



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

**Department: Community Development**

**Prepared by: Alicia Giudice, Director  
Alexis Captanian, Housing Analyst**

**City Manager Approval:** 

**TOPIC: COMMERCIAL LINKAGE FEES**

**SUBJECT: INFORMATIONAL REPORT ON REGIONAL NEXUS STUDY OF COMMERCIAL LINKAGE FEES**

**RECOMMENDATION:** Accept informational report.

**BACKGROUND:**

To promote affordable housing, the City of San Rafael, the County of Marin (County) and five other jurisdictions within the County, collaborated on a regional effort to analyze commercial linkage fees. 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 reasonable relationship between the new employment created by commercial development, and the accompanying need for affordable housing for the new workforce whose wages are often insufficient to afford market rate housing in Marin County.

A nexus study analyzes the connection between projected commercial development and the cost of addressing the need for affordable housing for lower income households created by the development. It determines the justifiable fee that might be charged on commercial development based on the need for affordable housing that new development projects create. The fees generated are then used to increase and expand the supply of affordable housing.

The County hired Strategic Economics and Vernazza Wolfe Associates (“Consultants”) to conduct a commercial linkage fee nexus study (see Attachment 1). This study was designed to provide participating jurisdictions information needed to potentially update or establish policies and fees for new commercial development to further support affordable housing. The City of San Rafael and other jurisdictions applied and received funding for this project through the Senate Bill 2 (SB2) Planning Grant Program.

The project was coordinated by the County and initiated by members of Marin’s Housing Working Group, a group of Planning Directors from the cities and towns in Marin County. The jurisdictions that participated in the study include Corte Madera, Fairfax, Larkspur, San Anselmo, San Rafael, Sausalito, and unincorporated Marin. The project aimed to properly calibrate commercial linkage fees to the local market and to provide the opportunity to create similar policies among participating jurisdictions.

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**FOR CITY CLERK ONLY**

**Council Meeting:**

**Disposition:**

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The Marin County Board of Supervisors adopted the commercial linkage fee study on May 16<sup>th</sup> ([Agenda Item 12](#)) and will bring forward a fee proposal later this summer. City staff are providing this status update about the nexus study to seek input from the community and the City Council prior to bringing forward a recommendation regarding any potential changes to commercial linkage fees.

Over the past decade, the City's affordable housing requirements have been applied to several commercial development projects. Table 1 shows projects that contributed more than \$100,000 in commercial linkage fees to the City's Affordable Housing Trust Fund since 2012.

**Table 1**

| <b>YEAR</b> | <b>DESCRIPTION</b>      | <b>AMOUNT</b> |
|-------------|-------------------------|---------------|
| 2023        | Assisted Living         | \$600,000     |
| 2021        | Hotel                   | \$276,276     |
| 2019        | Assisted Living         | \$396,320     |
| 2012        | Retail (Target)         | \$773,766     |
| 2012        | Retail (Car Dealership) | \$279,117     |

From 2005 through 2022, total revenues collected are estimated at \$2,556,106, or an average annual revenue of \$144,006. Fees generated are placed in the City's Affordable Housing Trust Fund and used solely to increase and expand the supply of housing affordable to very low-, low- and moderate-income households.

### **ANALYSIS**

#### **The Regional Nexus Study**

The City participated in a regional nexus study to assess whether the City's existing commercial linkage fees are appropriate and effective in the current market context, and to explore the possibility of establishing fees in line with other Marin jurisdictions. Staff is considering alignment of fees based on feedback from developers that fragmented policies across jurisdictions present an added barrier to housing development.

The regional nexus study addresses two main areas of analysis: 1) the linkage between new jobs and the needed affordable housing, and 2) the affordability gap between what employee households can afford and what new housing costs to build. The study considered three commercial uses: office/R&D, retail/restaurant, and hotel. The study recommends updating the commercial linkage fee methodology to assign a dollar amount per square foot, depending on the type of use.

The study was conducted during the COVID-19 pandemic. The analysis considers 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. Additionally, the impacts of the COVID-19 pandemic on the market for each commercial use type is discussed in Section V of the report.

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**City of San Rafael's Current Commercial Linkage Fee**

The City of San Rafael adopted its first commercial linkage fee nexus study and policy in December 2004. The existing requirements are codified in Title 14 of the San Rafael Municipal Code ([Section 14.16.030: Affordable Housing Requirements](#)).

The City's current fee is defined as a percentage of the inclusionary in-lieu fee. The methodology calculates an affordable housing linkage fee requirement based on a multiplier per 1000 square feet, depending on the type of use. That number is then multiplied by the per-unit affordable housing fee to determine the in-lieu fee for commercial projects. The per-unit in-lieu fee that is used in the calculation is updated over time based on a built-in escalator for inflation.

The City's existing commercial use categories and their requirements are summarized in Table 2 below. This fee only applies to net increases in square footage for commercial development. The fee does not apply to projects with less than five thousand (5,000) square feet of new construction.

**Table 2**

| Development Type                            | Number of New Very Low-, Low- and Moderate-Income Units (per 1,000 square feet of gross floor area) |
|---|---|
| Office or Research and Development uses     | 0.03  |
| Retail, Restaurant or Personal Service uses | 0.0225  |
| Manufacturing or Light Industrial uses      | 0.01625   |
| Warehouse uses                              | 0.00875   |
| Hotel or motel uses                         | 0.0075  |

*Example:*

For a development project proposing 20,000 square feet of new office space, the fee would be calculated as follows:

$$\begin{aligned} 20,000 \text{ sq ft of Office} / 1000 \text{ sq ft} &= 20 \\ 20 \times 0.03 &= 0.6 \text{ units} \\ 0.6 \times \$343,969^* &= \$206,381 \end{aligned}$$

The developer would be required to pay \$206,381 in commercial linkage fees or provide one unit of affordable housing (since 0.6 is greater than 0.5, the requirement rounds up to 1 unit).

\*\$343,969 is the City's affordable housing in-lieu fee, per unit, through June 30, 2023.

**Comparing Existing Fees to the Nexus Study Proposal**

Four of the participating jurisdictions did not have a commercial linkage fee policy in place at the time of the study. Corte Madera, San Rafael, and unincorporated Marin County each had different fees and fee methodologies in place. As mentioned above, San Rafael's existing fee methodology is not expressed as a dollar amount per square foot.

To facilitate the comparison of jurisdictions' existing fees, the consultants applied their methodology to the City of San Rafael's current methodology. This produced the dollar amounts per square foot listed in Figure 27 below for each commercial use. To use the same example from above, 20,000 square feet of new office space multiplied by \$10.32 per square foot equals \$206,400, approximately the same fee as calculated using San Rafael's current methodology.

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Figure 27 summarizes commercial linkage fees of participating jurisdictions at the time of the study, all expressed in the same format for easy comparison.

