

Report

Commercial Linkage Fee Nexus Study

The Economics of Land Use



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City of Foster City

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1. INTRODUCTION AND EXECUTIVE SUMMARY

Background

The City of Foster City is concerned with the limited supply of housing that is affordable to lower-wage workers in the City, and previously adopted a commercial linkage fee to address this supply challenge based on analysis from 2015. A commercial linkage fee, also known as a jobs-housing linkage fee, is a type of development impact fee charged to developers of new nonresidential properties to help support affordable housing for new workers. The conceptual underpinning of the fee is that new nonresidential development creates new jobs, and some of these jobs will pay wages below what is required for a worker to afford a market-rate housing unit in the city. If the cost to construct new housing units is higher than can be supported by the rents or home prices that workers can afford to pay, the difference is considered an “affordability gap.” The nexus (or reasonable relationship) established between the projected number of lower-wage jobs created by new development, and the subsidy needed to fund this “affordability gap” and support the creation and maintenance of units that are affordable to workers in these jobs is the basis for the linkage fee.

Economic & Planning Systems (EPS) was retained in 2021 to update the City’s linkage fee calculations. EPS has completed a nexus analysis that quantifies the relationship between the growth in several nonresidential land uses, including retail/restaurant/services, office/R&D/medical office, and lodging (Commercial Land Uses) and the demand for and cost of affordable housing for the local workforce.

Assessing an impact fee, such as a linkage fee, based on an established nexus is allowed pursuant to under the State of California’s Mitigation Fee Act (AB 1600 or California Government Code sections 66000 et seq.) As a development impact fee, this linkage fee can only be charged to new development and must be based on the impact of new development on the need for resources to subsidize the development of new affordable housing. Fee revenue may be collected by the City and used to subsidize the production or preservation of affordable units for lower-income households.

Key Findings

Table 1 summarizes the maximum justifiable linkage fee by Commercial Land Use category. The methodology used to establish the maximum justifiable fees is described in the subsequent chapters of this report. Please note that these maximum fees are supported by the nexus analysis, but are likely to exceed levels that could be feasibly borne by new commercial developments. The City has the opportunity to adopt fees up to these maximum levels, and under separate cover EPS has provided analysis of the fee levels adopted by competitive cities. The “adjusted maximum” fees identified on **Table 1** reflect one rationale for adjusting the maximum fees downward, by discounting the maximum fees to reflect the current fact that only 7.9 percent of people who work in Foster City also reside in Foster City.

Table 1 Summary of Maximum Allowable Linkage Fees

Employment Category	Maximum Fee <i>per sq. ft.</i>	Adjusted Maximum [1] <i>per sq. ft.</i>
Retail/Restaurant/Services	\$757	\$59.81
Office/R&D/Medical Office	\$466	\$36.80
Lodging	\$288	\$22.75

[1] Adjusted maximum fee reflects proportion of workers who may actually reside in Foster City, based on current percentage of Foster City employees that also reside in the City.

Source: Economic & Planning Systems, Inc.

Table 2 presents the income categories that are relevant for this fee program. This study uses incomes defined by the State of California’s Department of Housing and Community Development (HCD). The number of worker households that are generated as a result of commercial development are categorized on the basis of these income levels.

Table 2 San Mateo County Income Category Definitions (2021)

Income Group and Standard Definition	HCD 2021 Maximum Income 3-Person Household
Extremely Low	≤30% AMI \$49,350
Very Low	>30% to ≤50% AMI \$82,250
Low	>50% to ≤80% AMI \$131,750
Median	>80% to ≤100% AMI \$134,650
Moderate	>100% AMI to ≤120% AMI \$161,550

Source: California Department of Housing and Community Development (HCD);

Sources

To estimate the fee, EPS relied on numerous sources of data, including the following:

- U.S. Bureau of Labor Statistics (BLS) "May 2020 National Industry-Specific Occupational Employment and Wage Estimates"
- State Department of Housing and Community Development (HCD) annual income limits for 2021
- U.S. Census Bureau American Community Survey (ACS) 5-Year Estimates (2015-2019)
- Input from City of Foster City’s staff regarding affordability levels, recently developed affordable housing projects, market assumptions, and nexus study methodology

These and other data sources are identified on the tables provided throughout this report. In addition, data from recent Foster City developments and land transactions have been combined with information collected from various market-rate and affordable housing developers to estimate appropriate development cost assumptions for use in Foster City.

Organization of Report

Following this **Introduction and Executive Summary**, this study includes the following chapters:

- **Chapter 2** summarizes the required nexus findings of the Study.
- **Chapter 3** describes the methodology used to calculate the fee.

2. REQUIRED NEXUS FINDINGS FOR FEE PROGRAM

The following section confirms that this Nexus Study contains the findings required under the Mitigation Fee Act for the establishment of a development impact fee.

Background

The City of Foster City (City) had previously adopted a commercial linkage fee based on a nexus study prepared in 2015. Given that the City is in the process of drafting a new Housing Element, as well as a number of changes in local housing supply, regional housing needs, and broader economic and housing trends, the City hired Economic & Planning Systems, Inc. (EPS) to update the affordable housing impact fee for new commercial (i.e., nonresidential) development.

Authority

This study serves as the basis for requiring development impact fees under AB 1600 legislation, as codified by the Mitigation Fee Act (California Government Code sections 66000 *et seq.*). This section of the Mitigation Fee Act sets forth the procedural requirements for establishing and collecting development impact fees. These procedures require that a reasonable relationship, or nexus, must exist between a governmental exaction and the purpose of the condition.

In 1991, the Ninth Circuit U.S. Court of Appeals upheld the City of Sacramento's nonresidential linkage fee.¹ In that case, the court found that the City of Sacramento's fee program "substantially advanced a legitimate interest." EPS is using a similar methodology to the nexus study reviewed in that case to develop the City of Foster City's fee program.

