,000	\$180,000	\$211,000 \$185,000	4.6%	0.1%
. •						
Software Developers, Applications	\$134,000	\$139,000 \$153,000	\$207,000	\$214,000	18.0% 29.2%	1.1%
Software Developers, Systems Software	\$150,100	\$153,000 \$133,000	\$220,000	\$220,000		1.8%
Network and Computer Systems Administrators	\$117,700 \$148,300	\$123,000 \$154,000	\$196,000 \$229,000	\$202,000 \$236,000	6.4% 2.4%	0.4% 0.1%
Computer Hear Support Specialists						
Computer Network Support Specialists	\$84,400	\$92,000	\$154,000	\$166,000	8.7%	0.5%
Computer Network Support Specialists	\$85,800 \$138,000	\$94,000 \$144,000	\$156,000	\$169,000	2.7%	0.2%
Computer Occupations, All Other	\$138,900 \$123,400	\$144,000	\$215,000	\$221,000	5.9%	0.4%
Statisticians Other Computer and Mathematical Cocumations	\$123,400 \$130,700	\$129,000	\$206,000	\$211,000	3.0%	0.2%
Other Computer and Mathematical Occupations	\$130,700	\$136,000	\$202,000	\$208,000	4.8%	0.3%
Weighted Mean Annual Wage	\$130,700	\$135,000	\$204,000	\$209,000	100.0%	6.1%

APPENDIX C TABLE 10
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
INDUSTRIAL WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

SAN JOSE, CA	
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	2020 Avg.		ld Income E		% of Total	% of Tota
Occupation ³	Worker Compensation ¹	One Worker	Two Workers	Three+ Workers	Occupation Group ²	Industria Workers
Page 2 of 3		<u> 11011101</u>	TTOTAGE	TTOTROTO		Worker
Architecture and Engineering Occupations						
Aerospace Engineers	\$142,600	\$148,000	\$220,000	\$227,000	5.3%	0.6%
Biomedical Engineers	\$124,700	\$130,000	\$208,000	\$214,000	2.8%	0.3%
Computer Hardware Engineers	\$164,700	\$168,000	\$241,000	\$241,000	3.5%	0.4%
Electrical Engineers	\$141,400	\$147,000	\$218,000	\$225,000	12.5%	1.3%
Electronics Engineers, Except Computer	\$144,700	\$150,000	\$224,000	\$231,000	7.6%	0.8%
Industrial Engineers	\$124,600	\$130,000	\$208,000	\$213,000	16.3%	1.7%
Mechanical Engineers	\$128,300	\$133,000	\$198,000	\$204,000	16.5%	1.7%
Engineers, All Other	\$130,100	\$135,000	\$201,000	\$207,000	5.7%	0.6%
Electrical and Electronics Engineering Technicians	\$73,500	\$80,000	\$152,000	\$172,000	7.8%	0.8%
Industrial Engineering Technicians	\$63,900	\$69,000	\$132,000	\$150,000	3.8%	0.4%
Mechanical Engineering Technicians	\$71,500	\$78,000	\$148,000	\$168,000	2.4%	0.2%
Engineering Technicians, Except Drafters, All Other	\$78,200	\$85,000	\$142,000	\$154,000	3.8%	0.4%
Other Architecture and Engineering Occupations	\$121,900	\$127,000	\$203,000	\$209,000	<u>11.8%</u>	1.2%
Weighted Mean Annual Wage	·	\$127,000	\$198,000	\$206,000	100.0%	10.4%
Life, Physical, and Social Science Occupations						
Biochemists and Biophysicists	\$140,400	\$146,000	\$217,000	\$224,000	9.3%	0.5%
Biological Scientists, All Other	\$112,400	\$117,000	\$187,000	\$192,000	4.7%	0.3%
Medical Scientists, Except Epidemiologists	\$115,700	\$121,000	\$193,000	\$198,000	23.4%	1.3%
Physicists	\$131,800	\$137,000	\$204,000	\$210,000	3.4%	0.2%
Chemists	\$117,000	\$122,000	\$195,000	\$200,000	8.5%	0.5%
Biological Technicians	\$66,400	\$72,000	\$137,000	\$156,000	12.8%	0.7%
Chemical Technicians	\$51,800	\$56,000	\$107,000	\$121,000	4.1%	0.2%
Social Science Research Assistants	\$61,000	\$66,000	\$126,000	\$143,000	7.0%	0.4%
Life, Physical, and Social Science Technicians, All Other	\$72,000	\$78,000	\$149,000	\$169,000	4.3%	0.2%
Other Life, Physical, and Social Science Occupations	\$100,400	\$105,000	\$167,000	\$172,000	22.6%	1.3%
Weighted Mean Annual Wage	\$100,400	\$106,000	\$172,000	\$181,000	100.0%	5.7%
Sales and Related Occupations						
First-Line Supervisors of Non-Retail Sales Workers	\$88,000	\$96,000	\$160,000	\$173,000	3.3%	0.1%
Cashiers	\$34,000	\$43,000	\$87,000	\$106,000	7.5%	0.3%
Counter and Rental Clerks	\$44,300	\$56,000	\$114,000	\$138,000	6.3%	0.2%
Parts Salespersons	\$44,400	\$56,000	\$114,000	\$139,000	3.0%	0.1%
Retail Salespersons	\$40,000	\$51,000	\$103,000	\$125,000	7.8%	0.3%
Sales Representatives, Services, All Other	\$83,400	\$91,000	\$152,000	\$164,000	9.4%	0.4%
Sales Representatives, Wholesale and Manufacturing, Technic		\$118,000	\$188,000	\$193,000	20.0%	0.8%
Sales Representatives, Wholesale and Manufacturing, Except		\$97,000	\$163,000	\$176,000	32.9%	1.3%
Demonstrators and Product Promoters	\$37,200	\$47,000	\$96,000	\$116.000	2.5%	0.1%
Sales Engineers	\$142,600	\$148,000	\$220,000	\$227,000	4.6%	0.2%
Other Sales and Related Occupations	\$82,200	\$90,000	\$150,000	\$162,000	2.9%	0.1%
Weighted Mean Annual Wage	<u></u>	\$90,000	\$153,000	\$166,000	100.0%	3.8%
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Wo	or \$71,800	\$78,000	\$149,000	\$168,000	5.3%	0.6%
Bookkeeping, Accounting, and Auditing Clerks	\$55,200	\$60,000	\$114,000	\$129,000	9.6%	1.0%
Customer Service Representatives	\$48,900	\$62,000	\$126,000	\$153,000	13.0%	1.4%
Production, Planning, and Expediting Clerks	\$62,600	\$68,000	\$130,000	\$147,000	6.9%	0.7%
Shipping, Receiving, and Traffic Clerks	\$41,900	\$53,000	\$108,000	\$131,000	11.0%	1.2%
Stock Clerks and Order Fillers	\$33,700	\$43,000	\$87,000	\$105,000	5.6%	0.6%
Executive Secretaries and Executive Administrative Assistants		\$92,000	\$153,000	\$166,000	4.9%	0.5%
Secretaries and Administrative Assistants, Except Legal, Medic		\$63,000	\$128,000	\$156,000	13.0%	1.4%
Office Clerks, General	\$47,800	\$60,000	\$123,000	\$149,000	17.7%	1.9%
	¥ ,000	+-3,000	+	+ ,		,
Other Office and Administrative Support Occupations	\$52,100	\$56,000	\$108,000	\$122,000	<u>13.1%</u>	1.4%

APPENDIX C TABLE 10
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
INDUSTRIAL WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

