



TOWN OF FAIRFAX

STAFF REPORT

June 7, 2023

TO: Mayor and Town Council

FROM: Daniel Hortert, Contract Planner

SUBJECT: Adopt a Resolution Approving the Inclusionary Housing and Commercial Linkage Studies and Direct staff to bring back an Inclusionary Housing Ordinance and Housing Impact Fee Ordinance for Consideration.

RECOMMENDATION

1. That the Town Council receive a presentation and hold a public hearing regarding fee studies supporting an affordable housing in-lieu fee and commercial/non-residential linkage fee (Studies).
2. That the Town Council move to adopt the Resolution approving the Studies in compliance with State law (see Attachment A).
3. That the Town Council direct staff to return to Council with an Inclusionary Affordable Housing Ordinance Program and related impact fees.

DISCUSSION

Planning agencies in Marin County, under the auspices of its Planning Directors group, have been working cooperatively to cost-share grant funding for local programs to help develop inclusionary housing fees. In 2019, during the 5th Cycle Housing Element, the Town was awarded a grant pursuant to California Senate Bill 2 (SB 2 Grant) to work with six other Marin County jurisdictions on various housing related issues, including the development of common inclusionary in lieu fee policies, and associated commercial linkage fees. Participating jurisdictions included: Fairfax, Corte Madera, Larkspur, San Anselmo, San Rafael, Sausalito, and Unincorporated County of Marin. Of these, only Fairfax and San Anselmo do not have existing inclusionary housing policies.

Adoption of a Resolution approving the Studies is the first required step toward implementing the larger inclusionary housing policies and program, which will return to the Council for consideration based upon the outcome of the Studies.

The Studies, which have been completed and are now under consideration for adoption by this Council, include:

1. Inclusionary Study

The Inclusionary Study draws on a thorough review of current inclusionary housing policies as well as best practices. The study provides detailed analysis quantifying the affordability gap to support updated in-lieu fee calculations. The recommendations include key policy considerations for affordable housing inclusionary requirements and an associated in-lieu fee that would apply to all new multi-unit developments in the Town of Fairfax.

2. Commercial Linkage Fee Study

The Commercial Linkage Fee Study quantifies the increase in demand for affordable housing that accompanies jobs created by non-residential development. The study draws on analysis of the gap between what households can afford to pay for housing and the cost of developing new housing units. The resulting recommendation is an updated Commercial Linkage Fee that would apply to all new non-residential development in the Town of Fairfax.

ANALYSIS

What is Inclusionary Housing? Cities, towns, and Counties have been operating inclusionary housing policies and programs since the 1970s. Inclusionary housing policies and programs aim to create affordable housing units by requiring housing developers seeking to construct new market-rate units to set aside a certain number of affordable units for moderate-income to low-income tenants or homeowners. Inclusionary housing policies are designed to encourage new housing developers to build affordable homes in market-rate housing areas with the goal of creating communities with diverse income levels. Inclusionary housing requirements also help a municipality satisfy its Regional Housing Needs Allocation (RHNA) for units at various affordability income levels. The benefits of inclusionary housing include the following:

1. **Increased supply of affordable housing:** Inclusionary housing policies help increase the amount of affordable housing available to lower-income and moderate-income households, which helps meet state-imposed affordability requirements in the RHNA. Inclusionary housing policies also offer a path to meeting federal fair housing standards set by the Department of Housing and Urban Development.
2. **Greater opportunity for low-income households:** As housing prices soar, inclusionary housing policies aim to help low-income renters and homeowners afford to live in areas with greater access to employment, schools, and public transportation.
3. **Decrease economic and racial segregation:** Inclusionary housing can help create economically and racially diverse communities by enabling people to move from high-poverty to low-poverty areas.
4. **Healthier communities:** Living in a mixed-income community can have a positive effect on residents' health, such as a reduction in stress and overall improved mental health.

In support of inclusionary housing, the Town's 5th Cycle 2015-2023 Housing Element includes Program H-4.1.1.2, which would have established inclusionary requirements and adoption of an inclusionary ordinance (2015-2023 Adopted Housing Element, p. 56 and 86). The same Program proposes an in-lieu affordable housing fund to accompany the Inclusionary Housing Ordinance.

The collaboration among Marin cities, towns, and the County has resulted in significant staff and consultant cost savings, with the County of Marin taking a lead role. Moreover, the collaboration has helped ensure a cohesive and consistent approach throughout participating Marin jurisdictions providing predictability for stakeholders including housing developers.

SB 2 grant funds were also used to produce the fee studies to support the adoption of affordable housing in-lieu and non-residential/commercial linkage fees. The fee studies were conducted by Strategic Economics and Vernazza Wolf Associates (the Consultants) and

included legal support for both the affordable housing inclusionary in-lieu fee and the nonresidential/commercial linkage fee. Additionally, the Consultants held stakeholder meetings that included market-rate developers, affordable housing developers, and housing advocates. Participating developers indicated that the complexity and variety of inclusionary policies makes housing projects more burdensome because it is difficult to establish project costs. It was suggested that a common inclusionary policy for all Marin County jurisdictions would create consistency for developers and ease roadblocks to housing developments, thereby creating more housing.

Assembly Bill 602 (2021) imposes certain procedural and substantive requirements regarding the adoption of development impact fees. In part, the bill requires the adoption of an impact fee nexus study at least 30 days prior to the adoption of the associated development impact fee itself at a public hearing. Additionally, AB 602 requires that any impact fee study that is adopted after July 1, 2022 either calculate a fee levied or imposed on a housing development project proportionately to the square footage of the proposed unit or make specified findings explaining why square footage is not an appropriate metric to calculate fees. In part, the intent is to allow smaller housing units by making the fees proportional to size, thereby reducing the fee amount. In accordance with the requirements of AB 602, the Town is asked to consider and adopt the Studies to form the basis for adoption of the associated development impact fees at a subsequent meeting.

FISCAL IMPACT

The Town received SB 2 grant funding in 2019, in which money was expended on the development of inclusionary housing policies and related fees in conjunction with participating Marin jurisdictions. Significant staff time and consultant time was saved by this collaboration.

CEQA COMPLIANCE

The studies supporting affordable-housing in-lieu fees and the nonresidential/commercial linkage fees are exempt from the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15061(b)(3) because it can be seen with certainty that there is no possibility that the Amendment will have a significant effect on the environment; and because it is not a "project" under CEQA since a project does not include the creation of a governmental funding mechanism that does not involve any commitment to any specific project (CEQA Guidelines section 15378(b)(4)), and this Resolution commits no fees to any specific project.

ATTACHMENTS

Resolution with exhibits attached:

Exhibit A- Inclusionary Fee Study prepared by Strategic Economics and Vernazza Wolfe Associates dated February 10, 2023

Exhibit B- Commercial Linkage Fee Study prepared by Strategic Economics and Vernazza Wolfe Associates dated February 18, 2023

RESOLUTION 23-__

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF FAIRFAX ADOPTING STUDIES IN SUPPORT OF AFFORDABLE HOUSING IN-LIEU FEES AND COMMERCIAL/NON-RESIDENTIAL LINKAGE FEES

WHEREAS, all communities in the State of California, including the Town of Fairfax, face a housing crisis that includes the lack of access to affordable housing, which has a direct negative impact on the public health, safety, and welfare of the residents of Fairfax; and

WHEREAS, inclusionary housing policies, and related affordable housing in-lieu and nonresidential/commercial linkage fees, which fees are deposited into an affordable housing fund to be used to promote and secure affordable housing, are tools that help jurisdictions increase the supply of affordable housing units; and

WHEREAS, California Government Code section 65580 provides that the availability of housing is of vital Statewide importance and that local governments have a responsibility to use their powers to facilitate the development of housing and make adequate provision for the housing needs of all economic segments of the community; and

WHEREAS, the adoption of inclusionary housing policies, including supporting affordable housing in-lieu fees and commercial/non-residential linkage fees, is critical for the Town in reaching its Regional Housing Needs Allocation (RHNA) housing requirements for very-low, low, and moderate-income households; and

WHEREAS, the Town of Fairfax was awarded funding pursuant to a State Grant established by California Senate Bill 2 (SB 2) for actions to increase housing, and a portion of this money was utilized in collaboration with other Marin jurisdictions to formulate inclusionary housing policies and supporting fee studies; and

WHEREAS, using the SB 2 funding, the Town of Fairfax collaborated with several Marin jurisdictions to participate in studies led by Strategic Economics, Inc., and Vernazza Wolf Associates (Consultants) on the development of a common inclusionary housing policy; and

WHEREAS, Consultants completed an Affordable Housing In-Lieu Fee Study and a Commercial/Non-Residential Linkage Fee Study (Studies), which Studies support the adoption of said fees; and

WHEREAS, the Studies rely on widely used, appropriate methodology to determine the maximum amount needed to fully mitigate the burdens created by residential and non-residential development on the need for affordable housing; and

WHEREAS, the Studies demonstrate that said fees do not exceed the affordable housing impacts attributable to the development projects on which the fees are imposed; and

WHEREAS, Assembly Bill 602 (2021) imposes certain procedural and substantive requirements regarding the adoption of development impact fees including requiring the adoption of the supporting impact fee nexus study at least 30 days prior to the adoption of the associated development impact fee at a public hearing (Gov. Code, § 66016.5(a)); and

WHEREAS, on June 7, 2023, at a duly noticed public hearing, the Town Council did hear and consider the Studies regarding the affordable housing in-lieu fee and commercial/nonresidential linkage fees pursuant to AB 602; and

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Fairfax hereby adopts the Studies supporting the Affordable Housing In-Lieu Fees as set forth in Exhibit “A” and Commercial/Non-Residential Linkage Fees as set forth in Exhibit “B” attached hereto and incorporated herein by reference.

BE IT FURTHER RESOLVED that the facts set forth in the recitals in this Resolution are true and correct and incorporated herein by reference. The recitals constitute findings in this matter and, together with the staff report, other written reports, oral staff presentation, public testimony, and other information contained in the record, are an adequate and appropriate evidentiary basis for the actions taken in this Resolution.

BE IT FURTHER RESOLVED that this Resolution is exempt from the California Environmental Quality Act (“CEQA”) pursuant to CEQA Guidelines section 15061(b)(3) because it can be seen with certainty that there is no possibility that the Resolution will have a significant effect on the environment; and because it is not a “project” under CEQA.

ADOPTED AT A PUBLIC HEARING at a regular meeting of the Fairfax Town Council on the 7th day of June 2023 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Chance Cutrano, Mayor

ATTEST: _____
Michele Gardner, Town Clerk

Exhibits A and B attached

EXHIBIT A



MEMORANDUM

To: Ben Berto, Town of Fairfax
From: Strategic Economics and Vernazza Wolfe Associates
Date: February 10, 2023
Project: Marin Inclusionary Study
Subject: Inclusionary Program and In-Lieu Fee Study for Fairfax

Purpose and Background

The County of Marin, Town of Fairfax, and five other jurisdictions within Marin 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 report provides an assessment of the existing inclusionary housing programs, summarizes best practices for setting inclusionary housing requirements, including on-site affordable units and fees in-lieu of providing affordable units on-site. The report provides an updated calculation of in-lieu fees for all the jurisdictions participating in this study. The maximum in-lieu fees were calculated for three different housing product types – single-family subdivisions, townhomes/condominiums, and rental apartments.

This report also includes an analysis of key policy considerations and recommendations to guide Fairfax's decision-makers on potential changes to the inclusionary housing requirements and associated in-lieu fees.

The memo is organized into the following sections:

- I. Analysis of Existing Inclusionary Policies
- II. Best Practices for Inclusionary Policies
- III. Affordability Gap/In-lieu Fee Calculation
- IV. Policy Considerations and Recommendations

I. Analysis of Existing Inclusionary Policies

Some of the communities in Marin County have a relatively long history with inclusionary zoning. Of the seven jurisdictions participating in this study, five already have inclusionary policies, some of which have existed in some form since the 1980s. Sausalito adopted its policy in 2019, while the communities of San Anselmo and Fairfax have not yet adopted a policy. Concurrent to the preparation of this memo, San Rafael adopted a significantly modified inclusionary policy; both the current policy and the newly adopted versions are shown in Figures 1 and 2.

Inclusionary programs typically have a specific onsite requirement to designate a portion of the project for affordable units (see Figure 1 for a comparison of onsite requirements for the seven jurisdictions) as well as alternative means of compliance with the policy, such as the payment of in-lieu fees or land dedication (Figure 2). Below are some key observations of the policy elements across the jurisdictions:

- **All jurisdictions apply an inclusionary requirement to both rental and for-sale projects.** Fairfax and San Anselmo do not have existing inclusionary housing ordinances.
- **The policies for rental projects tend to target lower income households (very low- and low-income households) while the policies for for-sale projects tend to target a combination of low- and moderate-income households.** Exceptions to this include Corte Madera and San Rafael, which have identical affordability targets for both rental and for-sale projects, and Unincorporated Marin County, which has unusually low-income targets: 60 percent of area median income (AMI) for for-sale and 50 percent of AMI for rental developments.
- **The percentage affordable requirement ranges from ten percent to 25 percent.** Some jurisdictions require smaller percentages for smaller projects: Larkspur has a lower requirement for projects less than twenty units in size, while both San Rafael's current and newly adopted policies include a modified requirement for larger projects. Sausalito requires a higher percentage (with deeper affordability) for projects in commercial districts.
- **The inclusionary policies generally have a relatively low unit threshold.** The unit thresholds (minimum number of units in a project for the policy to be applicable) range from 1 or more units in Corte Madera to 5 or more units in Larkspur. The relatively low unit thresholds reflect the smaller multifamily and subdivision developments characteristic of Marin.
- **San Rafael recently modified its policy by relaxing the onsite inclusionary requirement, adding flexibility, and shifting the targeted income groups slightly higher.**
- **The jurisdictions take a mix of approaches to alternative means of compliance, but, overall, the alternatives are structured to encourage developers to build units onsite.** Jurisdictions either disallow the payment of in-lieu fees in all circumstances (Sausalito), or disallow them in some circumstances (Corte Madera, Larkspur, San Rafael), or allow the payment of in-lieu fees on fractional units (Larkspur, Unincorporated Marin County). Land dedication or the provision of offsite units is generally allowed under special circumstances.