**Unified Fee Proposal**

Figure 27 also includes the unified fee proposal that the County and other jurisdictions are considering recommending to their elected bodies. The study results suggest that Marin jurisdictions' existing fees for hotels are low; the unified fee proposal therefore proposes to increase this fee. The fee for Office/R&D is slightly less than San Rafael's current fee. For retail/restaurant/services, the unified proposal would maintain a similar fee per square foot for developments under 2500 square feet (increasing minimally from \$7.74 to \$8) and would raise the fee per square foot for retail/restaurant/service developments over 2500 square feet by an additional two dollars per square foot, to ten dollars. Currently, retail/restaurant/services under 5,000 square feet are exempt from the commercial linkage fee. If the City were to adopt the unified fee proposal this would be a new cost to new developments under 5,000 square feet of either \$8 or \$10 per square foot depending on the number of square feet.

The unified fee proposal does not include San Rafael's current fee exemption for any project involving new construction under five thousand (5,000) square feet. The City would need to consider whether to preserve or modify this exemption.

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

**COMMUNITY OUTREACH:**

The consultants held three stakeholder meetings that included market-rate developers, affordable housing developers, and housing advocates to gather their input on the studies and fee structures. The developers indicated that the varied fee policies across jurisdictions makes developing housing projects more burdensome because it is difficult to estimate project costs. They suggested that a common, or at least similar, policy for Marin County jurisdictions would remove some roadblocks to housing development, thereby creating more housing. Staff will conduct additional outreach prior to bringing recommendations regarding changes to the commercial linkage fee methodology and/or fees to the City Council.

**FISCAL IMPACT:**

There is no fiscal impact. This is an informational report only.

**OPTIONS:**

The City Council has the following options to consider on this matter:

1. Accept the informational report.
2. Direct staff to provide additional information.
3. Take no action.

**ATTACHMENTS:**

1. Commercial Linkage Fee Study



## MEMORANDUM

To: Alicia Giudice, City of San Rafael  
From: Strategic Economics and Vernazza Wolfe Associates  
Date: February 18, 2023  
Project: Marin Inclusionary Study  
Subject: Commercial Linkage Fee Study

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### 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.<sup>1</sup> 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

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<sup>1</sup> 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.<sup>2</sup>

### **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.

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<sup>2</sup> 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.<sup>3</sup>

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.<sup>4</sup> 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.

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<sup>3</sup> 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.

<sup>4</sup> 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).<sup>5</sup> 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).<sup>6</sup> 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.

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<sup>5</sup> 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.

<sup>6</sup> 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**

| <b>Employee Density Figure</b>                      | <b>Source</b>   |
|---|---|
| <b>Visitor Accommodations</b>                       |   |
| 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   |
| <b>Retail</b>                                       |   |
| 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.                     |
| <b>Office</b>                                       |   |
| 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  |
| <b>Medical Office</b>                               |   |
| 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.;<br>163 rooms* | 880 sq. ft. per worker;<br>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%                              |
| <b>Total</b> |  | <b>100%</b>                        |

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**

| <b>NAICS Code</b> | <b>Description</b>     | <b>Percent Total Workers in Prototype</b> |
|-------------------|------------------------|---|
| 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 wages<sup>7</sup> 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**

| <b>Commercial Prototype</b> | <b>Weighted Average Annual Wage (a)</b> |
|-----------------------------|---|
| 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.

<sup>7</sup> 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.<sup>8</sup> 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

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<sup>8</sup> 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 |
|--|-----------------------------|---------------------------------|
| <b>Office/Medical Office/R&amp;D</b>                 |                             |                                 |
| 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%                             |
| <b>Total Households Requiring Affordable Housing</b> | <b>97</b>                   | <b>100%</b>                     |
| <b>Total Households</b>                              | <b>166</b>                  |                                 |
| <b>Retail/Restaurants/ Services</b>                  |                             |                                 |
| 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%                              |
| <b>Total Households Requiring Affordable Housing</b> | <b>137</b>                  | <b>100%</b>                     |
| <b>Total</b>   | <b>139</b>                  |                                 |
| <b>Hotel</b>   |                             |                                 |
| 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%                              |
| <b>Total Households Requiring Affordable Housing</b> | <b>67</b>                   | <b>100%</b>                     |
| <b>Total</b>   | <b>71</b>                   |                                 |

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.<sup>9</sup> 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.<sup>10</sup>

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.

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<sup>9</sup> 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).

<sup>10</sup> 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**

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

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.<sup>11</sup> 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.

<sup>11</sup> 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 |
|------------------------------------|---------------------------|----------------------|-------------------|
| <b>Per Unit</b>                    |                           |                      |                   |
| Land Cost                          | \$350,000                 | \$200,000            | \$75,000          |
| Hard Costs                         | \$335,343                 | \$371,640            | \$382,228         |
| Soft Costs                         | \$96,028                  | \$100,057            | \$106,605         |
| <b>Development Costs</b>           | <b>\$781,371</b>          | <b>\$671,697</b>     | <b>\$563,833</b>  |
| <b>Per Net Residential Sq. Ft.</b> |                           |                      |                   |
| Land Cost                          | \$159                     | \$111                | \$94              |
| Hard Cost                          | \$152                     | \$206                | \$478             |
| Soft Costs                         | \$44                      | \$56                 | \$133             |
| <b>Development Costs</b>           | <b>\$355</b>              | <b>\$373</b>         | <b>\$705</b>      |

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**

|                       | <b>Supportable Debt (a)</b> | <b>Development Costs (b)</b> | <b>Affordability Gap (c)</b> |
|-----------------------|-----------------------------|------------------------------|------------------------------|
| 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**

|                                  | <b>Affordable Sales Price (a)</b> | <b>Development Cost (b)</b> | <b>Affordability Gap (c)</b> |
|----------------------------------|-----------------------------------|-----------------------------|------------------------------|
| <b>Condo Townhome</b>            |                                   |                             |                              |
| Low-income (70%)                 | \$341,089                         | \$671,697                   | \$330,608                    |
| Moderate-income (110%)           | \$596,128                         | \$671,697                   | \$75,568                     |
| <b>Single-family Subdivision</b> |                                   |                             |                              |
| 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**

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

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.