	2020 Avg.	Househo	ld Income E	stimate 4	% of Total	% of Total
_	Worker	One	Two	Three+	Occupation	Industrial
Occupation ³	Compensation ¹	Worker	Workers	Workers	Group ²	Workers
Page 3 of 3						
Installation, Maintenance, and Repair Occupations						
First-Line Supervisors of Mechanics, Installers, and Repairers	\$96,300	\$105,000	\$175,000	\$189,000	8.0%	0.8%
Computer, Automated Teller, and Office Machine Repairers	\$46,900	\$59,000	\$120,000	\$146,000	6.8%	0.7%
Electrical and Electronics Repairers, Commercial and Industrial	\$59,900	\$65,000	\$124,000	\$140,000	3.3%	0.3%
Automotive Body and Related Repairers	\$56,800	\$62,000	\$118,000	\$133,000	12.3%	1.3%
Automotive Glass Installers and Repairers	\$66,300	\$72,000	\$137,000	\$155,000	2.2%	0.2%
Automotive Service Technicians and Mechanics	\$60,300	\$65,000	\$125,000	\$141,000	28.2%	3.0%
Bus and Truck Mechanics and Diesel Engine Specialists	\$69,400	\$75,000	\$144,000	\$163,000	3.3%	0.4%
Industrial Machinery Mechanics	\$76,800	\$84,000	\$140,000	\$151,000	7.1%	0.7%
Medical Equipment Repairers	\$62,300	\$68,000	\$129,000	\$146,000	3.6%	0.4%
Maintenance and Repair Workers, General	\$56,000	\$61,000	\$116,000	\$131,000	7.7%	0.8%
HelpersInstallation, Maintenance, and Repair Workers	\$46,500	\$59,000	\$119,000	\$145,000	2.6%	0.3%
Other Installation, Maintenance, and Repair Occupations	\$63,300	\$69,000	\$131,000	\$148,000	14.9%	1.6%
Weighted Mean Annual Wage	\$63,300	\$69,000	\$130,000	\$146,000	100.0%	10.6%
Production Occupations						
First-Line Supervisors of Production and Operating Workers	\$76,200	\$83,000	\$139,000	\$150,000	6.8%	2.0%
Electrical, Electronic, and Electromechanical Assemblers, Exce	\$47,500	\$60,000	\$122,000	\$148,000	12.4%	3.6%
Assemblers and Fabricators, All Other, Including Team Assemb	\$38,100	\$48,000	\$98,000	\$119,000	13.8%	4.0%
Computer-Controlled Machine Tool Operators, Metal and Plasti	\$45,800	\$58,000	\$118,000	\$143,000	4.6%	1.3%
Machinists	\$51,500	\$56,000	\$107,000	\$121,000	12.6%	3.6%
Welders, Cutters, Solderers, and Brazers	\$59,700	\$65,000	\$124,000	\$140,000	4.4%	1.3%
Printing Press Operators	\$45,500	\$58,000	\$117,000	\$142,000	2.6%	0.7%
Inspectors, Testers, Sorters, Samplers, and Weighers	\$51,800	\$56,000	\$107,000	\$121,000	6.9%	2.0%
Dental Laboratory Technicians	\$47,600	\$60,000	\$122,000	\$149,000	2.3%	0.7%
Packaging and Filling Machine Operators and Tenders	\$36,600	\$46,000	\$94,000	\$114,000	2.9%	0.9%
HelpersProduction Workers	\$32,900	\$42,000	\$84,000	\$103,000	2.3%	0.7%
Other Production Occupations	\$49,200	\$62,000	\$126,000	\$154,000	28.3%	8.2%
Weighted Mean Annual Wage	\$49,200	\$59,000	\$116,000	\$138,000	100.0%	29.0%
Transportation and Material Moving Occupations						
First-Line Supervisors of Transportation and Material Moving W	\$67,800	\$74,000	\$140,000	\$159,000	5.8%	0.3%
Driver/Sales Workers	\$39,000	\$49,000	\$100,000	\$122,000	2.1%	0.1%
Heavy and Tractor-Trailer Truck Drivers	\$55,400	\$60,000	\$115,000	\$130,000	4.6%	0.3%
Light Truck or Delivery Services Drivers	\$50,400	\$55,000	\$104,000	\$118,000	6.3%	0.4%
Industrial Truck and Tractor Operators	\$46,600	\$59,000	\$120,000	\$146,000	4.7%	0.3%
Cleaners of Vehicles and Equipment	\$35,600	\$45,000	\$91,000	\$111,000	34.4%	2.0%
Laborers and Freight, Stock, and Material Movers, Hand	\$41,200	\$52,000	\$106,000	\$129,000	20.1%	1.2%
Packers and Packagers, Hand	\$33,200	\$42,000	\$85,000	\$104,000	8.4%	0.5%
Other Transportation and Material Moving Occupations	\$41,600	\$53,000	\$107,000	\$130,000	<u>13.7%</u>	0.8%
Weighted Mean Annual Wage	\$41,600	\$51,000	\$102,000	\$123,000	100.0%	5.8%

^{96.4%}

¹ The methodology utilized by the California Employment Development Department (EDD) assumes hourly paid employees are employed full-time. EDD data is adjusted by KMA to reflect San Jose minimum wage. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2018 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to Santa Clara County as of 2019 and are adjusted by EDD to the first quarter of 2020.

³ Including occupations representing 2% or more of the major occupation group.

⁴ Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 3-6.

APPENDIX C TABLE 11 ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2018 R&D WORKERS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	Worker Occupation Distribution R&D
Major Occupations (2% or more)	1,00
Management Occupations	14.6%
Business and Financial Operations Occupations	9.7%
Computer and Mathematical Occupations	12.0%
Architecture and Engineering Occupations	16.5%
Life, Physical, and Social Science Occupations	25.7%
Healthcare Practitioners and Technical Occupations	3.0%
Office and Administrative Support Occupations	8.5%
Production Occupations	2.1%
All Other Worker Occupations - R&D	<u>8.0%</u>
TOTAL	100.0%

APPENDIX C TABLE 12
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
R&D WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