FIGURE 1: ONSITE INCLUSIONARY REQUIREMENTS BY JURISDICTION

| | Percentage Affordable by Project Size | Minimum Size Threshold | Affordability Target | |
|--|---|------------------------|---|--|
| | | | Rental | For-Sale |
| Corte Madera | All projects: 25% | 1 unit | 5% Very Low-Income; 10% Low-Income; 10% Moderate-Income | |
| Sausalito | | | | |
| Commercial Districts | 1-5 units: 1 unit; 6+ units: 20% | 1 unit | Low-income | Moderate-income |
| Other Areas | 15% | 4 units | Moderate-income | |
| Larkspur | 5-19 units: 15% 20+ units: 20% | 5 units | 50% Very Low-Income; 50% Low-Income | 50% Low-Income; 50% Moderate-Income |
| Unincorporated Marin County | 2+ units or lots: 20% | 2 units or lots | Very Low-Income (50% AMI) | Low-Income (60% AMI) |
| San Rafael | | | | |
| Current Policy | 2-10 units: 10% 11-20 units: 15% 21+ units: 20% | 2 units | 50% Very Low-Income; 50% Low-Income | 50% Low-Income; 50% Moderate-Income |
| <i>New Policy (Approved by City Council 2/21/2021)</i> | | | | |
| Primary Requirement | 2-15 units: 10% 16+ units: 5% | 2 units | Low-Income | |
| Secondary Requirement (in addition to the primary requirement for 16+ unit projects) | 16+ units: Additional 5% or 10% | 16 units | 5% additional set-aside: Low-Income; 10% additional set-aside: Moderate-Income | |
| Fairfax | | | No Policy | |
| San Anselmo | | | No Policy | |

Source: Staff from Jurisdictions, 2020; Strategic Economics, 2021.

FIGURE 2: INCLUSIONARY REQUIREMENT ALTERNATIVE MEANS OF COMPLIANCE BY JURISDICTION

| Alternative Means of Compliance | |
|--|---|
| Corte Madera | 1-9 unit projects can pay in lieu fee. 10+ unit projects must incorporate units on-site. |
| Sausalito | |
| Commercial Districts | Applicants can propose land dedication or off-site units if on-site units are not possible, though there is no in-lieu fee option. |
| Other Areas | Applicants can propose land dedication or off-site units if on-site units are not possible, though there is no in-lieu fee option. |
| Larkspur | Land donation, transfer of inclusionary credits, second dwelling units; In-lieu fee available for 5-14 unit projects and for fractional units (Rental: \$213,267, For-Sale: \$338,126). |
| Unincorporated Marin County | 2+ unit projects and subdivisions: In-lieu fee available for fractional units (\$329,485 per unit). |
| San Rafael | |
| Former Policy | In-lieu fee for fractional units (\$343,969 per unit). |
| <i>New Policy (Approved by City Council 2/21/2021)</i> | |
| Primary Requirement | None (must be on-site) |
| Secondary Requirement | In-lieu fee, off-site units located within 1/2 mile of project, or land donation. |
| Fairfax | No Policy |
| San Anselmo | No Policy |

EFFECTIVENESS OF INCLUSIONARY POLICIES

The Consultant Team surveyed the five participating jurisdictions that currently have policies, including questions about the units produced by their policy, the means of production, and fee revenues collected. The Team also held meetings with market-rate developers, affordable housing providers, and other stakeholders (see Appendix A) to gain their perspective regarding the policies.

To summarize the results of the inclusionary policies, the Consultant Team summarized the number of units produced and the revenues generated from 2016 to 2020, shown in Figure 3. To provide more context on housing product, a summary of allocated and permitted units in the 2015-2023 Regional Housing Needs Assessment (RHNA) cycle is shown in Figure 4. The effectiveness of the inclusionary policies as a tool for affordable housing production is discussed below.

The jurisdictions in this study produced 58 affordable units through their inclusionary programs over a five-year period. In the last five years, the five jurisdictions with inclusionary policies produced a total of 41 affordable rental units, 17 affordable for-sale units, and approximately \$4 million for affordable housing development. San Rafael constituted most of the activity, with all 41 rental units produced there, 13 for-sale units produced, and \$3.6 million generated from a single development, the 81-unit Village at Loch Lomond Marina project.¹

Inclusionary programs accounted for about 14 percent of affordable housing production in the seven participating jurisdictions. According to the RHNA progress report shown in Figure 4, the participating jurisdictions permitted a total 414 affordable units and 700 market-rate units from 2015 to 2020. This indicates that the majority of below-market rate housing development has been implemented through 100 percent affordable projects. The jurisdictions are on track to meet their market-rate (over 120% AMI) and low-income (80% AMI) housing allocations. However, they are less likely to meet the target for producing very-low income (50% AMI) and moderate-income (120%) units.

The inclusionary programs have not resulted in significant production of new affordable units in part because of the complexity of residential development in the county. Residential developers participating in this study cited many factors contributing to the complexity of housing development in Marin, including long and unpredictable approvals processes, opposition from some community members, lack of available sites, especially those that are zoned for multi-family housing, high land and construction costs, and inadequate or expensive infrastructure.

Inclusionary requirements can be a secondary factor impacting the viability of new development in Marin, mainly in instances where the requirement is poorly matched to market conditions. Market rate developers participating this study believed that new development projects can support inclusionary requirements for lower income households. However, some noted that the percentage requirement had been increased over time in many cities, without consideration of the relative market strengths of different locations in the county. For example, some jurisdictions have targeted very low-income households for for-sale projects, which requires a deeper subsidy than low- and moderate-income households.

The conversion of off-site units as an alternative means of compliance with the inclusionary requirement can fall short of the communities' goals for affordable housing. Allowing developers to convert existing units to deed-restricted affordable units can be problematic. First, unlike the

¹ The \$3.6 million generated from the Loch Lomond Marina project were not from in-lieu fees but rather a "buyout" of a portion of the BMR requirement.

construction of new units, the conversion of existing units fails to expand the overall supply of housing in the county, trading a market rate unit for one below market rate unit rather than expanding the overall supply. Second, converted units are often of lower quality than new units, and may come with hidden costs, such as additional maintenance costs.

In Marin County, the current inclusionary requirement appears to encourage developers to reduce the scale of projects to allow for the payment of in-lieu fees rather than providing on-site units. The County's policy targets very low-income households: 50 percent of Area Median Income for rental developments and 60 percent for for-sale. These income targets are lower than other jurisdictions in the Bay Area. Projects with two units or more must provide units onsite, with the payment of in-lieu fees allowed only on fractional units. According to County staff, some development projects have reduced the scale of their projects to enable the payment of in-lieu fees rather than providing units on-site.

The variation in inclusionary requirements from jurisdiction to jurisdiction can create confusion and unnecessary complexity for developers. Because each jurisdiction in Marin County has set its inclusionary requirements in an uncoordinated way, the finer details of the many different policies can be difficult for developers to navigate. A more standardized approach that is closely tied to market conditions, rather than jurisdictional boundaries, would help to rationalize the process for developers.

FIGURE 3: AFFORDABLE UNITS PRODUCED AND FEE REVENUES COLLECTED, BY JURISDICTION, 2016-2020.

| Jurisdiction | Rental Units | For-sale Units | Fee Revenues |
|-----------------------------|---------------------|-----------------------|----------------------------|
| Corte Madera | 0 | 3 | \$379,478 |
| Fairfax ^[a] | n/a | n/a | n/a |
| Larkspur | 0 | 0 | 0 |
| Unincorporated Marin County | 0 | 1 ^[d] | \$213,603 |
| San Anselmo ^[b] | n/a | n/a | n/a |
| San Rafael | 41 | 13 | \$3,600,000 ^[e] |
| Sausalito ^[c] | 0 | 0 | 0 |
| Total | 41 | 17 | \$4,193,081 |

^[a] Fairfax does not currently have an inclusionary program.

^[b] San Anselmo does not currently have an inclusionary program.

^[c] Sausalito adopted an inclusionary program in 2019.

^[d] Produced through a shared agreement with Mill Valley.

^[e] Revenues collected from a buy-out of six Below Market Rate units.

Source: Reported by each jurisdiction, 2016-2020.

FIGURE 4. RHNA FIFTH CYCLE ALLOCATION AND PERMITTED UNITS BY AFFORDABILITY LEVEL ACROSS JURISDICTIONS, AS OF 2020

| | Corte Madera | Fairfax | Larkspur | San Anselmo | San Rafael | Sausalito | Unincorporated Marin County | Total |
|-------------------------------------|--------------|---------|----------|-------------|------------|-----------|--------------------------------|-------|
| Very Low Income (50% AMI) | | | | | | | | |
| RHNA | 22 | 16 | 40 | 33 | 240 | 26 | 55 | 432 |
| Permitted Units | 16 | 13 | 6 | 15 | 5 | 12 | 26 | 93 |
| % Complete | 73% | 81% | 15% | 45% | 2% | 46% | 47% | 22% |
| Low Income (80% AMI) | | | | | | | | |
| RHNA | 13 | 11 | 20 | 17 | 148 | 14 | 32 | 255 |
| Permitted Units | 13 | 60 | 11 | 21 | 79 | 20 | 27 | 231 |
| % Complete | 100% | 545% | 55% | 124% | 53% | 143% | 84% | 91% |
| Moderate Income (120% AMI) | | | | | | | | |
| RHNA | 13 | 11 | 21 | 19 | 181 | 16 | 37 | 298 |
| Permitted Units | 8 | 4 | 9 | 23 | 12 | 6 | 28 | 90 |
| % Complete | 62% | 36% | 43% | 121% | 7% | 38% | 76% | 30% |
| Market-Rate (>120% AMI) | | | | | | | | |
| RHNA | 24 | 23 | 51 | 37 | 438 | 23 | 61 | 657 |
| Permitted Units | 179 | 10 | 90 | 39 | 201 | 7 | 174 | 700 |
| % Complete | 746% | 43% | 176% | 105% | 46% | 30% | 285% | 107% |
| Permitted Units Summary | | | | | | | | |
| Total Affordable Units (<120% AMI) | 37 | 77 | 26 | 59 | 96 | 38 | 81 | 414 |
| Total Market Rate Units (>120% AMI) | 179 | 10 | 90 | 39 | 201 | 7 | 174 | 700 |
| Affordable Units as Share of Total | 17% | 89% | 22% | 60% | 32% | 84% | 32% | 37% |

Source: HCD, 2020; Strategic Economics, 2021.

II. Best Practices for Inclusionary Policies

This section provides a discussion of key policy issues for jurisdictions to consider as they introduce a new inclusionary program or modify an existing program, and provides recommendations based on best practices. To identify best practices, the Consultant Team reviewed reports from the UC Berkeley Turner Center for Housing Innovation, Grounded Solutions Network, and the Lincoln Institute of Land Policy. To guide the recommendations for best practices, the Consultant Team first designated market area zones. Following that, the policy elements discussed in this section include:

- Considering market factors when setting inclusionary requirements
- The income groups targeted in inclusionary requirements
- The minimum applicable development size
- Setting in-lieu fees as an alternative to on-site or off-site units, and
- Other alternative means of compliance.

MARKET CONDITIONS

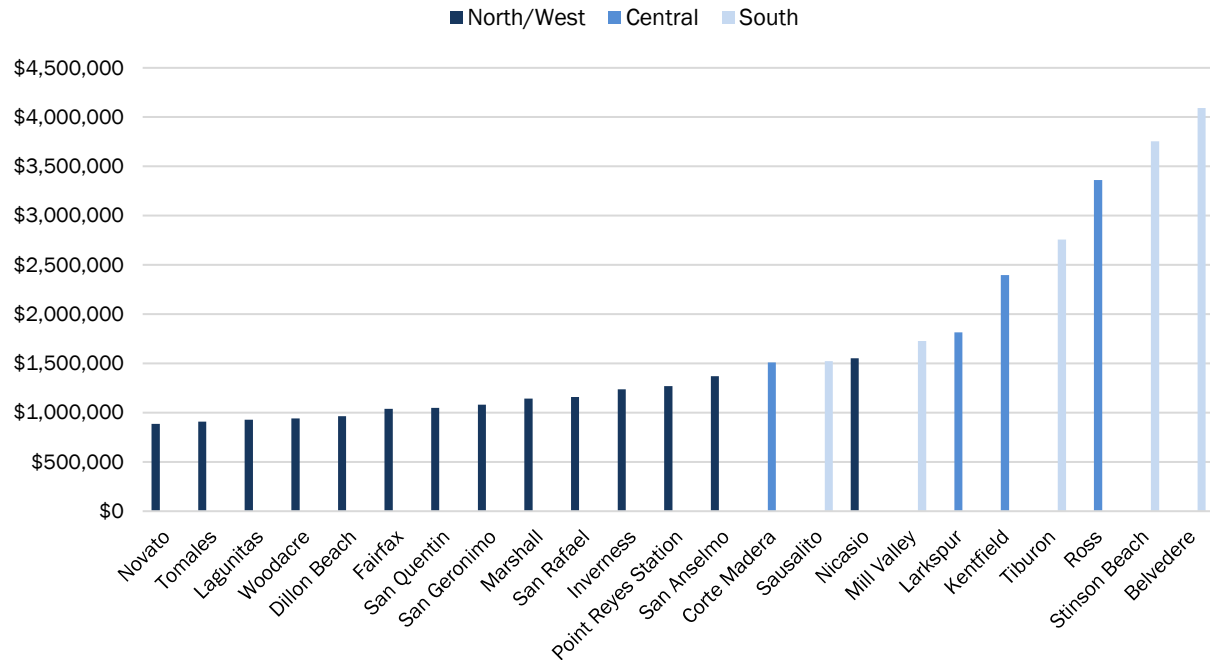
It is important to consider market conditions when setting an inclusionary housing requirement to ensure that the policy can be tailored to the unique context of each jurisdiction, and that the policy does not constrain the development of new housing. Jurisdictions that have stronger housing markets can establish higher inclusionary requirements than those with less established or weaker markets.

Based on Zillow home sale data and interviews with residential developers with experience working in Marin County (see Appendix A), the Consultant Team identified three market areas for for-sale housing across the participating jurisdictions in the County. Figures 5 and 6 show Zillow home value indices for both overall home sales and condominium sales.

As shown in Figure 5, home values are highest in South Marin, which offer the best access to San Francisco via the Golden Gate Bridge and ferries. Home values are slightly lower in Central Marin, and drop in North/ West Marin areas, which are comparatively less accessible.