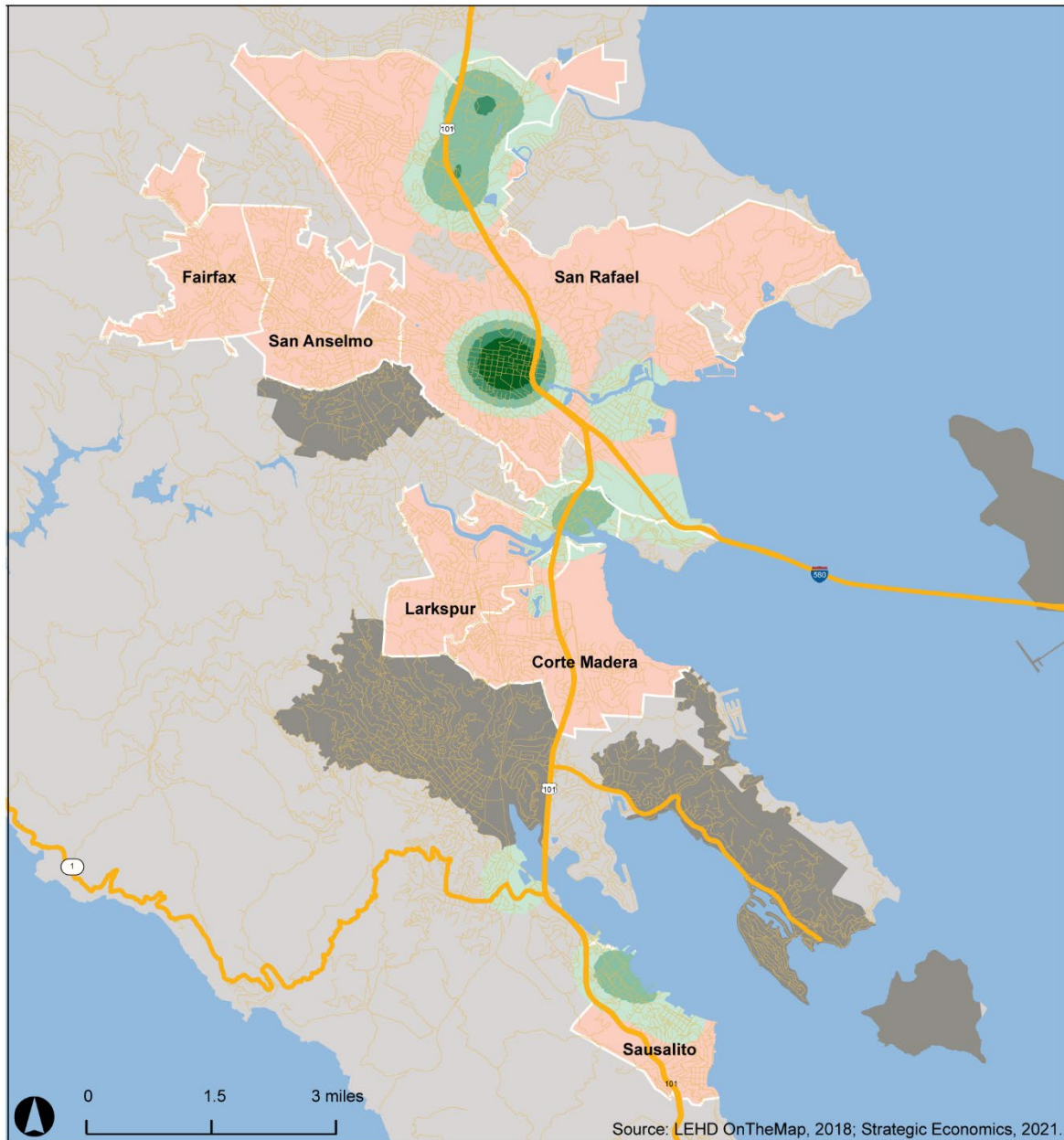
It is unlikely that the county will see significant new retail development in the coming years. When the market does recover, new retail is expected to be relatively small scale, serving a local trade area and/or any new residential development. Rather than concentrating in any one area of the county, 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, to 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.<sup>12</sup>

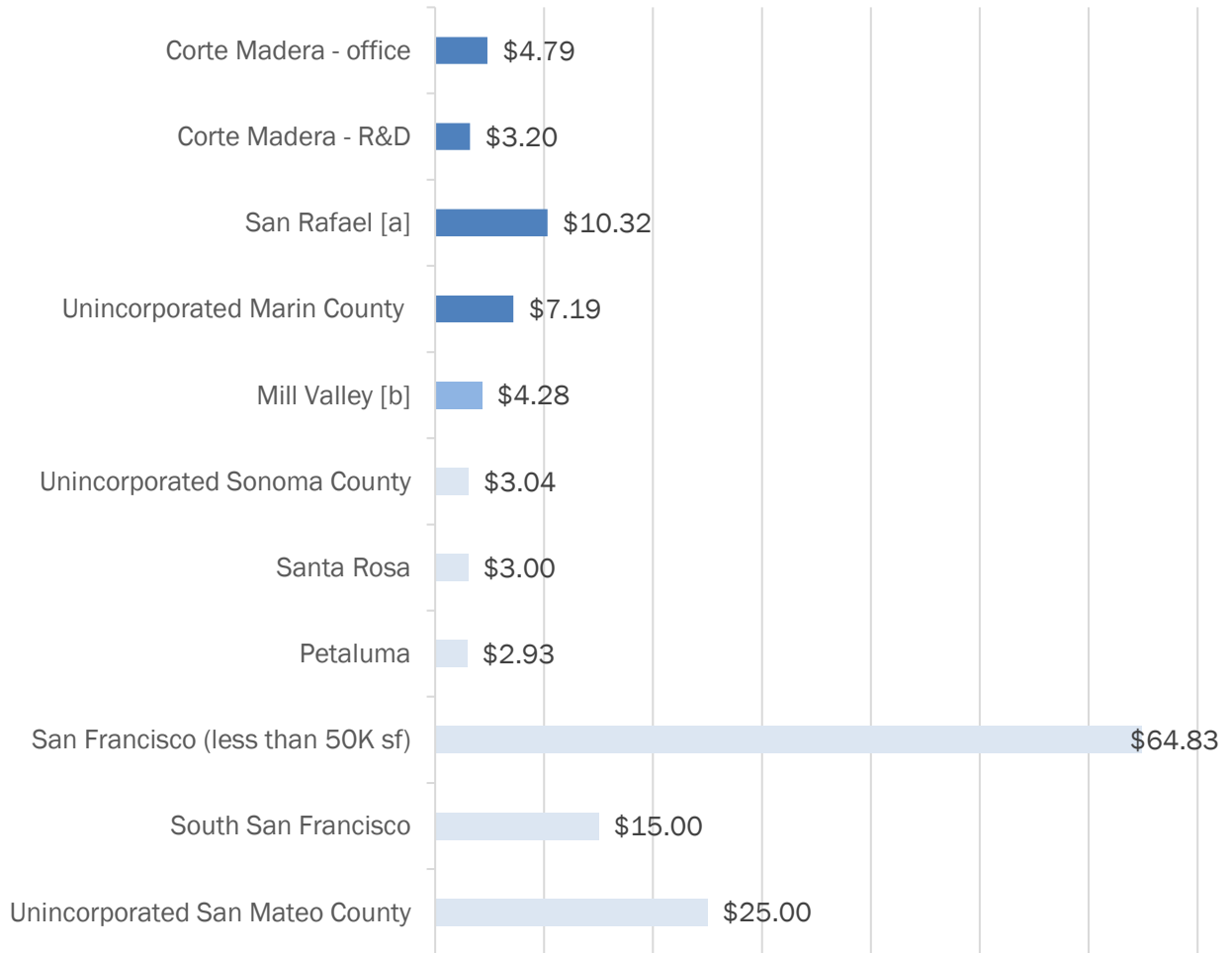
Figure 19 gives a comparison of linkage fees for retail/restaurants/services. These fees tend to be lower than what is charged for office, except in places where retail markets have been particularly strong. In Marin County the linkage fees on these uses range from \$3.28 to \$8.38, with Corte Madera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