SAN JOSE, CA

Cocupation 3 Worker (borne) Worker (borne) Worker (borne) Cocupation (borne) Worker (borne) Cocupation (borne) Worker (borne) <th< th=""><th></th><th>2020 Avg.</th><th colspan="2">Household Income Estimate 4</th><th>% of Total</th><th>% of Total</th></th<>		2020 Avg.	Household Income Estimate 4		% of Total	% of Total	
Management Occupations		Worker	One	Two	Three+	Occupation	R&D
Management Occupations	Occupation ³	Compensation ¹	Worker	Workers	Workers	Group 2	Workers
Chief Executives	Page 1 of 3						
General and Operations Managers	Management Occupations						
Marketing Managers \$203,300 \$275,000 \$275,000 4.5% 0.7% Sales Managers \$177,700 \$181,000 \$260,000 \$26,000 2.7% 0.4% Administrative Services Managers \$145,000 \$151,000 \$224,000 \$231,000 3.8% 0.6% Computer and Information Systems Managers \$1812,00 \$184,000 \$266,000 \$297,000 7.6% 1.1% Financial Managers \$162,100 \$155,000 \$223,000 \$223,000 \$223,000 \$223,000 \$228,000 \$228,000 \$228,000 \$228,000 \$260,000 \$20	Chief Executives	\$253,400	\$255,000	\$283,000	\$284,000	2.5%	0.4%
Sales Managers	General and Operations Managers	\$165,700	\$169,000	\$243,000	\$243,000	16.7%	2.4%
Administrative Services Managers \$145,000 \$151,000 \$224,000 \$231,000 3.8% 0.6%	Marketing Managers	\$203,300	\$207,000	\$275,000	\$276,000	4.5%	0.7%
Computer and Information Systems Managers	Sales Managers	\$177,700	\$181,000	\$260,000	\$260,000	2.7%	0.4%
Financial Managers	Administrative Services Managers	\$145,000	\$151,000	\$224,000	\$231,000	3.8%	0.6%
Industrial Production Managers	Computer and Information Systems Managers	\$219,000	\$223,000	\$296,000	\$297,000	7.6%	1.1%
Human Resources Managers	Financial Managers	\$181,200	\$184,000	\$266,000	\$266,000	6.0%	0.9%
Architectural and Engineering Managers	Industrial Production Managers	\$152,100	\$155,000	\$223,000	\$223,000	2.6%	0.4%
Medical and Health Services Managers \$147,200 \$153,000 \$227,000 \$225,000 \$4,3% 0.6% Natural Sciences Managers \$200,200 \$204,000 \$270,000 \$270,000 \$177,000 \$275	Human Resources Managers	\$177,600	\$181,000	\$260,000	\$260,000	2.2%	0.3%
Natural Sciences Managers	Architectural and Engineering Managers	\$207,000	\$211,000	\$280,000	\$281,000	12.1%	1.8%
Managers, All Other	Medical and Health Services Managers	\$147,200	\$153,000	\$227,000	\$235,000	4.3%	0.6%
Other Management Occupations \$187,100 \$190,000 \$274,000 \$274,000 \$264,000 100.0% 14.6% Business and Financial Operations Occupations Buyers and Purchasing Agents \$84,000 \$92,000 \$153,000 \$165,000 7.9% 0.8% Compliance Officers \$95,400 \$104,000 \$174,000 \$168,000 7.9% 0.8% Logisticians \$98,900 \$167,000 \$170,000 7.3% 0.7% Logisticians \$98,900 \$102,000 \$170,000 \$70,000 1.0% 1.0% Training and Development Specialists \$122,900 \$122,000 \$205,000 \$210,000 10.7% 1.0% Training and Development Specialists, All Other \$102,500 \$107,000 \$174,000 \$184,000 4.0% 0.4% Market Research Analysts \$102,500 \$107,000 \$171,000 \$184,000 4.0% 0.4% Business Operations Specialists, All Other \$102,500 \$107,000 \$171,000 \$176,000 \$23,3% 2.3% Accountants and Auditor	Natural Sciences Managers	\$200,200	\$204,000	\$270,000	\$272,000	19.7%	2.9%
Business and Financial Operations Occupations S84,000 S92,000 S163,000 S165,000 7.9% 0.8% Compilance Officers S94,000 S104,000 S174,000 S176,000 7.9% 0.8% Compilance Officers S95,400 S104,000 S174,000 S176,000 S17	Managers, All Other	\$174,500	\$178,000	\$256,000	\$256,000	9.5%	1.4%
Business and Financial Operations Occupations \$84,000 \$92,000 \$153,000 \$165,000 7.9% 0.8%	Other Management Occupations	<u>\$187,100</u>	\$190,000	\$274,000	\$274,000	<u>5.6%</u>	0.8%
Buyers and Purchasing Agents	Weighted Mean Annual Wage	\$187,100	\$191,000	\$263,000	\$264,000	100.0%	14.6%
Compliance Officers \$95,400 \$104,000 \$174,000 \$188,000 10.6% 1.0% Human Resources Specialists \$86,300 \$94,000 \$157,000 \$170,000 7.3% 0.7% Logisticians \$98,900 \$108,000 \$180,000 \$194,000 4.1% 0.4% Management Analysts \$122,900 \$128,000 \$205,000 \$210,000 10.7% 1.0% Training and Development Specialists \$93,600 \$102,000 \$171,000 \$184,000 4.0% 0.4% Market Research Analysts and Marketing Specialists \$100,400 \$105,000 \$172,000 \$172,000 8.5% 0.8% Business Operations Specialists, All Other \$102,500 \$107,000 \$176,000 \$176,000 23.3% 2.3% Accountants and Auditors \$92,400 \$101,000 \$168,000 \$122,000 \$129,000 \$204,000 4.5% 0.4% Other Business and Financial Operations Occupations \$99,900 \$109,000 \$124,000 \$199,000 \$204,000 4.5% 0.4% Comp	Business and Financial Operations Occupations						
Human Resources Specialists	Buyers and Purchasing Agents	\$84,000	\$92,000	\$153,000	\$165,000	7.9%	0.8%
Logisticians	Compliance Officers	\$95,400	\$104,000	\$174,000	\$188,000	10.6%	1.0%
Logisticians	Human Resources Specialists	\$86,300	\$94,000	\$157,000	\$170,000	7.3%	0.7%
Training and Development Specialists \$93,600 \$102,000 \$171,000 \$184,000 4.0% 0.4% Market Research Analysts and Marketing Specialists \$100,400 \$105,000 \$167,000 \$172,000 8.5% 0.8% Business Operations Specialists, All Other \$102,500 \$107,000 \$171,000 \$176,000 23.3% 2.3% Accountants and Auditors \$92,400 \$101,000 \$188,000 \$182,000 12.9% 1.3% Financial Analysts \$119,400 \$124,000 \$199,000 \$204,000 4.5% 0.4% Other Business and Financial Operations Occupations \$99,900 \$107,000 \$174,000 \$196,000 6.2% 0.6% Weighted Mean Annual Wage \$99,900 \$107,000 \$174,000 \$250,000 6.8% 0.8% Computer and Information Research Scientists \$170,900 \$174,000 \$250,000 \$250,000 6.8% 0.8% Computer Systems Analysts \$122,500 \$128,000 \$204,000 \$211,000 11.3% 1.4% Information Security Analysts <	Logisticians	\$98,900	\$108,000		\$194,000	4.1%	0.4%
Market Research Analysts and Marketing Specialists \$100,400 \$105,000 \$172,000 \$5% 0.8% Business Operations Specialists, All Other \$102,500 \$107,000 \$171,000 \$176,000 23.3% 2.3% Accountants and Auditors \$92,400 \$101,000 \$168,000 \$182,000 12.9% 1.3% Financial Analysts \$119,400 \$124,000 \$199,000 \$204,000 4.5% 0.4% Other Business and Financial Operations Occupations \$99,900 \$107,000 \$174,000 \$196,000 6.2% 0.6% Weighted Mean Annual Wage \$99,900 \$107,000 \$174,000 \$184,000 100.0% 9.7% Computer and Information Research Scientists \$170,900 \$174,000 \$250,000 \$250,000 6.8% 0.8% Computer Systems Analysts \$122,500 \$128,000 \$204,000 \$210,000 11.3% 1.4% Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 <td>Management Analysts</td> <td>\$122,900</td> <td>\$128,000</td> <td>\$205,000</td> <td>\$210,000</td> <td>10.7%</td> <td>1.0%</td>	Management Analysts	\$122,900	\$128,000	\$205,000	\$210,000	10.7%	1.0%
Business Operations Specialists, All Other	Training and Development Specialists	\$93,600	\$102,000	\$171,000	\$184,000	4.0%	0.4%
Accountants and Auditors \$92,400 \$101,000 \$168,000 \$182,000 12.9% 1.3% Financial Analysts \$119,400 \$124,000 \$199,000 \$204,000 4.5% 0.4% Other Business and Financial Operations Occupations \$99,900 \$109,000 \$182,000 \$196,000 6.2% 0.6% Weighted Mean Annual Wage \$99,900 \$107,000 \$174,000 \$184,000 100.0% 9.7% Computer and Mathematical Occupations Computer and Information Research Scientists \$170,900 \$174,000 \$250,000 \$250,000 6.8% 0.8% Computer Systems Analysts \$122,500 \$128,000 \$204,000 \$210,000 11.3% 1.4% Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 \$185,000 \$221,000 4.0% 0.5% Software Developers, Applications \$134,000 \$139,000 \$207,000 \$220,000 17.6% 2.1% Database Administrators \$112,200 \$117,000 \$187,000 \$122,000 17.6% 2.1% Database Administrators \$112,200 \$117,000 \$187,000 \$220,000 \$220,000 \$206,000 \$200,000 \$20		\$100,400	\$105,000	\$167,000	\$172,000	8.5%	0.8%
Financial Analysts	Business Operations Specialists, All Other	\$102,500	\$107,000	\$171,000	\$176,000	23.3%	2.3%
Other Business and Financial Operations Weighted Mean Annual Wage \$99,900 \$109,000 \$182,000 \$196,000 6.2% 0.6% Computer and Mathematical Occupations Computer and Information Research Scientists \$170,900 \$174,000 \$250,000 \$250,000 6.8% 0.8% Computer Systems Analysts \$122,500 \$128,000 \$204,000 \$210,000 11.3% 1.4% Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 \$180,000 \$185,000 5.8% 0.7% Software Developers, Applications \$134,000 \$139,000 \$207,000 \$214,000 16.7% 2.0% Software Developers, Systems Software \$150,100 \$153,000 \$220,000 \$220,000 17.6% 2.1% Database Administrators \$112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$117,700 \$123,000 \$196,000 \$220,000 \$220,000 6.4% <td>Accountants and Auditors</td> <td>\$92,400</td> <td>\$101,000</td> <td>\$168,000</td> <td>\$182,000</td> <td>12.9%</td> <td>1.3%</td>	Accountants and Auditors	\$92,400	\$101,000	\$168,000	\$182,000	12.9%	1.3%
Weighted Mean Annual Wage \$99,900 \$107,000 \$174,000 \$184,000 100.0% 9.7% Computer and Mathematical Occupations \$170,900 \$174,000 \$250,000 \$250,000 6.8% 0.8% Computer Systems Analysts \$122,500 \$128,000 \$204,000 \$210,000 11.3% 1.4% Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 \$180,000<	Financial Analysts	\$119,400	\$124,000	\$199,000	\$204,000	4.5%	0.4%
Weighted Mean Annual Wage \$99,900 \$107,000 \$174,000 \$184,000 100.0% 9.7% Computer and Mathematical Occupations \$170,900 \$174,000 \$250,000 \$250,000 6.8% 0.8% Computer Systems Analysts \$122,500 \$128,000 \$204,000 \$210,000 11.3% 1.4% Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 \$180,000<	Other Business and Financial Operations Occupations	\$99,900	\$109,000	\$182,000	\$196,000	6.2%	0.6%
Computer and Information Research Scientists \$170,900 \$174,000 \$250,000 \$250,000 6.8% 0.8% Computer Systems Analysts \$122,500 \$128,000 \$204,000 \$210,000 11.3% 1.4% Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 \$180,000 \$185,000 5.8% 0.7% Software Developers, Applications \$134,000 \$139,000 \$207,000 \$214,000 16.7% 2.0% Software Developers, Systems Software \$150,100 \$153,000 \$220,000 \$220,000 17.6% 2.1% Database Administrators \$1112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$1117,700 \$123,000 \$196,000 \$202,000 6.4% 0.8% Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400	•	· · · · · · · · · · · · · · · · · · ·					
Computer and Information Research Scientists \$170,900 \$174,000 \$250,000 \$250,000 6.8% 0.8% Computer Systems Analysts \$122,500 \$128,000 \$204,000 \$210,000 11.3% 1.4% Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 \$180,000 \$185,000 5.8% 0.7% Software Developers, Applications \$134,000 \$139,000 \$207,000 \$214,000 16.7% 2.0% Software Developers, Systems Software \$150,100 \$153,000 \$220,000 \$220,000 17.6% 2.1% Database Administrators \$1112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$1117,700 \$123,000 \$196,000 \$202,000 6.4% 0.8% Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400	Computer and Mathematical Occupations						
Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 \$180,000 \$185,000 5.8% 0.7% Software Developers, Applications \$134,000 \$139,000 \$207,000 \$214,000 16.7% 2.0% Software Developers, Systems Software \$150,100 \$153,000 \$220,000 \$220,000 17.6% 2.1% Database Administrators \$112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$117,700 \$123,000 \$196,000 \$202,000 6.4% 0.8% Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 </td <td></td> <td>\$170,900</td> <td>\$174,000</td> <td>\$250,000</td> <td>\$250,000</td> <td>6.8%</td> <td>0.8%</td>		\$170,900	\$174,000	\$250,000	\$250,000	6.8%	0.8%
Information Security Analysts \$123,400 \$129,000 \$206,000 \$211,000 4.0% 0.5% Computer Programmers \$108,000 \$113,000 \$180,000 \$185,000 5.8% 0.7% Software Developers, Applications \$134,000 \$139,000 \$207,000 \$214,000 16.7% 2.0% Software Developers, Systems Software \$150,100 \$153,000 \$220,000 \$220,000 17.6% 2.1% Database Administrators \$112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$117,700 \$123,000 \$196,000 \$202,000 6.4% 0.8% Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Other Computer and Mathematical Occupations \$123,400	Computer Systems Analysts	\$122,500	\$128,000	\$204,000	\$210,000	11.3%	1.4%
Computer Programmers \$108,000 \$113,000 \$180,000 \$185,000 5.8% 0.7% Software Developers, Applications \$134,000 \$139,000 \$207,000 \$214,000 16.7% 2.0% Software Developers, Systems Software \$150,100 \$153,000 \$220,000 \$220,000 17.6% 2.1% Database Administrators \$112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$117,700 \$123,000 \$196,000 \$202,000 6.4% 0.8% Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000		\$123,400	\$129,000	\$206,000	\$211,000	4.0%	0.5%
Software Developers, Applications \$134,000 \$139,000 \$207,000 \$214,000 16.7% 2.0% Software Developers, Systems Software \$150,100 \$153,000 \$220,000 \$220,000 17.6% 2.1% Database Administrators \$112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$117,700 \$123,000 \$196,000 \$202,000 6.4% 0.8% Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$13	· · ·			\$180,000			
Software Developers, Systems Software \$150,100 \$153,000 \$220,000 \$220,000 17.6% 2.1% Database Administrators \$112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$117,700 \$123,000 \$196,000 \$202,000 6.4% 0.8% Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%	Software Developers, Applications	\$134,000			\$214,000	16.7%	2.0%
Database Administrators \$112,200 \$117,000 \$187,000 \$192,000 2.6% 0.3% Network and Computer Systems Administrators \$117,700 \$123,000 \$196,000 \$202,000 6.4% 0.8% Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%						17.6%	2.1%
Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%	·	\$112,200	\$117,000	\$187,000	\$192,000	2.6%	0.3%
Computer Network Architects \$148,300 \$154,000 \$229,000 \$236,000 3.0% 0.4% Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%	Network and Computer Systems Administrators				\$202,000	6.4%	0.8%
Computer User Support Specialists \$84,400 \$92,000 \$154,000 \$166,000 4.7% 0.6% Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%							
Computer Occupations, All Other \$138,900 \$144,000 \$215,000 \$221,000 7.3% 0.9% Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%	·						
Operations Research Analysts \$101,400 \$106,000 \$169,000 \$174,000 3.3% 0.4% Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%							
Statisticians \$123,400 \$129,000 \$206,000 \$211,000 7.3% 0.9% Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%					. ,		
Other Computer and Mathematical Occupations \$131,000 \$136,000 \$202,000 \$209,000 3.2% 0.4%							
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APPENDIX C TABLE 12
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
R&D WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