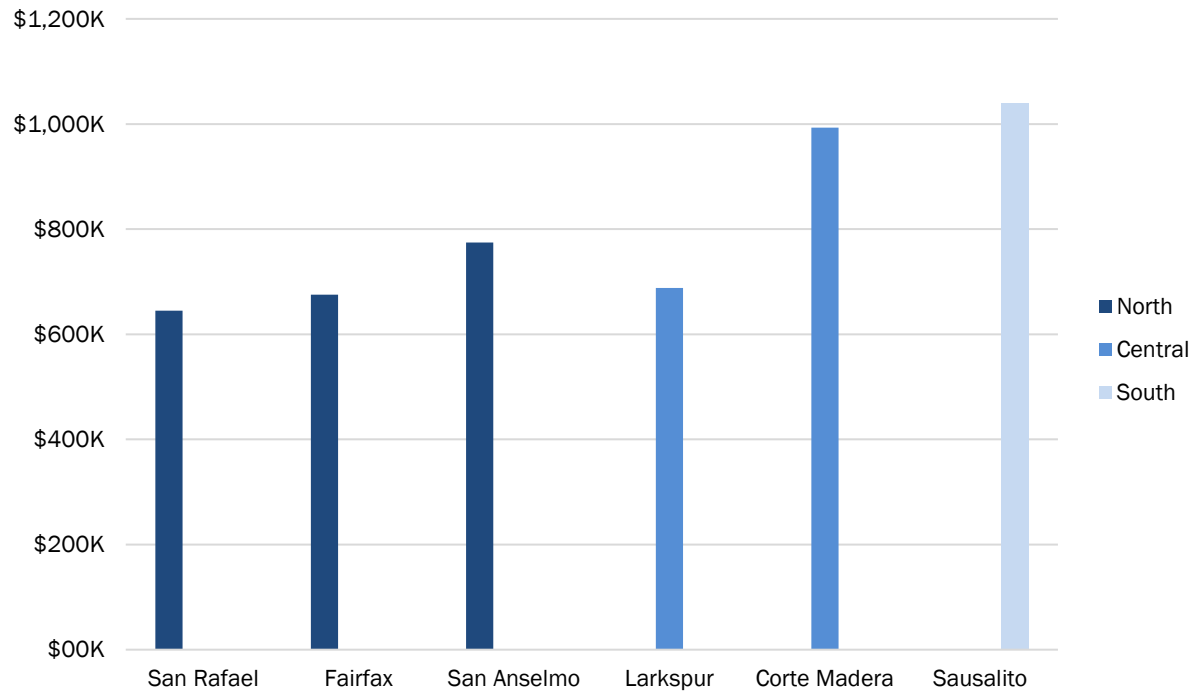
The market for rental housing is different from for-sale housing in Marin County. The rental housing market is strongest in the more urbanized areas that offer access to transportation infrastructure, jobs, and amenities. Most of the recent market-rate rental development activity has occurred in urban San Rafael. Tam Ridge is another significant rental project which was completed in Corte Madera in 2017.

FIGURE 5: ZILLOW HOME VALUE INDEX FOR MARIN COMMUNITIES



Source: Zillow, 2020; Strategic Economics, 2021.

FIGURE 6: ZILLOW HOME VALUE INDEX FOR CONDO/COOPS IN MARIN COMMUNITIES



Source: Zillow, 2020; Strategic Economics, 2021.

PERCENTAGE REQUIREMENTS

Figure 7 and Figure 8 illustrate the income targets and percentage requirements for the jurisdictions that currently have inclusionary programs. Figure 7 plots the current onsite requirements for rental units, with the percent set-aside on the x-axis and average Area Median Income² targeted by the policy on the y-axis. Figure 8 shows the same information for for-sale units. Policies that appear toward the lower right of the plots have a higher percentage requirement and deeper affordability, while those toward the upper left have a relatively lower percentage requirement and less affordability.

Five of the seven participating jurisdictions already have inclusionary policies in place requiring affordable units onsite. The percentage of units varies by jurisdiction, ranging from 10 percent (San Rafael) to 25 percent (Corte Madera). Most of the jurisdictions have similar percentage requirements for for-sale and rental development, but the income targeted is typically lower for rental than for for-sale housing.

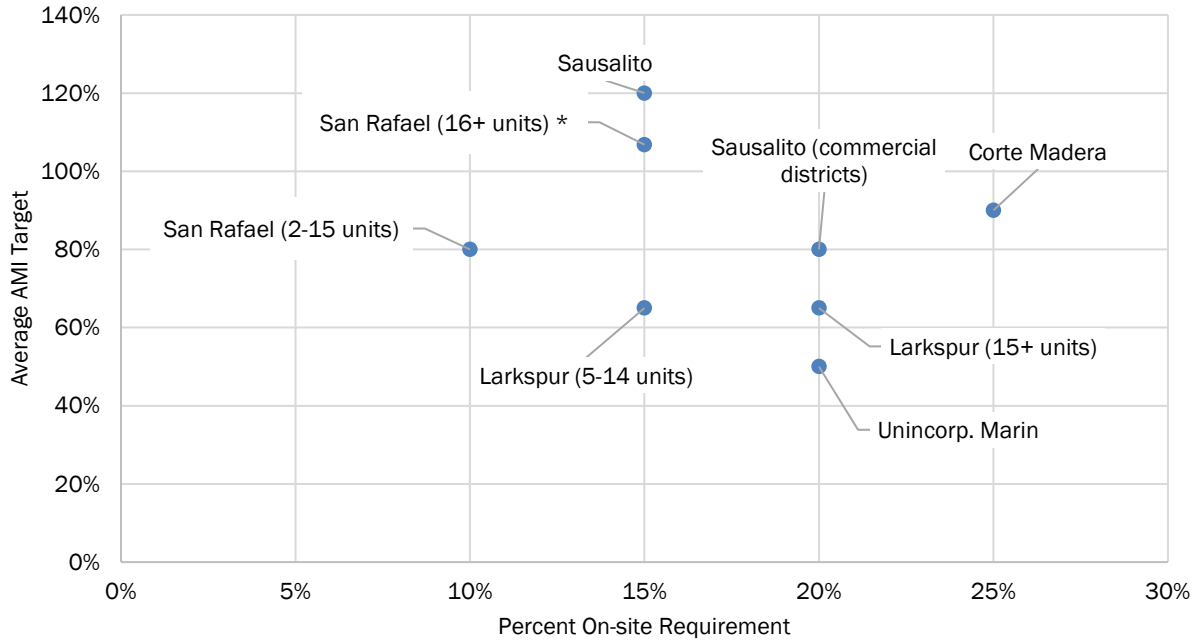
The percentage of affordable housing required in a project should be set at an economically feasible level so that the inclusionary requirement does not create an impediment to housing development.³ According to market-rate housing developers, the market context for inclusionary requirements is particularly important in Marin. Development projects in the southern and central portions of the county, such as Corte Madera, Larkspur, Sausalito and parts of Unincorporated Marin, can more feasibly accommodate a higher percentage of inclusionary and/or a deeper level of affordability, compared to communities located in northern and western portions of the county.

Setting a high inclusionary requirement could be prohibitive for new rental projects in Marin County. San Rafael recently relaxed its inclusionary requirement to encourage new development, despite being the most active rental market in the county. Because rental developments tend to serve a lower income market segment than for-sale developments, the inclusionary requirement for rentals is sometimes slightly lower than that for for-sale developments. Local jurisdictions can make up that gap by providing zoning incentives to reduce development costs for rental projects.

² For example, San Rafael requires at least 50 percent of its BMR units to be targeted to very low-income households (maximum income: 50 percent of AMI) and the remainder to be targeted to low-income households (maximum income: 80 percent of AMI). Therefore, the average AMI target for San Rafael is $.50 \times .50 + .50 \times .80 = 65$ percent of AMI.

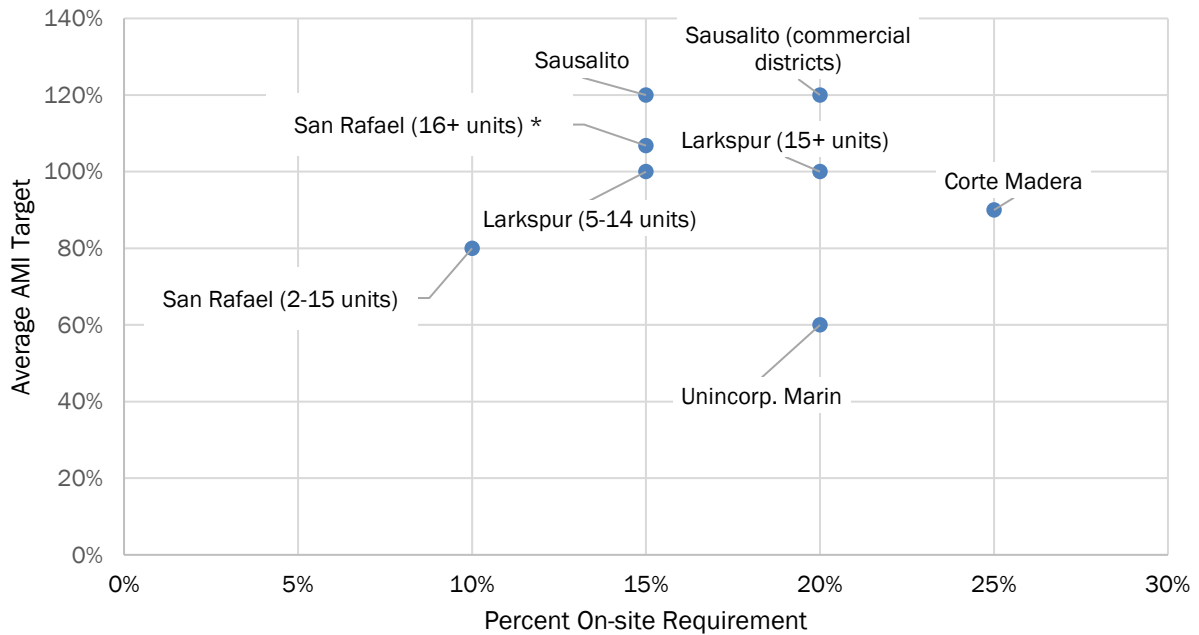
³ AB1505, also known as the “Palmer Fix” permits California Department of Housing and Community Development (HCD) to review inclusionary zoning ordinances adopted or amended after September 15, 2017 if it requires more than 15% of the units to be affordable to lower income households and if the locality has failed to meet 75% of its share of the above moderate RHNA. HCD can request localities to provide an “economic feasibility study” to demonstrate that the higher inclusionary requirement will not impede development activity.

FIGURE 7: AVERAGE AMI TARGETS AND PERCENT ONSITE REQUIREMENT FOR RENTAL DEVELOPMENTS



* Assumes the developer selects the 10% / moderate-income option for the secondary requirement.
Source: Participating jurisdictions, 2020; Strategic Economics, 2021.

FIGURE 8: AVERAGE AMI TARGETS AND PERCENT SET-ASIDE FOR FOR-SALE DEVELOPMENTS



* Assumes the developer selects the 10% / moderate-income option for the secondary requirement.
Source: Participating jurisdictions, 2020; Strategic Economics, 2021.

INCOME TARGETS

There is a wide range in the income targets for inclusionary programs among the participating jurisdictions, as shown in Figures 7 and 8. It is common practice for jurisdictions to target lower-income households for renter housing than for ownership housing. This is because it is generally easier for low- and moderate-income households to meet typical lending requirements.

Larkspur, Sausalito, and Unincorporated Marin County target lower-income households for rental units compared to for-sale units. San Rafael and Corte Madera target moderate-income for both rental and for-sale housing.

RENTAL

The income targets for rental units among the jurisdictions vary widely (Figure 7). Unincorporated Marin targets very low-income households, while Larkspur targets a mix of very low- and low-income households. The other jurisdictions have higher income targets overall, including targeting to some moderate-income households.

Currently, the most active rental market in Marin is San Rafael, which, of the jurisdictions in this study, produced the only affordable rental units in the last five years (Figure 3). These units were produced under the city's previous policy, which targeted low- and very low-income households. San Rafael has relaxed this requirement with its new ordinance, which is designed to further promote new development. Among other changes, the new ordinance eliminates targeting for very low-income households.

FOR-SALE

In comparison to rentals, the income targets for for-sale development are overall more uniform across jurisdictions. The targeted income groups tend to consist of a mix of low- and moderate-income households.

The exception to this pattern is Unincorporated Marin County, which requires a significantly deeper level of affordability (60 percent of AMI) on for-sale projects. This policy can pose a challenge in two ways. First, it can make the County uncompetitive for development with its neighbors. Further, the lower-than-average income targets in Marin County's policy was identified by developers as being a financial burden on projects such that many do not pencil. As mentioned in Section I, County staff reports that developers tend to reduce the size of their projects in order to build fewer onsite BMR units than otherwise would have been required, preferring to pay the in-lieu fee on fractional units to the greatest extent possible.

UNIT THRESHOLDS

One important element of an inclusionary policy is the minimum size of development (the threshold number of dwelling units) for which the policy will apply. Because smaller scale projects are often more complex and less efficient than larger projects, many inclusionary programs around the country have exemptions or lower requirements on small projects. According to Grounded Solutions Network, California jurisdictions typically set the minimum threshold for an inclusionary requirement at between

two to five units.⁴ This is consistent with the policies of the jurisdictions in this study, where the minimum threshold ranges between one unit and five units.

Because a significant share of new development projects in Marin County's jurisdictions are quite small, it is important that all projects be required to provide affordable units. However, for smaller projects that have more challenging development feasibility, the percentage set-aside required could be lower, or the income group targeted could be set higher. In San Rafael projects with 5 to 15 units have a set-aside requirement of 10 percent, compared to 15 percent for larger projects. Similarly, Larkspur's ordinance requires 15 percent affordable units for projects with less than 15 units, compared to 20 percent for larger projects. San Francisco has a lower percentage requirement on projects between 10 to 24 units of 12 percent, compared to approximately 21 percent for larger projects.

SETTING IN-LIEU FEES

A jurisdiction's approach to setting in-lieu fees should consider a number of factors. The first consideration is to compare the in-lieu fee option with the provision of onsite units – which of these options does the jurisdiction wish to encourage? In many California communities, collecting in-lieu fees and leveraging funding from other sources can allow them to build 100 percent affordable housing projects for extremely-low, very-low, and low-income households. However, this approach requires administrative capacity on behalf of city and county staff, capacity from local affordable housing developers, and access to other funding sources. It can also take a significant amount of time to acquire sites and secure funding to build 100 percent affordable projects.

For many of the above reasons, most of the jurisdictions participating in this study would prefer to incentivize on-site production rather than off-site units. Inclusionary housing is an important tool to promote mixed-income housing and to help correct historical patterns of economic and racial segregation. Setting the in-lieu fee at the maximum level can encourage more developers to provide units onsite. When the in-lieu fee option is available, developers are more likely to pay the fee when constructing high value or luxury units, because the revenue sacrificed from building units onsite is higher. (The potential value of luxury units is high, which means the developer must forgo more revenue for each unit that is designated affordable.)

Another consideration for in-lieu fees is the basis of the fee. Is the fee charged on the basis of dwelling units or square feet of residential area? While communities in Marin generally charge on a per unit basis, charging on the fee on a per-square-foot basis can encourage the development of smaller units, like studios and one-bedrooms. As an example, San Francisco's affordable housing in-lieu fee is charged on a per-square-foot basis.

It is recommended that fees be implemented with a schedule for annual adjustments. As economic factors, such as construction costs, change over time, the affordability gap will also change. Fees should be adjusted based on a regularly published cost index.

Further considerations for setting in-lieu fees on the basis of the affordability gap analysis are examined in Section IV.

⁴ Jacobus, Rick. "Inclusionary Housing: Creating and Maintaining Equitable Communities," Lincoln Institute of Land Policy, 2015.