Required Nexus Findings

- Identify the purpose of the fee.
- Identify how the fee is to be used.
- Determine how a reasonable relationship exists between the fee's use and the type of development project on which the fee is imposed.
- Determine how a reasonable relationship exists between the demand for the affordable housing and the type of development project on which the fee is imposed.
- Demonstrate a reasonable relationship between the amount of the fee and the cost of the public benefit attributable to the development on which the fee is imposed.

¹ *Commercial Builders of Northern California v. City of Sacramento*, 941 F2d 872 (1991).

Purpose of Fee

The fee program established through this Nexus Study will fund the development and preservation of affordable housing in the City to serve lower-wage workers employed by new nonresidential development.

Use of Fee

The fee will be collected by the City. The funds are used to assist in the production or rehabilitation of affordable housing units and/or the acquisition of existing at-risk units in the City. The fee may also fund the studies and administration to support the fee program.

Relationship between Use of Fee and Type of Development

New commercial development in the City will generate new jobs. Some portion of the workers in those jobs will not earn wages high enough to afford rent prices necessary to support new residential development without subsidy. The linkage fee will be used to help fund this subsidy, resulting in the development of residential units affordable to the local workforce.

Relationship between Demand for Affordable Housing and Type of Project

The City and EPS have identified three Commercial Land Use categories for which a separate fee has been calculated. The proportion of lower wage workers and the number of square feet per employee for each employment category has been assessed to ensure a proper nexus is established.

Relationship between Amount of Fee and Cost of Public Benefit Attributed to New Development

EPS estimated the difference between the cost of developing new rental housing and the value of the new rental units based on rents affordable to workers at wages typical of businesses in different commercial land uses. The affordable rents yielded unit values below the cost of construction, indicating an "affordability gap." To estimate the fee for each Commercial Land Use, this gap was multiplied by the anticipated number of lower wage workers generated by the new development projects and the number of households of various income categories those workers are likely to form.

AB 602 Provisions

Assembly Bill 602 passed in the California Assembly in 2021 and was signed by the Governor. The legislation adds some new requirements for impact fees in addition to those required under AB 1600. While much of the intent of AB 602 was to clarify and limit impact fees applied to residential development, certain aspects of AB 602 may also apply to nonresidential development.

Existing Level of Service

Under Government Code 66016.5, AB 602 requires that an impact fee nexus study “identify the existing level of service for each public facility, identify the proposed new level of service, and include an explanation of why the new level of service is appropriate.” The City of Foster City wishes to use the commercial linkage fee program to generate revenues to increase the number of deed-restricted affordable housing as new workers are added to the local employment base.

The City of Foster City currently has 437 assisted affordable rental housing units for an employment base of 16,688 workers.² This represents a ratio of 0.026 assisted affordable rental units per worker. The “adjusted maximum” linkage fee levels identified herein would allow the City to subsidize a similar or greater number of affordable units per worker – 0.040 per retail worker, 0,022 per office worker, and 0.044 per lodging worker.³ These similar or greater proportions may be appropriate given the shortfall of such affordable units in the city, region, and state, and the demonstrated impacts of new commercial development on the City’s need for affordable housing.

As an example of public policy reflecting that shortfall, the State’s Regional Housing Needs Allocation (RHNA) process has indicated that Foster City should aim to produce 1,896 total housing units between 2023 and 2031, including 1,119 units priced at moderate or lower incomes, and this target would represent a significant increase in the pace of both targeted and actual affordable housing production in recent years.⁴

Collection of Fees at Previous Levels

Under Government Code 66016.5, AB 602 requires that “if a nexus study supports the increase of an existing fee, the local agency shall review the assumptions of the nexus study supporting the original fee and evaluate the amount of fees collected under the original fee.” The previously adopted commercial linkage fee nexus study was drafted in 2015, and included development cost and value assumptions that have been updated to reflect contemporary development economics. The overall costs of housing production – such as land, labor, and materials – have increased since 2015, resulting in a higher estimate of housing subsidies required for affordable units and thus a higher maximum fee. The City of Foster City has had a commercial linkage fee since

² Assisted rental unit count is from the Foster City Housing Element draft as of May 16, 2022 ([788c02cb591527e6949c74d1b529376d_APP_A - Housing Needs Assessment-5-7-22.pdf](https://www.amazonaws.com/788c02cb591527e6949c74d1b529376d_APP_A_-_Housing_Needs_Assessment-5-7-22.pdf) ([amazonaws.com](https://www.amazonaws.com/))). The employment base circa 2019 is from the US Census Bureau’s “On The Map” website as of May 9, 2022.

³ Proportions are calculated as the number of affordable units that could be subsidized by the maximum fee on a 100,000 square foot space, discounted to 7.9 percent of that figure given commute patterns to reflect the “adjusted maximum” (as shown on **Tables 9-11**) and then divided by the total number of employees that would work in a given building size (as shown on **Table 7**).

⁴ For the 2015-2023 RHNA cycle, the State’s targets for Foster City were 430 total units, including 311 units (72 percent) at moderate or lower income. Through 2021, Foster City has issued permits for 166 (roughly 52 percent) of those targeted affordable units. [Regional Housing Needs Assessment \(RHNA\)/Plan Bay Area | Foster City California](#)

2017, and has accumulated \$570,414 of such fee payments as of May 2022. The majority of this amount, \$360,580, was collected in FY 2020-2021.