SAN JOSE, CA	
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SAN JUSE, CA	2020 Avg.	Househo	ld Income E	stimate 4	% of Total	% of Total
	Worker	One	Two	Three+	Occupation	R&D
Occupation ³	Compensation ¹	Worker	Workers	Workers	Group 2	Workers
Page 2 of 3						
Architecture and Engineering Occupations						
Aerospace Engineers	\$142,600	\$148,000	\$220,000	\$227,000	5.6%	0.9%
Biomedical Engineers	\$124,700	\$130,000	\$208,000	\$214,000	3.0%	0.5%
Chemical Engineers	\$116,300	\$121,000	\$194,000	\$199,000	3.3%	0.6%
Civil Engineers	\$116,100	\$121,000	\$194,000	\$199,000	2.2%	0.4%
Computer Hardware Engineers	\$164,700	\$168,000	\$241,000	\$241,000	6.1%	1.0%
Electrical Engineers	\$141,400	\$147,000	\$218,000	\$225,000	11.4%	1.9%
Electronics Engineers, Except Computer	\$144,700	\$150,000	\$224,000	\$231,000	7.9%	1.3%
Industrial Engineers	\$124,600	\$130,000	\$208,000	\$213,000	8.5%	1.4%
Materials Engineers	\$115,400	\$120,000	\$192,000	\$198,000	2.3%	0.4%
Mechanical Engineers	\$128,300	\$133,000	\$198,000	\$204,000	16.9%	2.8%
Engineers, All Other	\$130,100	\$135,000	\$201,000	\$207,000	7.7%	1.3%
Electrical and Electronics Engineering Technicians	\$73,500	\$80,000	\$152,000	\$172,000	4.4%	0.7%
Mechanical Engineering Technicians	\$71,500	\$78,000	\$148,000	\$168,000	2.2%	0.4%
Engineering Technicians, Except Drafters, All Other	\$78,200	\$85,000	\$142,000	\$154,000	5.1%	0.8%
Other Architecture and Engineering Occupations	<u>\$126,400</u>	\$131,000	\$195,000	\$201,000	<u>13.5%</u>	2.2%
Weighted Mean Annual Wage	\$126,400	\$132,000	\$201,000	\$208,000	100.0%	16.5%
Life, Physical, and Social Science Occupations						
Biological Scientists, All Other	\$112,400	\$117,000	\$187,000	\$192,000	5.8%	1.5%
Medical Scientists, Except Epidemiologists	\$115,700	\$121,000	\$193,000	\$198,000	27.6%	7.1%
Physicists	\$131,800	\$137,000	\$204,000	\$210,000	4.0%	1.0%
Chemists	\$117,000	\$122,000	\$195,000	\$200,000	7.8%	2.0%
Biological Technicians	\$66,400	\$72,000	\$137,000	\$156,000	15.5%	4.0%
Social Science Research Assistants	\$61,000	\$66,000	\$126,000	\$143,000	3.5%	0.9%
Life, Physical, and Social Science Technicians, All Other	\$72,000	\$78,000	\$149,000	\$169,000	3.9%	1.0%
Other Life, Physical, and Social Science Occupations	\$100,000	\$104,000	\$167,000	\$171,000	<u>31.9%</u>	8.2%
Weighted Mean Annual Wage	\$100,000	\$105,000	\$172,000	\$180,000	100.0%	25.7%
Healthcare Practitioners and Technical Occupations						
Physicians and Surgeons, All Other	\$250,000	\$252,000	\$279,000	\$280,000	7.7%	0.2%
Veterinarians	\$105,500	\$110,000	\$176,000	\$181,000	2.5%	0.1%
Registered Nurses	\$143,800	\$150,000	\$222,000	\$229,000	11.9%	0.4%
Nurse Practitioners	\$139,600	\$145,000	\$216,000	\$222,000	2.4%	0.1%
Clinical Laboratory Technologists and Technicians	\$66,100	\$72,000	\$137,000	\$155,000	41.9%	1.2%
Veterinary Technologists and Technicians	\$50,400	\$55,000	\$104,000	\$118,000	5.2%	0.2%
Medical Records and Health Information Technicians	\$61,000	\$66,000	\$126,000	\$143,000	4.3%	0.1%
Occupational Health and Safety Specialists	\$91,100	\$99,000	\$166,000	\$179,000	8.5%	0.3%
Healthcare Practitioners and Technical Workers, All Other	\$75,700	\$83,000	\$138,000	\$149,000	2.2%	0.1%
Other Healthcare Practitioners and Technical Occupations	<u>\$97,800</u>	\$107,000	\$178,000	\$192,000	<u>13.4%</u>	0.4%
Weighted Mean Annual Wage	\$97,800	\$104,000	\$167,000	\$180,000	100.0%	3.0%
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Workers	\$71,800	\$78,000	\$149,000	\$168,000	7.3%	0.6%
Bookkeeping, Accounting, and Auditing Clerks	\$55,200	\$60,000	\$114,000	\$129,000	6.4%	0.5%
Customer Service Representatives	\$48,900	\$62,000	\$126,000	\$153,000	5.3%	0.5%
Production, Planning, and Expediting Clerks	\$62,600	\$68,000	\$130,000	\$147,000	4.2%	0.4%
Shipping, Receiving, and Traffic Clerks	\$41,900	\$53,000	\$108,000	\$131,000	2.7%	0.2%
Executive Secretaries and Executive Administrative Assistants	\$84,200	\$92,000	\$153,000	\$166,000	16.3%	1.4%
Secretaries and Administrative Assistants, Except Legal, Medical, an		\$63,000	\$128,000	\$156,000	22.1%	1.9%
Office Clerks, General	\$47,800	\$60,000	\$123,000	\$149,000	16.9%	1.4%
Other Office and Administrative Support Occupations	<u>\$59,100</u>	<u>\$64,000</u>	\$122,000	\$139,000	<u>18.8%</u>	<u>1.6%</u>
Weighted Mean Annual Wage	\$59,100	\$68,000	\$130,000	\$151,000	100.0%	8.5%