ALTERNATIVE MEANS OF COMPLIANCE

Because circumstances surrounding each project are different, it is important for an inclusionary program to provide alternative ways of meeting the inclusionary requirement other than with the provision of onsite units. Marin County has successfully used alternative means to produce new affordable units and raise revenue for housing; these alternative means include the provision of offsite units, land dedication, and partnerships with affordable housing developers. The option to construct units offsite is typically met with a higher percentage than what would be required onsite.

Market rate developers stress that flexibility in the inclusionary policy is a key determinant of the production of new housing. For some projects, the dedication of land to a jurisdiction or an affordable developer can result in the construction of a greater number of units for lower income households than the provision of on-site inclusionary units.

As mentioned in Section I, some developers may propose to fulfill an inclusionary requirement, not through the construction of new units offsite, but through the conversion of offsite market rate units to deed-restricted affordable units. However, this approach has some disadvantages. First, it does not result in net new housing units. Second, the off-site unit does not create a mixed-income development project. Finally, the conversion of units can sometimes result in affordable housing units that are of lower quality than new construction. If the off-site provision of units is offered as a means of compliance, it is important for the jurisdiction to ensure that the offsite units are of equivalent quality and within close proximity to the market-rate development project. Other best practices are to require that the value of the off-site contribution is equivalent or greater than the value of the in-lieu fees.

BEST PRACTICES FOR SMALL LOT SUBDIVISIONS

Recent state legislation (AB 1315 [2019-2020]) sets forth rules for small lot subdivisions to encourage affordable housing in areas zoned for multifamily development. The law allows developers to subdivide parcels into smaller lots for the construction of small, individual units with limited parking. For the purposes of applying an inclusionary policy, it is advisable to treat a small lot subdivision as if it were a new construction project of the same number of units.

As there may be a significant period of time between the subdivision and when new construction occurs, jurisdictions should clarify for developers the point in time when the inclusionary policy is applied and, for example, any applicable in-lieu fees are paid. Ordinarily, it is the developer entitling the construction of the residential units, and not the developer performing the land division, who will be responsible for fulfilling whatever inclusionary policy is in effect at that time and paying any applicable fees.

III. Calculation of In-Lieu Fee

Inclusionary zoning requires that new developments provide affordable housing along with market-rate housing units, either on-site or off-site, or comply with alternative measures such as payment of fees “in-lieu” of providing affordable units. The in-lieu fee is calculated based on the housing affordability gap – the difference between what households at various income levels can pay for housing and the cost of developing market rate housing. If this is for-sale housing, then the gap is based on the difference between annual mortgage costs and affordable monthly housing payments, and for rental housing, it is the difference between market rate rents and affordable rents. Once the total gap is calculated, the actual fee that is adopted depends on financial feasibility of the costs of the fee on prototypical residential developments.

For the purposes of this study, the in-lieu fees were calculated for Marin County and participating jurisdictions for three development types:

- For-sale single-family subdivisions
- For-sale condominium townhomes
- Rental apartments

While the study presents the total affordability gap, the actual fee that is adopted in each jurisdiction depends on policy considerations, which are outlined in Section IV of this report.

METHODOLOGY

The affordability gap is defined as the difference between what very low-, low- and moderate-income households can afford to pay for housing and the cost of developing new housing. Because it measures this shortfall that must be made up by a developer offering Below Market Rate units, the affordability gap is useful for setting in-lieu fees as an alternative to producing units directly through the inclusionary program.

The following steps illustrate the methodology used for calculating the affordability gap:

1. Estimate affordable rents and housing prices for households in target groups;
2. Estimate development costs of building new housing units, based on current cost and market data;
3. Calculate the difference between what renters and homeowners can afford to pay for housing, and the cost of developing those rental and for-sale units

Because California Department of Housing and Community Development (HCD) and the U.S. Department of Housing and Urban Development (HUD) define the ability to pay for housing at the county level, the affordability gap is calculated on the same income categories for the entire county. The calculated in-lieu fees are valid for all of the jurisdictions participating in this study.

RESIDENTIAL PROTOTYPES

The Consultant Team established three housing prototypes that represent the types of development likely to occur in Marin County. The prototypes are informed by recently built and proposed development projects in Marin as well as conversations with developers with experience in Marin County. Example projects that represent the types of development likely to occur in Marin County are

shown in Figures 9 and 10. All five projects are in either San Rafael or Corte Madera, which have attracted most of the recent development activity among the participating jurisdictions.

FIGURE 9. MARIN PROJECTS THAT INFORMED PROTOTYPES 1 AND 2 (FOR-SALE PROTOTYPES)

| Project | The Strand | Enclave | 350 Merrydale Rd. |
|---------------------------------|---|--|--|
| Building Type | Detached single-family and townhomes | Townhomes | Townhomes, plus flats |
| Jurisdiction | San Rafael | Corte Madera | San Rafael |
| Status | Built in 2015 | Built in 2019 | Proposed |
| Units | 34 detached, 42 townhomes | 16 townhomes | 41 townhomes, 4 flats |
| Site Size (acres) | 8.5 (approximate) | 1.3 | 2.28 |
| Units Per Acre | 9 | 12 | 20 |
| Unit Size Sq. Ft. (Approximate) | Townhome: 1,650-1,900 Sq. Ft.; Detached: 1,950-3,300 Sq. Ft. | 2,020 Sq. Ft. | Townhome: 1,450-2,100 Sq. Ft.; Flat: 800 Sq. Ft. |
| Parking | 2 car garage per unit plus visitor surface parking | 2 car garage per unit plus visitor surface parking | 2 car garage per townhome unit; 1 car garage per flat unit; Surface visitor parking. |

Source: Costar, 2021; Various marketing materials for, and articles about projects; Interviews with developers; Strategic Economics, 2021.

FIGURE 10. MARIN PROJECTS THAT INFORMED PROTOTYPE 3 (RENTAL PROTOTYPE)

| Project | Tam Ridge | 703 Third St. |
|---------------------------------------|--|---|
| Building Type | Wood-frame apartment flats over podium, plus townhomes | Wood-frame apartment flats over podium, using density bonus, near SMART station |
| Jurisdiction | Corte Madera | San Rafael |
| Status | Built in 2017 | Proposed |
| Units | 154 flats, 25 townhomes | 120 flats |
| Site Size (acres) | 4.5 | 0.63 |
| Unit Density | 40 | 190 |
| Unit Size Sq. Ft. Range (Approximate) | Flats: 750-1,100 Sq. Ft.; Townhome: 1,300 Sq. Ft. | 450-900 Sq. Ft. |
| Parking | 1.6 spaces per unit (tenant parking in podium garage plus visitor surface parking) | 1 space per unit in podium (incorporates mechanical lifts) |

Source: Costar, 2021; Various marketing materials for, and articles about projects; Interviews with developers; Strategic Economics, 2021.

The prototypes are generally based on developments built recently or proposed. Some communities in Marin typically see much smaller projects and are unlikely to see new projects of this scale. However, the per-unit cost of development is unlikely to be significantly different even for smaller and lower density projects, because the reductions in construction costs would be counterbalanced with the higher cost of land per unit.

The prototypes developed for the analysis are summarized below and further details are shown in Figure 11.

Prototype 1: Single-Family Subdivision

The single-family subdivision prototype has 14 detached for-sale units at a density of seven units per acre, making it typical for a “small-lot” subdivision. The units, which are two stories, are a mix of three and four-bedrooms and average 2,200 square feet.

Prototype 2: Condominium Townhome

The condominium townhome prototype includes 30 attached for-sale units at a density of 15 units per acre. Two-thirds of the units have three bedrooms while one-third have four bedrooms. The units are three stories with tuck-under garages on the ground level, and the average unit size is 1,800 square feet.

Prototype 3: Rental Apartments

The rental apartment prototype is a 100-unit apartment building. It has a density of 50 units per acre and is five stories. The building is a “Five-over-one” construction type, which means the first floor is a “Type I” concrete podium to accommodate parking, with four stories of “Type V” wood-frame construction for the residential area above. Typical of rental projects, the units in this prototype are a mix of studios, one-bedrooms, and two-bedrooms. The average unit size is 800 square feet.

FIGURE 11. SUMMARY OF PROTOTYPES

| | Prototype 1: Single-Family Subdivision | Prototype 2: Condominium Townhome | Prototype 3: Rental Apartments |
|--|--|---|--|
| Tenure | For-Sale | For-Sale | Rental |
| Unit Mix | 3, 4 bedrooms | 3, 4 bedrooms | Studios, 1, 2 bedrooms |
| Construction Type | Wood-frame | Wood-frame | Type V over 1 |
| Residential Stories | 2 | 3 | 5 |
| Number of Units | 14 | 30 | 100 |
| Parcel Size (Acres) | 2 | 2 | 2 |
| Parcel Size (Sq. Ft.) | 87,120 | 87,120 | 87,120 |
| Dwelling Units Per Acre | 7 | 15 | 50 |
| Unit Mix | 7 3-Bedrooms; 7 4-Bedrooms | 20 3-Bedrooms; 10 4-Bedrooms | 10 Studios; 50 1-Bedrooms; 40 2-Bedrooms |
| Average Unit Size | 2,200 | 1,800 | 800 |
| Net Residential Sq. Ft. | 30,800 | 54,000 | 80,000 |
| Efficiency Ratio (a) | 100% | 100% | 90% |
| Gross Residential Sq. Ft. | 30,800 | 54,000 | 88,889 |
| Parking Type | 2-car garage plus surface | 2-car garage plus surface | Podium |
| Parking Ratio (Per Unit) (b) | 2.50 | 2.25 | 1.25 |
| Total Parking Spaces | 35 | 68 | 125 |
| Garage Parking Sq. Ft. (c) | 9,800 | 21,000 | 43,750 |
| Floor-Area Ratio (Residential Only) | 0.35 | 0.62 | 1.02 |
| Floor-Area Ratio (Including Structured Parking) | 0.47 | 0.86 | 1.52 |

Source: Strategic Economics, 2021.

Notes:

(a) Sq. Ft. associated with residential units divided by total interior square feet of building, (excludes space associated with parking).

(b) The urban design specifications of these three prototypes, such as their parking ratios, may vary from the building typologies suggested in Opticos' Objective Design and Development Standards study, currently in process. The parking ratios, as well as other metrics displayed here, are market-based, informed by conversation with residential developers familiar with Marin.

(c) Based on "350 sq. ft. per parking space" standard industry assumption, which incorporates circulation.

ESTIMATING AFFORDABLE RENTS AND HOUSING PRICES

Affordable rents and housing prices were identified based on resources from public agencies, such as HUD and HCD, which set income levels and maximum housing costs for federal and state-funded affordable housing programs. The Marin Housing Authority then provided the specific approach for calculating affordable sales prices, which currently vary across jurisdictions because of the different income levels that jurisdictions target as a part of their inclusionary programs.

The Consultant Team identified the affordability targets that would be tested in collaboration with the County of Marin, set at a level typical of existing inclusionary policies among participating jurisdictions. The affordable targets are shown below in Figure 12. Consistent with best practices from other inclusionary housing programs, the affordability gap for both rental and for-sale units was calculated for very low-, low-, and moderate-income households.⁵ In consultation with the client, the Consultant Team identified specific AMI levels to reflect the average incomes of households that these units would serve, with for-sale units typically targeting households with incomes that are slightly higher than rental units within the income categories. The income levels tested for the for-sale prototypes are generally higher than for the rental prototypes because for-sale affordable housing programs tend to serve households at the higher end of the income target ranges.

FIGURE 12. HOUSEHOLD INCOME TARGETS FOR AFFORDABLE UNITS BY TENURE

| | For-sale Housing | Rental Housing |
|-----------------|-------------------------|-----------------------|
| Very Low-income | 50% AMI | 50% AMI |
| Low-income | 70% AMI | 65% AMI |
| Moderate Income | 110% AMI | 90% AMI |

Source: County of Marin; Strategic Economics, 2021.

Figure 13 below shows the maximum affordable monthly rents for rental housing. The household sizes shown are for one, two, and three persons per household, reflecting the typical occupancy of studio, one-bedroom, and two-bedroom units, respectively, in Prototype 3.

Based on HCD guidelines, the affordable rent is calculated as 30 percent of a household's gross monthly income, minus a deduction for utilities. The utility deduction includes costs that are usually passed onto the tenant, such as heating, water heating, cooking, and electricity. Natural gas is assumed for heating and water heating. (Water, sewer, and trash removal costs are typically covered by the property owner and excluded from the utility deduction.)

⁵ Households that fall between 30-50% AMI are considered very low-income; households that fall within 50-80% AMI are considered Low-income; households that fall between 80-120% AMI are considered moderate income.

FIGURE 13. MAXIMUM AFFORDABLE RENT ASSUMPTIONS FOR VERY LOW, LOW, AND MODERATE INCOME HOUSEHOLDS

| Very Low-income (50%) | | Household Size | | |
|----------------------------------|--|----------------|----------------|----------------|
| | | 1 | 2 | 3 |
| Maximum Annual Household Income | | \$50,075 | \$57,250 | \$64,400 |
| Maximum Monthly Housing Cost (a) | | \$1,252 | \$1,431 | \$1,610 |
| | | Unit Type | | |
| | | Studio | 1-BR | 2-BR |
| Maximum Monthly Housing Cost (a) | | \$1,252 | \$1,431 | \$1,610 |
| Utility Allowance (b) | | \$43 | \$52 | \$71 |
| Maximum Rent | | \$1,209 | \$1,379 | \$1,539 |

| Low-income (65%) | | Household Size | | |
|----------------------------------|--|----------------|----------------|----------------|
| | | 1 | 2 | 3 |
| Maximum Annual Household Income | | \$65,098 | \$74,425 | \$83,720 |
| Maximum Monthly Housing Cost (a) | | \$1,627 | \$1,861 | \$2,093 |
| | | Unit Type | | |
| | | Studio | 1-BR | 2-BR |
| Maximum Monthly Housing Cost (b) | | \$1,627 | \$1,861 | \$2,093 |
| Utility Allowance (c) | | \$43 | \$52 | \$71 |
| Maximum Rent | | \$1,584 | \$1,809 | \$2,022 |

| Moderate Income (90%) | | Household Size | | |
|----------------------------------|--|----------------|----------------|----------------|
| | | 1 | 2 | 3 |
| Maximum Annual Household Income | | \$90,135 | \$103,050 | \$115,920 |
| Maximum Monthly Housing Cost (c) | | \$2,253 | \$2,576 | \$2,898 |
| | | Unit Type | | |
| | | Studio | 1-BR | 2-BR |
| Maximum Monthly Housing Cost (a) | | \$2,253 | \$2,576 | \$2,898 |
| Utility Allowance (b) | | \$43 | \$52 | \$71 |
| Maximum Rent | | \$2,210 | \$2,524 | \$2,827 |

Sources: Marin Housing Authority, 2020; U.S. Department of Housing and Urban Development, 2020; Strategic Economics, 2020.