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<sup>12</sup> 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**



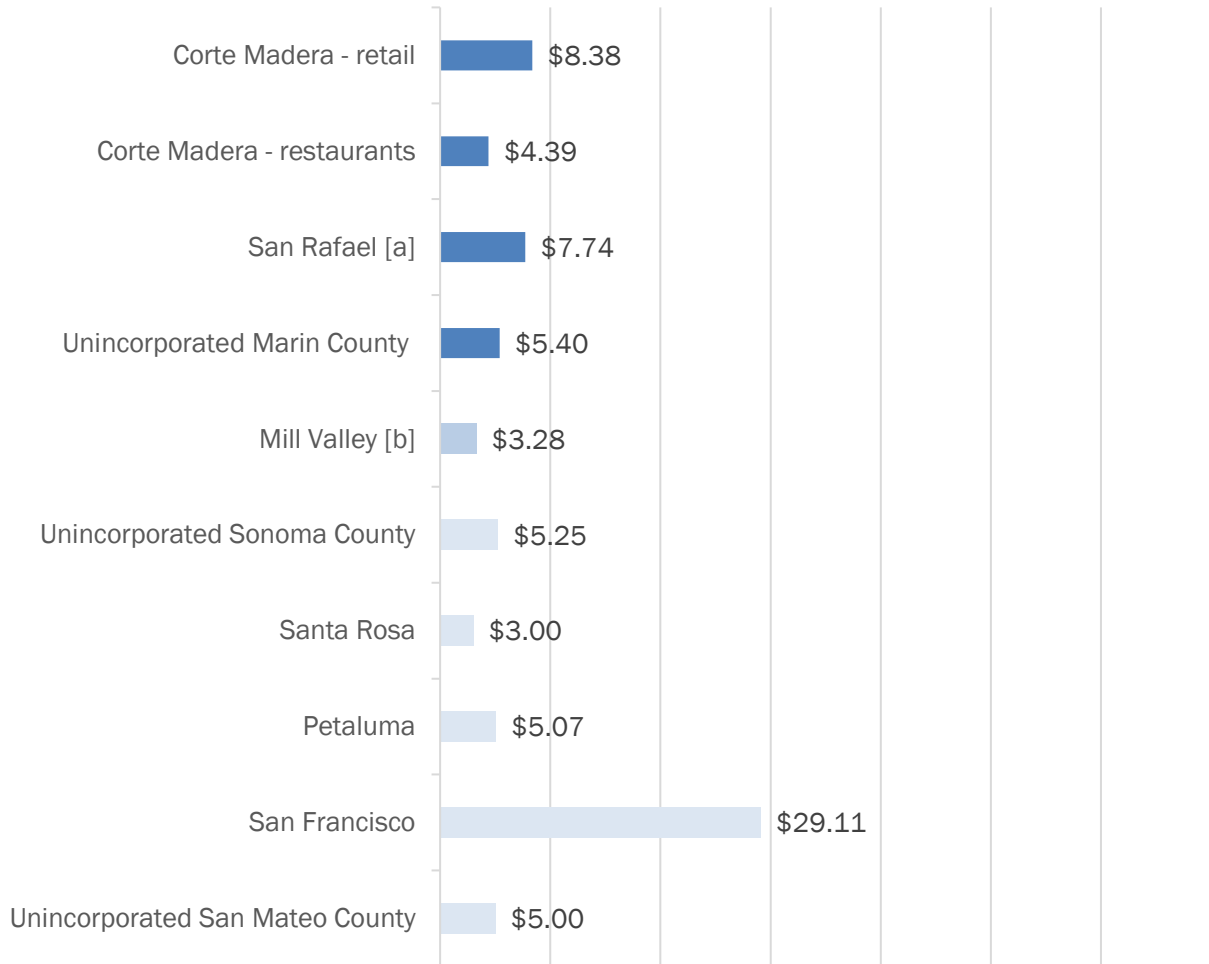
[a] San Rafael's fee is defined as a percentage of the inclusionary in-lieu fee.