Capital Improvement Plan

Under Government Code 66016.5, AB 602 requires that "large jurisdictions shall adopt a capital improvement plan as a part of the nexus study." Under Government Code 66002, "any local agency which levies a fee subject to Section 66001 may adopt a capital improvement plan, which shall indicate the approximate location, size, time of availability, and estimates of cost for all facilities or improvements to be financed with the fees." Capital improvement plans typically include specific infrastructure projects and public facilities rather than affordable housing developments, and affordable housing is not listed in the statute as the type of "facility" or "improvement" for which a capital improvement plan must be adopted. However, the City has expressed its intent to support the permitting and construction of affordable housing units as specified in the State's RHNA process, including 1,119 moderate and lower income units. These units may be located in various areas within the City's boundaries, may range from single units to larger complexes of 100 or more units, and are intended to be permitted and/or developed by 2031. This nexus study estimates the costs to develop such units, less their value as income-restricted units, which represents the housing production subsidies to be financed with the collected linkage fees.

3. METHODOLOGY AND FEE CALCULATION

Land Use Categories

The Commercial Land Uses analyzed in this study are presented in **Table 3**, along with a description of the types of businesses that are included in each category. In general, each land use category is intended to be associated with a particular type of building or land use, to which the fees can be applied. The City has asked EPS to evaluate three distinct land use categories, but the City may choose not to increase fees for all land use categories. While most land use categories are discretely associated with a particular type of building, others may be interchangeable as tenants may shift between building types (e.g., offices locating in retail space). This analysis bases its employment projections on NAICS codes associated with the most typical tenants for each land use category, as defined in **Appendix B**.

Table 3 Land Use Category Descriptions

Employment Category	Description and Examples
Retail/Restaurant/Services	Businesses selling merchandise, entertainment, and personal services to the general public. Examples include grocery stores, drug stores, clothing stores, general merchandise stores, beauty salons, and gas stations. Restaurants are also included in this category.
Office/R&D/Medical Office	Employers engaged in business activity with limited direct access from the general public. This category includes a wide range of office uses including traditional office spaces, medical offices, and advanced R&D facilities found in San Mateo County.
Lodging	Lodging or short-term accommodations for travelers, vacationers, and others and comprises establishments primarily engaged in providing short-term lodging in facilities known as hotels, motor hotels, resort hotels, and motels.

Source: Economic & Planning Systems, Inc.

Estimates of New Worker Households

The following section details the methodology for estimating the distribution of household income levels for new worker households in the City, and the number of these households that will be generated by new development in each Commercial Land Use category.

Occupational Category and Wage Distribution

The first step in determining the number of new worker households requiring affordable residential units is to associate each land use type with occupational categories and estimate the wage distribution within those categories. This estimate included the following analytical steps:

- EPS used Bureau of Labor Statistics (BLS) national data regarding industries and occupation categories to estimate the proportion of occupations likely to be represented under each land use category. For example, EPS evaluated the occupation categories for the lodging industry to determine the proportional distribution of occupations for the land use category "Lodging." North American Industry Classification System (NAICS) sector 721000 ("Accommodation") shows that 4.5 percent of the jobs in the lodging industry nationwide are taken by managers, while 27.9 percent are in the category of buildings and grounds cleaning and maintenance (see **Table B-2**). The occupational distribution for all designated employment categories is provided in **Appendix B**.
- EPS used the BLS's *National Industry-Specific Occupational Employment and Wage Estimates* for 2020 (the most recent year available) to estimate the wages earned by employees in industry sectors related to the land use categories. This BLS data set includes wage data for occupations at both the national and Metropolitan Statistical Area (MSA) levels.⁵ To account for regional wage disparities, EPS calculated wage adjustment factors, as displayed in **Table 4**, and applied these adjustment factors to the national income level for each occupation by industry sector to estimate the wages for workers in the City.
- The wages for each occupation were multiplied by 1.67, the average number of workers per working household in the City.⁶ The resulting figure represents estimated annual household income under the assumption that all workers in a household have similar earning potential. While certainly there will be some variation in wages per employee within a household, in the absence of more specific data, this analysis assumes comparable levels of education and training and thus hourly earnings among all workers in a household.

⁵ Foster City is within the San Francisco-Oakland-Hayward MSA. Wage data for the MSA are provided by occupations, aggregated for all industries, while national-level occupation wage data are broken out by industry sector (e.g., "management" workers in retail/restaurants/services industries versus in office/R&D/medical office industries).

⁶ From the Census Bureau's American Community Survey.

Table 4 Adjustment Factors - Converting National Wages to San Francisco MSA Wages

Occupation Category	US Average Wage	San Francisco-Oakland- Hayward MSA Average Wage	San Francisco-Oakland- Hayward MSA % of US Average
Management	\$126,480	\$167,810	132.7%
Business and Financial Operations	\$80,680	\$100,950	125.1%
Computer and Mathematical Science	\$96,770	\$128,210	132.5%
Architecture and Engineering	\$90,300	\$106,250	117.7%
Life, Physical, and Social Science	\$79,360	\$107,190	135.1%
Community and Social Services	\$52,180	\$68,370	131.0%
Legal Occupations	\$112,320	\$158,890	141.5%
Education, Training and Library	\$59,810	\$72,130	120.6%
Arts, Design, Entertainment, Sports, and Media	\$64,400	\$83,120	129.1%
Healthcare Practitioner and Technical	\$85,900	\$125,300	145.9%
Healthcare Support	\$32,250	\$40,480	125.5%
Protective Services	\$52,220	\$70,550	135.1%
Food Preparation and Serving	\$27,650	\$38,340	138.7%
Buildings and Grounds Cleaning and Maintenance	\$32,760	\$44,770	136.7%
Personal Care and Service	\$32,610	\$42,330	129.8%
Sales and Related Occupations	\$45,750	\$62,830	137.3%
Office and Administrative Support	\$42,390	\$55,660	131.3%
Farming, Fishing and Forestry	\$33,310	\$40,470	121.5%
Construction and Extraction	\$53,940	\$78,750	146.0%
Installation, Maintenance, and Repair	\$52,360	\$67,740	129.4%
Production	\$41,760	\$50,000	119.7%
Transportation and Material Moving	\$39,680	\$50,760	127.9%

Sources: Bureau of Labor Statistics *National Industry-Specific Occupational Employment and Wage Estimates*, May 2020; Economic & Planning Systems, Inc.