APPENDIX C TABLE 12 AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020 R&D WORKER OCCUPATIONS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE. CA

	2020 Avg.	Househo	ld Income E	stimate 4	% of Total	% of Total
	Worker	One	Two	Three+	Occupation	R&D
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	Workers	Group 2	Workers
Page 3 of 3						
Production Occupations						
First-Line Supervisors of Production and Operating Workers	\$76,200	\$83,000	\$139,000	\$150,000	14.6%	0.3%
Electrical, Electronic, and Electromechanical Assemblers, Except Coi	\$47,500	\$60,000	\$122,000	\$148,000	7.0%	0.1%
Machinists	\$51,500	\$56,000	\$107,000	\$121,000	8.1%	0.2%
Stationary Engineers and Boiler Operators	\$104,700	\$109,000	\$175,000	\$179,000	2.7%	0.1%
Chemical Equipment Operators and Tenders	\$48,100	\$61,000	\$123,000	\$150,000	3.0%	0.1%
Mixing and Blending Machine Setters, Operators, and Tenders	\$51,700	\$56,000	\$107,000	\$121,000	3.6%	0.1%
Inspectors, Testers, Sorters, Samplers, and Weighers	\$51,800	\$56,000	\$107,000	\$121,000	20.7%	0.4%
Packaging and Filling Machine Operators and Tenders	\$36,600	\$46,000	\$94,000	\$114,000	7.1%	0.1%
Production Workers, All Other	\$41,700	\$53,000	\$107,000	\$130,000	3.7%	0.1%
Other Production Occupations	\$56,200	\$61,000	\$116,000	\$132,000	29.5%	0.6%

92.0%

2.1%

100.0%

\$56,200

\$62,000 \$117,000

\$133,000

Weighted Mean Annual Wage

¹ The methodology utilized by the California Employment Development Department (EDD) assumes hourly paid employees are employed full-time. EDD data is adjusted by KMA to reflect San Jose minimum wage. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2018 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to Santa Clara County as of 2019 and are adjusted by EDD to the first quarter of 2020.

³ Including occupations representing 2% or more of the major occupation group.

⁴ Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 3-6.

APPENDIX C TABLE 13 ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2018 WAREHOUSE WORKERS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	Worker Occupation Distribution Warehouse
Major Occupations (2% or more)	***************************************
Management Occupations	2.7%
Business and Financial Operations Occupations	2.0%
Office and Administrative Support Occupations	22.5%
Installation, Maintenance, and Repair Occupations	2.8%
Production Occupations	2.4%
Transportation and Material Moving Occupations	63.4%
All Other Worker Occupations - Warehouse	<u>4.1%</u>
	TOTAL 100.0%

APPENDIX C TABLE 14

AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020

WAREHOUSE WORKER OCCUPATIONS

COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

SAN JOSE, CA

	2020 Avg.	g. Household Income Estimate ⁴		% of Total	% of Total	
	Worker	One	Two	Three+	•	Warehouse
Occupation ³	Compensation ¹	<u>Worker</u>	<u>Workers</u>	<u>Workers</u>	Group ²	Workers
Page 1 of 2						
Management Occupations						
General and Operations Managers	\$165,700	\$169,000	\$243,000	\$243,000	35.4%	0.9%
Sales Managers	\$177,700	\$181,000	\$260,000	\$260,000	2.9%	0.1%
Administrative Services Managers	\$145,000	\$151,000	\$224,000	\$231,000	4.4%	0.1%
Financial Managers	\$181,200	\$184,000	\$266,000	\$266,000	2.5%	0.1%
Industrial Production Managers	\$152,100	\$155,000	\$223,000	\$223,000	2.1%	0.1%
Transportation, Storage, and Distribution Managers	\$146,800	\$153,000	\$227,000	\$234,000	37.3%	1.0%
Human Resources Managers	\$177,600	\$181,000	\$260,000	\$260,000	3.1%	0.1%
Managers, All Other	\$174,500	\$178,000	\$256,000	\$256,000	4.9%	0.1%
Other Management Occupations	\$158,500	\$161,000	\$232,000	\$232,000	7.3%	0.2%
Weighted Mean Annual Wage	\$158,500	\$163,000	\$237,000	\$240,000	100.0%	2.7%
Business and Financial Operations Occupations						
Buyers and Purchasing Agents	\$84,000	\$92,000	\$153,000	\$165,000	15.8%	0.3%
Compliance Officers	\$95,400	\$104,000	\$174,000	\$188,000	2.3%	0.0%
Human Resources Specialists	\$86,300	\$94,000	\$157,000	\$170,000	15.8%	0.3%
Logisticians	\$98,900	\$108,000	\$180,000	\$194,000	13.8%	0.3%
Management Analysts	\$122,900	\$128,000	\$205,000	\$210,000	2.9%	0.1%
Training and Development Specialists	\$93,600	\$102,000	\$171,000	\$184,000	12.5%	0.3%
Market Research Analysts and Marketing Specialists	\$100,400	\$105,000	\$167,000	\$172,000	5.5%	0.1%
Business Operations Specialists, All Other	\$102,500	\$107,000	\$171,000	\$176,000	17.7%	0.4%
Accountants and Auditors	\$92,400	\$101,000	\$168,000	\$182,000	9.5%	0.2%
Other Business and Financial Operations Occupations	\$94,400	\$103,000	\$172,000	\$186,000	4.1%	0.1%
Weighted Mean Annual Wage	\$94,400	\$102,000	\$168,000	\$179,000	100.0%	2.0%
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Work	€ \$71,800	\$78,000	\$149,000	\$168,000	5.6%	1.3%
Customer Service Representatives	\$48,900	\$62,000	\$126,000	\$153,000	7.3%	1.6%
Order Clerks	\$46,200	\$58,000	\$119,000	\$144,000	2.2%	0.5%
Production, Planning, and Expediting Clerks	\$62,600	\$68,000	\$130,000	\$147,000	4.5%	1.0%
Shipping, Receiving, and Traffic Clerks	\$41,900	\$53,000	\$108,000	\$131,000	23.2%	5.2%
Stock Clerks and Order Fillers	\$33,700	\$43,000	\$87,000	\$105,000	38.7%	8.7%
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	\$38,800	\$49,000	\$100,000	\$121,000	2.6%	0.6%
Secretaries and Administrative Assistants, Except Legal, Medical	, \$49,900	\$63,000	\$128,000	\$156,000	2.7%	0.6%
Office Clerks, General	\$47,800	\$60,000	\$123,000	\$149,000	5.2%	1.2%
Other Office and Administrative Support Occupations	\$42,400	\$54,000	\$109,000	\$132,000	8.0%	<u>1.8%</u>
Weighted Mean Annual Wage	\$42,400	\$53,000	\$106,000	\$127,000	100.0%	22.5%