[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**

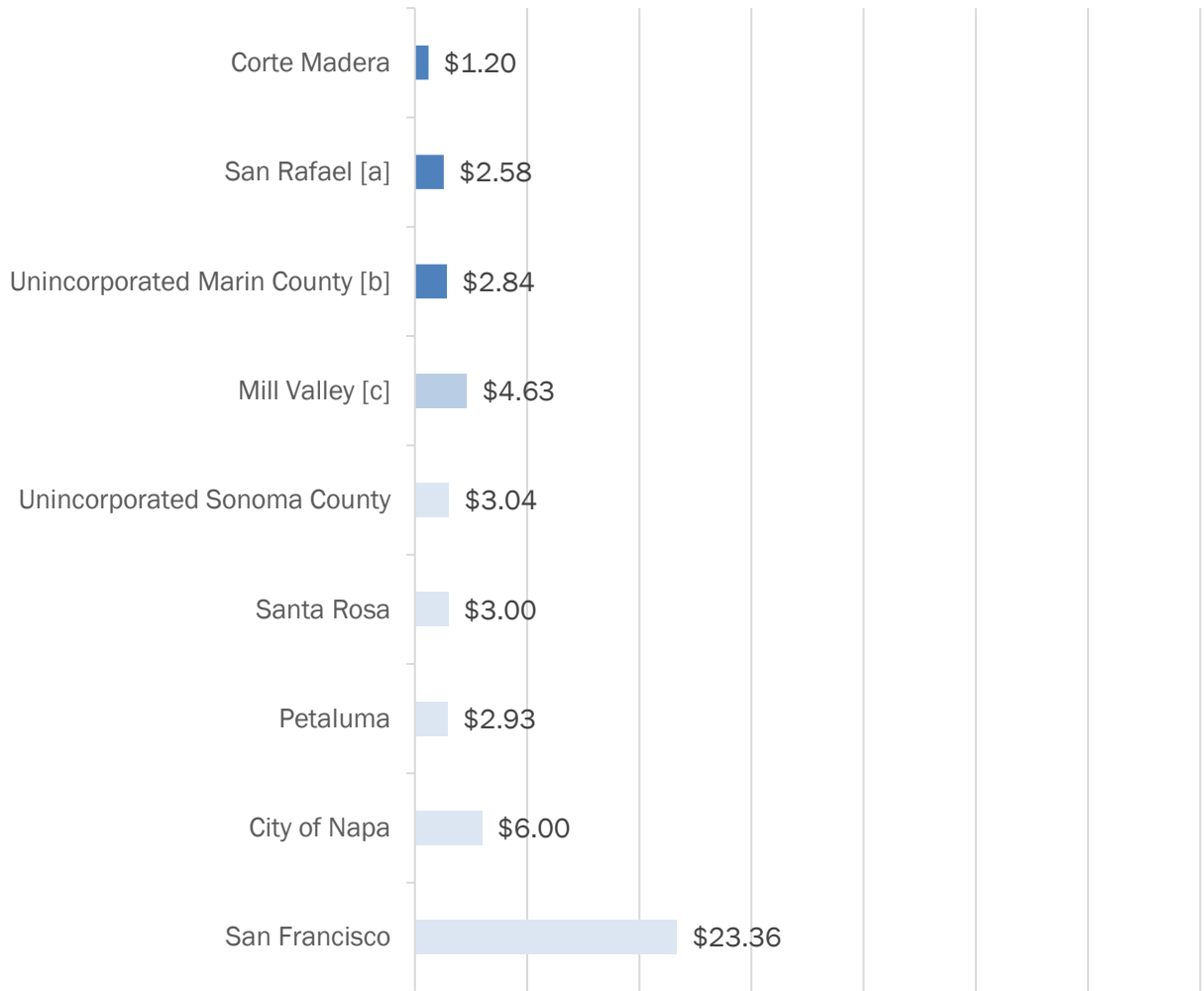


[a] San Rafael's fee is defined as a percentage of the inclusionary in-lieu fee.

[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<br>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.<sup>13</sup>

### 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).

<sup>13</sup> 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 |
|--------------------------------|----------------|---------------------------|----------------------|
| <b>Land Area</b>               |                |                           |                      |
| Parcel Size (Sq. Ft.)          | 43,560         | 21,780                    | 108,900              |
| Parcel Size (acres)            | 1.00           | 0.50                      | 2.50                 |
| <b>Building Height and FAR</b> |                |                           |                      |
| Total Stories                  | 2 stories      | Single story              | 3 stories            |
| FAR                            | 0.40           | 0.35                      | 0.65                 |
| <b>Building Area</b>           |                |                           |                      |
| 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                  |
| <b>Parking</b>                 |                |                           |                      |
| 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<br>Office | Small<br>Neighborhood<br>Center | Select Service<br>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 |
|-------------------------------|---------------------|---------------------------|----------------------|
| <b>Overall Project</b>        |                     |                           |                      |
| 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          |
| <b>Total Development Cost</b> | <b>\$13,033,072</b> | <b>\$5,045,381</b>        | <b>\$44,329,681</b>  |
| <b>Per GSF</b>                |                     |                           |                      |
| 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                 |
| <b>Total Development Cost</b> | <b>\$748</b>        | <b>\$662</b>              | <b>\$626</b>         |
| <b>Per Guest Room</b>         |                     |                           |                      |
| 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             |
| <b>Total Development Cost</b> |                     |                           | <b>\$385,390</b>     |

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<br>Office | Small Neighborhood<br>Center | Select Service<br>Hotel |
|---|-------------------|------------------------------|-------------------------|
| <b>Total Development Costs before Linkage Fee (\$/sf)</b> | <b>\$748</b>      | <b>\$662</b>                 | <b>\$626</b>            |
| <b>Linkage Fee Scenarios (\$/sf)</b>                      |                   |                              |                         |
| 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                 |
| <b>Linkage Fee Scenarios (as % to Total Dev. Costs)</b>   |                   |                              |                         |
| 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.<sup>14</sup> 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

<sup>14</sup> 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 |
| <b>Corte Madera</b>                |                |                           |                      |                           |                           |                      |
| 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%                 |
| <b>Fairfax</b>                     |                |                           |                      |                           |                           |                      |
| 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%                 |
| <b>Larkspur</b>                    |                |                           |                      |                           |                           |                      |
| 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%                 |
| <b>Unincorporated Marin County</b> |                |                           |                      |                           |                           |                      |
| 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%                 |
| <b>San Anselmo</b>                 |                |                           |                      |                           |                           |                      |
| 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%                 |

*Continued on next page*

Continued from previous page

|                            |         |         |         |      |      |      |
|----------------------------|---------|---------|---------|------|------|------|
| 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;<sup>15</sup> 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.

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<sup>15</sup> 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) <sup>[a]</sup>  | Revenues Collected          | Unified Fee Proposal (per square foot)   |
|-----------------------------|-------------------------|---|-----------------------------|--|
| Corte Madera                | 2001                    | Office: \$4.79<br>R&D: \$3.20<br>Retail: \$8.38<br>Restaurant: \$4.39<br>Hotel: \$1.20                                    | \$381,516 since April 2018  | Office/Medical Office/<br>R&D: \$10.00<br><br>Retail/Restaurants/<br>Services:<br>- \$8.00 (up to 2,500 square feet)<br>- \$10.00 (more than 2,500 square feet)<br><br>Hotel: \$5.00 |
| Fairfax                     | no current policy       |   |                             |  |
| Larkspur                    | no current policy       |   |                             |  |
| San Anselmo                 | no current policy       |   |                             |  |
| San Rafael                  | 2005                    | Office/R&D: \$10.32<br><br>Retail/Restaurant/<br>Services: \$7.74<br><br>Hotel: \$2.58<br><br><i>See Note [b], below.</i> | \$2,556,106 since inception |  |
| Sausalito                   | no current policy       |   |                             |  |
| Unincorporated Marin County | 2003                    | Office/R&D: \$7.19<br><br>Retail/Restaurant/<br>Services: \$5.40<br><br>Hotel: \$2.84 <sup>[c]</sup>                      | \$38,680 since 2019         |  |

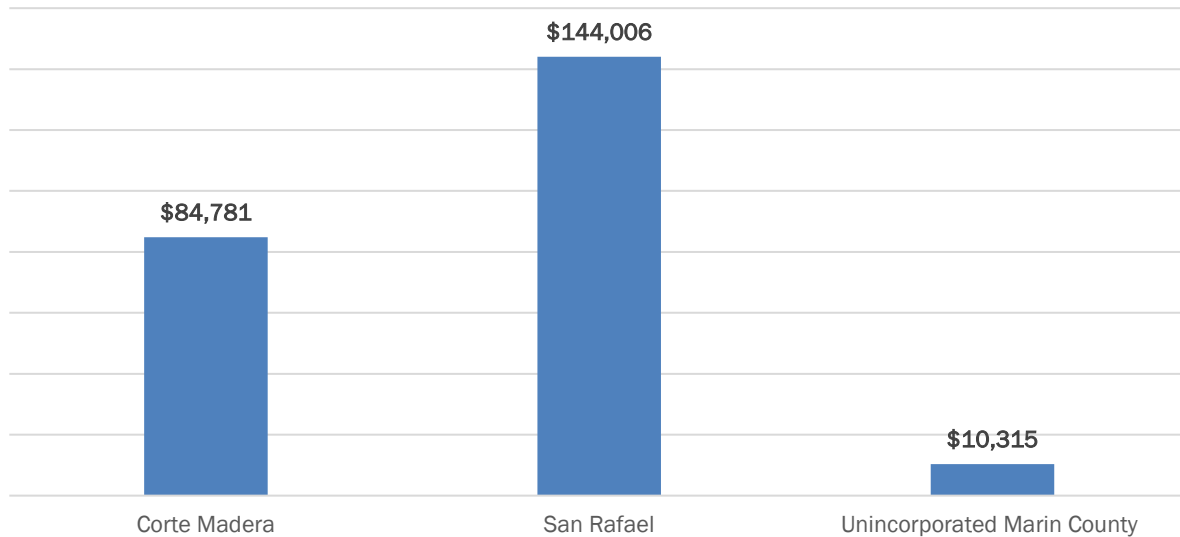
[a] In some jurisdictions, linkage fees may exist for other land uses outside the scope of this study. Only the relevant fees are shown.