Table 5 presents an example of how household income is calculated for each occupational category and the corresponding income category for that household.

Table 5 Illustration of Employees' Household Income Calculation

Item	Source	Example
Employment Land Use Category	City of Foster City and EPS	Lodging
Industry Category	Bureau of Labor Statistics (BLS)	Accommodation (NAICS Code 721000)
Occupation Category	BLS	Buildings and Grounds Cleaning and Maintenance
Nationwide Median Income for Occupation	BLS	\$28,820
Regional Wage Adjustment Factor for Occupation	BLS and EPS	136.7%
Median Wage Estimate for the San Francisco-Oakland-Hayward MSA	BLS and EPS	\$39,386
Workers per Household	American Community Survey 5-Year Estimates 2019	1.67
Median Income per Household	Workers per HH Multiplied by Med. Annual Wage	\$65,836
Income Category for 3-person Family	California Housing and Community Development (HCD)	Very Low

Sources: City of Foster City; Bureau of Labor Statistics; California Housing and Community Development; Economic & Planning Systems, Inc.

Distribution of Workers by Land Use Type

After identifying income ranges for each occupation category, EPS summed the percentages of the households in each income bracket across all occupations represented in the land use categories. These estimates of the proportion of worker households in each income brackets by land use category are presented in **Table 6**.

As illustrated, Retail/Restaurant/Services and Lodging are expected to generate significant numbers of households at the very low-income level, while jobs in the Office/R&D/Medical Offices uses are expected to yield more households with incomes at or above moderate-income levels. See **Appendix B** for details regarding the distribution of occupations and wages within each land use type.

Employment Densities

Different land use categories operate with varying levels of employment densities. A 100,000 square foot hotel, for example, typically has fewer employees than an office building of the same size. The number of building square feet anticipated for an employee is termed the “employment density” of each land use category.

The CoStar Group is a real estate industry source for information regarding commercial development, rents, vacancies, and other performance metrics. For some employment buildings, CoStar Group collects information regarding the size of leased space and the number of employees therein, and EPS has used representative data from Foster City and the Mid-Peninsula market area to estimate the employment densities for the Retail/Restaurant/Services and Office/R&D/Medical Office. CoStar does not provide such information for Lodging uses, but the City’s 2015 nexus study for the existing commercial linkage fee contained extensive research and citations regarding employment densities, and EPS has utilized the same assumptions as that previous study for the Lodging land use category (detailed in **Appendix Table A-1**). Using these employment density assumptions, EPS estimated the number of employees that would occupy a prototype 100,000-square foot building for each land use category, as shown in **Table 7**.

Household Formation

After calculating the estimated number of new employees generated for each land use category, EPS estimated the number of households represented by these new employees, detailed in **Table 7**. To calculate new households, EPS first adjusted the number of workers expected to form new households, accounting for those workers who are typically too young (aged 16 to 19) to form their own households.⁷ The resulting adjusted estimate of new workers was divided by 1.67, which represents the average number of workers per households in Foster City.⁸

⁷ Data from the Bureau of Labor Statistics indicate this age cohort represents about 3.2 percent of the overall workforce. This proportion was applied to all industries except retail/restaurant/services industries, where the younger worker cohort represent 10.8 percent of the overall industry employment.

⁸ Based on the Census Bureau’s American Community Survey 2015-2019 data regarding the number of Foster City’s residents who are defined as “workers” in households that have workers.

Table 6 Income Distribution of Worker Households by Employment Category

Employment Category [1]	Income Level			
	Very Low 50% AMI	Low 80% AMI	Moderate 120% AMI	Above Moderate >120% AMI
Retail/Restaurant/Services	89.7%	4.2%	0.9%	5.2%
Office/R&D/Medical Office	18.7%	27.0%	2.5%	51.8%
Lodging	83.9%	11.4%	0.2%	4.5%

[1] Designation of household income assumes a 3-person household and 1.67 workers per household, based on American Community Survey data.

Sources: Bureau of Labor Statistics; California Housing and Community Development (HCD); Economic & Planning Systems, Inc.

Table 7 Household Generation Rates by Employment Category

Employment Category	Sq.Ft. per Worker ¹	Total Workers per 100k Sq.Ft.	% of Workers Forming Households ²	Total Households per 100k Sq.Ft. ^{3,4}	Households by Income Level ⁵			
					Very Low 50% AMI	Low 80% AMI	Moderate 120% AMI	Above Moderate >120% AMI
Retail/Restaurant/Services	360	278	89.2%	148	133	6	1	8
Office/R&D/Medical Office	200	500	96.8%	290	54	78	7	150
Lodging	1,000	100	96.8%	58	49	7	0	3

[1] See **Appendix Table A-1** for sources on employment densities in different land uses.

[2] U.S. Bureau of Labor Statistics data indicates that 10.8% of retail/restaurant workers are aged 16-19, but an average of only 3.2% of workers in other industries fall into that age cohort. EPS has assumed that workers aged 16-19 do not form their own households.

[3] Assumes 1.67 employees per household based on Census data; rounded.

[4] This maximum nexus-based fee calculation assumes that Foster City fees account for all worker households generated by new employers in City of Foster City, though some workers and their households may choose to reside outside of Foster City.

[5] Figures are rounded to nearest whole number.

Sources: US Census; California Housing and Community Development (HCD); Economic & Planning Systems, Inc.