Notes:

- (a) 30 percent of maximum monthly household income.
- (b) The maximum monthly cost for each unit type is associated with households that have one more person than bedroom. (Ex: Maximum costs for studios are associated with affordability for one-person households; One-bedroom costs are associated with 2-person households; Two-bedroom costs are associated with 3-person households).
- (c) Utilities for rentals include an allowance for cooking (natural gas), heating (natural gas), water heating (natural gas), and "other electric" utility usage. Assumes water, sewer, and trash charges are included in the rent.

Figures 14 and 15 shows the calculations of affordable sales prices for for-sale housing. The calculations are based on the following assumptions:

- Based on the anticipated households that would occupy the 3- and 4-bedroom units in the two for-sale prototypes (prototypes 1 and 2), it is assumed that, on average, 6-person households

would occupy 4-bedroom units, while an even mix of 4- and 5-person households would occupy 3-bedroom units.

- Based on the Marin Housing Authority's approach for calculating affordable sales prices, homeowners were assumed to pay no more than 33 percent of their gross monthly income on housing costs.
- The maximum affordable sales price is determined by the total monthly mortgage payment that a homeowner could afford, which incorporates standard assumptions related to the mortgage terms and other monthly housing costs associated with homeownership.
 - 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 5 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 required on home purchases with a down payment of less than 20 percent. Note there is no utility deduction, in accordance with MHA's approach.
- Other monthly housing costs overall are assumed to be slightly greater for condominium housing types than for single-family detached housing types, which is driven by different assumptions on monthly homeowner's association costs. The homeowner's association costs are expected to be higher on a per-unit basis for condominium units than for detached single-family units, which decreases the household budget available for a mortgage. (On the other hand, detached single-family homeowners are responsible for more costs that are not included in Figure 14.)

FIGURE 14. MAXIMUM AFFORDABLE SALES PRICES FOR SINGLE-FAMILY DETACHED SUBDIVISION (PROTOTYPE 1)

| Household Size (Persons per HH) | 4.5 | 6 |
|---|-----------|-----------|
| Very Low Income (50% AMI) | | |
| Annual Household Income at 50% AMI | \$74,413 | \$83,000 |
| Maximum Monthly Housing Cost (a) | \$2,046 | \$2,283 |
| Monthly Deductions (b) | \$1,074 | \$1,218 |
| HOA Dues (c) | \$500 | \$600 |
| Property Taxes and Insurance (d) | \$574 | \$618 |
| Monthly Income Available for Mortgage Payment (e) | \$973 | \$1,064 |
| Maximum Mortgage Amount (f) | \$208,728 | \$228,378 |
| Maximum Affordable Sales Price (g) | \$219,714 | \$240,398 |
| Low Income (70%) | | |
| Annual Household Income at 70% AMI | \$104,178 | \$116,200 |
| Maximum Monthly Housing Cost (a) | \$2,865 | \$3,196 |
| Monthly Deductions (b) | \$1,342 | \$1,518 |
| HOA Dues (c) | \$500 | \$600 |
| Property Taxes and Insurance (d) | \$842 | \$918 |
| Monthly Income Available for Mortgage Payment (e) | \$1,523 | \$1,678 |
| Maximum Mortgage Amount (f) | \$326,872 | \$360,209 |
| Maximum Affordable Sales Price (g) | \$344,076 | \$379,167 |
| Moderate Income (110%) | | |
| Annual Household Income at 110% AMI | \$163,708 | \$182,600 |
| Maximum Monthly Housing Cost (a) | \$4,502 | \$5,022 |
| Monthly Deductions (b) | \$1,892 | \$2,131 |
| HOA Dues (c) | \$500 | \$600 |
| Property Taxes and Insurance (d) | \$1,392 | \$1,531 |
| Monthly Income Available for Mortgage Payment (e) | \$2,610 | \$2,891 |
| Maximum Mortgage Amount (f) | \$560,102 | \$620,390 |
| Maximum Affordable Sales Price (g) | \$589,581 | \$653,042 |

Source: Strategic Economics, 2021.

Notes:

- (a) 33 percent of maximum monthly household income.
- (b) Unlike for rentals, monthly deductions for for-sale units do not include utility costs.
- (c) Homeowners Association dues are assuming to average \$0.25 per square foot.
- (d) Assumes annual effective property tax rate of 1.50 percent of sales price, after exemptions; annual private mortgage insurance premium rate of 0.85 percent of mortgage amount.
- (e) Maximum monthly housing cost minus deductions.
- (f) Assumes 3.8 percent interest rate and 30-year loan term. Interest rate is based on correspondence with Marin Housing Authority.
- (g) Assumes 5 percent down payment (95 percent loan-to-value ratio).

FIGURE 15. MAXIMUM AFFORDABLE SALES PRICES FOR CONDOMINIUM TOWNHOME (PROTOTYPE 2)

| Household Size (Persons per HH) | 4.5 | 6 |
|---|-----------|-----------|
| Very Low Income (50% AMI) | | |
| Annual Household Income at 50% AMI | \$74,413 | \$83,000 |
| Maximum Monthly Housing Cost (a) | \$2,046 | \$2,283 |
| Monthly Deductions (b) | | |
| HOA Dues (c) | \$613 | \$665 |
| Property Taxes and Insurance (d) | \$537 | \$597 |
| Monthly Income Available for Mortgage Payment (e) | \$897 | \$1,020 |
| Maximum Mortgage Amount (f) | \$192,493 | \$218,997 |
| Maximum Affordable Sales Price (g) | \$202,624 | \$230,523 |
| Low Income (70%) | | |
| Annual Household Income at 70% AMI | \$104,178 | \$116,200 |
| Maximum Monthly Housing Cost (a) | \$2,865 | \$3,196 |
| Monthly Deductions (b) | \$1,418 | \$1,561 |
| HOA Dues (c) | \$613 | \$665 |
| Property Taxes and Insurance (d) | \$805 | \$896 |
| Monthly Income Available for Mortgage Payment (e) | \$1,447 | \$1,635 |
| Maximum Mortgage Amount (f) | \$310,637 | \$350,829 |
| Maximum Affordable Sales Price (g) | \$326,986 | \$369,293 |
| Moderate Income (110%) | | |
| Annual Household Income at 110% AMI | \$163,708 | \$182,600 |
| Maximum Monthly Housing Cost (a) | \$4,502 | \$5,022 |
| Monthly Deductions (b) | \$1,967 | \$2,175 |
| HOA Dues (c) | \$613 | \$665 |
| Property Taxes and Insurance (d) | \$1,355 | \$1,510 |
| Monthly Income Available for Mortgage Payment (e) | \$2,535 | \$2,847 |
| Maximum Mortgage Amount (f) | \$543,953 | \$611,059 |
| Maximum Affordable Sales Price (g) | \$572,582 | \$643,220 |

Source: Strategic Economics, 2020.

Notes:

- (a) 33 percent of maximum monthly household income.
- (b) Unlike for rentals, monthly deductions for for-sale units do not include utility costs.
- (c) Homeowners Association dues are assuming to average \$0.35 per square foot.
- (d) Assumes annual effective property tax rate of 1.50% percent of sales price, after exemptions; annual private mortgage insurance premium rate of 0.85 percent of mortgage amount.
- (e) Maximum monthly housing cost minus deductions.
- (f) Assumes 3.8 percent interest rate and 30-year loan term. Interest rate is based on correspondence with Marin Housing Authority.
- (g) Assumes 5 percent down payment (95 percent loan-to-value ratio).

MAXIMUM AFFORDABLE RENTS AND SALES PRICES

Figures 16 and 17 provide summaries for the maximum affordable rents and sales prices respectively for the various prototypes that were tested.

FIGURE 16. SUMMARY OF MAXIMUM AFFORDABLE RENTS

| Income Level | Studio | 1-BR | 2-BR |
|-----------------------|---------|---------|---------|
| Very Low-income (50%) | \$1,209 | \$1,379 | \$1,539 |
| Low-income (65%) | \$1,584 | \$1,809 | \$2,022 |
| Moderate Income (90%) | \$2,210 | \$2,524 | \$2,827 |

Source: Strategic Economics, 2021.

FIGURE 17. SUMMARY OF MAXIMUM AFFORDABLE SALES PRICES

| | Single-Family Subdivision | | Condominium Townhome | |
|---------------------------|---------------------------|-----------|----------------------|-----------|
| | 3-BR | 4-BR | 3-BR | 4-BR |
| Very Low Income (50% AMI) | \$219,714 | \$240,398 | \$202,624 | \$230,523 |
| Low Income (70%) | \$344,076 | \$379,167 | \$326,986 | \$369,293 |
| Moderate Income (110%) | \$589,581 | \$653,042 | \$572,582 | \$643,220 |

Source: Strategic Economics, 2021.

ESTIMATING DEVELOPMENT COSTS

The second step in the affordability gap analysis is to estimate development costs for the three prototypes. Development costs include land costs, direct or “hard” construction costs, indirect or “soft” costs, as well as financing costs, a developer fee, and a contingency for overruns.

Because multi-unit residential projects are relatively rare in Marin, the Consultant Team collected available data on the few recent comparable development projects and land sales and supplemented the data with feedback from local developers (see Appendix A), other available studies of costs in the Bay Area, and past experience with pro forma studies.

The development cost assumptions are shown below in Figure 18, and a chart that summarizes the breakdown of overall development costs for the prototypes is shown in Figure 19.

The development costs for for-sale housing are based on interviews with developers and homebuilders experienced with single-family and townhome development projects in Marin. This analysis estimated that total development costs for the single-family subdivision were \$355 per net residential square foot while the costs for the condominium townhome were \$373 per net residential square foot.

Because there are limited examples of recent multifamily development in Marin, the Consultant Team relied on a variety of sources to identify the multifamily cost assumptions. They are partly based on a pro forma for a proposed Type V development in Marin, as well as an interview with a multifamily developer. The team also relied on cost data and recently completed feasibility studies for similar rental apartment developments in the Bay Area. The analysis estimated that the total development cost for Prototype 3 was \$705 per net square foot.

The remainder of this section explains the costs assumptions in more detail.

FIGURE 18. SUMMARY OF DEVELOPMENT COST ASSUMPTIONS

| | Single Family Subdivision | Condominium Townhome | Rental Apartments |
|--|------------------------------|-------------------------|----------------------|
| Land Cost (a) | | | |
| Per Land Sq. Ft. | \$56 | \$69 | \$86 |
| Per Unit | \$350,000 | \$200,000 | \$75,000 |
| Hard Costs | | | |
| Site Costs per Land Sq. Ft. (b) | \$15 | \$35 | \$35 |
| Construction Costs per Sq. Ft. of Residential Area | \$110 | \$150 | \$350 |
| Parking Cost per Space (c) | n/a | n/a | \$32,500 |
| Other Costs (Displayed as % of Hard Cost) | | | |
| Soft Costs (d) | 12% | 12% | 12% |
| Contingency | 5% | 5% | 5% |
| Developer Overhead | 4% | 4% | 4% |
| Financing Costs | | | |
| Amount Financed (% of Hard and Soft Costs) | 65% | 65% | 70% |
| Construction Loan Fee | 1.5% | 1.5% | 1.5% |
| Term (Months) | 18 | 18 | 24 |
| Construction Interest Rate | 4.5% | 4.5% | 5.0% |

Source: Developer Interviews, 2021; Project Pro Formas, 2021; Strategic Economics, 2021.

Notes:

- (a) Entitled land
- (b) Assumes relatively flat site

(c) Parking costs for for-sale prototypes are incorporated into the construction cost. Cost for rental prototype refers to one level of podium
(d) Includes architectural, engineering, and consulting fees, as well as taxes, legal, insurance, accounting, and other costs.

FIGURE 19. TOTAL DEVELOPMENT COSTS BY PROTOTYPE

| Cost Category | Single Family Subdivision | Condominium Townhome | Rental Apartments |
|------------------------------------|------------------------------|-------------------------|----------------------|
| Total Project | | | |
| Land Cost | \$4,900,000 | \$6,000,000 | \$7,500,000 |
| Hard Costs | \$4,694,800 | \$11,149,200 | \$38,222,811 |
| Soft Costs | <u>\$1,344,396</u> | <u>\$3,001,696</u> | <u>\$10,660,521</u> |
| Development Costs | \$10,939,196 | \$20,150,896 | \$56,383,332 |
| Per Unit | | | |
| Land Cost | \$350,000 | \$200,000 | \$75,000 |
| Hard Costs | \$335,343 | \$371,640 | \$382,228 |
| Soft Costs | <u>\$96,028</u> | <u>\$100,057</u> | <u>\$106,605</u> |
| Development Costs | \$781,371 | \$671,697 | \$563,833 |
| Per Net Residential Sq. Ft. | | | |
| Land Cost | \$159 | \$111 | \$94 |
| Hard Cost | \$152 | \$206 | \$478 |
| Soft Costs | <u>\$44</u> | <u>\$56</u> | <u>\$133</u> |
| Development Costs | \$355 | \$373 | \$705 |

Source: Strategic Economics, 2021.

The following subsections provide further details on how the cost assumptions were identified.

LAND COST

Land costs typically vary widely, depending on factors such as location, zoning, and the amount of site work required to prepare the land for development. Because the price of land is so strongly tied to what can be built upon it, land costs are characterized in this study as the cost per dwelling unit of development. Recent comparable sales that informed land cost for the three prototypes are shown below in Figures 20-22.

- There is only one relevant recent sale for an entitled single-family subdivision. The site is in Mill Valley, which tends to have high land costs compared to the Marin average.
- A range of \$180,000 per unit to approximately \$300,000 per unit was identified for the condominium townhome prototype based on two recent sales, which reflect the high end (Mill Valley) and the low end (Novato) of the Marin County market.
- For the rental apartment prototype, two sales for sites entitled for multifamily development had land costs of \$75,000 per unit, a number that was corroborated by a developer with experienced in multifamily development in Marin.

Based on these comparable examples and feedback from developers, the land cost assumptions were set at \$350,000 per unit for Prototype 1, \$200,000 per unit for Prototype 2, and \$75,000 per unit for Prototype 3.

FIGURE 20. RECENT LAND SALE FOR SITE ZONED FOR SINGLE-FAMILY SUBDIVISION

| Site Address | 548 Miller Ave., Mill Valley |
|---------------------|---|
| Description | Single-family subdivision (13 fee simple lots, three of which include ADUs) |
| Site Acres | 1.58 |
| Site Sq. Ft. | 68,825 |
| Units Per Acre | 10 |
| Sale Date | September 2019 |
| Sale Price | \$8,500,000 |
| Price Per Unit | \$531,250 |

Source: Costar, 2021; Strategic Economics, 2021.

FIGURE 21. RECENT LAND SALES FOR CONDOMINIUM TOWNHOMES

| Site Address | 500 Miller Ave., Mill Valley | 7533-7537 Redwood Blvd., Novato |
|----------------|---|---|
| Description | Nine condominium townhomes with underground parking and corner retail space | 50 condominium townhomes (Atherton Place) |
| Site Acres | 1.2 | 3.7 |
| Site Sq. Ft. | 52,272 | 161,172 |
| Units Per Acre | 7.5 | 13.5 |
| Sale Date | June 2017 | July 2018 |
| Sale Price | \$2,900,000 | \$9,000,000 |
| Price Per Unit | \$322,222 | \$180,000 |

Source: Costar, 2021; Strategic Economics, 2021.

