



MEMORANDUM

To: Leelee Thomas and Molly Kron, County of Marin
From: Strategic Economics and Vernazza Wolfe Associates
Date: February 18, 2023
Project: Marin Inclusionary Study
Subject: Commercial Linkage Fee Study

I. INTRODUCTION AND METHODOLOGY

Purpose and Background

The County of Marin, along with six of the jurisdictions within the County, are collaborating on a regional effort to implement or update existing affordable housing policy tools, namely inclusionary zoning and commercial linkage fees. Some of the jurisdictions currently have inclusionary zoning and/or commercial linkage fee programs they intend to review and update as necessary, while others are establishing new programs. Together, the seven jurisdictions have retained Strategic Economics and Vernazza Wolfe Associates (the Consultant Team) to study and offer recommendations for both these policies.

This memo fulfills Task 4 of the study, which includes an analysis of commercial linkage fees in the seven participating jurisdictions. Currently, three of the seven jurisdictions charge commercial linkage fees, while the remaining four may enact fees based on the results of this study. A commercial linkage fee is a type of impact fee that charges new commercial development for its role in creating new demand for affordable housing. It is based on the finding of a “rational nexus” between the new employment created by commercial development, and the accompanying need for affordable housing for new worker households. There are two main parts to the analysis:

1. The nexus analysis establishes the linkage between new jobs and the needed affordable housing.
2. The affordability gap analysis quantifies the shortfall between what employee households can afford and what new housing costs to build. The affordability gap analysis was performed as part of the In-lieu Fee Study (Task 3) and is summarized in Section IV of this report.

The results of the nexus findings and the affordability gap analysis establish the maximum fees that can be charged on new development projects.

It is important to note that the analysis relies on occupational wage data from the California Employment Development Department collected in December 2019. It does not capture the effects of the COVID-19 pandemic on local employment and wages since then.

The Nexus Concept

Many commercial developments are associated with jobs that pay wages that are insufficient to afford local housing costs. A nexus study determines the justifiable commercial linkage fee that might be charged on development based on the need for affordable housing that new development projects create. To establish this relationship, a nexus analysis quantifies any increase in demand for affordable housing that accompanies new commercial development, and the additional funding required to address the uptick in demand. The increase in demand is a result of the net gain in employment directly attributable to the new commercial space that is built.

The magnitude of the nexus, and hence the maximum justifiable fee, depends on the number and types of jobs created and the prevailing cost of providing housing for the new worker households. The ability of the new workers to pay for housing costs is linked to their occupations (and hence salaries). Some of the new workers will have household incomes below the market prices for new homes and would qualify for income-restricted affordable housing. This study quantifies the demand for housing created at several household income levels and estimates the “affordability gap” between what worker households can afford to pay (to rent or to buy) and the actual costs of building new housing.

Methodology and Report Organization

To perform the nexus analysis, the Consultant Team used an established methodology described below to calculate the relationship between new commercial development and household incomes of employees, which then determines the employees' need for affordable housing. These steps provide the rationale for calculating the maximum justified commercial linkage fee that could be levied on commercial development. An overview of the methodology and contents of the report is provided below. There are ten steps to calculate the maximum nexus fees, which are covered in Section II, Section III, and Section IV of this report. However, most jurisdictions do not implement the maximum fee levels. There are multiple policy considerations that are taken into account, including market factors, the commercial linkage fees enacted in other similar communities, and the potential impact on development. These policy issues are discussed in Section V followed by recommendations for setting or updating the fee levels. Finally, Section VI outlines the fee proposal to be taken up by the jurisdictions based upon this study and follow-up collaboration with planning staff in the jurisdictions. To satisfy the requirements of recently passed state legislation (AB 602), this section provides further justification on the specific fee proposal under consideration.

STEPS 1-6: COMMERCIAL LINKAGE FEE NEXUS ANALYSIS (SEE SECTION II)

Step 1. Define commercial “land use prototypes” that represent broad categories of new commercial development in Marin County.

The purpose of defining prototypes is to estimate future employment linked to various categories of commercial space. The land use prototypes are used to estimate the amount of employment generated from commercial development in the county. Three land use prototypes were selected for the nexus analysis, based on common categories of commercial development in Marin County: 1) Office, R&D, and medical office uses; 2) Retail, restaurants, and services; and 3) Hotel.

Each land use prototype is assumed to be 100,000 square feet in floor area. This number was chosen not because it is necessarily typical of new commercial development, but rather as a round number to

simplify the calculations in the steps below. (In Section IV, more typical prototypes are designated to evaluate feasibility.)

Step 2. Estimate the number of workers that will work in the new commercial space.

The Consultant Team estimated the employment density for each prototype based on national survey data on employment density for commercial land uses and other sources. The employment density is expressed as the number of square feet of building area per worker.¹ For example, a building prototype of 100,000 sf and employing 100 workers would have an employment density of $100,000 / 100 = 1,000$ square feet per worker.

Step 3. Estimate the number of new households represented by these new workers.

Since there are multiple wage earners in a household, the number of new workers must be translated into a number of households. This adjustment is based on the average number of wage-earners per worker household for Marin County (1.60), estimated from the U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019.

Step 4. Estimate wages of new workers.

The first step in calculating employee wages is to identify industries that are typically associated with each prototype. Using industry data from the U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), industries were identified that are associated with each land use category. The next step is to identify all the occupations that are associated with each industry based on data provided by the U.S. Bureau of Labor Statistics (BLS). The national BLS occupational matrix is then calibrated to match the county's employment mix by weighting the national employment distribution to reflect the distribution of employment by industry within Marin County. Finally, the average wage by worker is calculated using data on average annual wages by occupation in the San Francisco-Oakland-Berkeley Metropolitan Statistical Area from the Bureau of Labor Statistics.

Step 5. Estimate household income of worker households.

Worker wage estimates from the previous step are then converted to household incomes. This step assumes that the income of the second wage-earner is similar to the wage of the first wage-earner. According to the U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019, there are 1.60 wage-earners per worker household in Marin County. Individual worker wages are therefore multiplied by 1.60 to represent household incomes.

Step 6. Calculate the number of households that would be eligible for affordable housing divided into relevant income categories.

The average household size in Marin is 2.4 persons, based on the US Census, American Community Survey 5-Year Estimates, 2015-2019. Because household income tables are organized by whole numbers, the average household size was rounded down to 2 persons. Thus, the income groups are defined for a household size of two persons and based on standard household income categories used

¹ The analysis takes into account the effects of physical distancing and remote work on employment density by estimating slightly higher assumptions of square feet per employee in office/R&D buildings than were typical before the COVID-19 pandemic.

in California. The income categories analyzed include very low-, low-, and moderate-income households.²

STEPS 7-9: CALCULATION OF THE HOUSING AFFORDABILITY GAP (SEE SECTION III)

The affordability gap represents the difference between what households can afford to pay for housing and the development cost of new housing. As part of the In-lieu Fee Study Calculation memo already submitted to participating jurisdictions, the Consultant Team analyzed the affordability gap of new rental and for-sale housing units. The In-lieu Fee Study identified the affordability gap for one rental prototype (rental stacked flats) and two for-sale housing prototypes (condo townhomes and single-family subdivision units) for very low-, low-, and moderate-income households. The affordability gap findings of this previous analysis were applicable here because the household incomes of new worker households identified in Step 5 align with the household income categories that were considered in that analysis. The steps below describe how the affordability gap analysis from the In-lieu Fee Study was adapted for this analysis.

Step 7. Estimate affordable rents and housing prices for households in the targeted income groups.

As part of the In-lieu Fee Study, the affordable rent levels and for-sale housing prices were estimated for each of the worker household income categories described above. Households with incomes in the very low-income range are assumed to occupy rental housing. Households in the low- and moderate-income ranges are assumed to require a combination of rental and for-sale housing. The respective rents and sales prices that are affordable to these households were based on the income limits used by the Marin Housing Authority and the California Department of Housing and Community Development.

Step 8. Estimate the development cost of new housing.

As part of the In-lieu Fee Study, the Consultant Team estimated the typical development costs of new units in rental apartment, townhome condo, and single family subdivision developments.

Step 9. Calculate the affordability gap.

The affordability gap is calculated for each of the three income categories. Very low-income households are assumed to be renters, so the affordability gap is the difference between the cost of developing new rental housing and what those households can afford to pay, based on the gap for the rental prototype analyzed in the In-lieu Fee Study. Since low-income and moderate-income households are expected to include a mix of renters and homeowners, the overall gap per household for these income categories is calculated as the average of the three affordability gaps for all three housing types that were considered in the In-lieu Fee Study.

To estimate the total affordability gap for each commercial land use prototype, the total number of very low-, low-, and moderate-income new worker households for each prototype is multiplied by the corresponding affordable housing gap figure.

² The occupation and wage analysis found no extremely low-income households. These households are defined as earning less than 30 percent of area median income and do not typically earn wages from permanent employment.

STEP 10: CALCULATION OF MAXIMUM LINKAGE FEES (SEE SECTION IV)

Step 10. Calculate maximum justifiable commercial linkage fees for each prototype.

For each category of land use, the maximum fee per square foot is the total affordability gap calculated in Step 9 divided by the floor area of the land use prototype (100,000 square feet for each).

MARKET FACTORS, FEASIBILITY, AND OTHER POLICY CONSIDERATIONS (SECTION V)

This section of this report contains a discussion and analysis of policy considerations jurisdictions should review before enacting a commercial linkage fee. Typically, a commercial linkage fee is set at a level significantly below the maximum justifiable fee determined in the nexus study. Thus, considerations for setting appropriate fee levels include the impact of fees on the total development costs of typical commercial projects. Jurisdictions will also want to be cognizant of similar linkage fees charged in nearby or comparable cities as well as the amount the commercial linkage fee will raise their existing municipal fees. To facilitate an analysis of these considerations, the Consultant Team created a set of illustrative “fee scenarios” to highlight the fees’ impact on development costs and the existing set of municipal fees for each jurisdiction. These fee scenarios were tested on three development prototypes representative of the three commercial land uses that were evaluated in the nexus study. These “feasibility prototypes” were created based on recent and proposed commercial development projects in Marin County, and in consultation with local developers. Following this analysis is a section with recommendations for setting the fees, as well as a brief analysis of the potential revenues that could be generated by implementing the fee recommendations.

UNIFIED FEE PROPOSAL AND FULFILLING STATE REQUIREMENTS FOR ADOPTION (SECTION VI)

The final section of the report considers the commercial linkage fee program to be formally proposed by the seven jurisdictions based on the recommendations in Section V. To establish more consistency and uniformity across jurisdictions, each of the jurisdictions plans to propose the same schedule of fees in their respective communities. The section first includes an overview of the fees in comparison to the linkage fees currently in place in some of the jurisdictions. Based on the unified fee proposal, Strategic Economics estimated the potential affordable housing revenues that could be raised over a five year period. Strategic Economics also performed further analysis on the unified fee proposal to fulfill the requirements of recently passed state legislation (AB 602) relating to impact fees imposed on new development. As required by AB 602, Strategic Economics summarized the revenues collected from each of the three existing fee programs and provided a justification for the new level of service advanced by the new fee program. Finally, the section concludes with a discussion of the purpose of these fees and the role of new commercial development to contribute to funding affordable housing in Marin County.

II. COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

This section describes each step of the nexus analysis in detail, including Steps 1 through 6 outlined in the previous section.

Step 1: Commercial Prototypes

This study examined the jobs-housing linkage for three commercial land use prototypes, which are described below. These prototypes were selected because they are the most common categories of commercial development in Marin County, based on a review of recently built, planned, and proposed projects.³

1. **Office/ R&D/ Medical Office:** Includes professional and business services offices, medical/dental office, and research and development.
2. **Retail/Restaurants/Services:** Includes retail stores, eating and drinking places (cafes, restaurants, bars, etc.), and personal and financial services such as salons, drycleaners, retail banks.
3. **Hotel:** Includes full-service hotels, limited-service hotels, motels, and other lodging.

The nexus analysis is calculated based on a 100,000 square foot building, but the actual development projects that are likely to occur in Marin will be smaller. ⁴ Since the fee is calculated on a per-square-foot basis, the fee would be proportional to the size of the development project.

Step 2: Number of Workers

For each building prototype, an average employment density was applied based on a combination of national survey data for existing commercial buildings and a review of other recently completed linkage fee nexus studies. Figure 1 summarizes the available research on employment density by building type that formed the basis for establishing average employment density assumptions for the nexus model.

Figure 2 shows the assumptions on worker density for each commercial land use prototype, measured by the average number of square feet per worker. A lower number of square feet per worker implies a higher worker density, which leads to a higher estimate of worker households. For each prototype, the Consultant Team selected an employee density number in the middle of the range; this is a more conservative approach to avoid overestimating the maximum linkage fee amount. The density factors represent the average density for the prototypes; individual projects and buildings may have a greater or lower worker density than the average.

The employee density factor is multiplied by the prototype's floor area (100,000 square feet) to calculate the total number of workers in each commercial prototype. The density assumption is used to generate the total number of direct workers occupying the commercial space in each prototype.

³ Some commercial developments will lie outside the three major categories of land use analyzed in this study. Examples of such land uses include industrial projects, assisted living facilities, and child care centers. Jurisdictions may still charge a commercial linkage fee on these land uses provided the applicant for development supplies estimates of jobs and wages that accompany the new development.

⁴ Section V contains financial feasibility testing on a more detailed set of prototypes that would be typical of new development in Marin County. These feasibility prototypes vary in size and contain additional details such as parking, number of floors, and land area.

- **Office/Medical Office/R&D.** The average density assumption for office is 375 square feet per worker. This is a blended average that represents a combination of business office spaces (estimated to be approximately 300 square feet per worker in the Bay Area), nonprofit offices, medical office, (typically estimated at approximately 500 square feet per worker) and R&D, (approximately 350 square feet per worker).⁵ Note that there are limited sources on R&D employee density, so the R&D density assumption is based on qualitative research from previous work in the Bay Area conducted by the Consultant Team.
- **Retail/Restaurants/Services.** Worker density varies widely for this category depending on the specific use (food service, grocery stores, dry goods retail, and services all have different average densities). Worker densities are typically higher for independent retailers and tenants in smaller-scale neighborhood centers and urban locations than in large-scale big box retail (around 600 square feet per worker). For this reason, Strategic Economics used a slightly higher density number of 450 square feet per worker.
- **Hotel.** The average employment density assumption for visitor accommodations is 0.70 workers per room (or approximately 880 square feet per worker).⁶ This density is consistent with the Vallen and Vallen estimate for select service mid-scale hotels, which are in between full-service “luxury” properties and economy properties. Select service hotels are typical of new development in Marin.

⁵ In the last decade, there has been a trend towards an increasing density of workers (225-250 square feet per worker) occupying open format office spaces. Since the onset of the COVID-19 pandemic, there is anecdotal evidence suggesting that the trend may be reversing as firms implement measures to create more physical distancing and allow employees to work from home. For this reason, the Consultant Team used a density number for business office that represents a return to conventional office spaces rather than open layouts.

⁶ The assumption of 880 square feet per worker for visitor accommodations assumes an average 0.70 workers per hotel room and an average room size of 615 square feet of gross building area per room.

FIGURE 1. EMPLOYMENT DENSITY DATA AND SOURCES

Employee Density Figure	Source
Visitor Accommodations	
1.5 workers per full-service (luxury) hotel room	Vallen and Vallen, "Chapter 1: The Traditional Hotel Industry," Check-In, Check-Out, 2012
0.5 to 1.0 workers per room for "in-between" hotels	Vallen and Vallen, "Chapter 1: The Traditional Hotel Industry," Check-In, Check-Out, 2012
As few as 0.25 workers per room for "budget" hotels	Vallen and Vallen, "Chapter 1: The Traditional Hotel Industry," Check-In, Check-Out, 2012
Retail	
605 square feet per worker	A.C. Nelson, "Reshaping Metropolitan America" (based on calculations from EIA survey)
368 square feet per worker	"San Francisco Jobs Housing Nexus Analysis", Keyser Marston Associates, 2019
400 square feet per worker	Study Session: City of Emeryville Impact Fees, Helen Bean, Director, Economic Development and Housing Department, 2014.
Office	
306 square feet per worker	Building Owners and Managers Association Survey, 2012
434 square feet per worker	Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey, Rev. 2006
300 square feet per worker	A.C. Nelson, "Reshaping Metropolitan America," 2013
250-350 square feet per worker	San Mateo County Housing Needs Study, Economic & Planning Systems, 2006
300 square feet per worker	Jobs Housing Impact Fee Draft Nexus Study: City of Napa, CA, Vernazza Wolfe Associates Inc., 2011
312.5 square feet per worker	Housing Impact Fee Nexus Study: Mountain View, CA, KMA, 2012
Medical Office	
484 square feet per worker for outpatient care	Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey: Building Characteristics Tables, Revised June 2006;
513 square feet per worker for inpatient care	Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey: Building Characteristics Tables, Revised June 2006;

Note: Many studies of worker density are older. Because information on worker densities is not collected by any public agency, estimates must rely on other studies, which are not routinely done.

FIGURE 2. EMPLOYMENT DENSITY BY PROTOTYPE

Commercial Prototype	Prototype Size	Average Worker Density	Number of Workers in Prototype
Office/Medical Office/R&D	100,000 sq. ft.	375 sq. ft. per worker	267 workers
Retail/Restaurant/Services	100,000 sq. ft.	450 sq. ft. per worker	222 workers
Hotel	100,000 sq. ft.; 163 rooms*	880 sq. ft. per worker; 0.70 workers per room	114 workers

* Assumes the gross building area is 615 square feet per room.
Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

Step 3: Number of Worker Households

Based on the total number of workers directly employed in the prototypes, the Consultant Team estimated the total number of worker households. The number of worker households is calculated by dividing the number of workers by the average number of wage-earners per household in Marin County. Based on data from the U.S. Census American Community Survey 5-Year Estimates, 2015-2019, there is an average of 1.60 workers per household in Marin. The calculation of total new worker households is shown in Figure 3 below, ranging from 71 for hotel to 167 for office.

FIGURE 3. NUMBER OF WORKER HOUSEHOLDS BY PROTOTYPE

Commercial Prototype	Number of New Workers	Workers per Household	Number of New Worker Households
Office/ Medical Office/ R&D	267	1.60	167
Retail/Restaurant/Services	222	1.60	139
Hotel	114	1.60	71

Sources: US Census, American Community Survey 3-Year Estimates, 2015-2019; Strategic Economics and Vernazza Wolfe Associates, 2021.

Step 4: Worker Wages

The first step in calculating employee wages is to establish a list of the industries associated with each prototype (as defined by the North American Industry Classification System, or “NAICS”). Using industry data from Quarterly Census of Employment and Wages (QCEW), industries were associated with each land use prototype. Figures 4 through 6 below list the industries associated with each prototype.

FIGURE 4. DEFINITION OF INDUSTRIES FOR OFFICE/MEDICAL OFFICE/R&D PROTOTYPE

NAICS Code	Description	Percent Total Workers in Prototype
5617	Services to buildings and dwellings	9.2%
5511	Management of companies and enterprises	8.8%
5415	Computer systems design and related services	6.5%
6214	Outpatient care centers	6.4%
5416	Management and technical consulting services	5.8%
6211	Offices of physicians	4.9%
6212	Offices of dentists	3.9%
5112	Software publishers	3.9%
5412	Accounting and bookkeeping services	3.9%
5313	Activities related to real estate	3.0%
5239	Other financial investment activities	3.0%
5413	Architectural and engineering services	2.9%
5611	Office administrative services	2.9%
5411	Legal services	2.7%
5221	Depository credit intermediation	2.3%
5311	Lessors of real estate	2.1%
5613	Employment services	2.1%
8133	Social advocacy organizations	2.0%
5419	Other professional and technical services	1.8%
8134	Civic and social organizations	1.7%
6213	Offices of other health practitioners	1.7%
5616	Investigation and security services	1.6%
5418	Advertising, pr, and related services	1.5%
5242	Insurance agencies and brokerages	1.4%
5619	Other support services	1.2%
5312	Offices of real estate agents and brokers	1.2%
5417	Scientific research and development services	1.1%
5111	Newspaper, book, and directory publishers	1.0%
5414	Specialized design services	1.0%
5231	Securities and commodity contracts brokerage	0.9%
5222	Nondepository credit intermediation	0.9%
6117	Educational support services	0.8%
8139	Professional and similar organizations	0.8%
3345	Electronic instrument manufacturing	0.7%
8132	Grantmaking and giving services	0.7%
5223	Activities related to credit intermediation	0.7%

FIGURE 4. DEFINITION OF INDUSTRIES FOR OFFICE/ MEDICAL OFFICE/ R&D PROTOTYPE, CONTINUED

NAICS Code	Description	Percent Total Workers in Prototype
5615	Travel arrangement and reservation services	0.7%
6114	Business, computer and management training	0.4%
5241	Insurance carriers	0.4%
5182	Data processing, hosting and related services	0.4%
5191	Other information services	0.3%
5173	Wired and wireless telecommunications carriers	0.3%
7114	Agents and managers for public figures	0.2%
7113	Promoters of performing arts and sports	0.1%
5122	Sound recording industries	0.1%
3391	Medical equipment and supplies manufacturing	0.1%
3344	Semiconductor and electronic component mfg.	0.02%
Total		100%

Source: United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2019; Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 5. DEFINITION OF INDUSTRIES FOR RETAIL/RESTAURANTS/SERVICES PROTOTYPE

NAICS Code	Description	Percent Total Workers in Prototype
7225	Restaurants and other eating places	38.6%
4451	Grocery stores	13.3%
4411	Automobile dealers	4.5%
4533	Used merchandise stores	3.7%
4441	Building material and supplies dealers	3.2%
8121	Personal care services	3.2%
4481	Clothing stores	3.1%
4422	Home furnishings stores	2.9%
4522	Department stores	2.9%
4461	Health and personal care stores	2.9%
4523	General merchandise stores, including warehouse clubs and supercenters	2.6%
4511	Sporting goods and musical instrument stores	2.3%
5121	Motion picture and video industries	1.6%
7223	Special food services	1.6%
8129	Other personal services	1.6%
4431	Electronics and appliance stores	1.5%
4471	Gasoline stations	1.3%
4539	Other miscellaneous store retailers	1.2%
8123	Drycleaning and laundry services	1.1%
4541	Electronic shopping and mail-order houses	0.8%
4413	Auto parts, accessories, and tire stores	0.8%
4452	Specialty food stores	0.7%
4532	Office supplies, stationery, and gift stores	0.6%
4512	Book stores and news dealers	0.5%
4421	Furniture stores	0.5%
7224	Drinking places, alcoholic beverages	0.5%
5321	Automotive equipment rental and leasing	0.5%
4442	Lawn and garden equipment and supplies stores	0.3%
4453	Beer, wine, and liquor stores	0.3%
4482	Shoe stores	0.3%
5322	Consumer goods rental	0.3%
4483	Jewelry, luggage, and leather goods stores	0.2%
4412	Other motor vehicle dealers	0.2%
8122	Death care services	0.2%
4531	Florists	0.1%
4542	Vending machine operators	0.02%
4543	Direct selling establishments	0.02%
Total		100%

Source: United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2019; Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 6. DEFINITION OF INDUSTRIES FOR HOTEL PROTOTYPE

NAICS Code	Description	Percent Total Workers in Prototype
7211	Traveler accommodation	100%

* Note: Unlike other prototypes, the visitor accommodations prototype only includes one NAICS industry category.