[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.<sup>16</sup> 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.<sup>17</sup> Note that in Marin County, the leveraging ratio may be higher because local jurisdictions tend to have more limited funding for affordable housing.

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

<sup>17</sup> 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](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 <sup>[a]</sup> | Potential Commercial Linkage Fee Revenues |
|--|---|---|---|
| Office / Medical Office / R&D  | \$10 /sf  | 100,000 sf  | \$1,000,000                               |
| Retail /Restaurants /Services  | \$8 /sf<br>(up to 2,500 square feet)<br><br>\$10 /sf<br>(more than 2,500 square feet) | 35,000 sf   | \$315,000 <sup>[b]</sup>                  |
| Hotel  | \$5 /sf   | 250,000 sf<br>(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) <sup>[c]</sup> |   |   | \$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).



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

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**

| <b>Jurisdiction</b>                  | <b>Deed-restricted Family Affordable Housing [a]</b> | <b>Total Employment [b]</b> | <b>Total Worker Households [c] = [b] / 1.60</b> | <b>Level of Service = [a] / [c]</b> |
|--------------------------------------|--|-----------------------------|---|-------------------------------------|
| 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                               |
| <b>Total All Seven Jurisdictions</b> | <b>1,709</b>   | <b>78,671</b>               | <b>49,169</b>                                   | <b>0.035</b>                        |

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.

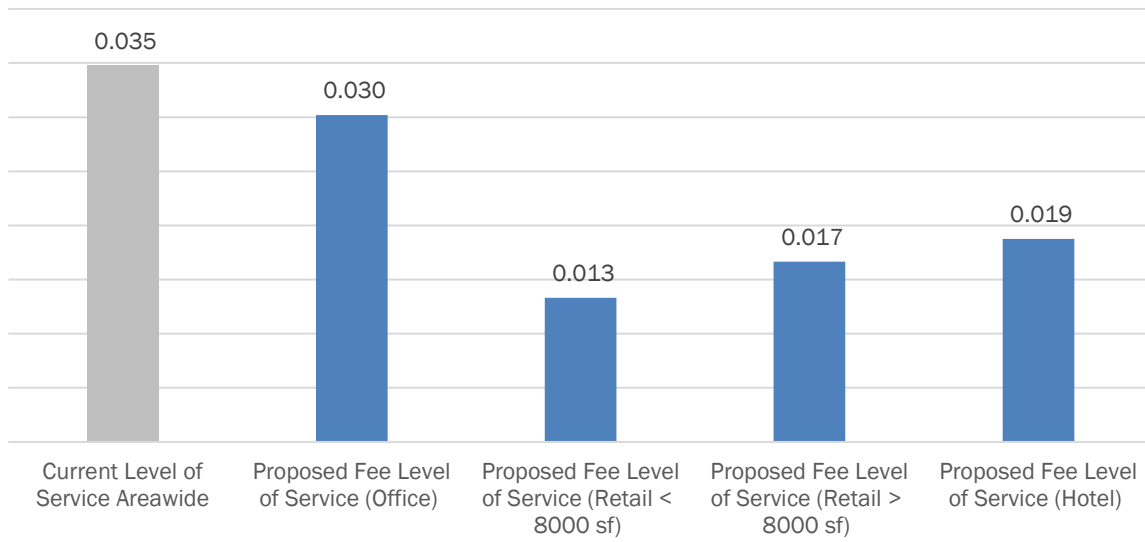
In summary, the fee program as proposed by the jurisdictions will accomplish two objectives. First, the unified fee proposal will level the playing field for developers, ensuring they are charged the same fee across all jurisdictions. Secondly, the fee levels are set such that the revenue is sufficient 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    |

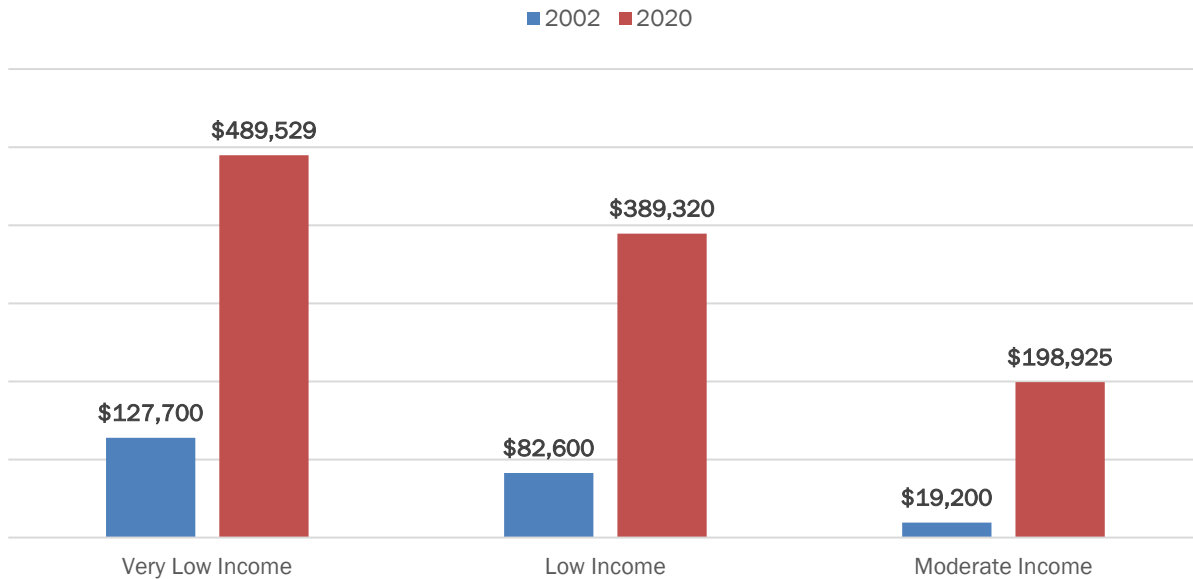
Source: Strategic Economics, 2022.