Housing Development Costs and Affordability Gap

In order to calculate the maximum justifiable fee for each land use category, EPS estimated the “affordability gap” related to developing residential units affordable to very-low, low, and moderate-income households. The average household in Foster City has 2.66 people according to 2019 Five-Year Estimates from the American Community Survey (ACS). Thus, this analysis estimates the costs of providing affordable housing for a three-person household, to represent the City’s average household size (rounded). California State law (California Health and Safety Code Section 50052.5) assumes that a three-person household would occupy a two-bedroom unit, and this assumption is used in this analysis.

The assumed prototype reflects multifamily construction at 35 dwelling units to the acre with surface parking, consistent with City staff representations of the general type of multifamily projects being built in Foster City as well as the recent inclusionary housing feasibility and in-lieu fee studies prepared by EPS for Foster City. This building prototype is generally cost-effective to construct, as it makes efficient use of land and does not involve overly expensive construction materials or techniques. Based on comparable recent projects in the vicinity of Foster City, EPS assumes that the typical net square footage of a two-bedroom rental unit in Foster City will be approximately 1,000 square feet.

Development Cost Assumptions

Affordable housing development costs include land costs, direct costs (e.g., labor and materials), and indirect or “soft” costs (e.g., architecture, entitlement, marketing, etc.). Data from recent land transactions in and around Foster City have been combined with EPS’s information from various market-rate and affordable housing developers on the Peninsula to estimate appropriate development cost assumptions for use in Foster City. A developer fee is also estimated, and represents the compensation to the developer for their efforts, investment, and risk. These assumptions are shown on **Table 8** and indicate that the total cost per unit for rental apartments is about \$848,000. By necessity, this figure represents a “prototypical” project; the actual costs for a given project will vary by location and project design characteristics.

Revenue Assumptions

Assumptions must be made regarding the applicable income level (very-low, low, and moderate) and the percentage of household income spent on housing costs to calculate the values of the affordable units. In addition, translating these assumptions into unit prices and values requires estimates of operating expenses and capitalization rates. The following assumptions were used in these calculations:

- *Income Levels*—This analysis estimates the subsidy required to produce units for households falling into the very low, low, and moderate-income categories for a three-person household. While these categories are generally defined as a percentage of area median income (AMI) by HCD, in San Mateo County the dollar amount thresholds for each category are not necessarily in line with the percentage thresholds. For example, in 2021, AMI in San Mateo County for a three-person household is \$134,650 according to the HCD, but the maximum income for the low-income category (typically defined as 51 to 80 percent of AMI) is \$131,750 (see **Table 2**). This income threshold, which is clearly higher than 80 percent of AMI, was established by HCD to reflect the relatively high cost of housing found in San Mateo

County.⁹ Note also that EPS has assumed the maximum income level allowable under each nominal income category (for instance “moderate income” levels are set at 120 percent AMI, the very top of the range typically defined as 80 to 120 percent AMI). This assumption thus minimizes the development subsidy required for units at each income category.

- *Percentage of Gross Household Income Available for Housing Costs*— HCD standards on overpaying for rent indicate that households should pay no more than 30 percent of their gross income on housing cost.¹⁰ For this analysis, EPS has assumed that all households shall spend 30 percent of their gross income on housing costs, including the cost of utilities stated by the San Mateo County utility allowance schedule.
- *Operating Costs for Rental Units*—This analysis assumes that apartment operators incur annual operating costs of \$9,000 per unit for below market rate housing for units affordable for those falling into the very low and low-income categories. EPS has assumed the units for moderate-income households would have similar operating costs but would be built by for-profit builders and thus also subject to property taxes, increasing their annual operating cost to 30 percent of annual rental revenue per unit.

Affordability Gap Results

Table 8 shows the costs and values for developing rental apartments in the City for households at various income levels. Across all categories, the cost of constructing the unit is higher than the supportable value of the unit. This is considered the “affordability gap,” and serves as the basis for calculating the subsidies required to provide housing for the lower-wage worker households generated by new nonresidential development. The results of the analysis illustrate that rents affordable to households earning moderate incomes and below cannot support the costs of new construction without subsidy.

⁹ See HCD State Income Limits 2021, <https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits/docs/income-limits-2021.pdf>

¹⁰ See HCD standards for Overpayment and Overcrowding, [Building Blocks: Housing Needs - Overpayment and Overcrowding \(ca.gov\)](#)

Table 8 Affordability Gap Analysis – Rental Product Type

Item	Assumption	Mid-Density Multifamily Apartments with Surface/Deck Parking			
		Very Low 50% AMI	Low 80% AMI	Moderate 120% AMI	
Site Assumptions					
Density/Acre		35	35	35	
Gross Unit Size [1]		1,150	1,150	1,150	
Net Unit Size		1,000	1,000	1,000	
Parking Spaces/Unit		2.25	2.25	2.25	
Acquisition Cost [2]					
	<i>Total Acquisition Cost</i>	\$180 per sq. ft.	\$7,837,315	\$7,837,315	\$7,837,315
	<i>Acquisition Cost per Unit</i>		\$223,923	\$223,923	\$223,923
Direct Costs					
Surface Parking Spaces	\$5,000 per space		\$11,250	\$11,250	\$11,250
Building Costs [3]	\$325 per sq. ft.		\$373,750	\$373,750	\$373,750
	<i>Direct Cost per Unit</i>		\$385,000	\$385,000	\$385,000
Indirect Costs [4]					
	<i>Indirect Cost per Unit</i>	35% of direct costs	\$134,750	\$134,750	\$134,750
Developer Fee					
	<i>Developer Fee per Unit</i>	14% of all costs	\$104,114	\$104,114	\$104,114
Total Cost per Unit			\$847,788	\$847,788	\$847,788
Maximum Supported Home Price					
Household Income [5]			\$82,250	\$131,750	\$161,550
Revenue to Property Owner/Year [6]			\$21,279	\$36,129	\$45,069
(less) Operating Expenses per Unit/Year [7]			(\$9,740)	(\$10,186)	(\$15,993)
Net Operating Income			\$11,539	\$25,943	\$29,076
Capitalization Rate [8]			4.0%	4.0%	4.0%
Total Supportable Unit Value [9]			\$288,469	\$648,581	\$726,889
Affordability Gap			(\$559,319)	(\$199,206)	(\$120,899)

[1] A load factor of 15% is applied to the net unit size to calculate the gross unit size.