Source: United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2019; Strategic Economics, 2020.

The next step is to identify all the occupations that are associated with each industry based on data provided by the U.S. Bureau of Labor Statistics (BLS). The best available data is at the national level; state level industry-occupation data exist but do not include all relevant industries. The national BLS occupational matrix is calibrated to match the county’s employment mix by weighting the national employment distribution to reflect the distribution of employment by industry within Marin County. Finally, the average wage by worker is calculated using data on average annual wages by occupation in the San Francisco-Oakland-Berkeley Metropolitan Statistical Area (the smallest geographic level at which wage data are available) from the Bureau of Labor Statistics.

Figure 7 below summarizes the results of these calculations, computing the average weighted wages⁷ for each prototype. As shown, office/medical office/R&D employees have the highest average wage of the three prototypes, reflecting a greater mix of higher salary occupations in that use. The lowest average annual wages are in the retail/restaurants/services category. Due to the level of detail associated with the data on occupational wages, the full occupation mix in each land use prototype are shown in Figures 35 through 37 at the end of this report.

FIGURE 7. AVERAGE ANNUAL WAGE BY PROTOTYPE

Commercial Prototype	Weighted Average Annual Wage (a)
Office/Medical Office/R&D	\$85,441
Retail/Restaurant/Services	\$37,493
Hotel	\$46,473

(a) Average wages are weighted to account for the proportion of jobs in each occupational wage category.

Source: United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2019; United States Bureau of Labor Statistics, Occupational Employment and Wage Estimates, 2019; Strategic Economics and Vernazza Wolfe Associates, 2021.

⁷ The weighted average wage accounts for the proportion of jobs in each occupational category.

Step 5: Household Incomes

Based on the employee wage calculations discussed above, household incomes are estimated for each land use prototype. As a standard assumption for nexus studies, the average worker wage is multiplied by the number of wage-earners per household to calculate the annual household income. According to the U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019, the average number of wage-earners per household in Marin County is 1.6. The average annual wage per employee within each occupation was multiplied by 1.6 to determine annual average household income.

Step 6: Household Income Categories

Employee households are then categorized as extremely low-, very low-, low-, moderate-, or above moderate-income based on standard income definitions based on percentage of Area Median Income (AMI).

According to the U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019, the average household size in Marin County is 2.4. To reference the available income tables, this has been rounded to 2, the nearest whole number. The income categories for very low-, low-, and moderate-income households, are therefore based on the household size of two persons, using the income thresholds shown in Figure 8.⁸ Note that this analysis uses 2020 income thresholds to match up with the affordability gap calculations which were also based on 2020 income figures.

FIGURE 8. AMI LEVELS FOR 2-PERSON HOUSEHOLDS IN MARIN COUNTY, 2020

Income Category	Maximum Income
Area Median Income (100% AMI)	\$114,500
Extremely Low-income (<30% AMI)	\$34,350
Very Low-income (31-50% AMI)	\$57,250
Low-income (51-80% AMI)	\$91,600
Moderate-income (81-120% AMI)	\$137,400

Source: Marin Housing Authority, 2020. Strategic Economics and Vernazza Wolfe Associates, 2021.

Using the income categories described above, the new worker households were sorted into income groups. As shown in Figure 9 below, the distribution of workers within each income group varies markedly between the prototypes. The majority of employment in retail/restaurants/services is in the very low-income group, while the majority of hotel workers are in the low-income group. Employment in office/medical office/R&D tends to be distributed more in the higher income groups. According to the results of this analysis, the primary affordable housing need associated with these prototypes is at the very low-income, low-income, and moderate-income levels. While the results of this analysis did not demonstrate demand from extremely low-income worker

⁸ Rounding to two persons per household is a conservative estimate. Using a larger household size assumption would result in a higher maximum commercial linkage fee calculation.

households associated with new commercial development, it is understood that there are worker households in Marin County that require extremely low-income housing.

FIGURE 9. NUMBER OF WORKER HOUSEHOLDS BY INCOME CATEGORY

Land Use	Number of Worker Households	Percent of Workers In Prototype
Office/Medical Office/R&D		
Extremely Low (<=30% AMI) (a)	0	0%
Very Low-income (31-50% AMI)	4	2%
Low-income (51-80% AMI)	67	40%
Moderate-income (81-120% AMI)	26	16%
Above 120% AMI (b)	69	42%
Total Households Requiring Affordable Housing	97	100%
Total Households	166	
Retail/Restaurants/ Services		
Extremely Low (<=30% AMI) (a)	0	0%
Very Low-income (31-50% AMI)	74	53%
Low-income (51-80% AMI)	59	42%
Moderate-income (81-120% AMI)	4	3%
Above 120% AMI (b)	2	1%
Total Households Requiring Affordable Housing	137	100%
Total	139	
Hotel		
Extremely Low (<=30% AMI) (a)	0	0%
Very Low-income (31-50% AMI)	14	19%
Low-income (51-80% AMI)	49	69%
Moderate-income (81-120% AMI)	4	6%
Above 120% AMI (b)	4	6%
Total Households Requiring Affordable Housing	67	100%
Total	71	

Notes:

- (a) The methodology used to estimate worker household incomes relies on identifying the weighted averages of a large number of occupations present in each land use prototype. According to the results of this analysis, the primary affordable housing need associated with these prototypes is at the very low-income, low-income, and moderate-income levels. While this methodology does not estimate demand from extremely low-income worker households associated with new commercial development, it is understood that there are worker households in Marin County that require extremely low-income housing.
- (b) Worker households earning above 120% AMI are expected to be able to afford market-rate rental or ownership housing, and therefore they are not incorporated in the affordability gap calculation.

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

III. HOUSING AFFORDABILITY GAP

This section summarizes the approach to calculating the housing affordability gap and the results of the analysis (steps 7, 8 and 9). The steps outlined here draw upon a previous estimation of affordability gaps in the In-lieu Fee Study. A more detailed explanation of the methodology and assumptions for the affordability gap calculation can be found in that study (“Inclusionary Program Study and In-lieu Fee Calculation”).

Methodology

The housing affordability gap is defined as the difference between what very low-, low-, and moderate-income households can afford to pay for housing and the development cost of building new housing units.⁹ From the nexus methodology section at the beginning of this report, calculating the housing affordability gap involves the following steps 7 through 9:

7. Estimating affordable rents and housing prices for households in the targeted income groups.
8. Estimating development costs of building new housing units, based on current cost and market data.
9. Calculating the difference between what renters and owners can afford to pay for housing and the cost of development of rental and ownership units to arrive at the “affordability gap.”

Step 7: Estimating Affordable Rents and Sales Prices

The first step in calculating the housing affordability gap is to determine the amount that households at the targeted income levels can afford to pay for housing. As introduced in Step 6, for eligibility purposes, most affordable housing programs define very low-income households as those earning 31 to 50 percent of area median income (AMI), low-income households as those earning between 51 and 80 percent of AMI, and moderate-income households as those earning between 81 and 120 percent of AMI.¹⁰

Households with incomes in the very low range are assumed to live in rental housing. Households in the low and moderate ranges are assumed to live in a mix of rental and ownership housing. While the nexus analysis identified some new worker households that would fall above the moderate-income range (above 120 percent of AMI), the Consultant Team did not calculate an affordability gap for this group because it is expected they would find housing at market rates.

⁹ As shown in the previous section, there are no households created by commercial development in the extremely low-income range (zero to 30 percent of AMI).

¹⁰ Drawing on the In-lieu Fee Study, very low-income households were assumed to be at 50% AMI; Low-income households were assumed to be at 70% AMI for ownership housing and 65% AMI for rental housing. Moderate-income households were assumed to be at 110% AMI for ownership housing and 90% AMI for rental housing.

Figure 10 shows the maximum monthly rents and supportable debt for rental housing, as determined by the In-lieu Fee study. Renters are assumed to pay a maximum of 30 percent of their gross monthly income on total housing costs for the housing to be considered “affordable”. The maximum rent is then identified after deducting utility costs from monthly income. It is assumed that one-to-three person households occupy these units. In order to calculate the affordability gap, the affordable rents were converted to supportable debt. The supportable debt represents the one-time value of the rental revenue stream, incorporating assumptions about operating expenses, reserves, vacancy and collection loss, and mortgage terms.

FIGURE 10. AFFORDABLE RENTS AND SUPPORTABLE DEBT BY UNIT TYPE

	Studio	1-BR	2-BR	Weighted Average (a)
Maximum Affordable Rents				
Very Low-income (50%)	\$1,209	\$1,379	\$1,539	\$1,426
Low-income (65%)	\$1,584	\$1,809	\$2,022	\$1,872
Moderate-income (90%)	\$2,210	\$2,524	\$2,827	\$2,614
Supportable Debt				
Very Low-income (50%)	\$39,393	\$66,904	\$92,699	\$74,471
Low-income (65%)	\$100,036	\$136,236	\$170,691	\$146,398
Moderate-income (90%)	\$153,206	\$191,816	\$229,058	\$202,852

Notes:

- (a) The weighted average incorporates a unit mix assumption of 50% 1-bedrooms, 40% 2-bedrooms, and 10% studio units.

Source: Marin Housing Authority, 2020; Strategic Economics and Vernazza Wolfe Associates, 2021.

Figure 11 shows the maximum sales prices for homeowners, as determined by the In-lieu Fee Study. Homeowners are assumed to pay a maximum of 33 percent of gross monthly income on total housing costs. The maximum affordable price for for-sale housing is then calculated based on the total monthly mortgage payment that a homeowner could afford, using typical mortgage loan assumptions for income-restricted ownership housing, as well as other housing cost assumptions such as homeowner’s association (HOA) fees.¹¹ It is assumed that four-to-six person households occupy these units. Due to varying HOA costs, the maximum sales price varies slightly between the two ownership prototypes, condominium townhomes and single-family subdivision units.

¹¹ The housing cost assumptions for homeowners are based on correspondence with the Marin Housing Authority. It is assumed the homeowner pays a 5% downpayment, and their mortgage is 30-year fixed rate, with an interest rate of 3.8%. Other annual housing costs include: 1) Homeowner’s insurance costing 0.28% of the sales price; 2) Property tax rate of 1.5% the sales price; 3) Private mortgage insurance premium rate of 0.85% the amount financed; 4) Interior property insurance of \$1,200; and 5) homeowner’s association fees of \$0.35 per square foot for condominium units and \$0.25 for single-family units.

FIGURE 11. AFFORDABLE SALES PRICES BY UNIT TYPE

	Condo Townhome			Single-Family Subdivision		
	3-BR	4-BR	Weighted Average (a)	3-BR	4-BR	Weighted Average (a)
Low-income (70%)	\$326,986	\$369,293	\$341,089	\$344,076	\$379,167	\$361,622
Moderate-income (110%)	\$572,582	\$643,220	\$596,128	\$589,581	\$653,042	\$621,311

Notes:

- (a) The weighted average for the condo townhome assumes a unit mix of 66% three-bedrooms units and 33% four-bedroom units. For the single-family subdivision, it is assumed half of the units have three bedrooms and half have four bedrooms.

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

Step 8: Estimating Housing Development Costs

The next step in calculating the housing affordability gap is to estimate the cost of developing new housing units to address the housing need. As part of the In-lieu Fee Study, the Consultant Team estimated development costs for three prototypes: a single-family subdivision, a development of condominium townhomes, and a rental apartment development. The estimated development costs of those prototypes are shown below in Figure 12.

FIGURE 12. TOTAL DEVELOPMENT COSTS BY PROTOTYPE

Cost Category	Single Family Subdivision	Condominium Townhome	Rental Apartments
Per Unit			
Land Cost	\$350,000	\$200,000	\$75,000
Hard Costs	\$335,343	\$371,640	\$382,228
Soft Costs	\$96,028	\$100,057	\$106,605
Development Costs	\$781,371	\$671,697	\$563,833
Per Net Residential Sq. Ft.			
Land Cost	\$159	\$111	\$94
Hard Cost	\$152	\$206	\$478
Soft Costs	\$44	\$56	\$133
Development Costs	\$355	\$373	\$705

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

Step 9: Calculating the Housing Affordability Gap

The final step is to calculate the housing affordability gap, or the difference between what renters and owners can afford to pay and the total cost of developing new units. The purpose of the housing affordability gap calculation is to help determine the fee amount that would be necessary to cover the cost of developing housing for very low-, low-, and moderate-income households. The calculation does not assume the availability of any other source of housing subsidy because not all housing is built with public subsidies, and tax credits and tax-exempt bond financing are highly competitive programs that will not always be available to developers of modest housing units.

Figures 13 and 14 shows the housing affordability gap calculation for the rental prototype and the two ownership prototypes respectively.

- For the rental prototype, the gap is defined as the difference between the per-unit cost of development and the supportable debt per unit. The supportable debt is calculated based on the net operating income generated by an affordable monthly rent, incorporating assumptions about operating expenses (including property taxes, insurance, etc.), reserves, vacancy and collection loss, and mortgage terms.
- For the ownership housing prototypes, the gap is calculated as the difference between the per-unit cost of development and the affordable sales price for each income level. To calculate the maximum affordable sales price, Strategic Economics relied on the approach used by Marin Housing Authority for local affordable housing homeownership programs. The mortgage is assumed to be 30-year fixed rate, with an interest rate of 3.8 percent, which is a typical rate at the time of research (December 2020). The owner is assumed to put down a five percent down payment, which is standard for conventional and CalFHA loans. Other monthly housing costs include homeowners' association dues, property taxes, homeowners' insurance, interior property insurance, and premiums for private mortgage insurance.

Note that for each prototype, the gaps shown for each income level are the weighted average of the specific gaps for each unit type in the prototype.

The average affordability gap for each income group was then calculated by averaging the affordability gaps for each prototype, shown in Figure 15. Since it is assumed that all households in the very low-income group are renters, the average affordability gap is simply the rental gap.

For more explanation, see the In-lieu Fee Study.

FIGURE 13. AFFORDABILITY GAP CALCULATION FOR RENTAL HOUSING BY INCOME GROUP

	Supportable Debt (a)	Development Costs (b)	Affordability Gap (c)
Very Low-income (50%)	\$74,471	\$564,000	\$489,529
Low-income (65%)	\$146,398	\$564,000	\$417,602
Moderate-income (90%)	\$202,852	\$564,000	\$361,148

Notes:

- (a) Calculated as net operating income generated by an affordable monthly rent, incorporating assumptions about operating expenses, reserves, vacancy and collection loss, and mortgage terms.
- (b) Assumes development cost of \$705 per net square foot on rental units.
- (c) Calculated as the difference between development costs and supportable debt.

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 14. AFFORDABILITY GAP CALCULATION FOR OWNERSHIP HOUSING BY INCOME GROUP

	Affordable Sales Price (a)	Development Cost (b)	Affordability Gap (c)
Condo Townhome			
Low-income (70%)	\$341,089	\$671,697	\$330,608
Moderate-income (110%)	\$596,128	\$671,697	\$75,568
Single-family Subdivision			
Low-income (70%)	\$361,622	\$781,371	\$419,749
Moderate-income (110%)	\$621,311	\$781,371	\$160,060

Notes:

- (a) Based on affordable sales prices identified in Figure 14, this is the weighted average affordable sales price, incorporating the prototypes' overall unit mix.
- (b) Assumes a development cost of \$373 per square foot for the condo townhome, and \$355 per square foot for the single-family subdivision.
- (c) Calculated as the difference between the affordable sales price and development cost.

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 15: AVERAGE AFFORDABILITY GAP FOR VERY LOW-, LOW-, AND MODERATE-INCOME HOUSEHOLDS

Income Level	Rental Gap	Ownership Gap Townhome	Ownership Gap SF Subdivision	Average Affordability Gap
Very Low-income (50% AMI)	\$489,529	N/A	N/A	\$489,529
Low-income (65% AMI Rental / 70% Owner)	\$417,602	\$330,608	\$419,749	\$389,320
Moderate-income (90% AMI Rental / 110% AMI Owner)	\$361,148	\$75,568	\$160,060	\$198,925

Note: The affordability gap for Above Moderate-income Households (more than 120 percent of AMI) is assumed to be zero.

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

IV. MAXIMUM LINKAGE FEES

This section builds on the findings of the previous analytical steps to calculate the maximum justified linkage fees for each commercial prototype.

Step 10: Maximum Fee Calculation

To derive the maximum nexus-based fee for each land use prototype, the housing affordability gap amounts (see previous section) are applied to the number of worker households in each respective income category (Figure 9). The number of very low-, low-, and moderate-income households associated with each land use prototype is used to calculate the total affordability gap (Figure 16). The above moderate-income households are included in the number of worker households shown in Figure 16, but there is no affordability gap for this group and it does not contribute to the total affordability gap. Finally, the total gap for each land use prototype is divided by 100,000 square feet to calculate a maximum fee per square foot.

As shown in Figure 16, the maximum fee results (rounded to the nearest dollar) are \$331 per square foot for office/medical office/R&D, \$601 per square foot for retail/restaurants/services, and \$267 per square foot for hotel.

The calculated linkage fees are relatively high because of the high cost of housing development in Marin, leading to large affordability gaps particularly for very low- and low-income households. The maximum fee calculation is highest for retail/restaurants/services because of the relatively low worker wage levels in these industries, combined with a moderate employee density. Hotel uses also employ a large share of lower wage workers, but have a much lower employee density, resulting in the lowest maximum fee of all of the uses. Finally, office/medical/R&D uses have a lower number of lower wage workers, but have the highest employment density, resulting in a maximum fee that is lower than retail/restaurants/services but higher than hotel.

The maximum fees shown in Figure 16 are not the recommended fees for adoption. They are the preliminary nexus-justified fees that represent the maximum that Marin jurisdictions could charge to mitigate affordable housing demand related to commercial development.

FIGURE 16. MAXIMUM COMMERCIAL LINKAGE FEES

Land Use	Number of Worker Households*	Average Gap (per Household)	Total Affordability Gap	Size of Prototype (SF)	Max Fee per SF
Office/Medical Office/R&D	166	\$199,226	\$33,116,879	100,000	\$331
Retail/Restaurants/Services	139	\$432,496	\$60,068,911	100,000	\$601
Hotel	71	\$374,089	\$26,673,031	100,000	\$267

* The number of worker households includes above moderate-income households. However, these households are assumed to have an affordability gap of zero and, therefore, do not affect the calculations of the total affordability gap and the maximum fee.

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

V. MARKET FACTORS, FEASIBILITY, AND OTHER POLICY CONSIDERATIONS

The previous section presented the maximum commercial linkage fees for each land use based on the nexus study. These fees are the maximum justifiable fee that jurisdictions can charge to mitigate the affordable housing need. However, for most jurisdictions, other factors are considered when enacting the commercial linkage fees, and, as a result, the fees are almost always set at a level significantly below the maximum amount that is justified by the nexus study.

This section considers market factors and their impact on the feasibility of a range of commercial linkage fee scenarios, as well as other policy factors each jurisdiction will want to consider when setting commercial linkage fees. The first subsection includes a brief market overview of commercial development in Marin County. That is followed by a review of commercial linkage fees in comparable cities, which inform a set of “fee scenarios” that are intended to illustrate a range of reasonable fee levels that could be adopted. Following that is a discussion highlighting the following policy considerations:

- An evaluation of the potential impact of the fee scenarios on the financial feasibility of commercial development; and
- An estimate of the amount the fee scenarios would raise existing municipal fees.

To inform this analysis, the Consultant Team reviewed recent development trends, spoke with local professionals in the development and building trades, and reviewed commercial linkage fee levels in comparable Bay Area jurisdictions.

Finally, this section makes a set of recommendations for setting the commercial linkage fees, including ranges for the fees, possible affordable housing revenues generated, and an approach for updating the fees.

Market Overview

Marin County is considered a secondary market for most commercial development in relation to San Francisco and the more urban areas of the East Bay. Consequently, Marin County’s commands lower rents and attracts less development activity than the primary commercial real estate markets. In the last year, the COVID-19 pandemic has depressed the market for commercial development, with rising vacancy rates and decreasing revenues for office, retail, and hotel uses. This dynamic presents many challenges for the feasibility of new development projects.

Market conditions for each of the land use categories addressed in this study are discussed separately below in more detail.

OFFICE/MEDICAL OFFICE/R&D

Office employment in Marin is concentrated in downtown San Rafael, with a few areas of lower density office employment in North San Rafael, eastern Larkspur, and Sausalito (see Figure 17). Recent office development has included the San Rafael Corporate Center, a Class A office development in downtown San Rafael; Biomarin Pharmaceuticals, R&D lab space also in downtown San Rafael; and smaller office developments in San Anselmo and Corte Madera.

According to developers interviewed for this study, because of uncertainties about the timing of the COVID-19 economic recovery, many investors are delaying decisions about building new

commercial projects. It is unclear whether the Biomarin laboratories will attract additional demand for life sciences R&D space.

Historically, San Rafael has been the center of office development in Marin County. Once the demand for office returns, it is likely that new, larger-scale office and R&D developments will continue to be concentrated in downtown San Rafael. As the primary location for office uses, San Rafael is considered the strongest tier for office uses in Marin County. The other six jurisdictions have not captured significant office development in the last decade, and therefore comprise a weaker office market tier.

RETAIL/RESTAURANTS/SERVICES

Demand for brick-and-mortar retail development nationwide has slowed as an increasing share of retail sales move online. The shelter-in-place restrictions from COVID-19 have accelerated this trend, and it is unclear when significant demand for new retail space will return. Marin County has seen only a small amount of retail development in recent years, limited to single tenant stores such as the RH showroom in Corte Madera. Redevelopment plans for the Northgate Mall in San Rafael will reduce the overall retail area on the site while adding over 1,300 new housing units.