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



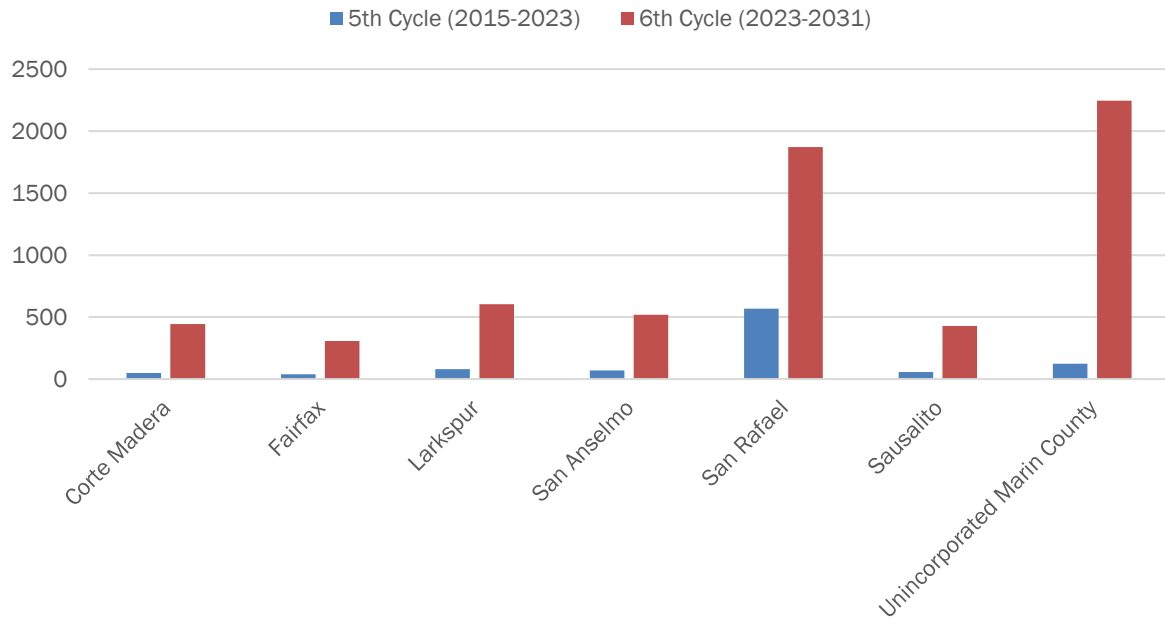
Source: Strategic Economics, 2022.

**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) |
|-----------------|---|-------------------------|-----------------------------------|
| <b>11-0000</b>  | <b>Management Occupations</b>   |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$166,968</b>        | <b>8.921%</b>                     |

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) |
|-----------------|---|-------------------------|-----------------------------------|
| <b>13-0000</b>  | <b>Business and Financial Operations Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$95,541</b>         | <b>11.657%</b>                    |
| <b>15-0000</b>  | <b>Computer and Mathematical Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$121,679</b>        | <b>11.473%</b>                    |
| <b>17-0000</b>  | <b>Architecture and Engineering Occupations</b>  |                         |                                   |
| 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, | \$75,160                | 0.086%                            |
| 17-3098         | Except Drafters, All Other   | \$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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$101,626</b>        | <b>3.146%</b>                     |
| <b>19-0000</b>  | <b>Life, Physical, and Social Science Occupations</b>                      |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                   | <b>\$81,448</b>         | <b>1.104%</b>                     |
| <b>21-0000</b>  | <b>Community and Social Service Occupations</b>                    |                         |                                   |
|                 | 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                   | <b>\$64,024</b>         | <b>1.403%</b>                     |
| <b>23-0000</b>  | <b>Legal Occupations</b>   |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                   | <b>\$141,697</b>        | <b>1.923%</b>                     |
| <b>25-0000</b>  | <b>Educational Instruction and Library Occupations</b>             |                         |                                   |

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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$54,651</b>         | <b>0.318%</b>                     |
| <b>27-0000</b>  | <b>Arts, Design, Entertainment, Sports, and Media Occupations</b>                              |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$81,665</b>         | <b>1.421%</b>                     |
| <b>29-0000</b>  | <b>Healthcare Practitioners and Technical Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$124,379</b>        | <b>9.259%</b>                     |
| <b>31-0000</b>  | <b>Healthcare Support Occupations</b>  |                         |                                   |

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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$48,408</b>         | <b>4.353%</b>                     |
| <b>33-0000</b>  | <b>Protective Service Occupations</b>                                     |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$42,511</b>         | <b>1.246%</b>                     |
| <b>35-0000</b>  | <b>Food Preparation and Serving Related Occupations</b>                   |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$37,675</b>         | <b>0.377%</b>                     |
| <b>37-0000</b>  | <b>Building and Grounds Cleaning and Maintenance Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$42,914</b>         | <b>14.358%</b>                    |
| <b>39-0000</b>  | <b>Personal Care and Service Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$41,279</b>         | <b>0.426%</b>                     |
| <b>41-0000</b>  | <b>Sales and Related Occupations</b>   |                         |                                   |
|                 | 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$81,059</b>         | <b>3.685%</b>                     |

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) |
|-----------------|---|-------------------------|-----------------------------------|
| <b>43-0000</b>  | <b>Office and Administrative Support Occupations</b>                            |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                     | <b>\$52,314</b>         | <b>17.996%</b>                    |
| <b>45-0000</b>  | <b>Farming, Fishing, and Forestry Occupations</b>                    |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                     | <b>\$39,878</b>         | <b>0.039%</b>                     |
| <b>47-0000</b>  | <b>Construction and Extraction Occupations</b>                       |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$76,185</b>         | <b>0.620%</b>                     |
| <b>49-0000</b>  | <b>Installation, Maintenance, and Repair Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$60,320</b>         | <b>1.246%</b>                     |
| <b>51-0000</b>  | <b>Production Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$44,646</b>         | <b>1.867%</b>                     |
| <b>53-0000</b>  | <b>Transportation and Material Moving Occupations</b>   |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$40,712</b>         | <b>3.162%</b>                     |
|                 | <b>Total, Land Use</b>   | <b>\$85,440.54</b>      | <b>100.000%</b>                   |

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) |
|-----------------|---|-------------------------|-----------------------------------|
| <b>11-0000</b>  | <b>Management Occupations</b>   |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$98,093</b>         | <b>2.423%</b>                     |
| <b>13-0000</b>  | <b>Business and Financial Operations Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$86,096</b>         | <b>0.269%</b>                     |