[2] Based on CoStar reported land sale transactions in Foster City.

[3] Includes costs for contingency and site improvement.

[4] Includes costs for architecture and engineering; entitlement and fees; project management; appraisal and market study; marketing, commissions, and general administration; financing and charges; and insurance.

[5] Based on 2021 income limits for a three-person household in San Mateo County.

[6] Assumes housing costs (e.g., rent and utilities) to be 30% of gross household income, and deducts \$3,396 for utilities.

[7] Vacancy rate is included in operating expenses. Affordable unit vacancy rate is assumed to be 3%. Operating expenses are assumed to be a flat \$9,000 for Low and Very Low, and 30% of revenues for Moderate units.

[8] A higher capitalization rate is assumed for affordable units compared to market rate.

[9] The total supportable unit value is determined by dividing the net operating income by the capitalization rate.

Source: CoStar; California Department Housing and Community Development; Economic & Planning Systems, Inc.

Fee Calculation

Tables 9 through **11** provide the maximum nonresidential housing fee calculations for each of the three land use categories.

The fee is calculated by the following steps:

1. Estimate the number of new households by income category generated by a prototype 100,000-square foot building in the land use category.
2. Multiply the number of households generated by the per-unit affordability gap (as calculated in **Table 8**) to determine the level of subsidy required to provide housing in Foster City for all new worker households.
3. Divide the total affordability gap by 100,000 square feet (the size of the prototype building) to determine a maximum fee per building square foot.

The “Maximum Fee per Square Foot” calculated in the following tables represents the maximum justifiable linkage fee that the City can charge for each land use category based on the required nexus findings. The City may, however, decide to adopt fees below the maximum justifiable levels based on economic or policy considerations. For example, EPS has calculated an “Adjusted Maximum” fee reflecting the idea that not every employee of newly developed workplaces will in fact reside in Foster City. According to the most recently available data from the US Census Bureau’s American Community Survey, only 7.9 percent of people who work in Foster City also live in Foster City. EPS has applied that proportion to the “Maximum Fee” to calculate an “Adjusted Maximum” for each land use category. To be clear, however, this type of adjustment is not legally required, but does yield a lower fee that is more comparable to the City’s current fee and those of nearby communities.

Table 9 Fee Calculation – Retail/Restaurant/Services

Item	Worker Households per 100k sq. ft.	Affordability Gap per household	Total Gap
<i>Table References:</i>			
	<i>Table 7</i>	<i>Table 8</i>	
Aggregate Financing Gap per 100K Sq. Ft			
Affordability Level			
Very Low Income	133	\$559,319	\$74,389,401
Low Income	6	\$199,206	\$1,195,238
Moderate	<u>1</u>	\$120,899	<u>\$120,899</u>
Total	140		\$75,705,537
Fee Calculation			
		<i>formula</i>	
Total Financing Gap		<i>a</i>	\$75,705,537
Total Building Sq. Ft.		<i>b</i>	100,000
Maximum Fee per Sq. Ft.		<i>c = a / b</i>	\$757.06
Adjustment for % of Workers Living in Foster City [1]			7.9%
Adjusted Fee per Sq. Ft.			\$59.81

[1] The US Census Bureau indicates that 7.9% of people working in Foster City also lived in Foster City in 2019 (most recent data available).

Sources: US Census Bureau "On The Map"; Economic & Planning Systems, Inc.

Table 10 Fee Calculation – Office/R&D/Medical Office

Item	Worker Households per 100k sq. ft.	Affordability Gap per household	Total Gap
<i>Table References:</i>			
	<i>Table 7</i>	<i>Table 8</i>	
Aggregate Financing Gap per 100K Sq. Ft			
Affordability Level			
Very Low Income	54	\$559,319	\$30,203,215
Low Income	78	\$199,206	\$15,538,092
Moderate	<u>7</u>	\$120,899	<u>\$846,292</u>
Total	139		\$46,587,599
Fee Calculation			
		<i>formula</i>	
Total Financing Gap		<i>a</i>	\$46,587,599
Total Building Sq. Ft.		<i>b</i>	100,000
Maximum Fee per Sq. Ft.		<i>c = a / b</i>	\$465.88
Adjustment for % of Workers Living in Foster City [1]			7.9%
Adjusted Fee per Sq. Ft.			\$36.80

[1] The US Census Bureau indicates that 7.9% of people working in Foster City also lived in Foster City in 2019 (most recent data available).

Sources: US Census Bureau "On The Map"; Economic & Planning Systems, Inc.

Table 11 Fee Calculation – Lodging

Item	Worker Households per 100k sq. ft.	Affordability Gap per household	Total Gap
<i>Table References:</i>	<i>Table 7</i>	<i>Table 8</i>	
Aggregate Financing Gap per 100K Sq. Ft			
Affordability Level			
Very Low Income	49	\$559,319	\$27,406,621
Low Income	7	\$199,206	\$1,394,444
Moderate	0	\$120,899	\$0
Total	56		\$28,801,065
Fee Calculation			
		<i>formula</i>	
Total Financing Gap		<i>a</i>	\$28,801,065
Total Building Sq. Ft. ¹		<i>b</i>	100,000
Maximum Fee per Sq. Ft.		<i>c = a / b</i>	\$288.01
Adjustment for % of Workers Living in Foster City [1]			7.9%
Adjusted Fee per Sq. Ft.			\$22.75

[1] The US Census Bureau indicates that 7.9% of people working in Foster City also lived in Foster City in 2019 (most recent data available).