APPENDIX C TABLE 14 AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020 WAREHOUSE WORKER OCCUPATIONS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	2020 Avg.	Household Income Estimate 4		% of Total	% of Total	
	Worker	One	Two	Three+	Occupation	Warehouse
Occupation ³	Compensation ¹	<u>Worker</u>	<u>Workers</u>	Workers	Group 2	<u>Workers</u>
Page 2 of 2						
Installation, Maintenance, and Repair Occupations						
First-Line Supervisors of Mechanics, Installers, and Repairers	\$96,300	\$105,000	\$175,000	\$189,000	8.8%	0.2%
Automotive Service Technicians and Mechanics	\$60,300	\$65,000	\$125,000	\$141,000	2.7%	0.1%
Bus and Truck Mechanics and Diesel Engine Specialists	\$69,400	\$75,000	\$144,000	\$163,000	9.1%	0.3%
Mobile Heavy Equipment Mechanics, Except Engines	\$74,400	\$81,000	\$154,000	\$174,000	2.8%	0.1%
Industrial Machinery Mechanics	\$76,800	\$84,000	\$140,000	\$151,000	3.9%	0.1%
Maintenance Workers, Machinery	\$68,700	\$74,000	\$142,000	\$161,000	2.6%	0.1%
Maintenance and Repair Workers, General	\$56,000	\$61,000	\$116,000	\$131,000	60.3%	1.7%
Installation, Maintenance, and Repair Workers, All Other	\$63,100	\$68,000	\$131,000	\$148,000	2.9%	0.1%
Other Installation, Maintenance, and Repair Occupations	\$63,200	<u>\$69,000</u>	<u>\$131,000</u>	<u>\$148,000</u>	<u>7.0%</u>	0.2%
Weighted Mean Annual Wage	\$63,200	\$69,000	\$128,000	\$144,000	100.0%	2.8%
Production Occupations						
First-Line Supervisors of Production and Operating Workers	\$76,200	\$83,000	\$139,000	\$150,000	8.3%	0.2%
Assemblers and Fabricators, All Other, Including Team Assembl	e \$38,100	\$48,000	\$98,000	\$119,000	15.6%	0.4%
Sewing Machine Operators	\$31,700	\$40,000	\$81,000	\$99,000	3.1%	0.1%
Inspectors, Testers, Sorters, Samplers, and Weighers	\$51,800	\$56,000	\$107,000	\$121,000	27.2%	0.7%
Packaging and Filling Machine Operators and Tenders	\$36,600	\$46,000	\$94,000	\$114,000	16.8%	0.4%
HelpersProduction Workers	\$32,900	\$42,000	\$84,000	\$103,000	2.3%	0.1%
Production Workers, All Other	\$41,700	\$53,000	\$107,000	\$130,000	5.3%	0.1%
Other Production Occupations	\$46,400	\$59,000	\$119,000	\$145,000	21.4%	0.5%
Weighted Mean Annual Wage	\$46,400	\$55,000	\$107,000	\$126,000	100.0%	2.4%
Transportation and Material Mariner Occupations						
Transportation and Material Moving Occupations First-Line Supervisors of Transportation and Material Moving Wo	r ¢67.900	\$74,000	\$140,000	\$159,000	6.4%	4.0%
	or \$67,800 \$55,400	\$60,000	\$140,000	\$139,000	7.9%	5.0%
Heavy and Tractor-Trailer Truck Drivers	\$55,400 \$50,400	\$55,000	\$113,000	\$130,000	2.8%	1.8%
Light Truck or Delivery Services Drivers Industrial Truck and Tractor Operators	\$50,400 \$46,600	\$59,000	\$104,000	\$118,000	25.3%	16.0%
•		\$59,000	\$120,000	\$140,000	45.4%	28.8%
Laborers and Freight, Stock, and Material Movers, Hand Packers and Packagers, Hand	\$41,200 \$33,200	\$52,000 \$42,000	\$85,000	\$129,000	9.4%	6.0%
-						
Other Transportation and Material Moving Occupations	\$45,000 \$45,000	\$57,000 \$55,000	\$116,000 \$444,000	\$141,000 \$433,000	2.8%	1.8%
Weighted Mean Annual Wage	\$45,000	\$55,000	\$111,000	\$133,000	100.0%	63.4%

95.9%

¹ The methodology utilized by the California Employment Development Department (EDD) assumes hourly paid employees are employed full-time. EDD data is adjusted by KMA to reflect San Jose minimum wage. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2018 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to Santa Clara County as of 2019 and are adjusted by EDD to the first quarter of 2020.

³ Including occupations representing 2% or more of the major occupation group.

⁴ Household income estimated based average worker compensation and ratios between employee income and household income for the San Francicsco Bay Area identified in Table 3-6.

APPENDIX C TABLE 15 ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2018 RESIDENTIAL CARE WORKERS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	Worker Occupation Distribution Residential Care
Major Occupations (2% or more)	
Management Occupations	3.3%
Healthcare Practitioners and Technical Occupations	10.6%
Healthcare Support Occupations	27.0%
Food Preparation and Serving Related Occupations	17.9%
Building and Grounds Cleaning and Maintenance Occupations	6.0%
Personal Care and Service Occupations	22.9%
Office and Administrative Support Occupations	5.3%
Installation, Maintenance, and Repair Occupations	2.5%
All Other Worker Occupations - Residential Care	<u>4.6%</u>
TOTAL	100.0%

APPENDIX C TABLE 16
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
RESIDENTIAL CARE WORKER OCCUPATIONS
COMMERCIAL LINKAGE FEE NEXUS ANALYSIS
SAN JOSE, CA