FIGURE 22. RECENT LAND SALES FOR MULTIFAMILY HOUSING

| Site Address | 703 Third St., San Rafael (a) | 1203-1211 Lincoln Ave., San Rafael (b) |
|----------------|---|---|
| Description | Proposed apartment project with 61 units and underground, automated parking and incorporating density bonus | 36 condominium flats Type V over I construction |
| Site Acres | 0.63 | 0.74 |
| Site Sq. Ft. | 27,395 | 32,234 |
| Units Per Acre | 97 | 49 |
| Sale Date | August 2014 | March 2017 |
| Sale Price | \$4,650,000 | \$2,700,000 |
| Price Per Unit | \$76,230 | \$75,000 |

Source: Costar, 2021; Developer Pro Formas, 2021; Strategic Economics, 2021.

Notes:

(a) Reflects the site's "base case scenario" which is more comparable to Prototype 3

(b) Site is now associated with pipeline assisted living proposal but at time of sale, it had been planned for condominiums

HARD COSTS

Hard costs refer to both horizontal site costs and vertical construction costs, including the residential area construction and parking construction.

According to developers active in Marin County, construction costs for the county are higher than other locations in the Bay Area because it is less accessible to construction workers. Subcontractors often charge a premium that is equivalent to prevailing wage. The construction cost estimates for residential buildings incorporate these cost factors specific to Marin County.

The construction costs also include horizontal/site costs that include demolition, grading, utility connection installation, paving, and landscaping. For the purposes of this analysis, it is assumed that

the hypothetical sites are relatively flat, with horizontal costs of \$15 per land square foot for the single-family subdivision, and \$35 per land square foot for the condominium townhomes and apartments.

The construction costs for the single-family subdivision and the condominium townhome, which are based on feedback from Marin developers and homebuilders, are \$110 and \$150 per gross residential square foot respectively. Note that the cost of garage parking is incorporated into the residential hard cost, while the cost of any surface parking is incorporated into the site cost for these prototypes.

For the rental prototype, the construction cost of the residential area is estimated to be \$350 per gross residential square foot. Because there are very few examples of recent and under construction apartments over podium in Marin, the Consultant Team also reviewed pro formas for planned affordable and market-rate projects in San Rafael and other Bay Area cities to estimate costs.

Based on this broad review of costs, the Consultant Team estimated that residential construction costs for Prototype 3 were approximately \$350 per gross residential square foot, which translates to per unit costs of \$564,000. A review of financial data from affordable housing projects in the San Francisco Bay Area supported these cost estimates, which show that affordable housing per unit costs are in the range of \$530,000 to \$678,000.

SOFT COSTS

Soft costs refer to necessary costs of development that are not directly related to the physical construction of the building. They include architecture, engineering costs and other professional services fees, as well as other costs associated with doing business, such as insurance and taxes. Finally, soft costs include city permits and fees, and other miscellaneous costs. It is estimated that soft costs are 12 percent of hard costs for all three prototypes, a standard assumption that was confirmed by developer interviewees. The developer's contingency and overhead, also account for an additional five and four percent of hard costs, respectively.⁶

FINANCING COSTS

Financing assumptions are consistent for both for-sale prototypes because the two hypothetical projects would have similar loan terms and construction timelines. Based on input from developers that specialize in owner-occupied single-family and townhome developments, 65 percent of the project cost would be financed with debt, with a typical interest rate of approximately 4.5 percent. The development period for the for-sale prototypes is assumed to be 18 months.

The rental apartment prototype incorporates a slightly higher interest rate at 5 percent, to account for a higher level of risk, with a 24-month development period. The amount financed is also tends to be slightly higher at 70 percent of project cost, according to a multifamily developer.

All three prototypes incorporate a 1.5 percent construction loan fee, which is a standard industry assumption.

⁶ Developer profit is not included in the consideration of costs.

AFFORDABILITY GAP

The final step is to calculate the housing affordability gap, which is the difference between what very low-, low-, and moderate-income households can afford to pay and the cost of developing those units. The gap helps determine the in-lieu fee amount that would be required to cover the cost associated with developing affordable housing units.

FOR-SALE HOUSING

Figures 23 and 24 shows the affordability gap calculation for the for-sale housing prototypes. For each unit type, the gap is calculated as the difference between the per-unit cost of development and the affordable sales price for each income level. The average housing affordability gap is weighted based on the unit mix in the prototypes.

FIGURE 23. AFFORDABILITY GAP FOR SINGLE-FAMILY SUBDIVISION

| Income Level and Unit Type | Unit Size (Sq. Ft.) | Affordable Sales Price (a) | Development Costs (b) | Affordability Gap (c) |
|-------------------------------|---------------------|----------------------------|-----------------------|-----------------------|
| Very Low Income (50%) | | | | |
| 3 Bedroom | 2,000 | \$219,714 | \$710,337 | \$490,623 |
| 4 Bedroom | 2,400 | \$240,398 | \$852,405 | \$612,007 |
| Weighted Average | | \$230,056 | \$781,371 | \$551,315 |
| Low Income (70%) | | | | |
| 3 Bedroom | 2,000 | \$344,076 | \$710,337 | \$366,261 |
| 4 Bedroom | 2,400 | \$379,167 | \$852,405 | \$473,237 |
| Weighted Average | | \$361,622 | \$781,371 | \$419,749 |
| Moderate Income (110%) | | | | |
| 3 Bedroom | 2,000 | \$589,581 | \$710,337 | \$120,757 |
| 4 Bedroom | 2,400 | \$653,042 | \$852,405 | \$199,363 |
| Weighted Average | | \$621,311 | \$781,371 | \$160,060 |

Source: Strategic Economics, 2021.

Notes:

- (a) See calculation in Figure 14, above.
- (b) Assumes \$349 per SF for development costs
- (c) Calculated as the difference between affordable sales price and development cost
- (d) Includes 50% three-bedrooms and 50% four-bedrooms.

FIGURE 24. AFFORDABILITY GAP FOR CONDOMINIUM TOWNHOME

| Income Level and Unit Type | Unit Size (Sq. Ft.) | Affordable Sales Price (a) | Development Costs (b) | Affordability Gap (c) |
|-------------------------------|---------------------|----------------------------|-----------------------|-----------------------|
| Very Low Income (50%) | | | | |
| 3 Bedroom | 1,750 | \$202,624 | \$653,038 | \$450,414 |
| 4 Bedroom | 1,900 | \$230,523 | \$709,013 | \$478,490 |
| Weighted Average | | \$211,924 | \$671,697 | \$459,773 |
| Low Income (70%) | | | | |
| 3 Bedroom | 1,750 | \$326,986 | \$653,038 | \$326,052 |
| 4 Bedroom | 1,900 | \$369,293 | \$709,013 | \$339,720 |
| Weighted Average | | \$341,089 | \$671,697 | \$330,608 |
| Moderate Income (110%) | | | | |
| 3 Bedroom | 1,750 | \$572,582 | \$653,038 | \$80,456 |
| 4 Bedroom | 1,900 | \$643,220 | \$709,013 | \$65,793 |
| Weighted Average | | \$596,128 | \$671,697 | \$75,568 |

Source: Strategic Economics, 2021.

Notes

(a) See calculation in Figure 15, above.

(b) Assumes \$393 per square foot for development costs

(c) Calculated as the difference between affordable sales price and development cost

(d) Includes two-thirds three-bedrooms and one-third four-bedrooms.

RENTAL HOUSING

Figure 25 shows the affordability gap calculation for the rental prototype. For each rental unit type and income level, 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 from the monthly rent from the affordable unit and incorporates assumptions about operating expenses (including property taxes, insurance, maintenance, etc.), reserves, and vacancy. It also incorporates financing assumptions related to the permanent loan on the property. Assumptions on operating costs are informed by data on Victory Village, which is a recent affordable housing development built in Marin. The average housing affordability gap is also weighted based on the unit mix of the prototype.

FIGURE 25. HOUSING AFFORDABILITY GAP FOR RENTAL APARTMENTS

| Income Level and Unit Type | Unit Size (Sq. Ft.) | Maximum Monthly Rent (a) | Annual Income | Net Operating Income (b) | Available for Debt Service (c) | Supportable Debt (d) | Development Costs (e) | Affordability Gap (f) |
|------------------------------|---------------------|--------------------------|---------------|--------------------------|--------------------------------|----------------------|-----------------------|-----------------------|
| Very Low-income (50%) | | | | | | | | |
| Studio | 650 | \$1,209 | \$14,507 | \$2,781 | \$2,418 | \$39,393 | \$458,250 | \$418,857 |
| 1 Bedroom | 750 | \$1,379 | \$16,551 | \$4,723 | \$4,107 | \$66,904 | \$528,750 | \$461,846 |
| 2 Bedroom | 900 | \$1,539 | \$18,468 | \$6,545 | \$5,691 | \$92,699 | \$634,500 | \$541,801 |
| Weighted Average (g) | | | | | | \$74,471 | \$564,000 | \$489,529 |
| Low-income (65%) | | | | | | | | |
| Studio | 650 | \$1,584 | \$19,013 | \$7,063 | \$6,141 | \$100,036 | \$458,250 | \$358,214 |
| 1 Bedroom | 750 | \$1,809 | \$21,704 | \$9,618 | \$8,364 | \$136,236 | \$528,750 | \$392,514 |
| 2 Bedroom | 900 | \$2,022 | \$24,264 | \$12,051 | \$10,479 | \$170,691 | \$634,500 | \$463,809 |
| Weighted Average (g) | | | | | | \$146,398 | \$564,000 | \$417,602 |
| Moderate Income (90%) | | | | | | | | |
| Studio | 650 | \$2,210 | \$26,525 | \$14,198 | \$12,346 | \$153,206 | \$458,250 | \$305,044 |
| 1 Bedroom | 750 | \$2,524 | \$30,291 | \$17,776 | \$15,458 | \$191,816 | \$528,750 | \$336,934 |
| 2 Bedroom | 900 | \$2,827 | \$33,924 | \$21,228 | \$18,459 | \$229,058 | \$634,500 | \$405,442 |
| Weighted Average (g) | | | | | | \$202,852 | \$564,000 | \$361,148 |

Notes:

(a) Affordable rent levels based on 2020 income limits

(b) Amount available for debt. Assumes 5% vacancy and collection loss and \$11,000 per unit for operating expenses and reserves, based on operating pro formas for recent affordable projects in Marin County.

(c) Assumes 1.15 Debt Coverage Ratio.

(d) Assumes 4.5% permanent financing interest rate and 30 year loan.

(e) Assumes development cost of \$705 per net square foot on rental units.

(f) Calculated as the difference between development costs and supportable debt.

(g) Incorporates 10% studios, 50% one-bedrooms, and 40% two-bedrooms.

SUMMARY OF MAXIMUM IN-LIEU FEE BY HOUSING TYPE

A summary of the affordability gaps by tenure and income level is displayed in Figure 26. The affordability gap is the basis for setting the maximum in-lieu fee. As shown, the maximum in-lieu fee per required affordable unit (rounded) is approximately \$377,000 for single-family subdivisions, \$289,000 for condominium townhomes, and \$423,000 for rental apartments.

The maximum in-lieu fee is highest for rental apartments because the average targeted income is lower (68 percent of AMI, compared to 78 percent AMI for for-sale housing), resulting in a wider affordability gap.

The calculated in-lieu fee is lower for condominium townhomes than single-family subdivisions because the construction cost for townhomes is slightly lower, while the targeted income groups remain the same.

It is important to note that the County of Marin can choose to adopt lower fees than the maximum calculated in-lieu fees shown in Figure 26.

FIGURE 26. SUMMARY OF MAXIMUM IN-LIEU FEES

| Income Level | For-sale Gap | | Rental Gap |
|---|---------------------------|----------------------|------------------|
| | Single-Family Subdivision | Condominium Townhome | |
| Very Low-income (50% AMI) | \$551,315 | \$459,773 | \$489,529 |
| Low-income (65% AMI Rental/ 70% Owner) | \$419,749 | \$330,608 | \$417,602 |
| Moderate Income (90% AMI Rental)/ 110% AMI Owner) | \$160,060 | \$75,568 | \$361,148 |
| Average Affordability Gap/ Maximum In-Lieu Fee | \$377,042 | \$ 288,650 | \$422,760 |

Source: Strategic Economics, 2021.

IV. Policy Considerations and Recommendations

This section summarizes key policy issues for the County of Marin to consider when updating its inclusionary housing ordinance and in-lieu fee. The following questions are addressed:

- How do the calculated in-lieu fees compare with the County's existing fees?
- How do the calculated fees compare with in-lieu fees in other jurisdictions?
- How much do the calculated in-lieu fees raise development costs in Marin County and impact financial feasibility?
- How do the calculated fees compare with existing municipal fees, such as building permit and other impact fees?

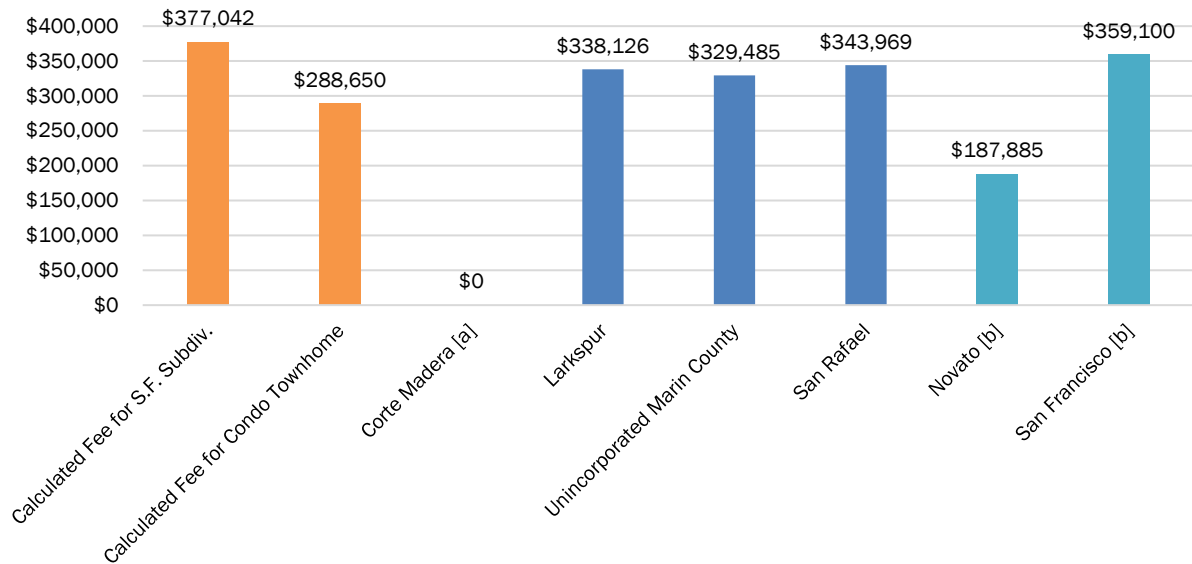
Each of these questions is addressed in the sections below, followed by a set of recommendations.