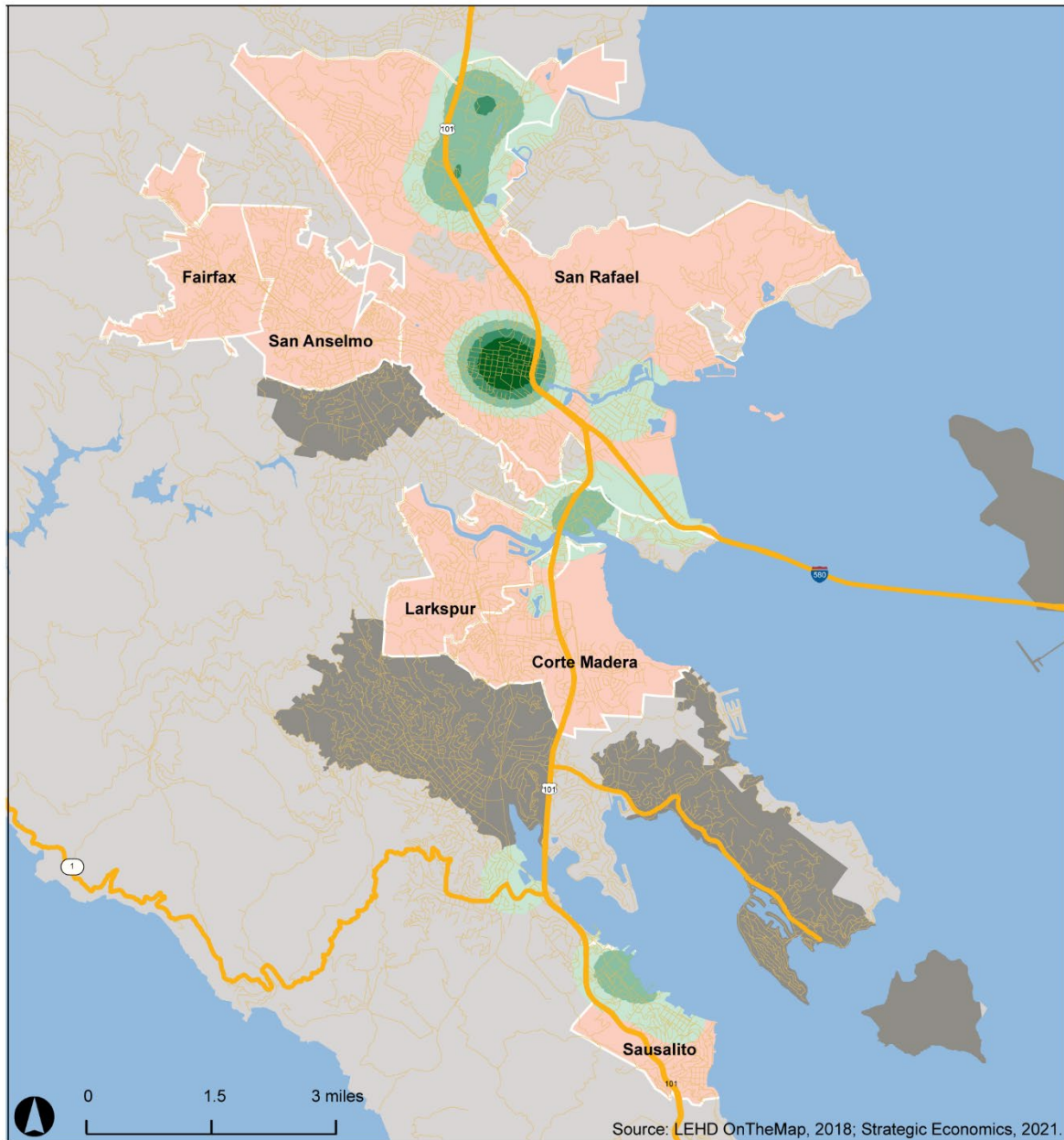
It is unlikely that the county will see significant new retail development in the coming years. When the market does recover, new retail is expected to be relatively small scale, serving a local trade area and/or any new residential development. Rather than concentrating in any one area of the county, retail is likely to be dispersed, favoring sites close to US-101, major highways with good visibility, or serving larger residential developments. For this reason, the Consultant Team recommends that the jurisdictions adopt a relatively uniform commercial linkage fee. Jurisdictions may also wish to enact lower fees for small and independently-owned businesses. Many jurisdictions exempt retail spaces of under 5,000 square feet from these fees.

HOTEL

Located geographically in between San Francisco and Northern California's wine country, Marin County is a secondary market for hotel development. Business travel is an important component of demand in San Rafael, serving the downtown employment center, while the market in the remainder of the county is mostly composed of leisure travelers. Although the county has seen no new hotels in over twenty years, currently several hotels and motels have been proposed, planned, or are under construction. These new projects include two in downtown San Rafael (the select service AC Marriot and Hampton Inn and Suites), and three additional proposals in Corte Madera and Larkspur. All of these developments were planned and proposed before the start of the COVID-19 pandemic, with the AC Marriot already under construction.

The pandemic has taken a serious toll on hotel demand, causing developers that have yet to break ground to reconsider moving forward with their projects. Developers and industry leaders do not expect the market to recover for several years.

FIGURE 17: OFFICE EMPLOYMENT DENSITY IN MARIN COUNTY, 2018



Marin County: Office jobs per square mile, 2018*

- <500 jobs
- 500 - 1,000 jobs
- 1,000 - 1,500 jobs
- 1,500 - 2,000 jobs
- >2,000 jobs

*Includes jobs in NAICS categories 51-55



Source: U.S. Census Longitudinal Employer-Household Dynamics, 2018; Strategic Economics and Vernazza Wolfe Associates, 2021.

Comparable Cities

Figures 18 through 20 show existing commercial linkage fees for the jurisdictions participating in this study alongside other comparable jurisdictions in Sonoma County, Napa County, San Mateo County, and San Francisco.

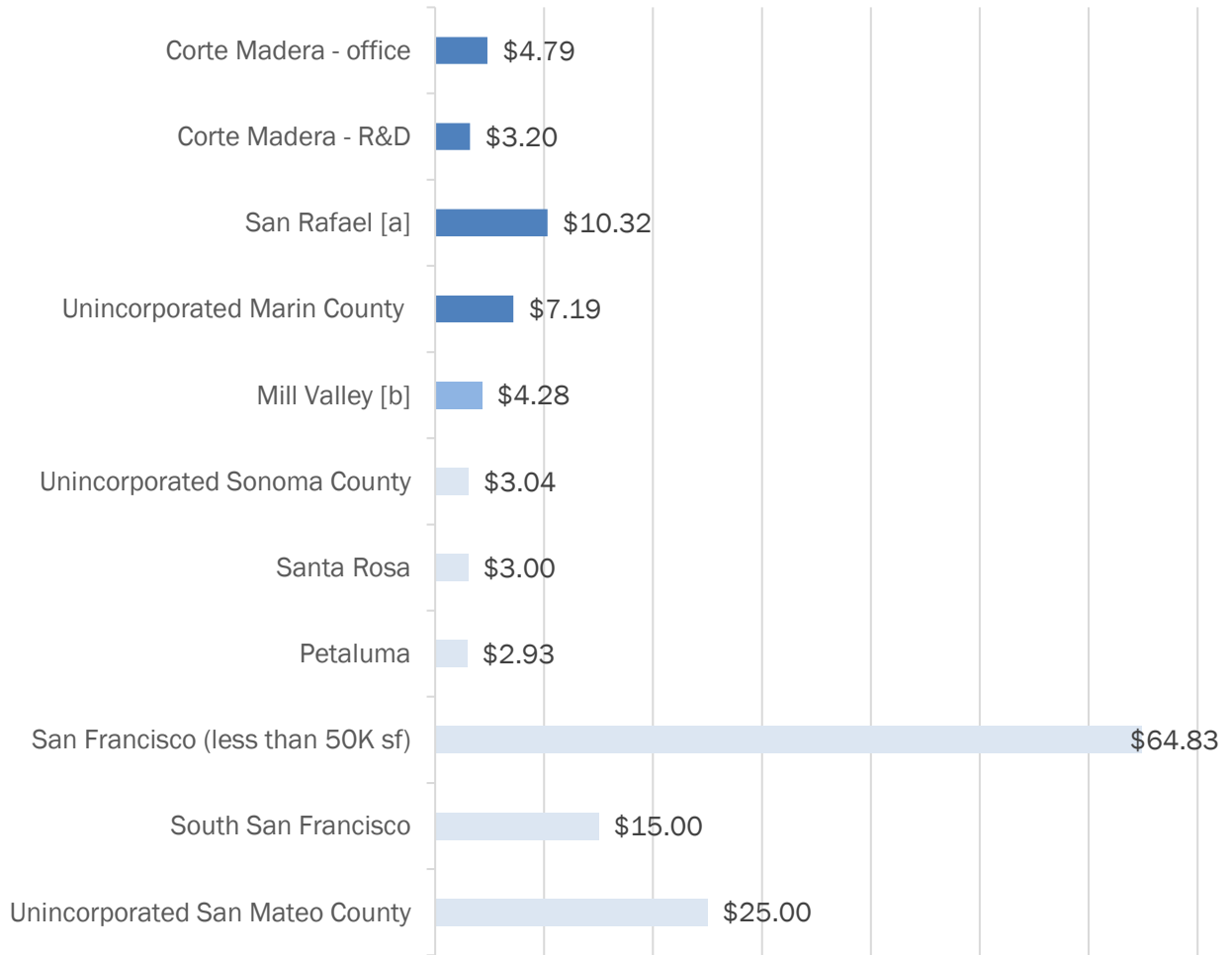
As shown in Figure 18, linkage fees for office/medical office/R&D land uses in Marin County range from \$3.20 to \$10.32 per square foot. The fee in San Rafael is at the high end of this range, reflecting its relative strength as an office center within the county. The selected jurisdictions from Sonoma County, (Petaluma, Santa Rosa, and Unincorporated Sonoma County) all charge approximately \$3.00 per square foot. San Francisco, San Mateo County, and South San Francisco have stronger office markets than Marin and all charge much higher fees ranging from \$15 to \$65 per square foot.¹²

Figure 19 gives a comparison of linkage fees for retail/restaurants/services. These fees tend to be lower than what is charged for office, except in places where retail markets have been particularly strong. In Marin County the linkage fees on these uses range from \$3.28 to \$8.38, with Corte Madera at the top of the range. The selected jurisdictions in Sonoma County range from \$3.00 to \$5.25.

Figure 20 shows linkage fees for hotel uses in the comparable jurisdictions. Fees charged for hotel uses in Marin tend to be lower than for other uses, ranging from \$1.20 to \$4.63 per square foot. The selected communities in Sonoma County all charge approximately \$3.00 per square foot, and the fee in the City of Napa is as high as \$6.00 per square foot. The fee in San Francisco is more than \$23 per square foot.

¹² South San Francisco is shown because it provides a reference point for life sciences industry clusters that have a high concentration of R&D space.

FIGURE 18: COMMERCIAL LINKAGE FEES FOR OFFICE/MEDICAL OFFICE/R&D ADOPTED IN MARIN AND COMPARABLE JURISDICTIONS

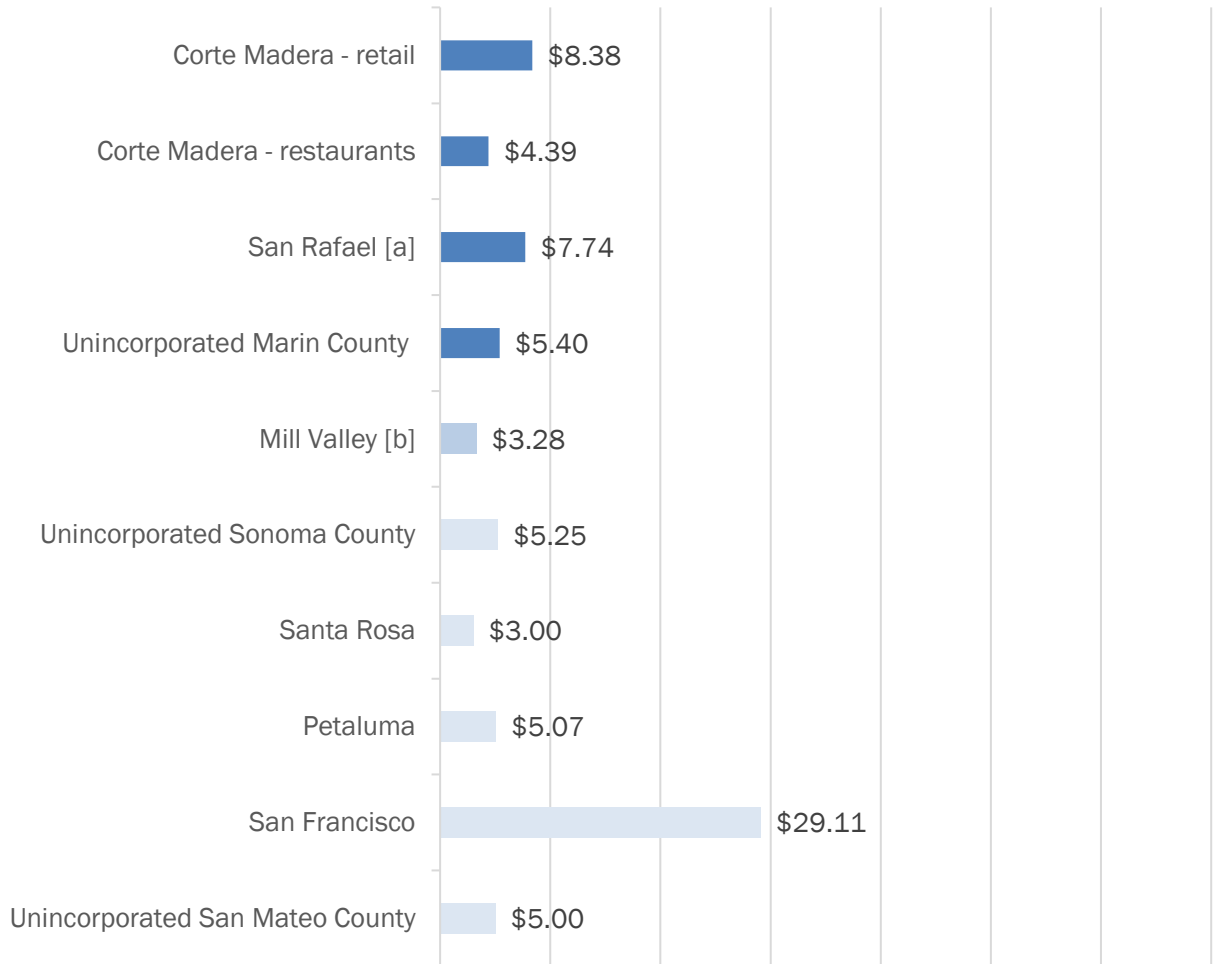


[a] San Rafael's fee is defined as a percentage of the inclusionary in-lieu fee.

[b] Mill Valley's fee is defined as one percent of the valuation of the proposed project. The Consultant Team assumed the valuation of the office prototype used for feasibility testing (see next section).

Sources: Published schedules of city fees; Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 19: COMMERCIAL LINKAGE FEES FOR RETAIL/RESTAURANT/SERVICES ADOPTED IN MARIN AND COMPARABLE JURISDICTIONS

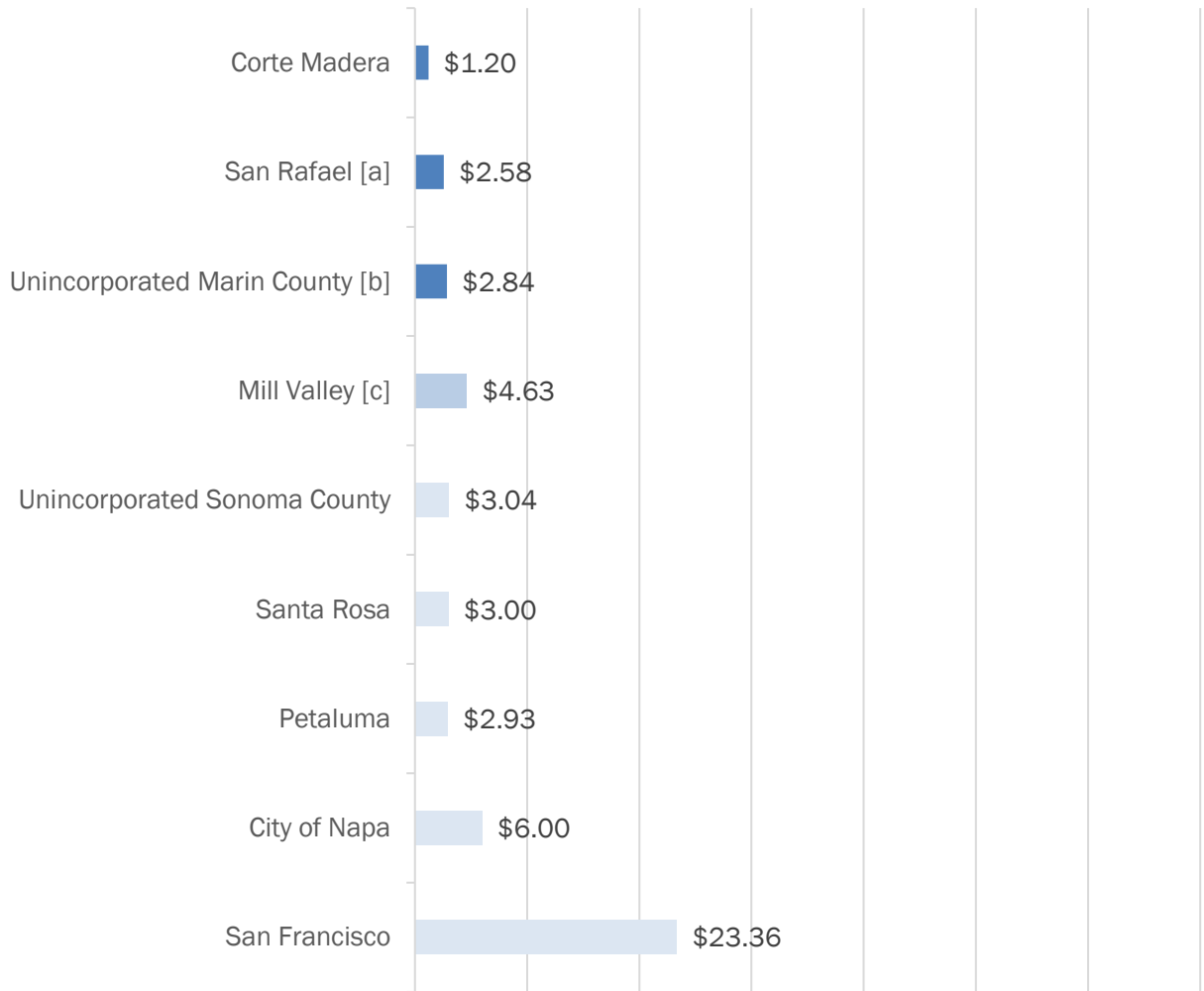


[a] San Rafael's fee is defined as a percentage of the inclusionary in-lieu fee.

[b] Mill Valley's fee is defined as one percent of the valuation of the proposed project. The Consultant Team assumed the valuation of the retail prototype used for feasibility testing (see next section).

Sources: Published schedules of city fees; Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 20: COMMERCIAL LINKAGE FEES FOR HOTEL ADOPTED IN MARIN AND COMPARABLE JURISDICTIONS



[a] San Rafael's fee is defined as a percentage of the inclusionary in-lieu fee.

[b] Marin County's fee \$1,745 per room. This figure was converted to a value per square foot assuming a hotel development will average 615 square feet of gross building area per room.

[c] Mill Valley's fee is defined as one percent of the valuation of the proposed project. The Consultant Team assumed the valuation of the hotel prototype used for feasibility testing (see next section).

Sources: Published schedules of city fees; Strategic Economics and Vernazza Wolfe Associates, 2021.

Fee Scenarios

The Consultant Team developed a set of fee scenarios to analyze the impact of a commercial linkage fee adopted for the three categories of land use. The determination of the fee scenarios was based on the range of fee levels that have been adopted in comparable cities and counties in the Bay Area.

The four fee scenarios range from \$3.00 per square foot to \$15.00 per square foot (Figure 21). The fee scenarios, which are all only a fraction of the nexus-justified maximum fee, are intended as a guide to illustrate a range of commercial linkage fee amounts that might be implemented for

each land use category. Jurisdictions may choose to set linkage fees at different scenarios for different land uses, at an amount different from the values shown, or may choose to implement a commercial linkage fee for only certain land uses.

FIGURE 21: COMMERCIAL LINKAGE FEE SCENARIOS PER BUILDING GROSS SQUARE FOOT

	Office/Medical Office/R&D	Retail/Restaurant/Services	Hotel
Maximum Fee	\$331	\$601	\$267
Scenario 1	\$3.00	\$3.00	\$3.00
Scenario 2	\$5.00	\$5.00	\$5.00
Scenario 3	\$10.00	\$10.00	\$10.00
Scenario 4	\$15.00	\$15.00	\$15.00

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

Feasibility Analysis

One of the important policy considerations when enacting a new fee is the impact of the fee on the financial feasibility of new commercial development. The Consultant Team analyzed the financial feasibility of potential new linkage fees by assessing their impact on overall development costs. While there are no established rules-of-thumb for setting commercial linkage fees in relation to development costs, generally where real estate markets are strong, new development is able to accommodate higher fees if they represent a relatively low share of overall development costs.¹³

DEVELOPMENT PROTOTYPES FOR ANALYZING FEASIBILITY

The Consultant Team designated a set of development prototypes to analyze feasibility. These prototypes are different from the commercial prototypes used for the nexus study and introduced in Section II. While the nexus prototypes represent broad categories of use, the development prototypes for feasibility represent more specific developments within each category and include additional details such as land area and parking to facilitate the estimation of costs. The three “feasibility prototypes” are defined as: 1) Class B Office; 2) Small Neighborhood Center; and 3) Select-Service Hotel. These development prototypes, which are designed to represent a typical development within each land use category, are informed by recent and proposed commercial developments in Marin, as well as from interviews with local developers and builders. The prototypes are described below and summarized further in Figure 22.

- **Class B Office:** A smaller, Class B office format was used because Marin is a secondary office market within the Bay Area, and the economics of smaller developments are likely to be more impacted by municipal fees than larger developments. This prototype is 17,000 square feet in two stories on a one acre site. Surface parking is assumed with a ratio of 4.0 (one stall per 250 square feet of gross building area).

¹³ Over time, fee increases are expected to be capitalized into lower land costs.

- **Small Neighborhood Center:** This is a 7,600 square-foot neighborhood shopping center on one-half acre. This prototype assumes surface parking with a parking ratio of 4.0 (one stall per 250 square feet of gross building area). Similar to the office prototype above, a smaller center is likely to be more impacted by new fees. In addition, the parcel size is very small because there is very limited retail development occurring in Marin, and developer interviews also suggested that Marin’s limited site availability meant larger retail developments were unlikely to occur.
- **Select-Service Hotel:** Most recent and pipeline hotel projects in Marin are select-service hotels. This prototype is a 70,000 square foot select service hotel with 115 guest rooms on a 2.5 acre site. It assumes surface parking with a parking ratio of 1.1 spaces per room. The hotel will include a limited number of high-quality amenities such as a small restaurant/bar, a fitness room, and a business center.

FIGURE 22. DEVELOPMENT PROTOTYPES

	Class B Office	Small Neighborhood Center	Select Service Hotel
Land Area			
Parcel Size (Sq. Ft.)	43,560	21,780	108,900
Parcel Size (acres)	1.00	0.50	2.50
Building Height and FAR			
Total Stories	2 stories	Single story	3 stories
FAR	0.40	0.35	0.65
Building Area			
Gross area (gsf)	17,424	7,623	70,785
Net area (nsf)	15,682	6,861	n/a
Number of rooms	n/a	n/a	115
Average Room Size (nsf)	n/a	n/a	400
Average Room Size (gsf)	n/a	n/a	615
Parking			
Total Spaces (surface)	70	30	127
Parking Ratio (per room)	n/a	n/a	1.10
Parking Ratio (per 1,000 SF)	4.0	4.0	1.8

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

DEVELOPMENT COSTS

The Consultant Team estimated development costs based on interviews with developers and general contractors experienced with commercial development in Marin, as well as a review of recent land transactions. Key development cost assumptions are described below, and a summary of the assumptions is provided in Figure 23.

LAND AND SITE COST ASSUMPTIONS

One of the critical cost factors for a commercial development project is land cost. To determine the land value of sites zoned for commercial uses, the Consultant Team combined feedback from developer interviews with an analysis of recent sales transactions of vacant parcels for development in the relevant areas of Marin County. Land costs can range greatly based on the site's location and characteristics. The Consultant Team reviewed comparable land sales and generally based land cost assumptions on the middle of the range of comparable land prices.

Site costs include the horizontal costs associated with preparation of the site for development and demolition of any existing buildings. As these costs vary widely from site to site, the Consultant Team estimated average site costs based on developer interviews and experience with previous feasibility studies.