SAN JOSE, CA	2020 Avg.	Househo	ld Income E	stimate 4	% of Total	% of Total
	Worker	One	Two	Three+	Occupation	Res. Care
Occupation ³	Compensation ¹	<u>Worker</u>	Workers	<u>Workers</u>	Group ²	Workers
Page 1 of 2						
Management Occupations						
Chief Executives	\$253,400	\$255,000	\$283,000	\$284,000	2.2%	0.1%
General and Operations Managers	\$165,700	\$169,000	\$243,000	\$243,000	32.2%	1.1%
Marketing Managers	\$203,300	\$207,000	\$275,000	\$276,000	2.9%	0.1%
Administrative Services Managers	\$145,000	\$151,000	\$224,000	\$231,000	5.9%	0.2%
Food Service Managers	\$87,400	\$95,000	\$159,000	\$172,000	7.8%	0.3%
Medical and Health Services Managers	\$147,200	\$153,000	\$227,000	\$235,000	33.4%	1.1%
Managers, All Other	\$174,500	\$178,000	\$256,000	\$256,000	2.1%	0.1%
Other Management Occupations	<u>\$153,700</u>	<u>\$156,000</u>	\$225,000	\$225,000	<u>13.6%</u>	0.4%
Weighted Mean Annual Wage	\$153,700	\$158,000	\$230,000	\$234,000	100.0%	3.3%
Healthcare Practitioners and Technical Occupations						
Registered Nurses	\$143,800	\$150,000	\$222,000	\$229,000	35.1%	3.7%
Dietetic Technicians	\$40,200	\$51,000	\$103,000	\$126,000	3.0%	0.3%
Licensed Practical and Licensed Vocational Nurses	\$69,600	\$75,000	\$144,000	\$163,000	52.0%	5.5%
Other Healthcare Practitioners and Technical Occupations	\$97,500	\$106,000	\$178,000	\$192,000	9.9%	<u>1.1%</u>
Weighted Mean Annual Wage	\$97,500	\$104,000	\$173,000	\$188,000	100.0%	10.6%
Healthcare Support Occupations						
Home Health Aides	\$37,800	\$48,000	\$97,000	\$118,000	27.5%	7.4%
Nursing Assistants	\$40,900	\$52,000	\$105,000	\$128,000	65.5%	17.6%
Medical Assistants	\$47,800	\$60,000	\$123,000	\$149,000	5.2%	1.4%
Other Healthcare Support Occupations	\$40,400	\$51,000	\$104,000	\$126,000	1.8%	0.5%
Weighted Mean Annual Wage	\$40,400	\$51,000	\$104,000	\$126,000	100.0%	27.0%
Food Preparation and Serving Related Occupations						
First-Line Supervisors of Food Preparation and Serving Workers	\$48,500	\$61,000	\$125,000	\$151,000	4.9%	0.9%
Cooks, Institution and Cafeteria	\$41,200	\$52,000	\$106,000	\$129,000	24.4%	4.4%
Food Preparation Workers	\$32,700	\$41,000	\$84,000	\$102,000	5.6%	1.0%
Combined Food Preparation and Serving Workers, Including Fast Fo		\$40,000	\$81,000	\$99,000	7.2%	1.3%
Waiters and Waitresses	\$32,600	\$41,000	\$84,000	\$102,000	8.5%	1.5%
Food Servers, Nonrestaurant	\$37,300	\$47,000	\$96,000	\$116,000	34.5%	6.2%
Dining Room and Cafeteria Attendants and Bartender Helpers	\$31,700	\$40,000	\$81,000	\$99,000	4.0%	0.7%
Dishwashers	\$31,700	\$40,000	\$81,000	\$99,000	5.9%	1.1%
Other Food Preparation and Serving Related Occupations	\$37,200	\$47,000	\$96,000	\$116,000	<u>5.1%</u>	0.9%
Weighted Mean Annual Wage	\$37,200	\$47,000	\$96,000	\$116,000	100.0%	17.9%
Building and Grounds Cleaning and Maintenance Occupations						
First-Line Supervisors of Housekeeping and Janitorial Workers	\$52,900	\$57,000	\$109,000	\$124,000	4.7%	0.3%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$38,500	\$49,000	\$99,000	\$120,000	10.7%	0.6%
Maids and Housekeeping Cleaners	\$37,400	\$47,000	\$96,000	\$117,000	81.4%	4.9%
Landscaping and Groundskeeping Workers	\$45,000	\$57,000	\$116,000	\$141,000	2.9%	0.2%
Other Building and Grounds Cleaning and Maintenance Occupations		\$49,000	\$99,000	\$120,000	0.4%	0.0%
Weighted Mean Annual Wage	\$38,500	\$48,000	\$98,000	\$118,000	100.0%	6.0%

APPENDIX C TABLE 16 AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020 RESIDENTIAL CARE WORKER OCCUPATIONS COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

	2020 Avg.	g. Household Income Estimate ⁴		% of Total	% of Total	
	Worker	One	Two	Three+	Occupation	Res. Care
Occupation ³	Compensation ¹	<u>Worker</u>	<u>Workers</u>	<u>Workers</u>	Group ²	<u>Workers</u>
Page 2 of 2						
Personal Care and Service Occupations						
First-Line Supervisors of Personal Service Workers	\$46,200	\$58,000	\$119,000	\$144,000	4.1%	0.9%
Personal Care Aides	\$31,700	\$40,000	\$81,000	\$99,000	81.3%	18.6%
Recreation Workers	\$41,700	\$53,000	\$107,000	\$130,000	10.5%	2.4%
Other Personal Care and Service Occupations	<u>\$33,400</u>	\$42,000	<u>\$86,000</u>	\$104,000	<u>4.1%</u>	0.9%
Weighted Mean Annual Wage	\$33,400	\$42,000	\$85,000	\$104,000	100.0%	22.9%
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Workers	\$71,800	\$78,000	\$149,000	\$168,000	8.1%	0.4%
Bookkeeping, Accounting, and Auditing Clerks	\$55,200	\$60,000	\$114,000	\$129,000	7.8%	0.4%
Customer Service Representatives	\$48,900	\$62,000	\$126,000	\$153,000	2.1%	0.1%
Receptionists and Information Clerks	\$39,200	\$50,000	\$101,000	\$122,000	36.1%	1.9%
Executive Secretaries and Executive Administrative Assistants	\$84,200	\$92,000	\$153,000	\$166,000	2.4%	0.1%
Medical Secretaries	\$55,600	\$60,000	\$115,000	\$130,000	3.7%	0.2%
Secretaries and Administrative Assistants, Except Legal, Medical, and	n \$49,900	\$63,000	\$128,000	\$156,000	12.8%	0.7%
Office Clerks, General	\$47,800	\$60,000	\$123,000	\$149,000	17.0%	0.9%
Other Office and Administrative Support Occupations	<u>\$48,800</u>	\$62,000	\$125,000	\$152,000	10.0%	0.5%
Weighted Mean Annual Wage	\$48,800	\$59,000	\$118,000	\$140,000	100.0%	5.3%
Installation, Maintenance, and Repair Occupations						
First-Line Supervisors of Mechanics, Installers, and Repairers	\$96,300	\$105,000	\$175,000	\$189,000	9.9%	0.2%
Maintenance and Repair Workers, General	\$56,000	\$61,000	\$116,000	\$131,000	88.0%	2.2%
Other Installation, Maintenance, and Repair Occupations	\$60,100	\$65,000	\$124,000	\$141,000	2.1%	0.1%
Weighted Mean Annual Wage	\$60,100	\$65,000	\$122,000	\$137,000	100.0%	2.5%

95.4%

¹ The methodology utilized by the California Employment Development Department (EDD) assumes hourly paid employees are employed full-time. EDD data is adjusted by KMA to reflect San Jose minimum wage. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2018 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to Santa Clara County as of 2019 and are adjusted by EDD to the first quarter of 2020.

 $^{^{\}rm 3}$ Including occupations representing 2% or more of the major occupation group.

⁴ Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 3-6.