COMPARISON OF IN-LIEU FEES IN MARIN COUNTY AND NEIGHBORING JURISDICTIONS

The newly calculated in-lieu fees from the previous section are shown along with the existing in-lieu fees for for-sale housing for the participating jurisdictions and other nearby jurisdictions for comparison in Figure 27. As shown, the newly calculated maximum in-lieu fee for single-family subdivisions is higher than the existing fee in all the other jurisdictions. However, the calculated fee for for-sale townhomes is lower than the County's existing fee but higher than the current in-lieu fee for for-sale housing in Novato.

The same information is shown for rental housing in Figure 28. As shown, the calculated maximum in-lieu fee for rental projects is higher than the existing fees in Marin County and all the neighboring cities. Larkspur, Novato, and San Francisco charge lower in-lieu fees for rental projects, even though the affordability gap may be higher than for-sale housing.

FIGURE 27: COMPARISON OF CALCULATED IN-LIEU FEES WITH EXISTING IN-LIEU FEES, FOR-SALE DEVELOPMENTS

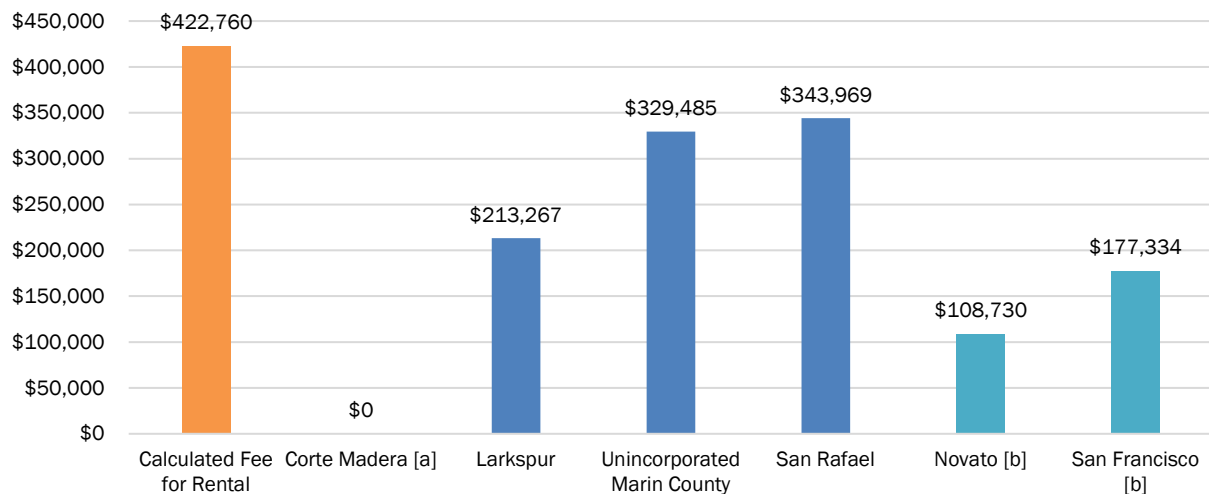


[a] Corte Madera has an in-lieu fee that is calculated based on construction costs and area median incomes. Because the assumptions in the calculation have not been updated for several years, the fee currently evaluates to zero.

[b] In-lieu fees for San Francisco and Novato vary by the number of units in the project. Both fee amounts assume the 30-unit condo townhome prototype.

Sources: Available documents from jurisdictions, 2020; Strategic Economics, 2021.

FIGURE 28: COMPARISON OF CALCULATED IN-LIEU FEES WITH EXISTING IN-LIEU FEES, RENTAL DEVELOPMENTS



[a] Corte Madera has an in-lieu fee that is calculated based on construction costs and area median incomes. Because the assumptions in the calculation have not been updated for several years, the fee currently evaluates to zero.

[b] In-lieu fees for San Francisco and Novato vary by the number of units in the project. Both fee amounts assume the 100-unit rental apartment prototype.

Sources: Available documents from jurisdictions, 2020; Strategic Economics, 2021.

Using the development cost estimates from the previous section, the Consultant Team calculated the increase in costs that would be experienced when charging the fee in-lieu of an onsite requirement at a level of 10 percent, 15 percent, 20 percent, and 25 percent. As shown in Figure 29, the cost of the fee for would range from five to 12 percent for the single-family subdivision

prototype, four to 11 percent for the condo townhome prototype, and seven to 19 percent for the apartment prototype.

FIGURE 29: IMPACT OF IN-LIEU FEE ON TOTAL DEVELOPMENT COSTS BY PROTOTYPE

| | Single Family Subdivision | Condo Townhome | Rental Apartment |
|-------------------------------------|--------------------------------------|---------------------------|-----------------------------|
| Total Development Costs per Unit | \$781,371 | \$671,697 | \$563,833 |
| In lieu Fees per Affordable Unit | \$289,905 | \$203,088 | \$422,760 |
| Increase in Total Development Costs | | | |
| @ 10% Onsite Requirement | 5% | 4% | 7% |
| @ 15% Onsite Requirement | 7% | 6% | 11% |
| @ 20% Onsite Requirement | 10% | 9% | 15% |
| @ 25% Onsite Requirement | 12% | 11% | 19% |

Source: Strategic Economics, 2021.

The calculated in-lieu fee for the apartment prototype has the largest impact on development costs, due to the much higher affordability gap for apartments. Although rental apartments are the least expensive of the three prototypes to build per unit, the smaller households expected to occupy these units, which translates to lower tenant incomes, and the high operating costs of apartments mean that the affordability gap for rentals is higher in this case. This analysis suggests that for-sale developments will be able to accommodate a substantially higher percentage onsite requirement than will rental projects.

BURDEN OF IN-LIEU COMBINED WITH OTHER MUNICIPAL FEES

The Consultant Team reviewed the total burden of the calculated in-lieu fees in the context of other municipal fees charged by the cities, including fees such as building permits as well as any impact fees each jurisdiction might have in place.⁷ A table of these costs for each jurisdiction is given in Figure 30 below, including the total fees that would be paid on each prototype in-lieu of hypothetical inclusionary requirements ranging from ten to 25 percent.

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 Fairfax are currently estimated at between one and two percent of development costs. Enacting maximum in-lieu fees with a 15 percent inclusionary requirement would raise municipal fees to between seven and 13 percent. The Town of Fairfax will need to take into account the impact to total development costs when setting an in-lieu fee and/or inclusionary percentage.

⁷ Connection fees charged by a local sanitary sewer and water district were also estimated; they would be expected to represent an additional three to four percent of development costs above what is shown in the Figure 30.

FIGURE 30: IN-LIEU FEES AND OTHER MUNICIPAL FEES* BY JURISDICTION

Current level of onsite requirement for each jurisdiction in bold.

| | Per Unit | | | As % of Development Costs | | |
|------------------------------------|------------------|-----------------|------------------|---------------------------|------------|------------|
| | S.F. Subdiv. | Condo | Apt. | S.F. Subdiv. | Condo | Apt. |
| Corte Madera | | | | | | |
| Municipal Fees | \$35,776 | \$27,116 | \$23,339 | 5% | 4% | 4% |
| Tot. Fees @10% Rqmt. | \$64,767 | \$47,424 | \$65,615 | 8% | 7% | 12% |
| Tot. Fees @15% Rqmt. | \$79,262 | \$57,579 | \$86,753 | 10% | 9% | 15% |
| Tot. Fees @20% Rqmt. | \$93,757 | \$67,733 | \$107,891 | 12% | 10% | 19% |
| Tot. Fees @25% Rqmt. | \$108,253 | \$77,888 | \$129,029 | 14% | 12% | 23% |
| Fairfax | | | | | | |
| Municipal Fees | \$13,231 | \$11,258 | \$8,104 | 2% | 2% | 1% |
| Tot. Fees @10% Rqmt. | \$42,221 | \$31,567 | \$50,380 | 5% | 5% | 9% |
| Tot. Fees @15% Rqmt. | \$56,717 | \$41,722 | \$71,518 | 7% | 6% | 13% |
| Tot. Fees @20% Rqmt. | \$71,212 | \$51,876 | \$92,656 | 9% | 8% | 16% |
| Tot. Fees @25% Rqmt. | \$85,707 | \$62,030 | \$113,794 | 11% | 9% | 20% |
| Larkspur | | | | | | |
| Municipal Fees | \$39,839 | \$25,951 | \$19,449 | 5% | 4% | 3% |
| Tot. Fees @10% Rqmt. | \$68,830 | \$46,260 | \$61,725 | 9% | 7% | 11% |
| Tot. Fees @15% Rqmt. | \$83,325 | \$56,414 | \$82,863 | 11% | 8% | 15% |
| Tot. Fees @20% Rqmt. | \$97,820 | \$66,569 | \$104,001 | 13% | 10% | 18% |
| Tot. Fees @25% Rqmt. | \$112,316 | \$76,723 | \$125,139 | 14% | 11% | 22% |
| Unincorporated Marin County | | | | | | |
| County Fees | \$25,397 | \$23,656 | \$5,470 | 3% | 4% | 1% |
| Tot. Fees @10% Rqmt. | \$63,101 | \$52,521 | \$47,746 | 8% | 8% | 8% |
| Tot. Fees @15% Rqmt. | \$81,953 | \$66,954 | \$68,884 | 10% | 10% | 12% |
| Tot. Fees @20% Rqmt. | \$100,806 | \$81,386 | \$90,022 | 15% | 12% | 18% |
| Tot. Fees @25% Rqmt. | \$119,658 | \$95,819 | \$111,160 | 17% | 15% | 22% |
| San Anselmo | | | | | | |
| Municipal Fees | \$12,821 | \$13,837 | \$14,034 | 2% | 2% | 2% |
| Tot. Fees @10% Rqmt. | \$41,811 | \$34,146 | \$56,310 | 5% | 5% | 10% |
| Tot. Fees @15% Rqmt. | \$56,306 | \$44,300 | \$77,448 | 7% | 7% | 14% |
| Tot. Fees @20% Rqmt. | \$70,802 | \$54,455 | \$98,586 | 9% | 8% | 17% |
| Tot. Fees @25% Rqmt. | \$85,297 | \$64,609 | \$119,724 | 11% | 10% | 21% |
| San Rafael | | | | | | |
| Municipal Fees | \$27,044 | \$23,545 | \$15,113 | 3% | 4% | 3% |
| Tot. Fees @10% Rqmt. | \$56,034 | \$43,854 | \$57,389 | 7% | 7% | 10% |
| Tot. Fees @15% Rqmt. | \$70,530 | \$54,009 | \$78,527 | 9% | 8% | 14% |
| Tot. Fees @20% Rqmt. | \$85,025 | \$64,163 | \$99,665 | 11% | 10% | 18% |
| Tot. Fees @25% Rqmt. | \$99,520 | \$74,317 | \$120,803 | 13% | 11% | 21% |

Continued next page

| | | | | | | |
|-------------------------------------|-----------------|-----------------|-----------------|-----------|-----------|------------|
| <i>Continued from previous page</i> | | | | | | |
| Sausalito | | | | | | |
| Municipal Fees | \$7,448 | \$7,694 | \$9,987 | 1% | 1% | 2% |
| Tot. Fees @10% Rqmt. | \$36,438 | \$28,003 | \$52,263 | 5% | 4% | 9% |
| Tot. Fees @15% Rqmt. | \$50,934 | \$38,157 | \$73,401 | 7% | 6% | 13% |
| Tot. Fees @20% Rqmt. | \$65,429 | \$48,311 | \$94,539 | 8% | 7% | 17% |
| Tot. Fees @25% Rqmt. | \$79,924 | \$58,466 | \$115,677 | 10% | 9% | 21% |

* Municipal 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 and additional four percent to development costs of the single family subdivision and three percent to condo townhomes and apartments.

Source: Strategic Economics, 2021.

CONVERSION TO PER SQUARE FOOT FEE

Jurisdictions can opt to implement the in-lieu fee as a per square foot fee, rather than a per unit fee, in order to incentivize development projects with smaller units. This may be useful for jurisdictions that primarily see developments with large, luxury units. The per square foot fees are calculated by dividing the per-unit in lieu fee by the weighted average unit square feet for each prototype. This calculation is shown below in Figure 31.

FIGURE 31. EQUIVALENT IN LIEU FEES PER UNIT SQUARE FOOT FOR PROTOTYPES

| | Multifamily Rental | Condominium Townhome | Single Family Subdivision |
|---|-------------------------------|---------------------------------|--------------------------------------|
| Weighted Average Unit Sq. Ft. | 800 | 1800 | 2,200 |
| Affordability Gap per Unit | | | |
| Very Low Income (50% AMI Rental and Owner) | \$489,529 | \$459,773 | \$551,315 |
| Low Income (65% AMI Rental/ 70% AMI Owner) | \$417,602 | \$330,608 | \$419,749 |
| Moderate Income (90% AMI Rental)/ 110% AMI Owner) | \$361,148 | \$75,568 | \$160,060 |
| Affordability Gap per Sq. Ft. | | | |
| Very Low Income (50% AMI) | \$612 | \$255 | \$251 |
| Low Income (65% AMI Rental/ 70% AMI Owner) | \$522 | \$184 | \$191 |
| Moderate Income (90% AMI Rental)/ 110% AMI Owner) | \$451 | \$42 | \$73 |

Source: Strategic Economics, 2021.

COMPARISON OF INCLUSIONARY REQUIREMENTS IN SELECTED BAY AREA CITIES

Figure 32 summarizes the inclusionary requirements for selected Bay Area cities outside of Marin County for the purposes of comparison. As shown, the cities all have inclusionary requirements on for-sale development projects ranging from a minimum of 5 percent in Oakland to 22 percent in San Francisco. The income targets for for-sale housing are typically low-income and moderate-income households.

For rental housing, the percentage requirement ranges from 5 percent in Oakland to 20 percent in San Francisco. Most of the jurisdictions require some proportion of very low-income units, along with low-income and moderate-income units.

San Francisco, San Jose, and Cupertino have lower requirements for small projects.