Sources: US Census Bureau "On The Map"; Economic & Planning Systems, Inc.



APPENDICES:

Appendix A: Assumptions and Sources

Appendix B: Occupation Distribution by
Employment Category



APPENDIX A:
Assumptions and Sources

**Table A-1
Assumptions and Sources
Foster City Affordable Housing Commercial Linkage Fee Study; EPS #211040**

Item	Total	Unit	Source
Demographic Assumptions			
Total Employed	17,742 persons		American Community Survey 5-Year Estimates 2019
Households	12,690 households		American Community Survey 5-Year Estimates 2019
Households with Earnings	10,614 households		American Community Survey 5-Year Estimates 2019
Workers per Household with Workers	1.67 persons		American Community Survey 5-Year Estimates 2019
Foster City Workers living in Foster City	7.9% of workers		US Census Bureau "On The Map" 2019 data
Employment Density Assumptions [1]			
Retail/Restaurant/Services	360 sq. ft. per employee		CoStar Group data
Office/R&D/Medical Office	200 sq. ft. per employee		CoStar Group data
Lodging	1,000 sq. ft. per employee		City of Foster City - 2015 Commercial Linkage Nexus Study

[1] Employment densities for office and retail were derived from CoStar Group using February 2022 self-reported employment and square footage figures for Foster City office tenants and mid-San Mateo County retail tenants; lodging densities are consistent with the 2015 Nexus Study produced by Strategic Economics/Vernazza Wolfe.

Sources: U.S. Census American Community Survey 5-Year Estimates 2019; US Census Bureau "On The Map"; CoStar Group; Strategic Economics/Vernazza Wolfe "Commercial Linkage Fee Nexus Study" prepared for Foster City in November 2015; and Economic & Planning Systems, Inc.



APPENDIX B:
Occupation Distribution by Employment Category

Table B-1
Occupation and Wage Distribution - Retail/Restaurant
Foster City Affordable Housing Commercial Linkage Fee Study; EPS #211040

Retail/Restaurant/Services

Occupation Category	RETAIL/RESTAURANT [1]					
	US Total Jobs by Occupation in Industry	US Average Wage by Occupation in Industry	San Francisco MSA Wage Est. [2]	% of Industry Jobs in Occupation Category	HH Income at 1.67 workers/HH	Income Category
Management	745,200	\$90,201	\$119,676	2.83%	\$200,046	Above Moderate
Business and Financial Operations	240,670	\$64,983	\$81,309	0.92%	\$135,914	Moderate
Computer and Mathematical Science	73,500	\$97,634	\$129,354	0.28%	\$216,224	Above Moderate
Architecture and Engineering	5,120	\$79,762	\$93,851	0.02%	\$156,878	Moderate
Life, Physical, and Social Science	1,960	\$64,684	\$87,368	0.01%	\$146,041	Moderate
Community and Social Services	3,150	\$44,642	\$58,493	0.01%	\$97,775	Low
Legal Occupations	3,210	\$75,730	\$107,129	0.01%	\$179,074	Above Moderate
Education, Training and Library	10,480	\$39,107	\$47,162	0.04%	\$78,835	Very Low
Arts, Design, Entertainment, Sports, and Media	152,850	\$42,540	\$54,905	0.58%	\$91,778	Low
Healthcare Practitioner and Technical	538,760	\$67,562	\$98,550	2.05%	\$164,733	Above Moderate
Healthcare Support	84,960	\$37,325	\$46,850	0.32%	\$78,313	Very Low
Protective Services	85,410	\$36,600	\$49,448	0.32%	\$82,655	Low
Food Preparation and Serving	9,330,280	\$27,110	\$37,591	35.48%	\$62,835	Very Low
Buildings and Grounds Cleaning and Maintenance	161,820	\$29,240	\$39,959	0.62%	\$66,794	Very Low
Personal Care and Service	684,820	\$33,352	\$43,293	2.60%	\$72,367	Very Low
Sales and Related Occupations	8,284,970	\$31,869	\$43,766	31.50%	\$73,158	Very Low
Office and Administrative Support	1,546,940	\$36,160	\$47,480	5.88%	\$79,366	Very Low
Farming, Fishing and Forestry	21,160	\$31,904	\$38,762	0.08%	\$64,793	Very Low
Construction and Extraction	47,350	\$48,028	\$70,119	0.18%	\$117,208	Low
Installation, Maintenance, and Repair	805,660	\$45,334	\$58,650	3.06%	\$98,037	Low
Production	566,720	\$33,446	\$40,045	2.15%	\$66,938	Very Low
Transportation and Material Moving	2,903,210	\$30,170	\$38,594	11.04%	\$64,513	Very Low
Total or Weighted Average	26,298,200		\$45,579	100.00%	\$76,189	

[1] Includes NAICS Sectors: 44 and 45 - Retail Trade; 532000 - Rental and Leasing Services; 812000 - Personal and Laundry Services; and 722000 - Food Services and Drinking Places.

[2] Adjusted using factors calculated in Table L-4.

Sources: US Bureau of Labor Statistics, May 2020 National Industry-Specific Occupational Employment and Wage Estimates; Economic & Planning Systems, Inc.