BUILDING AREA HARD COSTS

The hard costs for the building area include the cost of vertical construction of the building. This ranges from \$300 per gross square foot for the Small Neighborhood Center to \$450 per gross square foot for the Class B Office. These costs are informed by developer interviews as well as recent construction cost market reports.

TENANT IMPROVEMENTS AND FF&E COSTS

This cost category includes a separate allowance for tenant improvements for the office and retail prototypes as well as "fixtures, furniture, and equipment" (FF&E) for the hotel prototype. The tenant improvement allowance of \$75 per square foot for office and retail is based on recent feasibility studies for these development types in the Bay Area. The FF&E cost of \$25,000 per room is based on feedback from developer interviews.

SURFACE PARKING COSTS

The direct cost of parking is assumed to be an average of \$10,000 per stall for a surface lot, which applies to all development prototypes.

SOFT COST ASSUMPTIONS

Soft costs include all costs for architecture, engineering, consulting, legal, and accounting fees, as well as taxes, insurance, financing costs, contingency, and any other incidental costs not included in the cost categories listed in this section. Soft costs were estimated as 12 percent of hard costs for all prototypes. Note that existing municipal fees, including utility hook-ups, are not incorporated into this assumption, and are addressed separately, because they vary across the jurisdictions.

FIGURE 23: DEVELOPMENT COST ASSUMPTIONS

	Class B Office	Small Neighborhood Center	Select Service Hotel
Land and Sites Costs (per sf)	\$75	\$75	\$40
Building Area Hard Costs (per gsf)	\$400	\$300	\$450
Tenant Improvements (per nsf, office and retail only)	\$75	\$75	n/a
FF&E (per room, hotel only)	n/a	n/a	\$25,000
Surface parking (per space)	\$10,000	\$10,000	\$10,000
Soft Costs (as % of hard costs)	12%	12%	12%

Sources: Developer Interviews, 2021; Costar, 2021; Rider, Levett, Bucknall Quarterly Construction Cost Report, Q4 2020; Strategic Economics and Vernazza Wolfe Associates, 2021.

TOTAL DEVELOPMENT COSTS

Based on the assumptions summarized in Figure 23, The Consultant Team estimated the total development costs for the prototypes, summarized in Figure 24. The costs are summarized for the whole project, by square foot of gross building area, and by guest room for hotel. On a per-square foot basis, the Class B Office is the most expensive, and the Select Service Hotel is the least expensive.

FIGURE 24: TOTAL DEVELOPMENT COST BY PROTOTYPE

	Class B Office	Small Neighborhood Center	Select Service Hotel
Overall Project			
Land and Site Costs	\$3,267,000	\$1,633,500	\$4,356,000
Building Area Hard Costs	\$6,969,600	\$2,286,900	\$31,853,250
Tenant Improvements / FF&E	\$1,176,120	\$514,553	\$2,875,641
Surface parking	\$700,000	\$300,000	\$1,270,000
Soft Costs	\$920,352	\$310,428	\$3,974,790
Total Development Cost	\$13,033,072	\$5,045,381	\$44,329,681
Per GSF			
Land and Site Costs	\$188	\$214	\$62
Building Area Hard Costs	\$400	\$300	\$450
Tenant Improvements / FF&E	\$68	\$68	\$41
Surface parking	\$40	\$39	\$18
Soft Costs	\$53	\$41	\$56
Total Development Cost	\$748	\$662	\$626
Per Guest Room			
Land and Site Costs			\$37,870
Building Area Hard Costs			\$276,923
Tenant Improvements / FF&E			\$25,000
Surface parking			\$11,041
Soft Costs			\$34,556
Total Development Cost			\$385,390

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

INCREASES IN DEVELOPMENT COSTS

The fee scenarios were applied to the development costs for each prototype and are summarized below and in Figure 25. A fee level of \$3.00 per square foot (Scenario 1) increases development costs by 0.4 to 0.5 percent, depending on the prototype; a fee level of \$5.00 (Scenario 2) increases development costs by 0.7 to 0.8 percent; at \$10.00 per square foot (Scenario 3), the increase in costs ranges from 1.3 to 1.6 percent; and, finally, at \$15.00 per square foot (Scenario 4), the increase in costs ranges from 2.0 to 2.4 percent. In percentage terms, hotel development experiences the largest increase from a new fee because hotel is the least expensive prototype to build per square foot.

FIGURE 25: FEE SCENARIOS AND PERCENTAGE OF DEVELOPMENT COSTS FOR EACH PROTOTYPE

	Class B Office	Small Neighborhood Center	Select Service Hotel
Total Development Costs before Linkage Fee (\$/sf)	\$748	\$662	\$626
Linkage Fee Scenarios (\$/sf)			
Maximum Fee	\$331	\$601	\$267
Scenario 1	\$3.00	\$3.00	\$3.00
Scenario 2	\$5.00	\$5.00	\$5.00
Scenario 3	\$10.00	\$10.00	\$10.00
Scenario 4	\$15.00	\$15.00	\$15.00
Linkage Fee Scenarios (as % to Total Dev. Costs)			
Maximum Fee	44%	91%	43%
Scenario 1	0.4%	0.5%	0.5%
Scenario 2	0.7%	0.8%	0.8%
Scenario 3	1.3%	1.5%	1.6%
Scenario 4	2.0%	2.3%	2.4%

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

FEE SCENARIOS COMBINED WITH OTHER MUNICIPAL FEES

The Consultant Team reviewed the total burden of the fee scenarios in the context of other fees charged by the cities and Marin County, including fees such as building permits as well as any impact fees each jurisdiction might have in place.¹⁴ A table of these costs for each jurisdiction is given in Figure 26 below, including the total fees that would be paid on each prototype for the commercial linkage fee scenarios.

Because each jurisdiction has its own schedule of fees for new development, the cost of development in each community varies. For example, municipal fees for the prototypes in Corte Madera range from 0.6 percent to 0.9 percent of development costs, while fees in San Rafael are higher, ranging from 2.2

¹⁴ Connection fees charged by a local sanitary sewer and water district were also estimated; they would be expected to represent an additional 1.0 to 2.6 percent of development costs above what is shown in the Figure 26.

to 4.4 percent of development costs. Jurisdictions will need to take into account these baseline costs when setting a commercial linkage fee amount.

FIGURE 26. COMMERCIAL LINKAGE FEE SCENARIOS AND OTHER MUNICIPAL AND COUNTY FEES* BY JURISDICTION

	Per GSF			As % of Development Costs		
	Class B Office	Small Neighborhood Center	Select Service Hotel	Class B Office	Small Neighborhood Center	Select Service Hotel
Corte Madera						
Municipal Fees	\$4.71	\$4.75	\$5.90	0.6%	0.7%	0.9%
Total Fees with Scenario 1	\$7.71	\$7.75	\$8.90	1.0%	1.2%	1.4%
Total Fees with Scenario 2	\$9.71	\$9.75	\$10.90	1.3%	1.5%	1.7%
Total Fees with Scenario 3	\$14.71	\$14.75	\$15.90	2.0%	2.2%	2.5%
Total Fees with Scenario 4	\$19.71	\$19.75	\$20.90	2.6%	3.0%	3.3%
Fairfax						
Municipal Fees	\$8.53	\$8.83	\$9.42	1.1%	1.3%	1.5%
Total Fees with Scenario 1	\$11.53	\$11.83	\$12.42	1.5%	1.8%	2.0%
Total Fees with Scenario 2	\$13.53	\$13.83	\$14.42	1.8%	2.1%	2.3%
Total Fees with Scenario 3	\$18.53	\$18.83	\$19.42	2.5%	2.8%	3.1%
Total Fees with Scenario 4	\$23.53	\$23.83	\$24.42	3.1%	3.6%	3.9%
Larkspur						
Municipal Fees	\$16.02	\$19.04	\$13.05	2.1%	2.9%	2.1%
Total Fees with Scenario 1	\$19.02	\$22.04	\$16.05	2.5%	3.3%	2.6%
Total Fees with Scenario 2	\$21.02	\$24.04	\$18.05	2.8%	3.6%	2.9%
Total Fees with Scenario 3	\$26.02	\$29.04	\$23.05	3.5%	4.4%	3.7%
Total Fees with Scenario 4	\$31.02	\$34.04	\$28.05	4.1%	5.1%	4.5%
Unincorporated Marin County						
County Fees	\$4.88	\$5.38	\$5.14	0.7%	0.8%	0.8%
Total Fees with Scenario 1	\$7.88	\$8.38	\$8.14	1.1%	1.3%	1.3%
Total Fees with Scenario 2	\$9.88	\$10.38	\$10.14	1.3%	1.6%	1.6%
Total Fees with Scenario 3	\$14.88	\$15.38	\$15.14	2.0%	2.3%	2.4%
Total Fees with Scenario 4	\$19.88	\$20.38	\$20.14	2.7%	3.1%	3.2%
San Anselmo						
Municipal Fees	\$10.12	\$11.03	\$12.86	1.4%	1.7%	2.1%
Total Fees with Scenario 1	\$13.12	\$14.03	\$15.86	1.8%	2.1%	2.5%
Total Fees with Scenario 2	\$15.12	\$16.03	\$17.86	2.0%	2.4%	2.9%
Total Fees with Scenario 3	\$20.12	\$21.03	\$22.86	2.7%	3.2%	3.6%
Total Fees with Scenario 4	\$25.12	\$26.03	\$27.86	3.4%	3.9%	4.4%

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San Rafael						
Municipal Fees	\$16.59	\$29.24	\$14.62	2.2%	4.4%	2.3%
Total Fees with Scenario 1	\$19.59	\$32.24	\$17.62	2.6%	4.9%	2.8%
Total Fees with Scenario 2	\$21.59	\$34.24	\$19.62	2.9%	5.2%	3.1%
Total Fees with Scenario 3	\$26.59	\$39.24	\$24.62	3.6%	5.9%	3.9%
Total Fees with Scenario 4	\$31.59	\$44.24	\$29.62	4.2%	6.7%	4.7%
Sausalito						
Municipal Fees	\$7.18	\$7.81	\$9.08	1.0%	1.2%	1.4%
Total Fees with Scenario 1	\$10.18	\$10.81	\$12.08	1.4%	1.6%	1.9%
Total Fees with Scenario 2	\$12.18	\$12.81	\$14.08	1.6%	1.9%	2.2%
Total Fees with Scenario 3	\$17.18	\$17.81	\$19.08	2.3%	2.7%	3.0%
Total Fees with Scenario 4	\$22.18	\$22.81	\$24.08	3.0%	3.4%	3.8%

* Municipal and County fees include all applicable permits and impact fees charged by the jurisdiction. Water and sanitary sewer connection fees are not included. Based on estimates from Marin Municipal Water District and Ross Valley Sanitary District, water and sewer fees represent may add an additional 1.0 percent to development costs of Class B office, 1.9 percent to small neighborhood retail, and 2.6 percent to select service hotel.

Sources: Participating Jurisdictions, 2021; Strategic Economics and Vernazza Wolfe Associates, 2021.

Fee Recommendations

The Consultant Team evaluated the four fee scenarios based on the analyses summarized above: market factors, fees in comparable cities, fees as a percentage of development costs, and fees in relation to the municipal/county fees that are currently charged in the seven jurisdictions. Recommendations for setting a commercial linkage fee are outlined below.

In the wake of the commercial real estate market slowdown due to COVID-19, the Consultant Team recommends that jurisdictions enact commercial linkage fees that are generally comparable across the different jurisdictions within the county, without significantly raising fees in the places that already have them. Several jurisdictions in this study have commercial linkage fees currently in place, and the recommendations below do not represent a significant departure from these fee levels. Jurisdictions without commercial linkage fees should consider adopting fees comparable with their neighbors. However, there is one exception to this guidance with regard to office/R&D/medical office, where San Rafael can reasonably impose a higher fee than other jurisdictions.

For office/R&D/medical office uses, the Consultant Team recommends the commercial linkage fee for office be set between \$10 and \$15 per square foot in San Rafael and between \$5 and \$10 per square foot in the other six jurisdictions. Because the market for office is stronger in San Rafael, new office development is more likely to be able to support the higher fee levels. In San Rafael, the recommended fee level represents an increase in development costs of 0.7 to 1.3 percent for the Class B prototype (Figure 26). Class A office and R&D, which are more expensive product types and more likely to occur in downtown San Rafael, would experience a lower percentage increase. For the other communities, the recommended fees would result in an increase in development costs of 0.4 to 0.7 percent.

The Consultant Team recommends the commercial linkage fee for retail be set between \$5 and \$10 per square foot for all jurisdictions. The existing fee levels for retail are in this range, which amounts

to 0.8 to 1.5 percent in development costs for a small neighborhood center (Figure 26). Because the future of retail is very uncertain, it is difficult to generalize where demand will be strong once retail markets recover, and it is recommended the fees be relatively consistent across jurisdictions. Post-pandemic demand for retail could materialize in small scale developments dispersed throughout the county, depending on site-specific conditions related to transportation access and nearby amenities and development.

The Consultant Team recommends that jurisdictions consider reducing the commercial linkage fee requirement for small and independent businesses. It is expected that the viability of small-scale retail in particular will be challenging, so jurisdictions may choose to exempt smaller retail projects from paying the fee or reduce the overall fee. For instance, San Rafael does not apply a commercial linkage fee to developments 5,000 square feet and below, while Sonoma County exempts the first 2,000 square feet from its fee. Because many large “big-box” tenants occupy far more than 5,000 square feet, this incentive would not apply to those types of businesses. Because the definition for “small scale retail” may vary by jurisdiction, the Consultant Team recommends that each jurisdiction develop its own appropriate threshold.

For hotel uses, the Consultant Team recommends that all jurisdictions adopt a commercial linkage fee of \$3 to \$5 per square foot. This fee level would represent between 0.5 and 0.8 percent of development costs for a select service hotel (Figure 26). Fees of \$3 to \$5 would increase in the cost of development slightly in Corte Madera, San Rafael, and Unincorporated Marin County while keeping them comparable with Mill Valley and the communities in Sonoma County that were reviewed for this study. It is important to note that while jurisdictions may charge on the basis of number of rooms rather than square feet, charging the fee by square foot advantages more efficient hotels with smaller room sizes.

It is advised that the jurisdictions reexamine the potential for raising the fees once the commercial real estate market recovers and development activity picks up. This study provides the economic analysis for higher fees, so that a new study would not be needed if this were to occur in the next five years.

Other Policy Considerations

This section briefly addresses other considerations for adopting or updating a commercial linkage fee, including establishing equivalencies for payment of the fee, and an approach to updating the fees.

EQUIVALENCIES TO PAYMENT OF FEES

It is recommended that jurisdictions establish a process for developers to make an in-kind contribution to affordable housing in lieu of paying a commercial linkage fee. Some examples of alternative mitigation include land dedication, providing on-site affordable units, or providing off-site affordable units. Typically, developers would need to demonstrate that the value of these contributions would be in excess or equal to the value of the commercial linkage fee requirement. In such instances, jurisdictions will want to have an established process in place for financially evaluating these proposals as a substitute for paying the fee to create predictability and consistency for development projects.

UPDATING THE FEES

Similar to any impact fee, it will be necessary to adjust the commercial linkage impact fee on an annual basis. Adjustments are also needed due to possible changes in the affordability gaps. A simple

approach to annual adjustments is to use an index. The Consultant Team recommends using either the construction cost index (localized to the San Francisco Bay Area region), such as the one published by the Engineering News-Record, or the shelter component of the Consumer Price Index (CPI), whichever is higher.

VI. UNIFIED FEE PROPOSAL AND FULFILLING STATE REQUIREMENTS FOR ADOPTION

Strategic Economics collaborated with staff from the seven jurisdictions to develop a unified fee proposal that will be considered for adoption by each of the jurisdictions. Based on these conversations and the guideline recommendations in the previous section, this section outlines the commercial linkage fee schedule that has been proposed by the jurisdictions. It also provides further analysis on the fee proposal in order to meet state requirements for implementation. For four of the seven jurisdictions, this will be a new fee program. For the other three jurisdictions, the fees will represent an update to an existing commercial linkage fee program in that jurisdiction.

In 2021, the California legislature imposed new requirements (Assembly Bill 602 [2021-2022]) on impact fee nexus studies adopted by local governments after July 1, 2022. The legislation applies to this study in relation to any new commercial linkage fees to be implemented in the seven jurisdictions. Among other provisions, AB 602 requires the adopted nexus study to provide a justification for new impact fees for affordable housing should they seek a higher “level of service” for the community. The legislation also asks for a review of any current fee programs.

Considering the proposal put forth by the jurisdictions, this report section first includes an overview of the fees in comparison to the linkage fees currently in place in some of the jurisdictions. Based on the unified fee proposal, Strategic Economics estimated the potential affordable housing revenues that could be raised over a five year period. (Although the fee proposal is designed to apply the same fee levels across all seven jurisdictions, the adopted fees in any specific jurisdiction may ultimately deviate from the unified schedule, which would affect the generated revenues.) As required by AB 602, Strategic Economics also summarized the revenues collected from each of the three existing fee programs and provided a justification for the new level of service advanced by the new fee program. Finally, the section concludes with a discussion of the purpose of these fees and the role of new commercial development to contribute to funding affordable housing in Marin County.

Current and Proposed Commercial Linkage Fees

AB 602 includes the provision: “[i]f 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.” (Government Code § 66016.5). Below is a summary of the fee programs in place (in the jurisdictions that have them) and a discussion of the changes that would occur if the unified fee proposal were adopted.

The current and proposed commercial linkage fee programs are summarized in Figure 27. Three of the jurisdictions (Corte Madera, San Rafael, and the Unincorporated County) currently charge linkage fees on various types of nonresidential development. The fee programs each were proposed and adopted independently in the early 2000’s and tend to have disparate definitions for grouping

nonresidential development into categories for the application of a fee. Currently Marin County charges a hotel impact fee based on the number of rooms, rather than on a square foot basis;¹⁵ in Figure 27, Strategic Economics converted this number to a typical fee per square foot using a gross average room size assumption.

Strategic Economics and the jurisdictions made every best effort to collect data on fee revenues since each program's inception. In Marin County and Corte Madera, where the full history of fee revenues was not available, revenues collections are reported for those jurisdictions from the earliest dates data could be obtained. As shown in Figures 27 and 28:

- Corte Madera has collected \$381,516 since April 2018 (an average of \$84,781 annually);
- San Rafael has collected \$2,556,106 since 2005 (\$144,006 annually); and
- Unincorporated County has collected \$38,680 since 2019 (\$10,315 annually)

The higher rates of revenue generation in San Rafael and Corte Madera reflect their higher levels of commercial development as retail and office job centers, as compared with Unincorporated Marin County, which is largely suburban and rural.

The unified fee proposal is also shown in Figure 27. The proposed fee levels are \$10.00 per square foot for office, medical office, and R&D uses; \$8.00 or \$10.000 per square foot retail development, depending on the size of the development; and \$5.00 per square foot for hotel development. The jurisdictions are proposing a smaller fee level on retail developments up to 2,500 square feet to help lessen the burden of the fee on smaller, locally owned businesses.

In the other three jurisdictions that currently have fee programs, the proposed fees generally represent an increase from current levels. (For example, the fee for office development in Corte Madera would increase from \$4.79 per square foot to \$10.00 per square foot; while the fee for R&D development would increase from \$3.20 per square foot to \$10.00 per square foot.) The single exception to the fee increases is office and R&D development in San Rafael, which would experience a slight decrease from \$10.32 per square foot to \$10.00 per square foot.

¹⁵ A provision in AB 602 discourages jurisdictions from assessing impact fees on any basis other than square feet of floor area. All fees proposed in the unified fee schedule are based on this standard.

FIGURE 27: SUMMARY OF CURRENT COMMERCIAL LINKAGE FEES AND THE UNIFIED PROPOSED FEE LEVELS FOR ALL SEVEN JURISDICTIONS

Jurisdiction	Program Effective Since	Current Fee Levels (per equivalent square foot) ^[a]	Revenues Collected	Unified Fee Proposal (per square foot)
Corte Madera	2001	Office: \$4.79 R&D: \$3.20 Retail: \$8.38 Restaurant: \$4.39 Hotel: \$1.20	\$381,516 since April 2018	Office/Medical Office/ R&D: \$10.00 Retail/Restaurants/ Services: - \$8.00 (up to 2,500 square feet) - \$10.00 (more than 2,500 square feet) Hotel: \$5.00
Fairfax	no current policy			
Larkspur	no current policy			
San Anselmo	no current policy			
San Rafael	2005	Office/R&D: \$10.32 Retail/Restaurant/Services: \$7.74 Hotel: \$2.58 <i>See Note [b], below.</i>	\$2,556,106 since inception	
Sausalito	no current policy			
Unincorporated Marin County	2003	Office/R&D: \$7.19 Retail/Restaurant/Services: \$5.40 Hotel: \$2.84 ^[c]	\$38,680 since 2019	

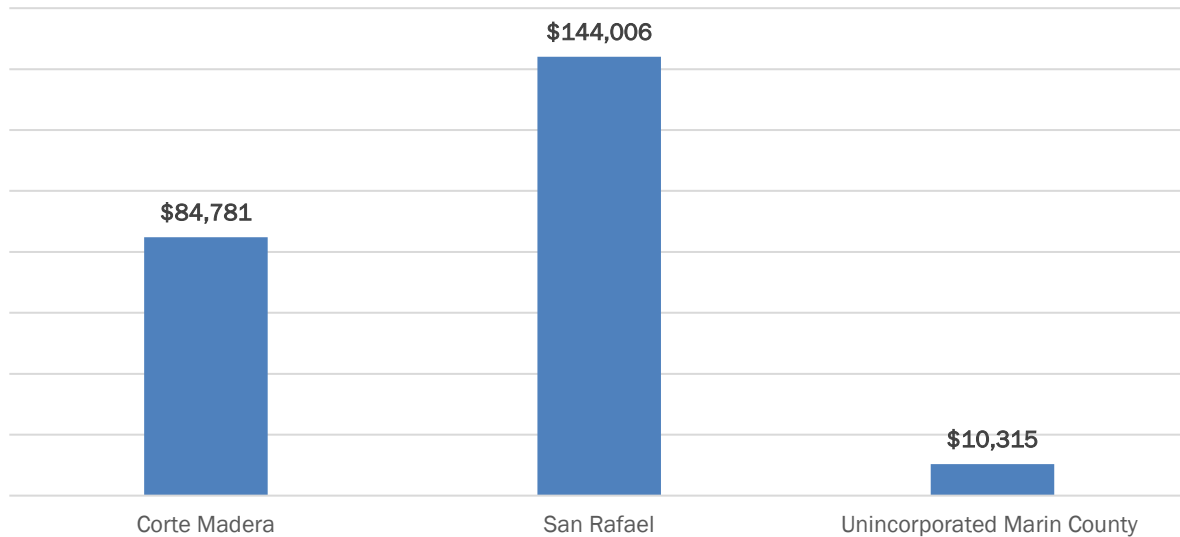
[a] In some jurisdictions, linkage fees may exist for other land uses outside the scope of this study. Only the relevant fees are shown.

[b] San Rafael's fees are defined as a percentage of the inclusionary in-lieu fee.

[c] Marin County's fee \$1,745 per room. This figure was converted to a value per square foot assuming a hotel development will average 615 square feet of gross building area per room.

Sources: Town of Corte Madera, 2022; City of San Rafael, 2022; County of Marin, 2022; Strategic Economics, 2022.