APPENDIX C TABLE 17 INDUSTRIES REPRESENTED COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

NAICS	Representative Industries	Percent of Employment
Page 1 of 3		
Office		
541500	Computer Systems Design and Related Services	20.008%
5220A1	Credit Intermediation and Related Activities (5221 And 5223 only)	8.079%
541200	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	7.646%
511200	Software Publishers	6.826%
551100	Management of Companies and Enterprises	6.119%
621200	Offices of Dentists	5.333%
541300	Architectural, Engineering, and Related Services	5.123%
621100	Offices of Physicians	4.909%
541600	Management, Scientific, and Technical Consulting Services	4.782%
541700	Scientific Research and Development Services	4.701%
541100	Legal Services	3.455%
518200	Data Processing, Hosting, and Related Services	3.130%
517000	Telecommunications	2.591%
621300	Offices of Other Health Practitioners	2.444%
524200	Agencies, Brokerages, and Other Insurance Related Activities	1.951%
519100	Other Information Services	1.749%
813400	Civic and Social Organizations	1.602%
541900	Other Professional, Scientific, and Technical Services	1.292%
813200	Grantmaking and Giving Services	1.214%
541800	Advertising and Related Services	1.146%
524100	Insurance Carriers	1.049%
561400	Business Support Services	1.035%
813900	Business, Professional, Labor, Political, and Similar Organizations	1.008%
561100	Office Administrative Services	0.783%
561900	Other Support Services	0.723%
522200	Nondepository Credit Intermediation	0.481%
813300	Social Advocacy Organizations	0.421%
541400	Specialized Design Services	0.397%
Tech Office		
511200	Software Publishers	15.057%
517000	Telecommunications	5.715%
541500	Computer Systems Design and Related Services	44.133%
541710	Research and Development in the Physical, Engineering, and Life Sciences	10.370%
518200	Data Processing, Hosting, and Related Services	6.905%
519100	Other Information Services	17.820%

APPENDIX C TABLE 17 INDUSTRIES REPRESENTED COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

NAICS	Representative Industries	Percent of Employment
Page 2 of 3		
Retail		
441100	Automobile Dealers	4.033%
441200	Other Motor Vehicle Dealers	0.184%
441300	Auto Parts, Accessories, and Tire Stores	1.714%
442100	Furniture Stores	0.401%
442200	Home Furnishings Stores	1.057%
443100	Electronics and Appliance Stores	2.162%
444100	Building Material and Supplies Dealers	3.405%
444200	Lawn & Garden Equipment/Supplies Stores	0.176%
4450A1	Food and Beverage Stores (4451 and 4452 only)	10.057%
445300	Beer, Wine, and Liquor Stores	0.417%
446100	Health and Personal Care Stores	4.860%
447100	Gasoline Stations	1.535%
448100	Clothing Stores	5.168%
448200	Shoe Stores	2.558%
512130	Motion Picture and Video Exhibition	0.562%
448300	Jewelry, Luggage & Leather Goods Stores	0.491%
451100	Sporting Goods/Musical Instrument Stores	1.551%
451200	Book, Periodical, and Music Stores	0.462%
452000	General Merchandise Stores	0.956%
453100	Florists	0.202%
4530A1	Miscellaneous Store Retailers (4532 and 4533 only)	1.594%
453900	Other Miscellaneous Store Retailers	0.886%
532100	Automotive Equipment Rental and Leasing	0.936%
5320A1	Rental and Leasing Services (5322, 5323, and 5324 only)	0.761%
713940	Fitness and Recreational Sports Centers	2.557%
722300	Special Food Services	4.764%
722400	Drinking Places (Alcoholic Beverages)	1.250%
722500	Restaurant and Other Eating Places	39.655%
812100	Personal Care Services	3.678%
812200	Death Care Services	0.491%
812300	Drycleaning and Laundry Services	0.720%
812900	Other Personal Services	0.756%
<u>Hotel</u>		
721100	Traveler Accommodation (with Casino hotels removed)	100.00%

APPENDIX C TABLE 17 INDUSTRIES REPRESENTED COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

NAICS	Representative Industries	Percent of Employment
Page 3 of 3		
<u>Industrial</u>		
311500	Dairy Product Manufacturing	0.128%
311800	Bakeries and Tortilla Manufacturing	2.773%
311900	Other Food Manufacturing	0.710%
312100	Beverage Manufacturing	1.908%
323100	Printing and Related Support Activities	2.783%
339100	Medical Equipment and Supplies Manufacturing	7.178%
325400	Pharmaceutical and Medicine Manufacturing	0.913%
3320A1	Fabricated Metal Product Manufacturing (3321, 3322, 3325, 3326, and 3329 on	
332700	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	7.973%
3330A1	Machinery Manufacturing (3331, 3332, 3334, and 3339 only)	6.492%
334200	Communications Equipment Manufacturing	3.400%
334500	Navigational, Measuring, Electromedical, and Control Instruments Manufacturin	
335900	Other Electrical Equipment and Component Manufacturing	2.535%
339100	Medical Equipment and Supplies Manufacturing	7.178%
541700	Scientific Research and Development Services	17.927%
339900	Other Miscellaneous Manufacturing	0.888%
811100	Automotive Repair and Maintenance	11.119%
811200	Electronic Equipment Repair/Maintenance	3.707%
811300	Commercial Machinery Repair/Maintenance	0.841%
Research and De	<u>evelopment</u>	
541710	Research and Development in the Physical, Engineering, and Life Sciences	100.000%
<u>Warehouse</u>		
493100	Warehousing and Storage	100.000%
Residential Care		
623300	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	100.000%

⁽¹⁾ Employment by industry is weighted to reflect mix of industries in the City of San Jose using data from the Quarterly Census of Employment and Wages for 4th Q 2018.

NAICS = North American Industry Classification System

	Nexus Study Building Type Categories								
		Office,				Research and		Residential	Not Addressed
City Use Category	Office	High-Tech	Retail	Hotel	Industrial	Development	Warehouse	Care	in Nexus Study
Social Services Agencies	Х								
(2)									
Health and Veterinary	Х								
Services									
Health Services	Х								
Offices and Financial	X	X							
Services									
Television/radio studios	Χ								
Animal Boarding							X		
Recreation, commercial			X						
indoor									
Cannabis sales			X						
Poolroom/billiards, arcade,			X						
amusement games, card									
room									
Alcohol Sales			Х						
Pawn shop/broker			X						
Bail Bond establishment			X						
Dining Facilities			X						
Drinking Establishment			Χ						
Drive-Through Uses			Х						
Food Services			X						
Fuel Service Station			Х						
General Retail			X						
General Services			Х						
Health Recreation			X						
Public Eating			Χ						
Establishment			.,						
Selling or leasing of			Χ						
vehicles			.,						
Photo Processing, Printing			Χ						
and Publishing - in retail									
structures									
Photo Processing, Printing,					X				
Publishing - industrial									
facilities				V					
Hotel/Inn Recycling Uses				Х	X (3)				
Cleaning Establishment					X (3)				
Industry					X				
Installation or selling of					X				
vehicle accessories or					^				
services									
Manufacturing & Industrial					X				
Services					^				
R&D, Lab, Processing						Х			
Stockyard, Warehouse,		+		+		^	X (3)		
and Wholesale							Λ (0)		
Waste/ Hazardous material		+		+			X (3)		
storage							Λ (0)		
Common Carrier Depot		+		+			X (3)		
Construction/corporation		+		+			X (3)		
yard							, (0)		
Residential care/service		+						Х	
facility for seven or more								^	
persons									

APPENDIX C TABLE 18 IDENTIFICATION OF CITY USE CLASIFICATIONS BY NEXUS STUDY BUILDING TYPE (1) COMMERCIAL LINKAGE FEE NEXUS ANALYSIS SAN JOSE, CA

Г	Nexus Study Building Type Categories									
	Office, Research and Residential Not Addre									
City Use Category	Office	High-Tech	Retail	Hotel	Industrial	Development	Warehouse	Care	in Nexus Study	
Shelter/hotel supportive	000	g	. totali		aaota.	Bevelopinone		04.0	X	
housing									^	
Agriculture									Х	
Aqua culture, aquaponics,									X	
and hydroponics									^	
Stadiums, arenas,									Х	
performing arts venues										
and rehearsal space										
Cemetery									Х	
Certified Farmer's Market									X	
and Neighborhood									,	
Agriculture										
Church/religious assembly									X	
Commercial Vehicle									X	
Storage									^	
Data Center									Х	
Day Care									X	
Education and Training									X	
Energy generation facility									X	
Mineral Extraction									X	
Museum, Libraries, Parks,									X	
Playgrounds, Community									, ,	
Centers Public or Private										
Outdoor Vending									Х	
Parking									X	
Peaking Power Plant									Х	
Public, Quasi-Public and									X	
Assembly Uses										
Stand-by/backup facilities									Х	
Public Storage / Mini-									X	
Storage										
Utilities, Electrical Power									Х	
Generation										
Utilities, Power Generation									Х	
Utility Facilities									X	
Wireless communications									X	
antenna										
						0				

⁽¹⁾ This matrix is intended to serve as a general guide regarding how City use categories relate to Nexus Study building types; however, there may be instances of specific projects that, because of their unique character, another building type category would be more applicable. Buildings may house more than one use over their useful life and Nexus Study findings reflect a representative range of uses for the identified building types.

⁽²⁾ Except governmental.

⁽³⁾ With respect to industrial or warehouse/storage structures included within such facilities. Nexus Study does not address outdoor storage areas.