Table B-2
Occupation and Wage Distribution - Lodging
Foster City Affordable Housing Commercial Linkage Fee Study; EPS #211040

Lodging

Occupation Category	LODGING [1]					
	US Total Jobs by Occupation in Industry	US Average Wage by Occupation in Industry	San Francisco MSA Wage Est. [2]	% of Industry Jobs in Occupation Category	HH Income at 1.67 workers/HH	Income Category
Management	70,720	\$84,050	\$111,515	4.49%	\$186,405	Above Moderate
Business and Financial Operations	26,610	\$60,120	\$75,225	1.69%	\$125,743	Low
Computer and Mathematical Science	3,110	\$66,230	\$87,748	0.20%	\$146,676	Moderate
Architecture and Engineering	490	\$65,260	\$76,787	0.03%	\$128,355	Low
Life, Physical, and Social Science	140	\$56,880	\$76,827	0.01%	\$128,421	Low
Community and Social Services	210	\$39,820	\$52,175	0.01%	\$87,214	Low
Legal Occupations	120	\$125,790	\$177,945	0.01%	\$297,447	Above Moderate
Education, Training and Library	2,300	\$38,890	\$46,901	0.15%	\$78,398	Very Low
Arts, Design, Entertainment, Sports, and Media	5,290	\$50,740	\$65,489	0.34%	\$109,470	Low
Healthcare Practitioner and Technical	330	\$51,540	\$75,180	0.02%	\$125,668	Low
Healthcare Support	6,790	\$43,730	\$54,890	0.43%	\$91,752	Low
Protective Services	33,360	\$35,080	\$47,394	2.12%	\$79,222	Very Low
Food Preparation and Serving	373,820	\$32,820	\$45,509	23.71%	\$76,071	Very Low
Buildings and Grounds Cleaning and Maintenance	439,450	\$28,820	\$39,386	27.88%	\$65,836	Very Low
Personal Care and Service	117,630	\$31,830	\$41,318	7.46%	\$69,065	Very Low
Sales and Related Occupations	45,840	\$43,280	\$59,438	2.91%	\$99,354	Low
Office and Administrative Support	300,620	\$31,000	\$40,704	19.07%	\$68,040	Very Low
Farming, Fishing and Forestry	810	\$33,130	\$40,251	0.05%	\$67,283	Very Low
Construction and Extraction	3,760	\$52,220	\$76,239	0.24%	\$127,438	Low
Installation, Maintenance, and Repair	90,440	\$39,990	\$51,736	5.74%	\$86,481	Low
Production	34,450	\$28,820	\$34,507	2.19%	\$57,680	Very Low
Transportation and Material Moving	20,110	\$30,480	\$38,991	1.28%	\$65,176	Very Low
Total or Weighted Average	1,576,400		\$46,807	100.00%	\$78,242	

[1] Includes NAICS Sector: 721000 - Accommodation.

[2] Adjusted using factors calculated in Table L-4.

Table B-3
Occupation and Wage Distribution - Office
Foster City Affordable Housing Commercial Linkage Fee Study; EPS #211040

Office/R&D/Medical Office

Occupation Category	OFFICE [1]					
	US Total Jobs by Occupation in Industry	US Average Wage by Occupation in Industry	San Francisco MSA Wage Est. [2]	% of Industry Jobs in Occupation Category	HH Income at 1.67 workers/HH	Income Category
Management	3,016,930	\$147,951	\$196,297	8.39%	\$328,124	Above Moderate
Business and Financial Operations	4,670,610	\$85,321	\$106,757	12.98%	\$178,451	Above Moderate
Computer and Mathematical Science	3,290,160	\$99,630	\$131,999	9.14%	\$220,645	Above Moderate
Architecture and Engineering	1,116,590	\$90,180	\$106,109	3.10%	\$177,368	Above Moderate
Life, Physical, and Social Science	476,400	\$86,397	\$116,694	1.32%	\$195,062	Above Moderate
Community and Social Services	342,530	\$51,711	\$67,756	0.95%	\$113,258	Low
Legal Occupations	842,240	\$114,650	\$162,186	2.34%	\$271,105	Above Moderate
Education, Training and Library	64,470	\$60,824	\$73,352	0.18%	\$122,613	Low
Arts, Design, Entertainment, Sports, and Media	914,120	\$72,567	\$93,661	2.54%	\$156,561	Moderate
Healthcare Practitioner and Technical	2,731,880	\$104,106	\$151,856	7.59%	\$253,838	Above Moderate
Healthcare Support	1,368,800	\$38,458	\$48,272	3.80%	\$80,689	Very Low
Protective Services	890,140	\$35,519	\$47,986	2.47%	\$80,212	Very Low
Food Preparation and Serving	167,730	\$29,816	\$41,344	0.47%	\$69,109	Very Low
Buildings and Grounds Cleaning and Maintenance	2,082,160	\$33,071	\$45,195	5.79%	\$75,547	Very Low
Personal Care and Service	189,260	\$32,513	\$42,204	0.53%	\$70,547	Very Low
Sales and Related Occupations	2,476,370	\$71,548	\$98,260	6.88%	\$164,247	Above Moderate
Office and Administrative Support	8,041,720	\$42,578	\$55,906	22.35%	\$93,451	Low
Farming, Fishing and Forestry	23,530	\$35,268	\$42,849	0.07%	\$71,625	Very Low
Construction and Extraction	305,450	\$53,061	\$77,467	0.85%	\$129,491	Low
Installation, Maintenance, and Repair	952,540	\$52,076	\$67,373	2.65%	\$112,618	Low
Production	829,890	\$36,921	\$44,206	2.31%	\$73,894	Very Low
Transportation and Material Moving	1,184,580	\$33,282	\$42,575	3.29%	\$71,167	Very Low
Total or Weighted Average	35,978,100		\$95,917	100.00%	\$160,331	

[1] Includes NAICS Sectors: 51 - Information; 52 - Finance and Insurance; 53 - Real Estate and Rental and Leasing (excluding 532000 -Rental and Leasing Services); 54 - Professional, Scientific, and Technical Services; 55 - Management of Companies and Enterprises; 561000 - Admin. and Support Services; 621100 - Offices of Physicians; 621200 - Offices of Dentists; 621300 - Offices of Other Health Practitioners; 621400 - Outpatient Care Centers; and 621500 - Medical and Diagnostic Laboratories.

[2] Adjusted using factors calculated in Table L-4.