FIGURE 28: AVERAGE ANNUAL COMMERCIAL LINKAGE FEE REVENUES BY JURISDICTION HAVING A FEE PROGRAM CURRENTLY IN PLACE



Sources: Town of Corte Madera, 2022; City of San Rafael, 2022; County of Marin, 2022; Strategic Economics, 2022.

Potential Fee Revenues under the Unified Fee Program

Figure 29 shows the potential fees that could be generated, along with the potential affordable housing funding that could be leveraged, over a five year period if the fee levels recommended above were adopted. Based on the past pace of new development and the development pipeline, the Consultant Team established very approximate numbers for the volume of development that could take place over a five year period once commercial real estate markets recover from the pandemic.¹⁶ Potential fee revenues are on the order of \$2.6 million across all jurisdictions. If every dollar in local contributions to affordable housing were able to attract three dollars from other funding sources, approximately \$10 million in affordable housing funds could be generated or leveraged through the recommended commercial linkage fees. This three to one leveraging assumption is based on a recent study that found that local contributions for affordable housing projects in the Bay Area accounted for 23 percent of total project costs on average.¹⁷ Note that in Marin County, the leveraging ratio may be higher because local jurisdictions tend to have more limited funding for affordable housing.

¹⁶ The development estimates in Figure 29 are illustrative of past trends and the development pipeline and do not represent a formal demand estimate.

¹⁷ This leveraging ratio will be updated as new information is available. See SPUR, “Housing as Infrastructure,” April 2021, https://www.spur.org/sites/default/files/2021-04/SPUR_Housing_as_Infrastructure_0.pdf.

FIGURE 29: POTENTIAL FEE REVENUES AND AFFORDABLE HOUSING FUNDS LEVERAGED OVER A FIVE YEAR PERIOD

Land Use	Unified Fee Proposal	Potential Development Areawide over Five Years ^[a]	Potential Commercial Linkage Fee Revenues
Office / Medical Office / R&D	\$10 /sf	100,000 sf	\$1,000,000
Retail /Restaurants /Services	\$8 /sf (up to 2,500 square feet) \$10 /sf (more than 2,500 square feet)	35,000 sf	\$315,000 ^[b]
Hotel	\$5 /sf	250,000 sf (400 rooms)	\$1,250,000
Subtotal Commercial Linkage Fee Local Revenues			\$2,565,000
Potential New Affordable Housing Funds Leveraged from Other Sources (3:1 ratio) ^[c]			\$7,695,000
Total Potential New Affordable Housing Funds			\$10,260,000

Notes:

- (a) For office/medical office/R&D and retail/restaurants/services, the development estimates are drawn from the pace of new development between 2011 and 2020. For hotel, the Consultant Team reviewed planned and proposed projects and estimated 400 rooms at approximately 615 square feet of gross building area per room.
- (b) Assumes half of new retail/restaurants/services developments are 2,500 square feet or less and half of new developments are more than 2,500 square feet.
- (c) Assumes that every dollar in local revenues leverages another three dollars in other subsidies, including tax credit equity, federal sources, state sources, and other funds. Actual leveraging will vary by project.

Sources: Costar, 2011-2020; Participating Jurisdictions, 2020; Strategic Economics and Vernazza Wolfe Associates, 2021.

Justification for New Fee Levels

AB 602 requires the nexus study for a new fee to “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” (Government Code § 66016.5).

In this study, Strategic Economics defined level of service as the ratio of deed-restricted, “family” affordable units within a jurisdiction to the number of worker households associated with employment in that jurisdiction (see below).

$$\text{Level of Service} = \frac{\text{family affordable units}}{\text{worker households}} = \left[\frac{\text{family affordable units}}{\text{workers}} \right] \left[\frac{\text{workers}}{\text{avg. workers per household in Marin Cty.}} \right]$$

Only *family* affordable units were counted because the workers associated with new commercial development are most likely to be family households, rather than, for example, seniors or disabled people applying for subsidized housing. This number was then compared to worker *households* because households is the standard unit of demand for housing. The number of worker households is estimated as the total employment in the jurisdiction divided by the average number of workers per household in Marin County. As mentioned in the first section of this report, the average workers per household in Marin County is 1.60.

Strategic Economics calculated the current level of service for family affordable housing for the seven jurisdictions as shown in Figure 30. The level of service over all jurisdictions is 0.035, ranging from 0.011 in Sausalito and San Anselmo, to 0.057 in the Unincorporated County. Larger communities such as San Rafael, Corte Madera, and Larkspur, which have had a more comprehensive set of affordable housing tools, generally have a higher proportion of family affordable housing than the smaller communities that are exploring inclusionary and commercial linkage fee programs for the first time.

FIGURE 30: FAMILY AFFORDABLE HOUSING, EMPLOYMENT, EMPLOYEE HOUSEHOLDS, AND CURRENT LEVEL OF SERVICE FOR THE SEVEN JURISDICTIONS

Jurisdiction	Deed-restricted Family Affordable Housing [a]	Total Employment [b]	Total Worker Households [c] = [b] / 1.60	Level of Service = [a] / [c]
Corte Madera	130	6,482	4,051	0.032
Fairfax	29	1,806	1,129	0.026
Larkspur	150	6,730	4,206	0.036
San Anselmo	21	3,113	1,946	0.011
San Rafael	780	39,218	24,511	0.032
Sausalito	38	5,627	3,517	0.011
Unincorporated County	561	15,695	9,809	0.057
Total All Seven Jurisdictions	1,709	78,671	49,169	0.035

Sources: [a] Family affordable housing developments supplied by the County of Marin, 2022; Inclusionary affordable units from Marin Housing Authority, 2022; [b] Employment data from U.S. Census Longitudinal Employer-Household Dynamics, 2019; Strategic Economics, 2022.

Next, Strategic Economics calculated the level of service associated with the current and proposed commercial linkage fees, or the number of family affordable units that could be funded per worker household created by new development. This calculation accounts for the employment created by new development for each use, the fee revenues that would be generated, and the affordability gap for

each use that would need to be filled with the fee revenues. Figure 31 shows a comparison of the level of service metrics for each jurisdiction and for the current and proposed fee programs.

As mentioned earlier, the fees would increase above their current level in nearly all cases and, therefore, would represent an increase in the level of service above any current fee program (or, in the case of four jurisdictions, no current fee program). This increase in level of service is justified for the following reasons:

- **Areawide, the level of service associated with the proposed fee program is commensurate with and, in some cases, even below the level of service already supplied by each jurisdiction's current inventory of family affordable housing.** Figure 32 shows a comparison of the current level of service aggregated across all seven jurisdictions with the level of service that would accompany each of the proposed fees. The areawide level of service is 0.035 while the fees have a level of service ranging from 0.013 to 0.030. Further, the proposed fee levels are not placing an undue burden on nonresidential development because they represent only a small fraction of the development's full impact on housing demand.
- **The cost of housing development, including affordable housing, has increased significantly since the inception of the current fee programs.** Higher fees are needed to cover these escalating costs. For example, while the unincorporated County is considering raising its fees by between 39 percent (for office, medical office, and R&D uses) and 76 percent (hotel), the affordability gap has increased significantly more since the nexus study was performed for the current fee program in 2002. As shown in Figure 33, the affordability gap has increased by 283 percent for Very Low Income households, 371 percent for Low Income households, and 936 percent for Moderate Income households.
- **State mandates will require a rapid acceleration in the production of family affordable housing in Marin County.** The Regional Housing Needs Allocation (RHNA) for Moderate, Low, and Very Low Income households will increase significantly for the upcoming RHNA cycle. Area-wide, the allocations add up to a more than six-fold increase over the last cycle (see Figure 34), while the allocations by jurisdiction have been tied more directly to projected job growth than in past RHNA cycles. A substantial contribution from nonresidential developers is needed to help meet these goals.

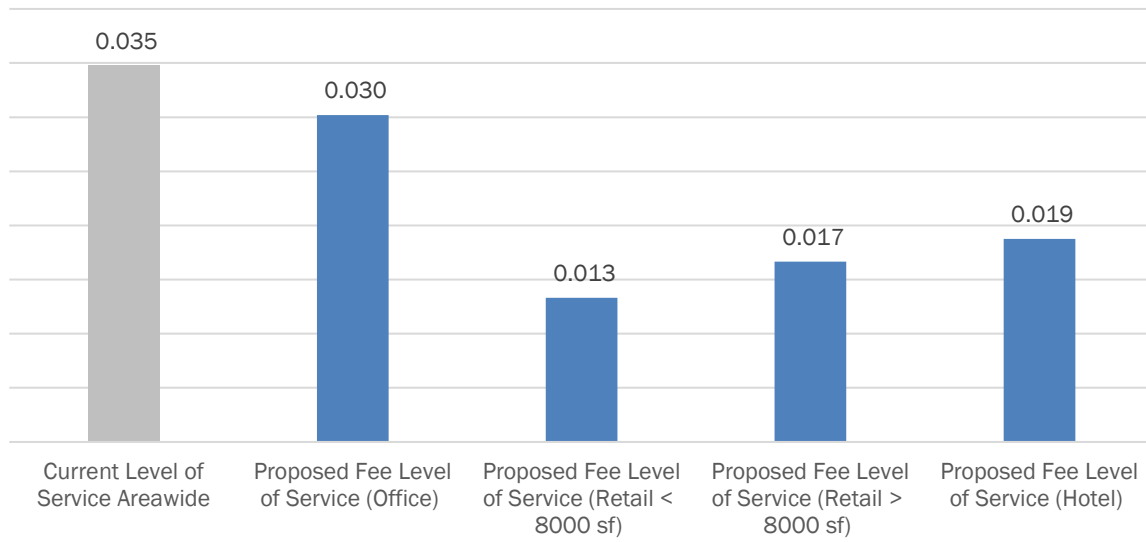
In summary, the fee program as proposed by the jurisdictions will accomplish two objectives. First, the unified fee proposal will level the playing field for developers, ensuring they are charged the same fee across all jurisdictions. Secondly, the fee levels are set such that the revenue is sufficient to support new affordable housing development in cities that are expected to experience continued job growth over the next RHNA cycle. Most commercial development and accompanying job growth is expected to occur in San Rafael, and to a lesser extent in Larkspur and Corte Madera.

FIGURE 31: LEVEL OF SERVICE COMPARISON JURISDICTION-WIDE AND FOR THE CURRENT AND PROPOSED COMMERCIAL LINKAGE FEES

Jurisdiction	Total Current Level of Service Jurisdiction-wide	Level of Service - Office Fees		Level of Service - Retail Fees			Level of Service - Hotel Fees	
		Current	Proposed	Current	Proposed < 2,500 sf)	Proposed > 2,500 sf	Current	Proposed
Corte Madera	0.032	0.012	0.030	0.011	0.013	0.017	0.004	0.019
Fairfax	0.026	-	0.030	-	0.013	0.017	-	0.019
Larkspur	0.036	-	0.030	-	0.013	0.017	-	0.019
San Anselmo	0.011	-	0.030	-	0.013	0.017	-	0.019
San Rafael	0.032	0.031	0.030	0.013	0.013	0.017	0.010	0.019
Sausalito	0.011	-	0.030	-	0.013	0.017	-	0.019
Unincorporated County	0.057	0.022	0.030	0.009	0.013	0.017	0.011	0.019

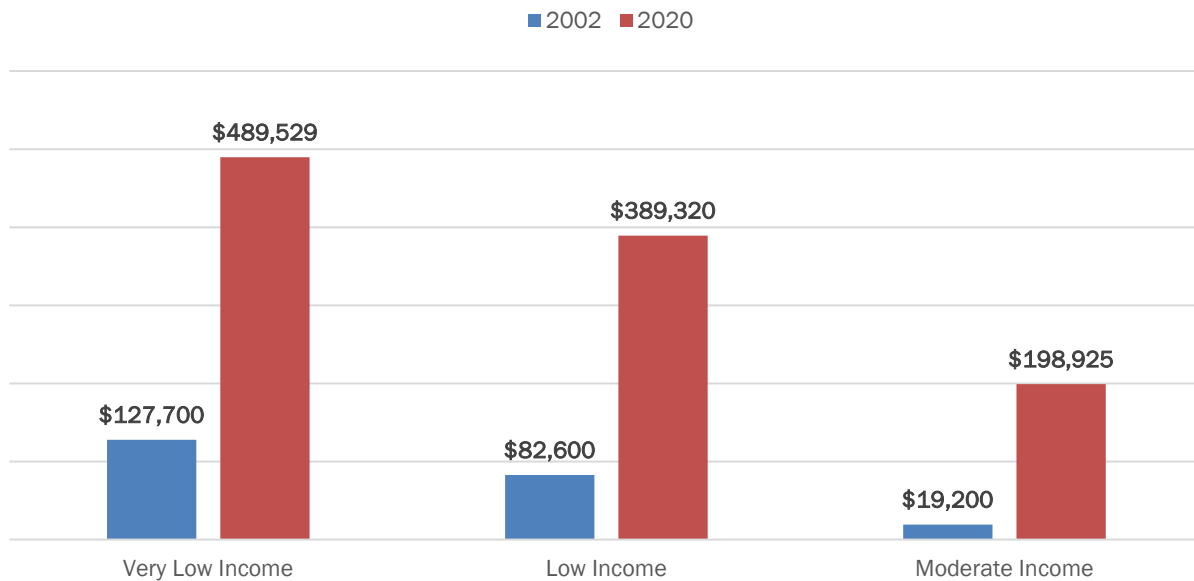
Source: Strategic Economics, 2022.

FIGURE 32: CURRENT LEVEL OF SERVICE ACROSS ALL JURISDICTIONS AND LEVEL OF SERVICE OF PROPOSED FEES



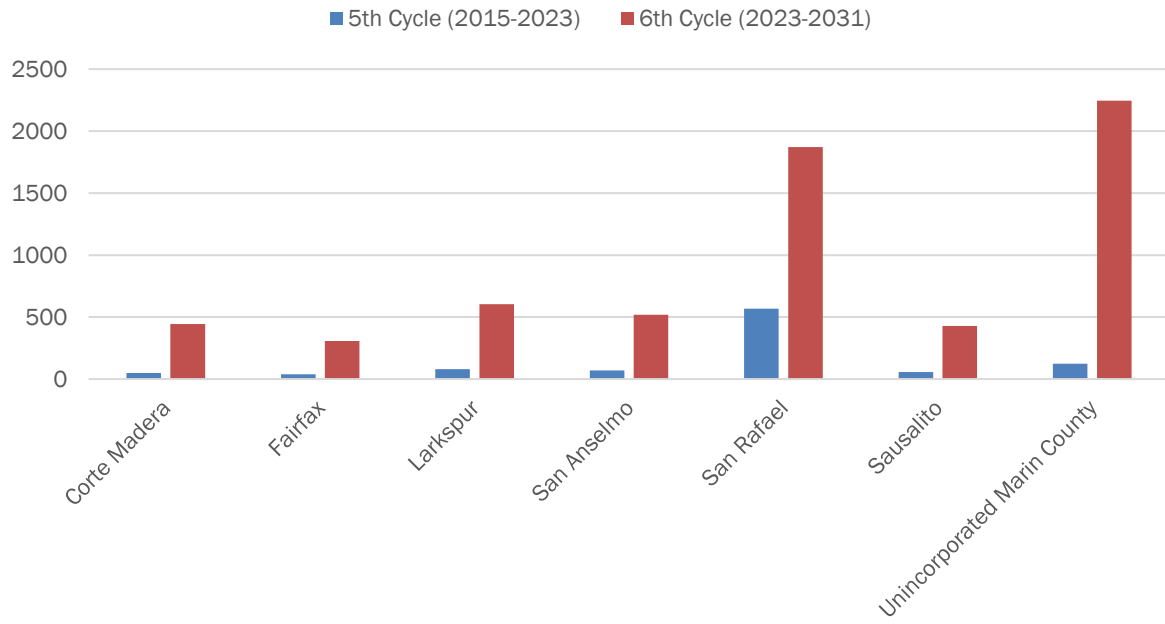
Source: Strategic Economics, 2022.

FIGURE 33: AFFORDABILITY GAP IN MARIN COUNTY FOR VERY LOW, LOW, AND MODERATE INCOME HOUSEHOLDS, 2002 AND 2020



Source: David Paul Rosen and Associates, 2002; Strategic Economics, 2020.

FIGURE 34: REGIONAL HOUSING NEED ALLOCATIONS FOR VERY LOW, LOW, AND MODERATE INCOME HOUSEHOLDS, FIFTH AND SIXTH CYCLES



Source: Department of Housing and Community Development, 2022; Strategic Economics, 2022.

Data Tables: Occupational Wage by Land Use Prototype

Figures 35-37 provide the full detail of the occupations associated with each land use, and their respective average wages. As a part of Step 4, this data is used to calculate the weighted average wage for each land use prototype (Figure 7).

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
11-0000	Management Occupations		
11-1021	General and Operations Managers	\$155,850	2.404%
11-3021	Computer and Information Systems Managers	\$201,960	1.131%
11-3031	Financial Managers	\$182,190	1.016%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$168,900	0.594%
11-2021	Marketing Managers	\$181,720	0.585%
11-9111	Medical and Health Services Managers	\$142,760	0.507%
11-2022	Sales Managers	\$159,720	0.504%
11-3010	Administrative Services and Facilities Managers	\$132,020	0.365%
11-3121	Human Resources Managers	\$163,810	0.295%
11-1011	Chief Executives	\$236,060	0.288%
11-9041	Architectural and Engineering Managers	\$186,500	0.270%
11-3061	Purchasing Managers	\$154,870	0.117%
11-2030	Public Relations and Fundraising Managers	\$142,950	0.104%
11-3071	Transportation, Storage, and Distribution Managers	\$123,910	0.098%
11-9151	Social and Community Service Managers	\$73,210	0.087%
11-9021	Construction Managers	\$134,880	0.082%
11-3051	Industrial Production Managers	\$140,910	0.082%
11-9051	Food Service Managers	\$63,460	0.074%
11-3131	Training and Development Managers	\$152,380	0.072%
11-9121	Natural Sciences Managers	\$208,910	0.067%
11-9141	Property, Real Estate, and Community Association Managers	\$92,930	0.061%
11-3111	Compensation and Benefits Managers	\$170,770	0.041%
11-2011	Advertising and Promotions Managers	\$175,210	0.040%
11-9039	Education Administrators, All Other	\$92,160	0.010%
11-9031	Education and Childcare Administrators, Preschool and Daycare	\$70,080	0.008%
11-9081	Lodging Managers	\$104,250	0.006%
11-9032	Education Administrators, Kindergarten through Secondary	\$129,070	0.004%
11-9033	Education Administrators, Postsecondary	\$130,980	0.003%
11-9161	Emergency Management Directors	\$132,440	0.003%
11-9013	Farmers, Ranchers, and Other Agricultural Managers	n/a	0.002%
11-9071	Gambling Managers	\$125,300	0.001%
	Weighted Mean Annual Wage	\$166,968	8.921%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
13-0000	Business and Financial Operations Occupations		
13-2011	Accountants and Auditors	\$93,590	2.418%
13-1111	Management Analysts	\$113,750	1.667%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	\$93,010	1.648%
13-1161	Market Research Analysts and Marketing Specialists	\$91,350	1.294%
13-1071	Human Resources Specialists	\$89,820	1.023%
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	\$119,100	0.681%
13-1020	Buyers and Purchasing Agents	\$79,040	0.459%
13-1151	Training and Development Specialists	\$83,550	0.410%
13-1041	Compliance Officers	\$92,960	0.299%
13-1081	Logisticians	\$82,010	0.269%
13-1031	Claims Adjusters, Examiners, and Investigators	\$88,480	0.221%
13-2082	Tax Preparers	\$72,280	0.210%
13-2072	Loan Officers	\$84,940	0.184%
13-1141	Compensation, Benefits, and Job Analysis Specialists	\$83,230	0.174%
13-1121	Meeting, Convention, and Event Planners	\$67,530	0.102%
13-2053	Insurance Underwriters	\$97,260	0.090%
13-2041	Credit Analysts	\$109,330	0.087%
13-1051	Cost Estimators	\$98,960	0.082%
13-2052	Personal Financial Advisors	\$157,720	0.062%
13-1131	Fundraisers	\$77,450	0.060%
13-2061	Financial Examiners	\$124,720	0.057%
13-1075	Labor Relations Specialists	\$86,370	0.057%
13-2031	Budget Analysts	\$93,800	0.051%
13-2071	Credit Counselors	\$53,010	0.028%
13-2020	Property Appraisers and Assessors	\$98,450	0.013%
13-1032	Insurance Appraisers, Auto Damage Agents and Business Managers of Artists, Performers, and Athletes	\$72,630	0.009%
13-1011		\$83,260	0.003%
	Weighted Mean Annual Wage	\$95,541	11.657%
15-0000	Computer and Mathematical Occupations		
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	\$145,250	4.036%
15-1211	Computer Systems Analysts	\$121,300	1.649%
15-1232	Computer User Support Specialists	\$75,640	1.418%
15-1299	Computer Occupations, All Other	\$120,370	0.860%
15-1244	Network and Computer Systems Administrators	\$104,370	0.745%
15-1251	Computer Programmers	\$116,400	0.597%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
15-1241	Computer Network Architects	\$137,720	0.405%
15-1231	Computer Network Support Specialists	\$85,990	0.367%
15-1212	Information Security Analysts	\$122,570	0.353%
15-1257	Web Developers and Digital Interface Designers	\$110,790	0.338%
15-1245	Database Administrators and Architects	\$107,930	0.266%
15-2031	Operations Research Analysts	\$116,910	0.199%
15-2098	Data Scientists and Mathematical Science Occupations, All Other	\$140,080	0.079%
15-2041	Statisticians	\$125,970	0.062%
15-1221	Computer and Information Research Scientists	\$142,150	0.060%
15-2011	Actuaries	\$116,500	0.036%
	Weighted Mean Annual Wage	\$121,679	11.473%
17-0000	Architecture and Engineering Occupations		
17-2051	Civil Engineers	\$120,110	0.466%
17-2141	Mechanical Engineers	\$123,270	0.313%
17-2071	Electrical Engineers	\$120,990	0.234%
17-1011	Architects, Except Landscape and Naval	\$103,530	0.228%
17-2112	Industrial Engineers	\$113,920	0.210%
17-3011	Architectural and Civil Drafters	\$67,050	0.190%
17-2199	Engineers, All Other	\$113,050	0.181%
17-2061	Computer Hardware Engineers	\$134,000	0.137%
17-2072	Electronics Engineers, Except Computer Electrical and Electronic Engineering Technologists and Technicians	\$112,800	0.110%
17-3023	Technologists and Technicians	\$67,200	0.108%
17-2081	Environmental Engineers	\$112,830	0.100%
17-3031	Surveying and Mapping Technicians	\$76,380	0.092%
17-3022	Civil Engineering Technologists and Technicians Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	\$75,160	0.086%
17-3098	Surveyors	\$75,070	0.086%
17-1022	Surveyors	\$88,860	0.085%
17-1012	Landscape Architects	\$94,750	0.064%
17-2011	Aerospace Engineers	\$135,230	0.054%
17-3013	Mechanical Drafters	\$71,180	0.047%
17-3027	Mechanical Engineering Technologists and Technicians	\$61,100	0.046%
17-3025	Environmental Engineering Technologists and Technicians	\$60,630	0.033%
17-3026	Industrial Engineering Technologists and Technicians	\$61,050	0.028%
17-3012	Electrical and Electronics Drafters	\$65,810	0.028%
17-2041	Chemical Engineers	\$106,430	0.024%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	\$114,800	0.024%
17-2131	Materials Engineers	\$104,560	0.021%
17-1021	Cartographers and Photogrammetrists	\$105,970	0.014%
17-3019	Drafters, All Other	\$73,450	0.014%
17-2031	Bioengineers and Biomedical Engineers	\$119,000	0.013%
17-2121	Marine Engineers and Naval Architects	\$136,480	0.010%
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians	\$61,190	0.008%
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	\$132,720	0.008%
	Weighted Mean Annual Wage	\$101,626	3.146%
19-0000	Life, Physical, and Social Science Occupations		
19-2041	Environmental Scientists and Specialists, Including Health	\$109,180	0.149%
19-1042	Medical Scientists, Except Epidemiologists	\$120,470	0.095%
19-3031	Clinical, Counseling, and School Psychologists	\$110,070	0.091%
19-5011	Occupational Health and Safety Specialists	\$108,230	0.072%
19-4042	Environmental Science and Protection Technicians, Including Health	\$58,010	0.060%
19-4099	Life, Physical, and Social Science Technicians, All Other	\$61,390	0.055%
19-4031	Chemical Technicians	\$55,980	0.054%
19-4021	Biological Technicians	\$60,040	0.042%
19-1021	Biochemists and Biophysicists	\$124,400	0.033%
19-1029	Biological Scientists, All Other	\$108,200	0.030%
19-4061	Social Science Research Assistants	\$54,210	0.024%
19-3011	Economists	\$133,180	0.024%
19-5012	Occupational Health and Safety Technicians	\$62,820	0.017%
19-1013	Soil and Plant Scientists	\$77,070	0.017%
19-3051	Urban and Regional Planners	\$105,370	0.016%
19-4010	Agricultural and Food Science Technicians	\$46,060	0.015%
19-1012	Food Scientists and Technologists	\$90,860	0.015%
19-2012	Physicists	\$134,500	0.014%
19-3091	Anthropologists and Archeologists	\$69,480	0.013%
19-3022	Survey Researchers	\$89,020	0.013%
19-1022	Microbiologists	\$104,580	0.013%
19-3099	Social Scientists and Related Workers, All Other	\$90,120	0.012%
19-1023	Zoologists and Wildlife Biologists	\$75,320	0.012%
19-2099	Physical Scientists, All Other	\$127,650	0.010%
19-2043	Hydrologists	\$108,850	0.010%
19-2021	Atmospheric and Space Scientists	\$114,370	0.009%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
19-1031	Conservation Scientists	\$83,700	0.009%
19-2032	Materials Scientists	\$119,470	0.008%
19-3039	Psychologists, All Other	\$106,870	0.007%
19-1032	Foresters	\$93,760	0.004%
19-4071	Forest and Conservation Technicians	\$47,410	0.003%
19-1041	Epidemiologists	\$107,760	0.002%
19-3041	Sociologists	\$101,420	0.001%
19-4092	Forensic Science Technicians	\$103,940	0.001%
	Weighted Mean Annual Wage	\$81,448	1.104%
21-0000	Community and Social Service Occupations		
	Substance Abuse, Behavioral Disorder, and Mental Health Counselors		
21-1018	Mental Health Counselors	\$60,290	0.449%
21-1093	Social and Human Service Assistants	\$48,800	0.222%
	Mental Health and Substance Abuse Social Workers		
21-1023	Workers	\$77,630	0.181%
21-1022	Healthcare Social Workers	\$86,560	0.128%
21-1021	Child, Family, and School Social Workers	\$61,900	0.085%
21-1013	Marriage and Family Therapists	\$63,470	0.075%
21-1094	Community Health Workers	\$55,350	0.064%
21-1091	Health Education Specialists	\$72,560	0.059%
	Community and Social Service Specialists, All Other		
21-1099	Other	\$59,510	0.038%
21-1015	Rehabilitation Counselors	\$50,320	0.038%
	Educational, Guidance, and Career Counselors and Advisors		
21-1012		\$78,220	0.027%
21-1019	Counselors, All Other	\$66,150	0.013%
21-1029	Social Workers, All Other	\$80,980	0.011%
21-2011	Clergy	\$72,730	0.007%
21-2021	Directors, Religious Activities and Education	\$67,180	0.003%
21-2099	Religious Workers, All Other	\$48,670	0.001%
	Weighted Mean Annual Wage	\$64,024	1.403%
23-0000	Legal Occupations		
23-1011	Lawyers	\$188,910	1.158%
23-2011	Paralegals and Legal Assistants	\$71,360	0.662%
23-2093	Title Examiners, Abstractors, and Searchers	\$59,890	0.064%
23-2099	Legal Support Workers, All Other	\$61,510	0.035%
23-1022	Arbitrators, Mediators, and Conciliators	\$114,800	0.004%
	Weighted Mean Annual Wage	\$141,697	1.923%
25-0000	Educational Instruction and Library Occupations		