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) |
|-----------------|---|-------------------------|-----------------------------------|
| <b>15-0000</b>  | <b>Computer and Mathematical Occupations</b>                            |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$109,230</b>        | <b>0.019%</b>                     |
| <b>21-0000</b>  | <b>Community and Social Service Occupations</b>                         |                         |                                   |
| 21-1019         | Counselors, All Other   | \$66,150                | 0.001%                            |
| 21-1022         | Healthcare Social Workers   | \$86,560                | 0.0005%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$73,047</b>         | <b>0.001%</b>                     |
| <b>23-0000</b>  | <b>Legal Occupations</b>  |                         |                                   |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$73,546</b>         | <b>0.002%</b>                     |
| <b>25-0000</b>  | <b>Educational Instruction and Library Occupations</b>                  |                         |                                   |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$54,313</b>         | <b>0.005%</b>                     |
| <b>27-0000</b>  | <b>Arts, Design, Entertainment, Sports, and Media Occupations</b>       |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$66,961</b>         | <b>0.102%</b>                     |
| <b>29-0000</b>  | <b>Healthcare Practitioners and Technical Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$86,954</b>         | <b>0.266%</b>                     |
| <b>31-0000</b>  | <b>Healthcare Support Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                 | <b>\$48,986</b>         | <b>0.063%</b>                     |
| <b>33-0000</b>  | <b>Protective Service Occupations</b>                            |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                 | <b>\$38,981</b>         | <b>0.108%</b>                     |
| <b>35-0000</b>  | <b>Food Preparation and Serving Related Occupations</b>          |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                 | <b>\$35,217</b>         | <b>86.687%</b>                    |
| <b>37-0000</b>  | <b>Building and Grounds Cleaning and Maintenance Occupations</b> |                         |                                   |
|                 | 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) |
|-----------------|---|-------------------------|-----------------------------------|
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$39,305</b>         | <b>0.321%</b>                     |
| <b>39-0000</b>  | <b>Personal Care and Service Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$35,291</b>         | <b>0.523%</b>                     |
| <b>41-0000</b>  | <b>Sales and Related Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$35,176</b>         | <b>5.992%</b>                     |
| <b>43-0000</b>  | <b>Office and Administrative Support Occupations</b>                                  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                     | <b>\$50,617</b>         | <b>1.104%</b>                     |
| <b>45-0000</b>  | <b>Farming, Fishing, and Forestry Occupations</b>                    |                         |                                   |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>                                     | <b>\$38,161</b>         | <b>0.002%</b>                     |
| <b>47-0000</b>  | <b>Construction and Extraction Occupations</b>                       |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>                                     | <b>\$70,399</b>         | <b>0.027%</b>                     |
| <b>49-0000</b>  | <b>Installation, Maintenance, and Repair Occupations</b>             |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$57,919</b>         | <b>0.594%</b>                     |
| <b>51-0000</b>  | <b>Production Occupations</b>   |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$38,854</b>         | <b>0.536%</b>                     |
| <b>53-0000</b>  | <b>Transportation and Material Moving Occupations</b>  |                         |                                   |
| 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%                            |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$42,424</b>         | <b>0.958%</b>                     |
|                 | <b>Total, Land Use</b>   | <b>\$37,493</b>         | <b>100.000%</b>                   |

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) |
|-----------------|---|-------------------------|----------------------------------|
| <b>11-0000</b>  | <b>Management Occupations</b>   |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$128,280</b>        | <b>4.198%</b>                    |
| <b>13-0000</b>  | <b>Business and Financial Operations Occupations</b>  |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$85,441</b>         | <b>1.660%</b>                    |
| <b>15-0000</b>  | <b>Computer and Mathematical Occupations</b>                            |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$99,597</b>         | <b>0.195%</b>                    |
| <b>17-0000</b>  | <b>Architecture and Engineering Occupations</b>                         |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$93,450</b>         | <b>0.031%</b>                    |
| <b>19-0000</b>  | <b>Life, Physical, and Social Science Occupations</b>                   |                         |                                  |
| 19-5011         | Occupational Health and Safety Specialists                              | \$108,230               | 0.005%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$108,230</b>        | <b>0.005%</b>                    |
| <b>23-0000</b>  | <b>Legal Occupations</b>  |                         |                                  |
| 23-1011         | Lawyers   | \$188,910               | 0.005%                           |
| 23-2011         | Paralegals and Legal Assistants   | \$71,360                | 0.002%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$152,176</b>        | <b>0.008%</b>                    |

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) |
|-----------------|---|-------------------------|----------------------------------|
| <b>27-0000</b>  | <b>Arts, Design, Entertainment, Sports, and Media Occupations</b>             |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$62,212</b>         | <b>0.340%</b>                    |
| <b>29-0000</b>  | <b>Healthcare Practitioners and Technical Occupations</b>                     |                         |                                  |
| 29-2040         | Emergency Medical Technicians and Paramedics                                  | \$54,180                | 0.013%                           |
| 29-1141         | Registered Nurses   | \$138,000               | 0.002%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$67,277</b>         | <b>0.016%</b>                    |
| <b>31-0000</b>  | <b>Healthcare Support Occupations</b>   |                         |                                  |
| 31-9011         | Massage Therapists  | \$50,560                | 0.516%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$50,560</b>         | <b>0.516%</b>                    |
| <b>33-0000</b>  | <b>Protective Service Occupations</b>   |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$39,966</b>         | <b>2.226%</b>                    |
| <b>35-0000</b>  | <b>Food Preparation and Serving Related Occupations</b>                       |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$37,537</b>         | <b>25.543%</b>                   |
| <b>37-0000</b>  | <b>Building and Grounds Cleaning and Maintenance Occupations</b>                |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$42,139</b>         | <b>27.608%</b>                   |
| <b>39-0000</b>  | <b>Personal Care and Service Occupations</b>                                    |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$35,162</b>         | <b>7.833%</b>                    |
| <b>41-0000</b>  | <b>Sales and Related Occupations</b>  |                         |                                  |
|                 | 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$54,861</b>         | <b>2.959%</b>                    |
| <b>43-0000</b>  | <b>Office and Administrative Support Occupations</b>  |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$44,074</b>         | <b>17.792%</b>                   |
| <b>45-0000</b>  | <b>Farming, Fishing, and Forestry Occupations</b>                               |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$39,723</b>         | <b>0.009%</b>                    |



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) |
|-----------------|---|-------------------------|----------------------------------|
| <b>47-0000</b>  | <b>Construction and Extraction Occupations</b>                                |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$77,765</b>         | <b>0.248%</b>                    |
| <b>49-0000</b>  | <b>Installation, Maintenance, and Repair Occupations</b>                      |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>  | <b>\$58,694</b>         | <b>5.162%</b>                    |

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) |
|-----------------|--|-------------------------|----------------------------------|
| <b>51-0000</b>  | <b>Production Occupations</b>  |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>   | <b>\$37,439</b>         | <b>2.208%</b>                    |
| <b>53-0000</b>  | <b>Transportation and Material Moving Occupations</b>  |                         |                                  |
| 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%                           |
|                 | <b>Weighted Mean Annual Wage</b>       | <b>\$39,024</b>         | <b>1.444%</b>                    |
|                 | <b>Total, Land Use</b>                 | <b>\$46,473</b>         | <b>100.000%</b>                  |

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.