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
25-3031	Substitute Teachers, Short-Term	\$42,940	0.079%
25-9045	Teaching Assistants, Except Postsecondary	\$39,730	0.046%
25-9031	Instructional Coordinators	\$77,090	0.041%
25-3021	Self-Enrichment Teachers	\$53,730	0.038%
25-3097	Tutors and Teachers and Instructors, All Other	\$50,800	0.030%
25-2011	Preschool Teachers, Except Special Education	\$45,050	0.024%
25-2059	Special Education Teachers, All Other	\$66,210	0.011%
25-4022	Librarians and Media Collections Specialists	\$89,390	0.010%
25-9099	Educational Instruction and Library Workers, All Other	\$61,100	0.009%
25-1194	Career/Technical Education Teachers, Postsecondary	\$87,990	0.007%
25-4031	Library Technicians	\$58,980	0.005%
25-3011	Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	\$94,920	0.002%
25-2051	Special Education Teachers, Preschool	\$62,550	0.002%
25-1071	Health Specialties Teachers, Postsecondary	\$115,900	0.002%
25-4011	Archivists	\$81,730	0.001%
25-2058	Special Education Teachers, Secondary School	\$93,110	0.001%
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	\$93,350	0.001%
25-2052	Special Education Teachers, Kindergarten and Elementary School	\$73,540	0.001%
25-9044	Teaching Assistants, Postsecondary	\$33,880	0.001%
25-2021	Elementary School Teachers, Except Special Education	\$84,040	0.001%
	Weighted Mean Annual Wage	\$54,651	0.318%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations		
27-3031	Public Relations Specialists	\$84,520	0.274%
27-1024	Graphic Designers	\$77,110	0.257%
27-3042	Technical Writers	\$102,500	0.109%
27-1026	Merchandise Displayers and Window Trimmers	\$38,480	0.102%
27-3041	Editors	\$86,530	0.091%
27-1025	Interior Designers	\$72,240	0.068%
27-1011	Art Directors	\$135,970	0.063%
27-3043	Writers and Authors	\$93,060	0.062%
27-4021	Photographers	\$61,530	0.056%
27-3091	Interpreters and Translators	\$78,250	0.055%
27-1014	Special Effects Artists and Animators	\$97,570	0.047%
27-2012	Producers and Directors	\$104,520	0.045%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
27-1021	Commercial and Industrial Designers	\$87,530	0.039%
27-1022	Fashion Designers	\$89,400	0.029%
27-4011	Audio and Video Technicians	\$64,140	0.026%
27-3023	News Analysts, Reporters, and Journalists	\$81,080	0.017%
27-1029	Designers, All Other	\$91,810	0.014%
27-2022	Coaches and Scouts	\$48,900	0.013%
27-3099	Media and Communication Workers, All Other	\$63,270	0.009%
27-4032	Film and Video Editors	\$83,100	0.007%
27-4031	Camera Operators, Television, Video, and Film	\$59,160	0.005%
27-1023	Floral Designers	\$39,920	0.005%
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	\$85,980	0.004%
27-4098	Lighting Technicians and Media and Communication Equipment Workers, All Other	\$60,610	0.003%
27-2023	Umpires, Referees, and Other Sports Officials	\$38,360	0.003%
27-4014	Sound Engineering Technicians	\$70,470	0.002%
27-1027	Set and Exhibit Designers	\$60,530	0.002%
27-1019	Artists and Related Workers, All Other	\$93,840	0.001%
27-1012	Craft Artists	\$59,460	0.001%
27-4012	Broadcast Technicians	\$57,390	0.001%
	Weighted Mean Annual Wage	\$81,665	1.421%
29-0000	Healthcare Practitioners and Technical Occupations		
29-1141	Registered Nurses	\$138,000	1.900%
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	\$173,990	0.831%
29-1292	Dental Hygienists	\$113,940	0.701%
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	\$58,370	0.682%
29-2061	Licensed Practical and Licensed Vocational Nurses	\$69,490	0.592%
29-1171	Nurse Practitioners	\$157,150	0.510%
29-1021	Dentists, General	\$169,730	0.349%
29-1215	Family Medicine Physicians	\$213,960	0.343%
29-1071	Physician Assistants	\$126,810	0.330%
29-2034	Radiologic Technologists and Technicians	\$103,670	0.253%
29-2010	Clinical Laboratory Technologists and Technicians	\$65,210	0.216%
29-1123	Physical Therapists	\$102,470	0.211%
29-2057	Ophthalmic Medical Technicians	\$52,660	0.173%
29-2056	Veterinary Technologists and Technicians	\$46,670	0.155%
29-2055	Surgical Technologists	\$72,790	0.119%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
29-1216	General Internal Medicine Physicians	\$227,810	0.116%
29-1248	Surgeons, Except Ophthalmologists	\$256,870	0.108%
29-1151	Nurse Anesthetists	\$254,860	0.105%
29-1131	Veterinarians	\$113,930	0.104%
29-1221	Pediatricians, General	\$213,530	0.093%
29-1051	Pharmacists	\$148,390	0.093%
29-2052	Pharmacy Technicians	\$51,090	0.092%
29-1122	Occupational Therapists	\$103,740	0.086%
29-2081	Opticians, Dispensing	\$50,840	0.082%
29-2032	Diagnostic Medical Sonographers	\$115,280	0.081%
29-1127	Speech-Language Pathologists	\$97,500	0.073%
29-1041	Optometrists	\$125,680	0.068%
29-1031	Dietitians and Nutritionists	\$87,890	0.065%
29-9098	Health Information Technologists, Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers, All Other	\$81,080	0.064%
29-1218	Obstetricians and Gynecologists	\$223,430	0.059%
29-1223	Psychiatrists	\$257,150	0.055%
29-1011	Chiropractors	\$79,240	0.052%
29-2053	Psychiatric Technicians	\$54,930	0.044%
29-2031	Cardiovascular Technologists and Technicians	\$75,720	0.037%
29-2035	Magnetic Resonance Imaging Technologists	\$104,870	0.029%
29-2040	Emergency Medical Technicians and Paramedics	\$54,180	0.028%
29-1298	Acupuncturists and Healthcare Diagnosing or Treating Practitioners, All Other	\$76,670	0.028%
29-1126	Respiratory Therapists	\$97,950	0.027%
29-1124	Radiation Therapists	\$142,300	0.025%
29-1181	Audiologists	\$102,560	0.023%
29-9091	Athletic Trainers	\$60,150	0.022%
29-1161	Nurse Midwives	\$156,450	0.018%
29-1081	Podiatrists	\$132,380	0.016%
29-2033	Nuclear Medicine Technologists	\$124,660	0.014%
29-1129	Therapists, All Other	\$62,790	0.011%
29-2091	Orthotists and Prosthetists	\$81,090	0.007%
29-1125	Recreational Therapists	\$74,200	0.005%
29-2051	Dietetic Technicians	\$39,770	0.004%
29-2092	Hearing Aid Specialists	\$66,050	0.004%
29-9092	Genetic Counselors	\$108,000	0.002%
	Weighted Mean Annual Wage	\$124,379	9.259%
31-0000	Healthcare Support Occupations		

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
31-9092	Medical Assistants	\$48,920	2.108%
31-9091	Dental Assistants	\$51,510	1.095%
31-1120	Home Health and Personal Care Aides	\$30,320	0.255%
31-1131	Nursing Assistants	\$45,100	0.239%
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	\$36,590	0.134%
31-2021	Physical Therapist Assistants	\$63,110	0.095%
31-9094	Medical Transcriptionists	\$50,060	0.086%
31-9097	Phlebotomists	\$54,040	0.059%
31-2022	Physical Therapist Aides	\$35,520	0.059%
31-9011	Massage Therapists	\$50,560	0.052%
31-9093	Medical Equipment Preparers	\$60,670	0.047%
31-9099	Healthcare Support Workers, All Other	\$50,950	0.043%
31-2011	Occupational Therapy Assistants	\$73,400	0.037%
31-1133	Psychiatric Aides	\$30,930	0.015%
31-1132	Orderlies	\$44,730	0.011%
31-9095	Pharmacy Aides	\$46,430	0.010%
31-2012	Occupational Therapy Aides	\$47,740	0.007%
	Weighted Mean Annual Wage	\$48,408	4.353%
33-0000	Protective Service Occupations		
33-9032	Security Guards	\$38,580	1.039%
33-1090	Miscellaneous First-Line Supervisors, Protective Service Workers	\$61,530	0.064%
33-9021	Private Detectives and Investigators	\$78,150	0.045%
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	\$31,600	0.031%
33-9091	Crossing Guards and Flaggers	\$52,400	0.031%
33-2011	Firefighters	\$98,680	0.016%
33-9098	School Bus Monitors and Protective Service Workers, All Other	\$49,650	0.016%
33-9011	Animal Control Workers	\$51,070	0.002%
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	\$166,930	0.002%
33-2021	Fire Inspectors and Investigators	\$119,380	0.001%
	Weighted Mean Annual Wage	\$42,511	1.246%
35-0000	Food Preparation and Serving Related Occupations		
35-3011	Bartenders	\$37,310	0.068%
35-3031	Waiters and Waitresses	\$37,810	0.062%
35-3023	Fast Food and Counter Workers	\$31,610	0.057%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	\$44,560	0.052%
35-2021	Food Preparation Workers	\$31,820	0.030%
35-2014	Cooks, Restaurant	\$38,430	0.024%
35-2012	Cooks, Institution and Cafeteria	\$40,710	0.022%
35-9021	Dishwashers	\$31,680	0.017%
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	\$35,040	0.015%
35-1011	Chefs and Head Cooks	\$63,740	0.012%
35-3041	Food Servers, Nonrestaurant	\$35,200	0.009%
35-2015	Cooks, Short Order	\$34,460	0.003%
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$34,520	0.002%
35-2011	Cooks, Fast Food	\$27,060	0.001%
35-9099	Food Preparation and Serving Related Workers, All Other	\$31,250	0.001%
35-2019	Cooks, All Other	\$40,740	0.001%
	Weighted Mean Annual Wage	\$37,675	0.377%
37-0000	Building and Grounds Cleaning and Maintenance Occupations		
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$38,870	7.030%
37-3011	Landscaping and Groundskeeping Workers	\$43,940	4.364%
37-2012	Maids and Housekeeping Cleaners	\$41,430	0.880%
37-2021	Pest Control Workers	\$47,050	0.584%
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	\$68,600	0.529%
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	\$53,550	0.431%
37-3013	Tree Trimmers and Pruners	\$49,440	0.316%
37-2019	Building Cleaning Workers, All Other	\$32,430	0.107%
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	\$79,020	0.097%
37-3019	Grounds Maintenance Workers, All Other	\$54,060	0.020%
	Weighted Mean Annual Wage	\$42,914	14.358%
39-0000	Personal Care and Service Occupations		
39-2021	Animal Caretakers	\$34,130	0.074%
39-9031	Exercise Trainers and Group Fitness Instructors	\$59,340	0.073%
39-9011	Childcare Workers	\$35,590	0.069%
39-9032	Recreation Workers	\$36,490	0.067%
39-1098	First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services	\$54,240	0.031%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
39-5094	Skincare Specialists	\$37,640	0.028%
39-9041	Residential Advisors	\$42,720	0.018%
39-3091	Amusement and Recreation Attendants	\$29,650	0.015%
39-9098	Crematory Operators and Personal Care and Service Workers, All Other	\$35,060	0.011%
39-7010	Tour and Travel Guides	\$42,380	0.009%
39-6011	Baggage Porters and Bellhops	\$33,390	0.008%
39-3031	Ushers, Lobby Attendants, and Ticket Takers	\$33,520	0.008%
39-6012	Concierges	\$44,060	0.006%
39-5012	Hairdressers, Hairstylists, and Cosmetologists	\$35,410	0.003%
39-3012	Gambling and Sports Book Writers and Runners Locker Room, Coatroom, and Dressing Room Attendants	\$32,190	0.002%
39-3093	Attendants	\$41,030	0.001%
39-3019	Gambling Service Workers, All Other	\$35,260	0.001%
39-2011	Animal Trainers	\$42,320	0.001%
	Weighted Mean Annual Wage	\$41,279	0.426%
41-0000	Sales and Related Occupations		
	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel		
41-3091		\$81,320	1.469%
41-3021	Insurance Sales Agents	\$109,960	0.419%
	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products		
41-4012		\$81,830	0.379%
	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products		
41-4011		\$104,680	0.285%
41-2031	Retail Salespersons	\$34,810	0.171%
	First-Line Supervisors of Non-Retail Sales Workers		
41-1012		\$77,590	0.162%
	Securities, Commodities, and Financial Services Sales Agents		
41-3031		\$101,770	0.139%
41-3011	Advertising Sales Agents	\$92,720	0.122%
41-9031	Sales Engineers	\$125,730	0.099%
41-9011	Demonstrators and Product Promoters	\$36,560	0.078%
41-9041	Telemarketers	\$33,420	0.072%
41-1011	First-Line Supervisors of Retail Sales Workers	\$46,980	0.059%
41-2011	Cashiers	\$32,150	0.051%
41-3041	Travel Agents	\$53,520	0.046%
41-9022	Real Estate Sales Agents	\$71,070	0.037%
41-2021	Counter and Rental Clerks	\$40,320	0.022%
41-2022	Parts Salespersons	\$45,260	0.007%
41-2012	Gambling Change Persons and Booth Cashiers	\$32,010	0.000%
	Weighted Mean Annual Wage	\$81,059	3.685%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
43-0000	Office and Administrative Support Occupations		
43-4051	Customer Service Representatives	\$49,200	2.549%
43-9061	Office Clerks, General	\$46,920	2.493%
43-4171	Receptionists and Information Clerks	\$39,990	1.818%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$54,980	1.729%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$51,170	1.697%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$71,190	1.447%
43-6013	Medical Secretaries and Administrative Assistants	\$49,140	1.382%
43-3021	Billing and Posting Clerks	\$50,120	0.988%
43-6011	Executive Secretaries and Executive Administrative Assistants	\$82,480	0.628%
43-6012	Legal Secretaries and Administrative Assistants	\$69,990	0.332%
43-9041	Insurance Claims and Policy Processing Clerks	\$53,480	0.268%
43-5061	Production, Planning, and Expediting Clerks	\$63,180	0.262%
43-3011	Bill and Account Collectors	\$55,830	0.244%
43-3051	Payroll and Timekeeping Clerks	\$63,280	0.214%
43-4111	Interviewers, Except Eligibility and Loan	\$55,180	0.207%
43-9021	Data Entry Keyers	\$41,790	0.194%
43-5071	Shipping, Receiving, and Inventory Clerks	\$42,910	0.189%
43-4131	Loan Interviewers and Clerks	\$49,770	0.176%
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	\$53,370	0.148%
43-9199	Office and Administrative Support Workers, All Other	\$45,160	0.146%
43-4071	File Clerks	\$41,240	0.135%
43-5032	Dispatchers, Except Police, Fire, and Ambulance	\$54,040	0.074%
43-4199	Information and Record Clerks, All Other	\$57,150	0.067%
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	\$39,020	0.061%
43-2011	Switchboard Operators, Including Answering Service	\$49,560	0.056%
43-3071	Tellers	\$36,170	0.052%
43-3061	Procurement Clerks	\$50,680	0.049%
43-5021	Couriers and Messengers	\$42,320	0.047%
43-4151	Order Clerks	\$45,220	0.045%
43-9071	Office Machine Operators, Except Computer	\$35,990	0.038%
43-3099	Financial Clerks, All Other	\$47,510	0.032%
43-5011	Cargo and Freight Agents	\$50,610	0.030%
43-4041	Credit Authorizers, Checkers, and Clerks	\$47,330	0.026%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	\$41,640	0.024%
43-4141	New Accounts Clerks	\$44,890	0.019%
43-9022	Word Processors and Typists	\$63,600	0.016%
43-4011	Brokerage Clerks	\$61,580	0.014%
43-4061	Eligibility Interviewers, Government Programs	\$68,450	0.010%
43-9111	Statistical Assistants	\$54,820	0.010%
43-9031	Desktop Publishers	\$64,290	0.008%
43-5041	Meter Readers, Utilities	\$76,620	0.008%
43-9081	Proofreaders and Copy Markers	\$51,200	0.007%
43-4081	Hotel, Motel, and Resort Desk Clerks	\$39,440	0.004%
43-2099	Communications Equipment Operators, All Other	\$65,500	0.004%
43-4031	Court, Municipal, and License Clerks	\$68,870	0.003%
43-2021	Telephone Operators	\$48,480	0.003%
43-4121	Library Assistants, Clerical	\$43,600	0.003%
	Weighted Mean Annual Wage	\$52,314	17.996%
45-0000	Farming, Fishing, and Forestry Occupations		
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	\$37,430	0.023%
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	\$35,610	0.006%
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	\$54,120	0.004%
45-2011	Agricultural Inspectors	\$71,880	0.002%
45-2091	Agricultural Equipment Operators	\$35,950	0.002%
45-2099	Agricultural Workers, All Other	\$40,440	0.002%
45-4011	Forest and Conservation Workers	\$28,010	0.001%
	Weighted Mean Annual Wage	\$39,878	0.039%
47-0000	Construction and Extraction Occupations		
47-2061	Construction Laborers	\$55,970	0.208%
47-4011	Construction and Building Inspectors	\$101,820	0.110%
47-2111	Electricians	\$100,400	0.068%
47-2031	Carpenters	\$71,490	0.051%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$99,580	0.048%
47-2152	Plumbers, Pipefitters, and Steamfitters	\$87,230	0.034%
47-2073	Operating Engineers and Other Construction Equipment Operators	\$86,240	0.020%
47-2051	Cement Masons and Concrete Finishers	\$65,350	0.011%
47-2141	Painters, Construction and Maintenance	\$67,770	0.011%
47-2211	Sheet Metal Workers	\$68,510	0.008%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
47-4090	Miscellaneous Construction and Related Workers	\$63,360	0.007%
47-4041	Hazardous Materials Removal Workers	\$48,770	0.007%
47-5097	Earth Drillers, Except Oil and Gas; and Explosives Workers, Ordnance Handling Experts, and Blasters	\$64,130	0.006%
47-3019	Helpers, Construction Trades, All Other	\$36,580	0.003%
47-5022	Excavating and Loading Machine and Dragline Operators, Surface Mining	\$91,850	0.003%
47-2181	Roofers	\$55,100	0.003%
47-2011	Boilermakers	\$86,630	0.002%
47-2071	Paving, Surfacing, and Tamping Equipment Operators	\$63,960	0.001%
47-5081	Helpers--Extraction Workers	\$48,630	0.001%
47-5012	Rotary Drill Operators, Oil and Gas	\$112,770	0.001%
47-2221	Structural Iron and Steel Workers	\$75,630	0.001%
47-3012	Helpers--Carpenters	\$41,650	0.001%
47-2121	Glaziers	\$72,550	0.001%
47-2041	Carpet Installers	\$64,200	0.001%
47-2151	Pipelayers	\$68,280	0.001%
47-4051	Highway Maintenance Workers	\$63,210	0.001%
	Weighted Mean Annual Wage	\$76,185	0.620%
49-0000	Installation, Maintenance, and Repair Occupations		
49-9071	Maintenance and Repair Workers, General	\$56,230	0.473%
49-9099	Installation, Maintenance, and Repair Workers, All Other	\$55,210	0.152%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	\$89,740	0.113%
49-2098	Security and Fire Alarm Systems Installers	\$50,410	0.063%
49-2011	Computer, Automated Teller, and Office Machine Repairers	\$45,100	0.052%
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	\$69,090	0.051%
49-9041	Industrial Machinery Mechanics	\$78,010	0.036%
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	\$45,750	0.034%
49-3023	Automotive Service Technicians and Mechanics	\$58,630	0.031%
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$68,840	0.027%
49-9052	Telecommunications Line Installers and Repairers	\$64,390	0.024%
49-9062	Medical Equipment Repairers	\$69,330	0.022%
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	\$75,510	0.019%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$79,500	0.017%
49-9094	Locksmiths and Safe Repairers	\$63,770	0.016%
49-9098	Helpers--Installation, Maintenance, and Repair Workers	\$37,740	0.015%
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$76,480	0.013%
49-9043	Maintenance Workers, Machinery	\$63,090	0.011%
49-9051	Electrical Power-Line Installers and Repairers	\$111,740	0.007%
49-9044	Millwrights	\$82,700	0.007%
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	\$63,770	0.006%
49-2097	Audiovisual Equipment Installers and Repairers	\$59,500	0.005%
49-3041	Farm Equipment Mechanics and Service Technicians	\$42,060	0.005%
49-2091	Avionics Technicians	\$91,240	0.004%
49-9069	Precision Instrument and Equipment Repairers, All Other	\$77,950	0.003%
49-3021	Automotive Body and Related Repairers	\$57,580	0.003%
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	\$43,550	0.002%
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	\$75,530	0.001%
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairers	\$85,700	0.001%
49-9031	Home Appliance Repairers	\$53,820	0.001%
49-9096	Riggers	\$73,610	0.001%
49-3093	Tire Repairers and Changers	\$36,640	0.001%
49-9081	Wind Turbine Service Technicians	\$62,910	0.001%
49-2092	Electric Motor, Power Tool, and Related Repairers	\$55,250	0.001%
	Weighted Mean Annual Wage	\$60,320	1.246%
51-0000	Production Occupations		
51-2090	Miscellaneous Assemblers and Fabricators	\$43,160	0.454%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$49,860	0.261%
51-9199	Production Workers, All Other	\$37,130	0.160%
51-9198	Helpers--Production Workers	\$34,400	0.146%
51-9111	Packaging and Filling Machine Operators and Tenders	\$34,740	0.096%
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	\$43,800	0.086%
51-1011	First-Line Supervisors of Production and Operating Workers	\$76,700	0.084%
51-6011	Laundry and Dry-Cleaning Workers	\$34,880	0.066%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
51-4041	Machinists	\$59,690	0.059%
51-4121	Welders, Cutters, Solderers, and Brazers	\$58,600	0.046%
51-5112	Printing Press Operators	\$43,690	0.039%
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$39,080	0.033%
51-6099	Textile, Apparel, and Furnishings Workers, All Other	\$37,420	0.030%
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	\$44,990	0.023%
51-3092	Food Batchmakers	\$35,300	0.018%
51-9081	Dental Laboratory Technicians	\$43,620	0.018%
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$41,700	0.017%
51-9083	Ophthalmic Laboratory Technicians	\$43,010	0.016%
51-4199	Metal Workers and Plastic Workers, All Other	\$49,010	0.014%
51-9161	Computer Numerically Controlled Tool Operators	\$50,790	0.012%
51-6031	Sewing Machine Operators	\$32,880	0.010%
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	\$35,910	0.009%
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	\$50,520	0.009%
51-5111	Prepress Technicians and Workers	\$53,090	0.008%
51-3099	Food Processing Workers, All Other	\$32,410	0.008%
51-8031	Water and Wastewater Treatment Plant and System Operators	\$93,680	0.007%
51-9151	Photographic Process Workers and Processing Machine Operators	\$51,650	0.007%
51-3011	Bakers	\$36,960	0.006%
51-9082	Medical Appliance Technicians	\$56,910	0.006%
51-4111	Tool and Die Makers	\$72,410	0.006%
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	\$44,460	0.005%
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	\$38,720	0.005%
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	\$48,700	0.004%
51-8013	Power Plant Operators	\$105,500	0.004%
51-2041	Structural Metal Fabricators and Fitters	\$44,090	0.004%
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	\$90,580	0.004%
51-6092	Fabric and Apparel Patternmakers	\$44,530	0.004%
51-7011	Cabinetmakers and Bench Carpenters	\$46,910	0.004%
51-5113	Print Binding and Finishing Workers	\$39,120	0.004%
51-8021	Stationary Engineers and Boiler Operators	\$103,370	0.004%
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	\$44,320	0.003%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
51-9011	Chemical Equipment Operators and Tenders	\$56,050	0.003%
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	\$45,170	0.003%
51-9162	Computer Numerically Controlled Tool Programmers	\$81,250	0.003%
51-8099	Plant and System Operators, All Other	\$79,160	0.002%
51-9071	Jewelers and Precious Stone and Metal Workers	\$39,560	0.002%
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	\$35,680	0.002%
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	\$31,740	0.002%
51-6093	Upholsterers	\$46,490	0.002%
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	\$51,190	0.002%
51-3093	Food Cooking Machine Operators and Tenders	\$29,560	0.002%
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	\$40,960	0.001%
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	\$37,690	0.001%
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	\$46,780	0.001%
51-7021	Furniture Finishers	\$35,980	0.001%
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$48,700	0.001%
51-9123	Painting, Coating, and Decorating Workers	\$49,290	0.001%
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$57,140	0.001%
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	\$39,920	0.001%
51-3021	Butchers and Meat Cutters	\$39,080	0.001%
51-6063	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	\$27,820	0.001%
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$45,420	0.001%
51-6052	Tailors, Dressmakers, and Custom Sewers	\$52,870	0.001%
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$53,800	0.001%
51-8092	Gas Plant Operators	\$98,340	0.001%
51-4071	Foundry Mold and Coremakers	\$43,730	0.001%
51-6021	Pressers, Textile, Garment, and Related Materials	\$30,100	0.001%
51-2051	Fiberglass Laminators and Fabricators	\$45,970	0.001%
	Weighted Mean Annual Wage	\$44,646	1.867%
53-0000	Transportation and Material Moving Occupations		
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$39,930	1.364%

FIGURE 35. OCCUPATION MIX AND AVERAGE WAGES FOR OFFICE/MEDICAL OFFICE/R&D, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Office Workers (c)
53-3031	Driver/Sales Workers	\$34,920	0.383%
53-7065	Stockers and Order Fillers	\$36,170	0.279%
53-7064	Packers and Packagers, Hand	\$32,950	0.277%
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$51,440	0.193%
53-7051	Industrial Truck and Tractor Operators	\$43,940	0.168%
53-3033	Light Truck Drivers	\$48,790	0.121%
53-7061	Cleaners of Vehicles and Equipment	\$33,470	0.119%
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$66,690	0.080%
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	\$40,610	0.056%
53-3099	Motor Vehicle Operators, All Other	\$55,930	0.031%
53-6021	Parking Attendants	\$34,320	0.022%
53-2012	Commercial Pilots	\$113,260	0.014%
53-3052	Bus Drivers, Transit and Intercity	\$58,860	0.006%
53-7063	Machine Feeders and Offbearers	\$43,880	0.006%
53-7199	Material Moving Workers, All Other	\$34,200	0.005%
53-2022	Airfield Operations Specialists	\$56,410	0.005%
53-6051	Transportation Inspectors	\$94,170	0.004%
53-6031	Automotive and Watercraft Service Attendants	\$31,340	0.003%
53-6098	Aircraft Service Attendants and Transportation Workers, All Other	\$52,040	0.003%
53-2011	Airline Pilots, Copilots, and Flight Engineers	\$243,550	0.002%
53-6041	Traffic Technicians	\$86,560	0.002%
53-2031	Flight Attendants	\$51,230	0.001%
53-6061	Passenger Attendants	\$34,080	0.001%
	Weighted Mean Annual Wage	\$40,712	3.162%
	Total, Land Use	\$85,440.54	100.000%

Notes:

- (a) Occupational mix by industry was obtained from US Bureau of Labor Statistics, Occupational Employment Statistics, 2019.
- (b) Wage data for the San Francisco Metropolitan Statistical Area was obtained from California Economic Development Department, OES Employment and Wages by Occupation, 2019.
- (c) Distribution of workers is calculated based on the existing distribution of employment by industry in Marin County, provided by Quarterly Census of Employment and Wages (QCEW), 2019

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 36. OCCUPATIONAL MIX AND AVERAGE WAGES FOR RETAIL/RESTAURANT/SERVICES

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
11-0000	Management Occupations		
11-9051	Food Service Managers	\$63,460	1.525%
11-1021	General and Operations Managers	\$155,850	0.800%
11-2022	Sales Managers	\$159,720	0.046%
11-3031	Financial Managers	\$182,190	0.016%
11-3010	Administrative Services and Facilities Managers	\$132,020	0.008%
11-2021	Marketing Managers	\$181,720	0.007%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$168,900	0.005%
11-3121	Human Resources Managers	\$163,810	0.004%
11-1011	Chief Executives	\$236,060	0.003%
11-3071	Transportation, Storage, and Distribution Managers	\$123,910	0.002%
11-3021	Computer and Information Systems Managers	\$201,960	0.002%
11-3131	Training and Development Managers	\$152,380	0.002%
11-9111	Medical and Health Services Managers	\$142,760	0.001%
11-3061	Purchasing Managers	\$154,870	0.001%
11-3051	Industrial Production Managers	\$140,910	0.001%
	Weighted Mean Annual Wage	\$98,093	2.423%
13-0000	Business and Financial Operations Occupations		
13-1151	Training and Development Specialists	\$83,550	0.079%
13-1161	Market Research Analysts and Marketing Specialists	\$91,350	0.041%
13-2011	Accountants and Auditors	\$93,590	0.035%
13-1071	Human Resources Specialists	\$89,820	0.029%
13-1121	Meeting, Convention, and Event Planners	\$67,530	0.029%
13-1020	Buyers and Purchasing Agents	\$79,040	0.019%
13-2072	Loan Officers	\$84,940	0.012%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	\$93,010	0.009%
13-1051	Cost Estimators	\$98,960	0.007%
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	\$119,100	0.003%
13-1111	Management Analysts	\$113,750	0.001%
13-1081	Logisticians	\$82,010	0.001%
13-2041	Credit Analysts	\$109,330	0.001%
13-1041	Compliance Officers	\$92,960	0.001%
	Weighted Mean Annual Wage	\$86,096	0.269%

FIGURE 36. OCCUPATIONAL MIX AND WAGES FOR RETAIL/RESTAURANT/SERVICES, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
15-0000	Computer and Mathematical Occupations		
15-1232	Computer User Support Specialists	\$75,640	0.004%
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	\$145,250	0.003%
15-1244	Network and Computer Systems Administrators	\$104,370	0.003%
15-1257	Web Developers and Digital Interface Designers	\$110,790	0.003%
15-1299	Computer Occupations, All Other	\$120,370	0.003%
15-1211	Computer Systems Analysts	\$121,300	0.001%
15-1231	Computer Network Support Specialists	\$85,990	0.001%
15-1251	Computer Programmers	\$116,400	0.001%
	Weighted Mean Annual Wage	\$109,230	0.019%
21-0000	Community and Social Service Occupations		
21-1019	Counselors, All Other	\$66,150	0.001%
21-1022	Healthcare Social Workers	\$86,560	0.0005%
	Weighted Mean Annual Wage	\$73,047	0.001%
23-0000	Legal Occupations		
23-2093	Title Examiners, Abstractors, and Searchers	\$59,890	0.002%
23-2099	Legal Support Workers, All Other	\$61,510	0.0003%
23-1011	Lawyers	\$188,910	0.0003%
	Weighted Mean Annual Wage	\$73,546	0.002%
25-0000	Educational Instruction and Library Occupations		
25-3021	Self-Enrichment Teachers	\$53,730	0.005%
25-3097	Tutors and Teachers and Instructors, All Other	\$50,800	0.0001%
25-9031	Instructional Coordinators	\$77,090	0.0001%
	Weighted Mean Annual Wage	\$54,313	0.005%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations		
27-2012	Producers and Directors	\$104,520	0.017%
27-3031	Public Relations Specialists	\$84,520	0.011%
27-1026	Merchandise Displayers and Window Trimmers	\$38,480	0.011%
27-4032	Film and Video Editors	\$83,100	0.007%
27-4011	Audio and Video Technicians	\$64,140	0.005%
27-1024	Graphic Designers	\$77,110	0.005%
27-1025	Interior Designers	\$72,240	0.004%
27-1014	Special Effects Artists and Animators	\$97,570	0.004%
27-4031	Camera Operators, Television, Video, and Film	\$59,160	0.003%

FIGURE 36. OCCUPATIONAL MIX AND WAGES FOR RETAIL/RESTAURANT/SERVICES, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
27-4098	Lighting Technicians and Media and Communication Equipment Workers, All Other	\$60,610	0.003%
27-3099	Media and Communication Workers, All Other	\$63,270	0.002%
27-4021	Photographers	\$61,530	0.002%
27-1027	Set and Exhibit Designers	\$60,530	0.002%
27-1011	Art Directors	\$135,970	0.002%
27-1023	Floral Designers	\$39,920	0.002%
27-3041	Editors	\$86,530	0.002%
27-1022	Fashion Designers	\$89,400	0.001%
27-4014	Sound Engineering Technicians	\$70,470	0.001%
27-1019	Artists and Related Workers, All Other	\$93,840	0.001%
27-3043	Writers and Authors	\$93,060	0.001%
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	\$85,980	0.001%
27-4012	Broadcast Technicians	\$57,390	0.001%
	Weighted Mean Annual Wage	\$66,961	0.102%
29-0000	Healthcare Practitioners and Technical Occupations		
29-2052	Pharmacy Technicians	\$51,090	0.143%
29-1051	Pharmacists	\$148,390	0.089%
29-2081	Opticians, Dispensing	\$50,840	0.014%
29-1041	Optometrists	\$125,680	0.004%
29-1031	Dietitians and Nutritionists	\$87,890	0.003%
29-2092	Hearing Aid Specialists	\$66,050	0.003%
29-1141	Registered Nurses	\$138,000	0.002%
29-2091	Orthotists and Prosthetists	\$81,090	0.001%
29-2057	Ophthalmic Medical Technicians	\$52,660	0.001%
29-1126	Respiratory Therapists	\$97,950	0.001%
29-1181	Audiologists	\$102,560	0.001%
29-1171	Nurse Practitioners	\$157,150	0.001%
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	\$58,370	0.001%
29-1298	Acupuncturists and Healthcare Diagnosing or Treating Practitioners, All Other	\$76,670	0.001%
	Weighted Mean Annual Wage	\$86,954	0.266%
31-0000	Healthcare Support Occupations		
31-9011	Massage Therapists	\$50,560	0.041%
31-9095	Pharmacy Aides	\$46,430	0.017%
31-9099	Healthcare Support Workers, All Other	\$50,950	0.002%

FIGURE 36. OCCUPATIONAL MIX AND WAGES FOR RETAIL/RESTAURANT/SERVICES, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
31-1120	Home Health and Personal Care Aides	\$30,320	0.001%
31-9092	Medical Assistants	\$48,920	0.001%
	Weighted Mean Annual Wage	\$48,986	0.063%
33-0000	Protective Service Occupations		
33-9032	Security Guards	\$38,580	0.106%
	Miscellaneous First-Line Supervisors, Protective		
33-1090	Service Workers	\$61,530	0.001%
	School Bus Monitors and Protective Service		
33-9098	Workers, All Other	\$49,650	0.001%
	Weighted Mean Annual Wage	\$38,981	0.108%
35-0000	Food Preparation and Serving Related Occupations		
35-3023	Fast Food and Counter Workers	\$31,610	28.085%
35-3031	Waiters and Waitresses	\$37,810	18.684%
35-2014	Cooks, Restaurant	\$38,430	10.548%
	First-Line Supervisors of Food Preparation and		
35-1012	Serving Workers	\$44,560	6.745%
35-2011	Cooks, Fast Food	\$27,060	4.527%
35-2021	Food Preparation Workers	\$31,820	3.926%
35-9021	Dishwashers	\$31,680	3.412%
	Hosts and Hostesses, Restaurant, Lounge, and		
35-9031	Coffee Shop	\$34,520	3.306%
	Dining Room and Cafeteria Attendants and		
35-9011	Bartender Helpers	\$35,040	2.686%
35-3011	Bartenders	\$37,310	2.682%
35-2015	Cooks, Short Order	\$34,460	0.857%
35-1011	Chefs and Head Cooks	\$63,740	0.599%
	Food Preparation and Serving Related Workers,		
35-9099	All Other	\$31,250	0.368%
35-3041	Food Servers, Nonrestaurant	\$35,200	0.177%
35-2012	Cooks, Institution and Cafeteria	\$40,710	0.082%
35-2019	Cooks, All Other	\$40,740	0.002%
	Weighted Mean Annual Wage	\$35,217	86.687%
37-0000	Building and Grounds Cleaning and Maintenance Occupations		
	Janitors and Cleaners, Except Maids and		
37-2011	Housekeeping Cleaners	\$38,870	0.287%
37-2012	Maids and Housekeeping Cleaners	\$41,430	0.022%
37-3011	Landscaping and Groundskeeping Workers	\$43,940	0.011%
	First-Line Supervisors of Housekeeping and		
37-1011	Janitorial Workers	\$53,550	0.002%

FIGURE 36. OCCUPATIONAL MIX AND WAGES FOR RETAIL/RESTAURANT/SERVICES, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
	Weighted Mean Annual Wage	\$39,305	0.321%
39-0000	Personal Care and Service Occupations		
39-5012	Hairdressers, Hairstylists, and Cosmetologists	\$35,410	0.243%
39-5092	Manicurists and Pedicurists	\$29,490	0.079%
39-2021	Animal Caretakers	\$34,130	0.045%
39-5094	Skincare Specialists	\$37,640	0.031%
39-1098	First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services	\$54,240	0.027%
39-3091	Amusement and Recreation Attendants	\$29,650	0.025%
39-3031	Ushers, Lobby Attendants, and Ticket Takers	\$33,520	0.020%
39-5011	Barbers	\$52,940	0.014%
39-5093	Shampooers	-	0.009%
39-9098	Crematory Operators and Personal Care and Service Workers, All Other	\$35,060	0.007%
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	\$41,030	0.005%
39-9031	Exercise Trainers and Group Fitness Instructors	\$59,340	0.004%
39-2011	Animal Trainers	\$42,320	0.003%
39-6012	Concierges	\$44,060	0.002%
39-3021	Motion Picture Projectionists	\$34,350	0.001%
39-5091	Makeup Artists, Theatrical and Performance	-	0.001%
39-4021	Funeral Attendants	\$39,180	0.001%
39-4031	Morticians, Undertakers, and Funeral Arrangers	\$60,050	0.001%
39-3092	Costume Attendants	\$42,930	0.001%
39-6011	Baggage Porters and Bellhops	\$33,390	0.001%
39-7010	Tour and Travel Guides	\$42,380	0.001%
39-9011	Childcare Workers	\$35,590	0.001%
	Weighted Mean Annual Wage	\$35,291	0.523%
41-0000	Sales and Related Occupations		
41-2011	Cashiers	\$32,150	3.652%
41-2031	Retail Salespersons	\$34,810	1.668%
41-1011	First-Line Supervisors of Retail Sales Workers	\$46,980	0.367%
41-2022	Parts Salespersons	\$45,260	0.083%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$81,320	0.080%
41-2021	Counter and Rental Clerks	\$40,320	0.072%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$81,830	0.035%

FIGURE 36. OCCUPATIONAL MIX AND WAGES FOR RETAIL/RESTAURANT/SERVICES, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
41-1012	First-Line Supervisors of Non-Retail Sales Workers	\$77,590	0.013%
41-9099	Sales and Related Workers, All Other	-	0.010%
41-3031	Securities, Commodities, and Financial Services Sales Agents	\$101,770	0.004%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$104,680	0.003%
41-9041	Telemarketers	\$33,420	0.003%
41-9011	Demonstrators and Product Promoters	\$36,560	0.002%
41-3011	Advertising Sales Agents	\$92,720	0.001%
41-3021	Insurance Sales Agents	\$109,960	0.001%
	Weighted Mean Annual Wage	\$35,176	5.992%
43-0000	Office and Administrative Support Occupations		
43-9061	Office Clerks, General	\$46,920	0.285%
43-4051	Customer Service Representatives	\$49,200	0.214%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$54,980	0.202%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$51,170	0.094%
43-4171	Receptionists and Information Clerks	\$39,990	0.093%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$71,190	0.068%
43-5071	Shipping, Receiving, and Inventory Clerks	\$42,910	0.045%
43-4151	Order Clerks	\$45,220	0.016%
43-3051	Payroll and Timekeeping Clerks	\$63,280	0.015%
43-3021	Billing and Posting Clerks	\$50,120	0.011%
43-6011	Executive Secretaries and Executive Administrative Assistants	\$82,480	0.008%
43-5061	Production, Planning, and Expediting Clerks	\$63,180	0.007%
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	\$53,370	0.006%
43-2011	Switchboard Operators, Including Answering Service	\$49,560	0.006%
43-9199	Office and Administrative Support Workers, All Other	\$45,160	0.005%
43-3011	Bill and Account Collectors	\$55,830	0.004%
43-5032	Dispatchers, Except Police, Fire, and Ambulance	\$54,040	0.003%
43-4071	File Clerks	\$41,240	0.003%
43-3061	Procurement Clerks	\$50,680	0.003%
43-5021	Couriers and Messengers	\$42,320	0.003%
43-9021	Data Entry Keyers	\$41,790	0.002%
43-4199	Information and Record Clerks, All Other	\$57,150	0.002%
43-4041	Credit Authorizers, Checkers, and Clerks	\$47,330	0.002%

FIGURE 36. OCCUPATIONAL MIX AND WAGES FOR RETAIL/RESTAURANT/SERVICES, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
43-4131	Loan Interviewers and Clerks	\$49,770	0.002%
43-6013	Medical Secretaries and Administrative Assistants	\$49,140	0.001%
43-9041	Insurance Claims and Policy Processing Clerks	\$53,480	0.001%
	Weighted Mean Annual Wage	\$50,617	1.104%
45-0000	Farming, Fishing, and Forestry Occupations		
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	\$37,430	0.002%
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	\$54,120	0.0001%
	Weighted Mean Annual Wage	\$38,161	0.002%
47-0000	Construction and Extraction Occupations		
47-2031	Carpenters	\$71,490	0.007%
47-2121	Glaziers	\$72,550	0.005%
47-2041	Carpet Installers	\$64,200	0.005%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$99,580	0.002%
47-2111	Electricians	\$100,400	0.001%
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	\$66,540	0.001%
47-2061	Construction Laborers	\$55,970	0.001%
47-4031	Fence Erectors	\$44,820	0.001%
47-2044	Tile and Stone Setters	\$59,410	0.001%
	Weighted Mean Annual Wage	\$70,399	0.027%
49-0000	Installation, Maintenance, and Repair Occupations		
49-3023	Automotive Service Technicians and Mechanics	\$58,630	0.273%
49-9071	Maintenance and Repair Workers, General	\$56,230	0.166%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	\$89,740	0.038%
49-3021	Automotive Body and Related Repairers	\$57,580	0.028%
49-3093	Tire Repairers and Changers	\$36,640	0.018%
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	\$43,550	0.010%
49-9099	Installation, Maintenance, and Repair Workers, All Other	\$55,210	0.009%
49-2011	Computer, Automated Teller, and Office Machine Repairers	\$45,100	0.008%
49-9098	Helpers—Installation, Maintenance, and Repair Workers	\$37,740	0.007%
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$68,840	0.006%

FIGURE 36. OCCUPATIONAL MIX AND WAGES FOR RETAIL/RESTAURANT/SERVICES, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
49-3091	Bicycle Repairers	\$32,090	0.006%
49-9031	Home Appliance Repairers	\$53,820	0.004%
49-9011	Mechanical Door Repairers	\$52,210	0.003%
49-9063	Musical Instrument Repairers and Tuners	-	0.003%
49-2097	Audiovisual Equipment Installers and Repairers	\$59,500	0.003%
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	\$45,750	0.003%
49-9062	Medical Equipment Repairers	\$69,330	0.002%
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles	\$47,500	0.002%
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$76,480	0.001%
49-3052	Motorcycle Mechanics	\$57,800	0.001%
49-3051	Motorboat Mechanics and Service Technicians	\$59,490	0.001%
49-3092	Recreational Vehicle Service Technicians	\$42,360	0.001%
49-9096	Riggers	\$73,610	0.001%
49-9095	Manufactured Building and Mobile Home Installers	-	0.001%
	Weighted Mean Annual Wage	\$57,919	0.594%
51-0000	Production Occupations		
51-3011	Bakers	\$36,960	0.349%
51-6011	Laundry and Dry-Cleaning Workers	\$34,880	0.032%
51-3092	Food Batchmakers	\$35,300	0.032%
51-3021	Butchers and Meat Cutters	\$39,080	0.018%
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$57,140	0.014%
51-1011	First-Line Supervisors of Production and Operating Workers	\$76,700	0.013%
51-2090	Miscellaneous Assemblers and Fabricators	\$43,160	0.010%
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	\$39,920	0.009%
51-6021	Pressers, Textile, Garment, and Related Materials	\$30,100	0.009%
51-6052	Tailors, Dressmakers, and Custom Sewers	\$52,870	0.007%
51-9083	Ophthalmic Laboratory Technicians	\$43,010	0.006%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$49,860	0.005%
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	\$35,910	0.005%
51-3099	Food Processing Workers, All Other	\$32,410	0.005%
51-6031	Sewing Machine Operators	\$32,880	0.004%
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	\$50,520	0.003%
51-9198	Helpers--Production Workers	\$34,400	0.003%

FIGURE 36. OCCUPATIONAL MIX AND WAGES FOR RETAIL/RESTAURANT/SERVICES, CONTINUED

Occupation Code	Occupation Title (a)	Average Annual Wage (b)	Share of Total Retail Workers (c)
51-9151	Photographic Process Workers and Processing Machine Operators	\$51,650	0.002%
51-9199	Production Workers, All Other	\$37,130	0.001%
51-7011	Cabinetmakers and Bench Carpenters	\$46,910	0.001%
51-9082	Medical Appliance Technicians	\$56,910	0.001%
51-9194	Etchers and Engravers	-	0.001%
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	\$44,460	0.001%
51-5112	Printing Press Operators	\$43,690	0.001%
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	\$48,700	0.001%
51-9071	Jewelers and Precious Stone and Metal Workers	\$39,560	0.001%
51-4121	Welders, Cutters, Solderers, and Brazers	\$58,600	0.001%
51-9111	Packaging and Filling Machine Operators and Tenders	\$34,740	0.001%
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	\$31,740	0.001%
	Weighted Mean Annual Wage	\$38,854	0.536%
53-0000	Transportation and Material Moving Occupations		
53-3033	Light Truck Drivers	\$48,790	0.377%
53-7065	Stockers and Order Fillers	\$36,170	0.189%
53-7061	Cleaners of Vehicles and Equipment	\$33,470	0.096%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$39,930	0.093%
53-6021	Parking Attendants	\$34,320	0.063%
53-6031	Automotive and Watercraft Service Attendants	\$31,340	0.028%
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$66,690	0.026%
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	\$40,610	0.023%
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$51,440	0.016%
53-7064	Packers and Packagers, Hand	\$32,950	0.013%
53-3099	Motor Vehicle Operators, All Other	\$55,930	0.011%
53-7051	Industrial Truck and Tractor Operators	\$43,940	0.009%
53-7199	Material Moving Workers, All Other	\$34,200	0.006%
53-3031	Driver/Sales Workers	\$34,920	0.005%
53-6098	Aircraft Service Attendants and Transportation Workers, All Other	\$52,040	0.001%
	Weighted Mean Annual Wage	\$42,424	0.958%
	Total, Land Use	\$37,493	100.000%

Notes:

- (a) Occupational mix by industry was obtained from US Bureau of Labor Statistics, Occupational Employment Statistics, 2019.
- (b) Wage data for the San Francisco Metropolitan Statistical Area was obtained from California Economic Development Department, OES Employment and Wages by Occupation, 2019.
- (c) Distribution of workers is calculated based on the existing distribution of employment by industry in Marin County, provided by Quarterly Census of Employment and Wages (QCEW), 2019

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
11-0000	Management Occupations		
11-9081	Lodging Managers	\$104,250	1.622%
11-1021	General and Operations Managers	\$155,850	0.810%
11-9051	Food Service Managers	\$63,460	0.422%
11-2022	Sales Managers	\$159,720	0.308%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$168,900	0.214%
11-3031	Financial Managers	\$182,190	0.206%
11-3010	Administrative Services and Facilities Managers	\$132,020	0.192%
11-3121	Human Resources Managers	\$163,810	0.100%
11-9071	Gambling Managers	\$125,300	0.094%
11-2021	Marketing Managers	\$181,720	0.080%
11-3021	Computer and Information Systems Managers	\$201,960	0.035%
11-1011	Chief Executives	\$236,060	0.021%
11-3061	Purchasing Managers	\$154,870	0.021%
11-9141	Property, Real Estate, and Community Association Managers	\$92,930	0.019%
11-2030	Public Relations and Fundraising Managers	\$142,950	0.012%
11-9041	Architectural and Engineering Managers	\$186,500	0.011%
11-2011	Advertising and Promotions Managers	\$175,210	0.008%
11-9021	Construction Managers	\$134,880	0.007%
11-3131	Training and Development Managers	\$152,380	0.005%
11-3071	Transportation, Storage, and Distribution Managers	\$123,910	0.005%
11-3111	Compensation and Benefits Managers	\$170,770	0.003%
11-3051	Industrial Production Managers	\$140,910	0.003%
	Weighted Mean Annual Wage	\$128,280	4.198%
13-0000	Business and Financial Operations Occupations		
13-1121	Meeting, Convention, and Event Planners	\$67,530	0.441%
13-2011	Accountants and Auditors	\$93,590	0.438%
13-1071	Human Resources Specialists	\$89,820	0.225%
13-1161	Market Research Analysts and Marketing Specialists	\$91,350	0.182%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	\$93,010	0.145%
13-1020	Buyers and Purchasing Agents	\$79,040	0.087%
13-1151	Training and Development Specialists	\$83,550	0.040%
13-1041	Compliance Officers	\$92,960	0.029%
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	\$119,100	0.028%
13-1111	Management Analysts	\$113,750	0.020%

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL, CONTINUED

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
13-1141	Compensation, Benefits, and Job Analysis Specialists	\$83,230	0.013%
13-1075	Labor Relations Specialists	\$86,370	0.006%
13-2041	Credit Analysts	\$109,330	0.003%
13-2031	Budget Analysts	\$93,800	0.002%
	Weighted Mean Annual Wage	\$85,441	1.660%
15-0000	Computer and Mathematical Occupations		
15-1232	Computer User Support Specialists	\$75,640	0.071%
15-1244	Network and Computer Systems Administrators	\$104,370	0.041%
15-1299	Computer Occupations, All Other	\$120,370	0.022%
15-1211	Computer Systems Analysts	\$121,300	0.015%
15-1231	Computer Network Support Specialists	\$85,990	0.011%
15-1245	Database Administrators and Architects	\$107,930	0.008%
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	\$145,250	0.008%
15-1241	Computer Network Architects	\$137,720	0.006%
15-1212	Information Security Analysts	\$122,570	0.005%
15-1257	Web Developers and Digital Interface Designers	\$110,790	0.005%
15-1251	Computer Programmers	\$116,400	0.002%
	Weighted Mean Annual Wage	\$99,597	0.195%
17-0000	Architecture and Engineering Occupations		
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$67,200	0.012%
17-2141	Mechanical Engineers	\$123,270	0.008%
17-2199	Engineers, All Other	\$113,050	0.004%
17-2051	Civil Engineers	\$120,110	0.003%
17-3027	Mechanical Engineering Technologists and Technicians	\$61,100	0.003%
17-2071	Electrical Engineers	\$120,990	0.000%
	Weighted Mean Annual Wage	\$93,450	0.031%
19-0000	Life, Physical, and Social Science Occupations		
19-5011	Occupational Health and Safety Specialists	\$108,230	0.005%
	Weighted Mean Annual Wage	\$108,230	0.005%
23-0000	Legal Occupations		
23-1011	Lawyers	\$188,910	0.005%
23-2011	Paralegals and Legal Assistants	\$71,360	0.002%
	Weighted Mean Annual Wage	\$152,176	0.008%

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL, CONTINUED

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations		
27-4011	Audio and Video Technicians	\$64,140	0.139%
27-2022	Coaches and Scouts	\$48,900	0.065%
27-3031	Public Relations Specialists	\$84,520	0.039%
27-3099	Media and Communication Workers, All Other	\$63,270	0.027%
27-1024	Graphic Designers	\$77,110	0.019%
27-4098	Lighting Technicians and Media and Communication Equipment Workers, All Other	\$60,610	0.010%
27-1023	Floral Designers	\$39,920	0.009%
27-2090	Miscellaneous Entertainers and Performers, Sports and Related Workers	*	0.006%
27-1026	Merchandise Displayers and Window Trimmers	\$38,480	0.005%
27-2021	Athletes and Sports Competitors	-	0.003%
27-2042	Musicians and Singers	*	0.002%
27-2011	Actors	*	0.000%
	Weighted Mean Annual Wage	\$62,212	0.340%
29-0000	Healthcare Practitioners and Technical Occupations		
29-2040	Emergency Medical Technicians and Paramedics	\$54,180	0.013%
29-1141	Registered Nurses	\$138,000	0.002%
	Weighted Mean Annual Wage	\$67,277	0.016%
31-0000	Healthcare Support Occupations		
31-9011	Massage Therapists	\$50,560	0.516%
	Weighted Mean Annual Wage	\$50,560	0.516%
33-0000	Protective Service Occupations		
33-9032	Security Guards	\$38,580	1.530%
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	\$31,600	0.338%
33-1090	Miscellaneous First-Line Supervisors, Protective Service Workers	\$61,530	0.190%
33-9031	Gambling Surveillance Officers and Gambling Investigators	\$43,940	0.149%
33-9098	School Bus Monitors and Protective Service Workers, All Other	\$49,650	0.015%
33-9021	Private Detectives and Investigators	\$78,150	0.003%
	Weighted Mean Annual Wage	\$39,966	2.226%
35-0000	Food Preparation and Serving Related Occupations		
35-3031	Waiters and Waitresses	\$37,810	7.632%
35-2014	Cooks, Restaurant	\$38,430	4.125%

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL, CONTINUED

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	\$35,040	2.993%
35-3011	Bartenders	\$37,310	2.144%
35-9021	Dishwashers	\$31,680	1.520%
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	\$44,560	1.508%
35-3041	Food Servers, Nonrestaurant	\$35,200	1.378%
35-3023	Fast Food and Counter Workers	\$31,610	1.153%
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$34,520	0.949%
35-1011	Chefs and Head Cooks	\$63,740	0.735%
35-2021	Food Preparation Workers	\$31,820	0.702%
35-9099	Food Preparation and Serving Related Workers, All Other	\$31,250	0.290%
35-2012	Cooks, Institution and Cafeteria	\$40,710	0.213%
35-2015	Cooks, Short Order	\$34,460	0.129%
35-2011	Cooks, Fast Food	\$27,060	0.037%
35-2019	Cooks, All Other	\$40,740	0.034%
	Weighted Mean Annual Wage	\$37,537	25.543%
37-0000	Building and Grounds Cleaning and Maintenance Occupations		
37-2012	Maids and Housekeeping Cleaners	\$41,430	22.801%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$38,870	2.336%
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	\$53,550	1.759%
37-3011	Landscaping and Groundskeeping Workers	\$43,940	0.575%
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	\$68,600	0.085%
37-3019	Grounds Maintenance Workers, All Other	\$54,060	0.021%
37-2019	Building Cleaning Workers, All Other	\$32,430	0.020%
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	\$79,020	0.010%
	Weighted Mean Annual Wage	\$42,139	27.608%
39-0000	Personal Care and Service Occupations		
39-3011	Gambling Dealers	\$26,750	2.633%
39-6011	Baggage Porters and Bellhops	\$33,390	1.139%
39-1013	First-Line Supervisors of Gambling Services Workers	\$52,020	0.784%
39-3091	Amusement and Recreation Attendants	\$29,650	0.757%
39-6012	Concierges	\$44,060	0.635%
39-9032	Recreation Workers	\$36,490	0.261%

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL, CONTINUED

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
39-1098	First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services	\$54,240	0.249%
39-9098	Crematory Operators and Personal Care and Service Workers, All Other	\$35,060	0.238%
39-3019	Gambling Service Workers, All Other	\$35,260	0.223%
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	\$41,030	0.171%
39-9031	Exercise Trainers and Group Fitness Instructors	\$59,340	0.142%
39-5094	Skincare Specialists	\$37,640	0.130%
39-3031	Ushers, Lobby Attendants, and Ticket Takers	\$33,520	0.114%
39-3012	Gambling and Sports Book Writers and Runners	\$32,190	0.072%
39-5092	Manicurists and Pedicurists	\$29,490	0.070%
39-5012	Hairdressers, Hairstylists, and Cosmetologists	\$35,410	0.068%
39-9011	Childcare Workers	\$35,590	0.041%
39-7010	Tour and Travel Guides	\$42,380	0.039%
39-3099	Entertainment Attendants and Related Workers, All Other	\$37,000	0.037%
39-3092	Costume Attendants	\$42,930	0.020%
39-2011	Animal Trainers	\$42,320	0.000%
	Weighted Mean Annual Wage	\$35,162	7.833%
41-0000	Sales and Related Occupations		
	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel		
41-3091	Travel	\$81,320	1.184%
41-2011	Cashiers	\$32,150	0.704%
41-2031	Retail Salespersons	\$34,810	0.328%
41-2012	Gambling Change Persons and Booth Cashiers	\$32,010	0.326%
41-1011	First-Line Supervisors of Retail Sales Workers	\$46,980	0.144%
41-1012	First-Line Supervisors of Non-Retail Sales Workers	\$77,590	0.088%
41-9099	Sales and Related Workers, All Other	-	0.041%
41-2021	Counter and Rental Clerks	\$40,320	0.039%
41-9041	Telemarketers	\$33,420	0.030%
41-3041	Travel Agents	\$53,520	0.015%
41-3011	Advertising Sales Agents	\$92,720	0.007%
41-9021	Real Estate Brokers	*	0.002%
	Weighted Mean Annual Wage	\$54,861	2.959%
43-0000	Office and Administrative Support Occupations		
43-4081	Hotel, Motel, and Resort Desk Clerks	\$39,440	12.021%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$71,190	1.755%

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL, CONTINUED

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$54,980	1.037%
43-4051	Customer Service Representatives	\$49,200	0.440%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$51,170	0.427%
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	*	0.297%
43-3041	Gambling Cage Workers	\$30,160	0.292%
43-4171	Receptionists and Information Clerks	\$39,990	0.263%
43-2011	Switchboard Operators, Including Answering Service	\$49,560	0.233%
43-5071	Shipping, Receiving, and Inventory Clerks	\$42,910	0.109%
43-6011	Executive Secretaries and Executive Administrative Assistants	\$82,480	0.100%
43-5032	Dispatchers, Except Police, Fire, and Ambulance	\$54,040	0.071%
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	\$53,370	0.056%
43-9199	Office and Administrative Support Workers, All Other	\$45,160	0.053%
43-3051	Payroll and Timekeeping Clerks	\$63,280	0.050%
43-5061	Production, Planning, and Expediting Clerks	\$63,180	0.042%
43-3061	Procurement Clerks	\$50,680	0.032%
43-3021	Billing and Posting Clerks	\$50,120	0.024%
43-5021	Couriers and Messengers	\$42,320	0.020%
43-2021	Telephone Operators	\$48,480	0.016%
43-4151	Order Clerks	\$45,220	0.015%
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	\$41,640	0.011%
43-4199	Information and Record Clerks, All Other	\$57,150	0.009%
43-3011	Bill and Account Collectors	\$55,830	0.008%
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	\$39,020	0.007%
43-4041	Credit Authorizers, Checkers, and Clerks	\$47,330	0.005%
43-4071	File Clerks	\$41,240	0.004%
43-2099	Communications Equipment Operators, All Other	\$65,500	0.003%
43-9021	Data Entry Keyers	\$41,790	0.003%
43-3099	Financial Clerks, All Other	\$47,510	0.002%
	Weighted Mean Annual Wage	\$44,074	17.792%
45-0000	Farming, Fishing, and Forestry Occupations		
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	\$35,610	0.007%
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	\$54,120	0.002%
	Weighted Mean Annual Wage	\$39,723	0.009%

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL, CONTINUED

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
47-0000	Construction and Extraction Occupations		
47-2141	Painters, Construction and Maintenance	\$67,770	0.093%
47-2031	Carpenters	\$71,490	0.052%
47-2111	Electricians	\$100,400	0.040%
47-2152	Plumbers, Pipefitters, and Steamfitters	\$87,230	0.018%
47-2073	Operating Engineers and Other Construction Equipment Operators	\$86,240	0.017%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$99,580	0.011%
47-2061	Construction Laborers	\$55,970	0.006%
47-2011	Boilermakers	\$86,630	0.003%
47-2041	Carpet Installers	\$64,200	0.003%
47-4051	Highway Maintenance Workers	\$63,210	0.002%
47-4090	Miscellaneous Construction and Related Workers	\$63,360	0.002%
	Weighted Mean Annual Wage	\$77,765	0.248%
49-0000	Installation, Maintenance, and Repair Occupations		
49-9071	Maintenance and Repair Workers, General	\$56,230	4.443%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	\$89,740	0.406%
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	\$43,550	0.136%
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$76,480	0.041%
49-9099	Installation, Maintenance, and Repair Workers, All Other	\$55,210	0.041%
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	\$45,750	0.021%
49-9098	Helpers--Installation, Maintenance, and Repair Workers	\$37,740	0.016%
49-3023	Automotive Service Technicians and Mechanics	\$58,630	0.014%
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	\$75,510	0.011%
49-9043	Maintenance Workers, Machinery	\$63,090	0.008%
49-9094	Locksmiths and Safe Repairers	\$63,770	0.006%
49-9041	Industrial Machinery Mechanics	\$78,010	0.004%
49-2092	Electric Motor, Power Tool, and Related Repairers	\$55,250	0.003%
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$79,500	0.003%
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$68,840	0.003%
49-2011	Computer, Automated Teller, and Office Machine Repairers	\$45,100	0.001%
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	\$75,530	0.001%
	Weighted Mean Annual Wage	\$58,694	5.162%

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL, CONTINUED

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
51-0000	Production Occupations		
51-6011	Laundry and Dry-Cleaning Workers	\$34,880	1.846%
51-3011	Bakers	\$36,960	0.187%
51-1011	First-Line Supervisors of Production and Operating Workers	\$76,700	0.051%
51-8021	Stationary Engineers and Boiler Operators	\$103,370	0.030%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$49,860	0.020%
51-6052	Tailors, Dressmakers, and Custom Sewers	\$52,870	0.018%
51-3021	Butchers and Meat Cutters	\$39,080	0.010%
51-6031	Sewing Machine Operators	\$32,880	0.010%
51-6021	Pressers, Textile, Garment, and Related Materials	\$30,100	0.009%
51-6093	Upholsterers	\$46,490	0.007%
51-9193	Cooling and Freezing Equipment Operators and Tenders	\$39,590	0.006%
51-8031	Water and Wastewater Treatment Plant and System Operators	\$93,680	0.005%
51-9199	Production Workers, All Other	\$37,130	0.002%
51-3092	Food Batchmakers	\$35,300	0.002%
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$57,140	0.002%
51-9111	Packaging and Filling Machine Operators and Tenders	\$34,740	0.002%
	Weighted Mean Annual Wage	\$37,439	2.208%
53-0000	Transportation and Material Moving Occupations		
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	\$40,610	0.437%
53-6021	Parking Attendants	\$34,320	0.394%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$39,930	0.221%
53-7065	Stockers and Order Fillers	\$36,170	0.200%
53-3031	Driver/Sales Workers	\$34,920	0.069%
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$66,690	0.039%
53-3033	Light Truck Drivers	\$48,790	0.028%
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$51,440	0.011%
53-3099	Motor Vehicle Operators, All Other	\$55,930	0.011%
53-6031	Automotive and Watercraft Service Attendants	\$31,340	0.007%
53-6061	Passenger Attendants	\$34,080	0.005%
53-3052	Bus Drivers, Transit and Intercity	\$58,860	0.004%
53-5021	Captains, Mates, and Pilots of Water Vessels	\$95,770	0.003%
53-7199	Material Moving Workers, All Other	\$34,200	0.003%

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL, CONTINUED

Occupation Code	Occupation Name (a)	Average Annual Wage (b)	Share of Total Hotel Workers (c)
53-4041	Subway and Streetcar Operators	\$56,730	0.003%
53-5022	Motorboat Operators	-	0.002%
53-7051	Industrial Truck and Tractor Operators	\$43,940	0.000%
	Weighted Mean Annual Wage	\$39,024	1.444%
	Total, Land Use	\$46,473	100.000%

Notes:

- (a) Occupational mix by industry was obtained from US Bureau of Labor Statistics, Occupational Employment Statistics, 2019.
- (b) Wage data for the San Francisco Metropolitan Statistical Area was obtained from California Economic Development Department, OES Employment and Wages by Occupation, 2019.
- (c) Distribution of workers is calculated based on the existing distribution of employment by industry in Marin County, provided by Quarterly Census of Employment and Wages (QCEW), 2019

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.