FIGURE 32. INCLUSIONARY POLICIES FOR SELECT BAY AREA JURISDICTIONS

| Jurisdiction | For-Sale Housing | Rental Housing | Fee Option | Year Adopted/Updated |
|---------------|---|---|---|----------------------|
| Berkeley | 20% affordable at or below 80% AMI. | 20% must be affordable (10% at 80% AMI and 10% at 50% AMI). | For sale: In-lieu fee option (62.5% of difference between affordable and market price). Rental: Affordable housing impact fee \$39,716 per market-rate unit. | 2020 |
| Oakland | 5% at 50% AMI or 10% at 80% AMI or 10% at 120% AMI. | 5% at 50% AMI or 10% at 80% AMI or 10% at 120% AMI. | Fee permitted. | 2016 |
| San Francisco | Projects with 25+ units: 22% must be affordable to 80%-110% AMI. Projects with 10-24 units: 13% must be affordable. | Projects with 25+ units: 20% must be affordable to 55%-110% AMI. Projects with 10-24 units: 13% must be affordable to 55% AMI. | Fee permitted but with a higher percentage requirement than building on-site. Smaller projects pay a lower fee. | 2017 |
| San Jose | Projects with 20+ units must meet 15% affordable set-aside at or below 120% AMI. Smaller projects have lower percentage requirements. | 5% at 100% AMI, 5% at 60% AMI, and 5% at 50% AMI, or 10% at 30% AMI. Smaller projects have lower percentage requirements. | Fee permitted. | 2021 |
| Santa Cruz | 20% must be affordable to households at or 80% - 100% AMI. | 20% must be affordable to households at or below 80% AMI. | On-site units encouraged. | 2019 |
| Palo Alto | 15% must be affordable to households at 120% AMI or below. | No on-site requirement for rental. | For sale: Fee permitted but developer must demonstrate infeasibility of on-site units. Rental: Affordable housing impact fee charged. | 2012 |
| Cupertino | 15% must be affordable to 120% or 100% AMI. | 15% must be affordable to 120% or 80% AMI. | Projects with 1-6 units may provide a unit or pay a fee. For projects with 7 or more units, requires City Council approval. | 2012 |

Source: Urban Displacement Project, 2021; City of Berkeley, 2021; Strategic Economics, 2021.

Recommendations

A number of considerations inform the decision to update the inclusionary requirements and the in-lieu fees, including market and feasibility factors, comparative policies in other jurisdictions, and the pros and cons of alternative means of compliance. Below is a summary of recommendations tailored for the Town of Fairfax:

Establish inclusionary percentage requirement of 20 percent for for-sale and rental development projects. The Consultant Team recommends that the Town of Fairfax establish an inclusionary requirement of 20 percent for for-sale and rental development projects, including single-family subdivisions, townhomes, and rental apartments. This percentage requirement is consistent with many other jurisdictions in the Bay Area. Once the policy has been in effect and the market has responded, the Town may wish to review the policy to determine whether a higher inclusionary requirement can be supported.

Establish income targets that are consistent with other Marin County jurisdictions. The Consultant Team recommends that the inclusionary policy include a mix of very low-, low- and moderate-income households for both for-sale and rental projects.

Establish flexible requirements for housing projects containing six or fewer units. According to the site analysis conducted by Opticos for the Objective Development Design Standards project, a large share of potential housing sites countywide are infill lots that could only accommodate small projects. These types of projects are more challenging to build than larger projects. To ensure they are financially feasible, the Consultant Team recommends that the Town of Fairfax establish more flexible requirements for these types of projects, which could include:

- Allowing for a higher average income target, with a higher proportion of moderate-income units.
- Providing more flexibility on providing a combination of on-site units and payment of in-lieu fees.
- Allowing for the provision of an accessory dwelling unit (ADU), with provisions to ensure that it is made available to renter households.

For ownership housing, designate a separate fee for single-family versus townhome condominium developments, and set the fee amount at the maximum level for each. This study establishes a maximum in-lieu fee of \$377,042 for single-family subdivisions and a fee of \$288,650 for condominium townhomes. Establishing a lower fee on townhome condominiums relative to single-family subdivisions recognizes that higher density ownership housing can be relatively more challenging to build.

For rental housing, establish an in-lieu fee amount below the maximum level to avoid inhibiting development. The maximum calculated fees of \$422,760 are considerably higher than the fees in Marin County's jurisdictions. A high fee would be a significant cost burden on rental projects, which do not command the same values as for-sale housing in Fairfax. For this reason, the Consultant Team recommends that Fairfax consider implementing a lower fee than the maximum calculated in-lieu fee on rental development.

Allow for payment of fees and land dedication as alternative means of compliance. Many jurisdictions allow for developers to comply with the inclusionary policy by dedicating land for off-site units or acquiring and converting existing housing units to deed-restricted housing. However,

conversion can result in the provision of units that are not comparable in quality or location to the market-rate development projects. Furthermore, it does not add to the overall supply of housing and burdens the jurisdiction with the cost of monitoring and compliance. The Consultant Team recommends that the Town of Fairfax develop a policy that prioritizes on-site units, allowing for the payment of in-lieu fees or land dedication as the preferred alternatives. It is recommended that the off-site conversion option is permitted only if the converted units are of a similar quality and located within close proximity to the principal project.

Require for-sale development projects with on-site units to submit a plan for the ongoing maintenance of below-market rate units. According to Marin Housing, some for-sale condominium and townhome projects have not been able to adequately fund the maintenance and repair of below-market rate units. The Consultant Team recommends that the Town of Fairfax require developers to provide a realistic plan for collecting sufficient reserves for the repair and maintenance of below-market rate units without compromising the affordability of those units.

Explore options for a countywide administration program for inclusionary units. Establishing and administering an inclusionary program requires staff to manage negotiations with developers to provide affordable units (on-site or off-site) in accordance with local requirements, monitor the resales/leasing of below-market rate units to qualified households, and ongoing administration. Because there is often limited staffing capacity in-house, the Consultant Team recommends that the participating jurisdictions investigate the potential to partner with a non-profit to provide these services. Some cities charge property owners a small administrative fee to help offset the costs of monitoring and compliance.

Appendix A

The Consultant Team spoke with a range of stakeholders for this report, including market-rate housing developers, affordable housing developers, affordable housing advocates, Marin housing authority staff, and local community land trusts. Stakeholders that participated in either one-on-one interviews with the Consultant Team, or in developer forums, both of which helped inform this report, are listed below in Figure 33.

FIGURE 33. LIST OF STAKEHOLDERS INTERVIEWED FOR STUDY

| Name | Organization/ Affiliation |
|-------------------|--|
| Judith Bloomberg | Marin Organizing Committee |
| Arianne Dar | Bolinas Community Land Trust |
| Todd David | Housing Action Committee |
| Justin Derby | Meritage Homes |
| Bruce Dorfman | Thompson Dorfman |
| Aaron Eckhouse | California YIMBY |
| Michael Hooper | Campus Property Group |
| Larry Kennings | Marin Environmental Housing Collaborative |
| Stacey Laumann | Community Land Trust of West Marin |
| Marianne Lim | EAH Housing |
| Stephanie Lovette | Marin Housing Authority |
| Linda Mandolini | Eden Housing |
| Tom Monahan | Monahan Parker Development |
| Wick Polite | Seagate Properties |
| Kiki La Porta | Coalition for a Livable Marin |
| Phil Richardson | Individual developer |
| Suzanne Sadowsky | San Geronimo Valley Affordable Housing Association |
| Carmen Soruco | Marin Housing Authority |
| Mary Kay Sweeney | Homeward Bound Housing Crisis Action Group, San Rafael Chamber of |
| Joanne Webster | Commerce |

Source: Strategic Economics, 2021.

EXHIBIT B



MEMORANDUM

To: Heather Abrams and Daniel Hortert, Town of Fairfax
From: Strategic Economics and Vernazza Wolfe Associates
Date: February 18, 2023
Project: Marin Inclusionary Study
Subject: Commercial Linkage Fee Study

I. INTRODUCTION AND METHODOLOGY

Purpose and Background

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

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

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

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

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

The Nexus Concept

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

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

Methodology and Report Organization

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

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

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

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

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

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

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

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

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

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

Step 4. Estimate wages of new workers.

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

Step 5. Estimate household income of worker households.

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

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

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

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

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

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

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

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

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

Step 8. Estimate the development cost of new housing.

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

Step 9. Calculate the affordability gap.

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

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

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

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

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

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

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

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

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

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

II. COMMERCIAL LINKAGE FEE NEXUS ANALYSIS

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

Step 1: Commercial Prototypes

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

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

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

Step 2: Number of Workers

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

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

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

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

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

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

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

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

FIGURE 1. EMPLOYMENT DENSITY DATA AND SOURCES

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

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

FIGURE 2. EMPLOYMENT DENSITY BY PROTOTYPE

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

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

Step 3: Number of Worker Households

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

FIGURE 3. NUMBER OF WORKER HOUSEHOLDS BY PROTOTYPE

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

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

Step 4: Worker Wages

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

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

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

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

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

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

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

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

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

FIGURE 6. DEFINITION OF INDUSTRIES FOR HOTEL PROTOTYPE

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

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

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

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

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

FIGURE 7. AVERAGE ANNUAL WAGE BY PROTOTYPE

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

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

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

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

Step 5: Household Incomes

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

Step 6: Household Income Categories

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

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

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

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

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

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

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

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

FIGURE 9. NUMBER OF WORKER HOUSEHOLDS BY INCOME CATEGORY

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

Notes:

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

III. HOUSING AFFORDABILITY GAP

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

Methodology

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

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

Step 7: Estimating Affordable Rents and Sales Prices

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

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

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

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

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

FIGURE 10. AFFORDABLE RENTS AND SUPPORTABLE DEBT BY UNIT TYPE

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

Notes:

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

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

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

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

FIGURE 11. AFFORDABLE SALES PRICES BY UNIT TYPE

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

Notes:

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

Step 8: Estimating Housing Development Costs

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

FIGURE 12. TOTAL DEVELOPMENT COSTS BY PROTOTYPE

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

Step 9: Calculating the Housing Affordability Gap

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

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

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

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

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

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

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

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

Notes:

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

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

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

Notes:

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

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

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

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

IV. MAXIMUM LINKAGE FEES

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

Step 10: Maximum Fee Calculation

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

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

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

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

FIGURE 16. MAXIMUM COMMERCIAL LINKAGE FEES

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

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

V. MARKET FACTORS, FEASIBILITY, AND OTHER POLICY CONSIDERATIONS

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

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

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

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

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

Market Overview

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

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

OFFICE/MEDICAL OFFICE/R&D

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

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

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

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

RETAIL/RESTAURANTS/SERVICES

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

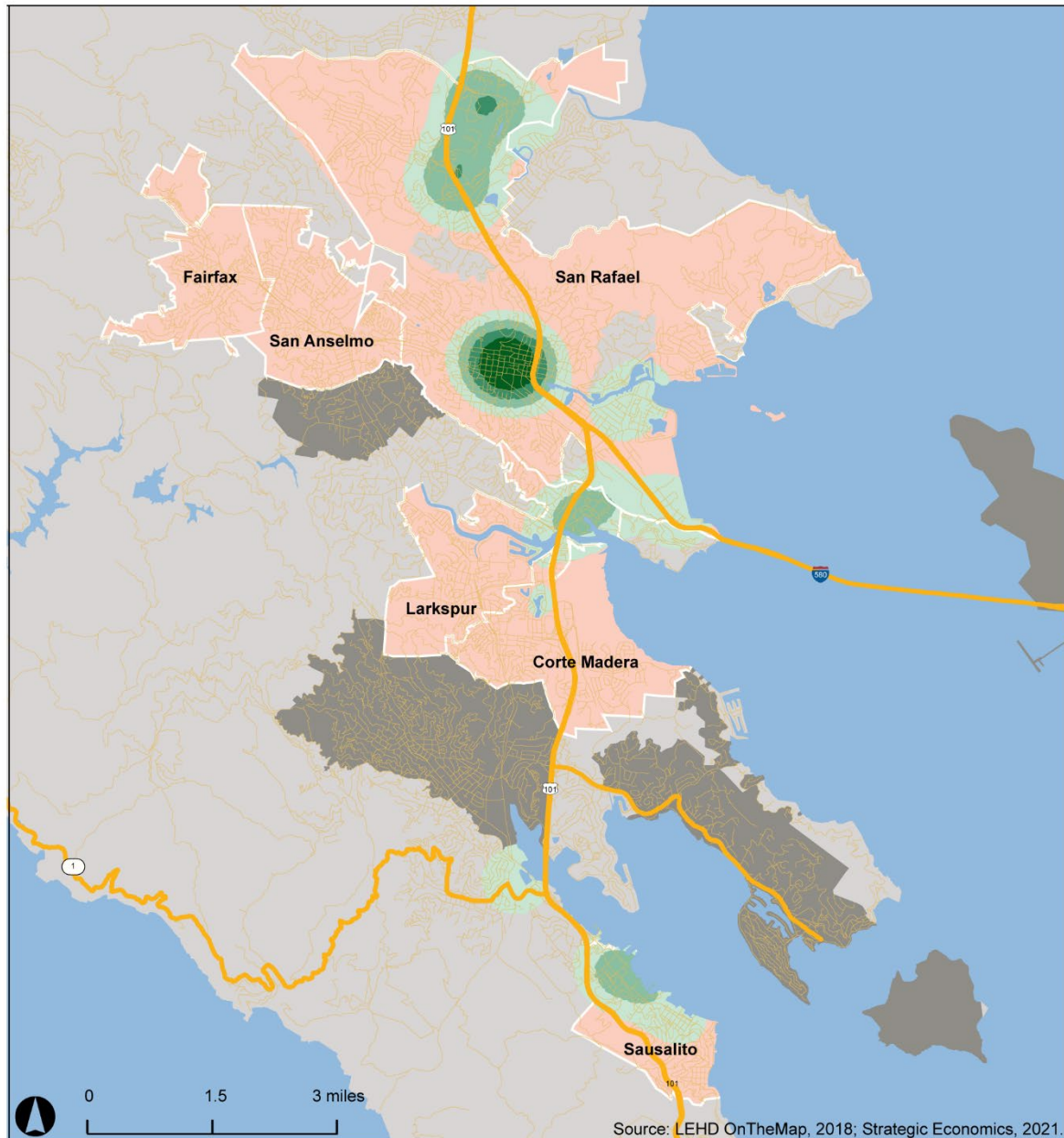
It is unlikely that the county will see significant new retail development in the coming years. When the market does recover, new retail is expected to be relatively small scale, serving a local trade area and/or any new residential development. Rather than concentrating in any one area of the county,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

HOTEL

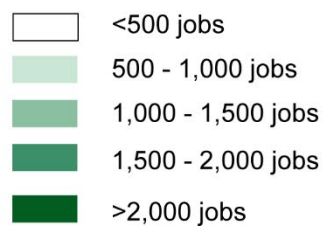
Located geographically in between San Francisco and Northern California's wine country, Marin County is a secondary market for hotel development. Business travel is an important component of demand in San Rafael, serving the downtown employment center, while the market in the remainder of the county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

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

FIGURE 17: OFFICE EMPLOYMENT DENSITY IN MARIN COUNTY, 2018



Marin County: Office jobs per square mile, 2018*



*Includes jobs in NAICS categories 51-55



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

Comparable Cities

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

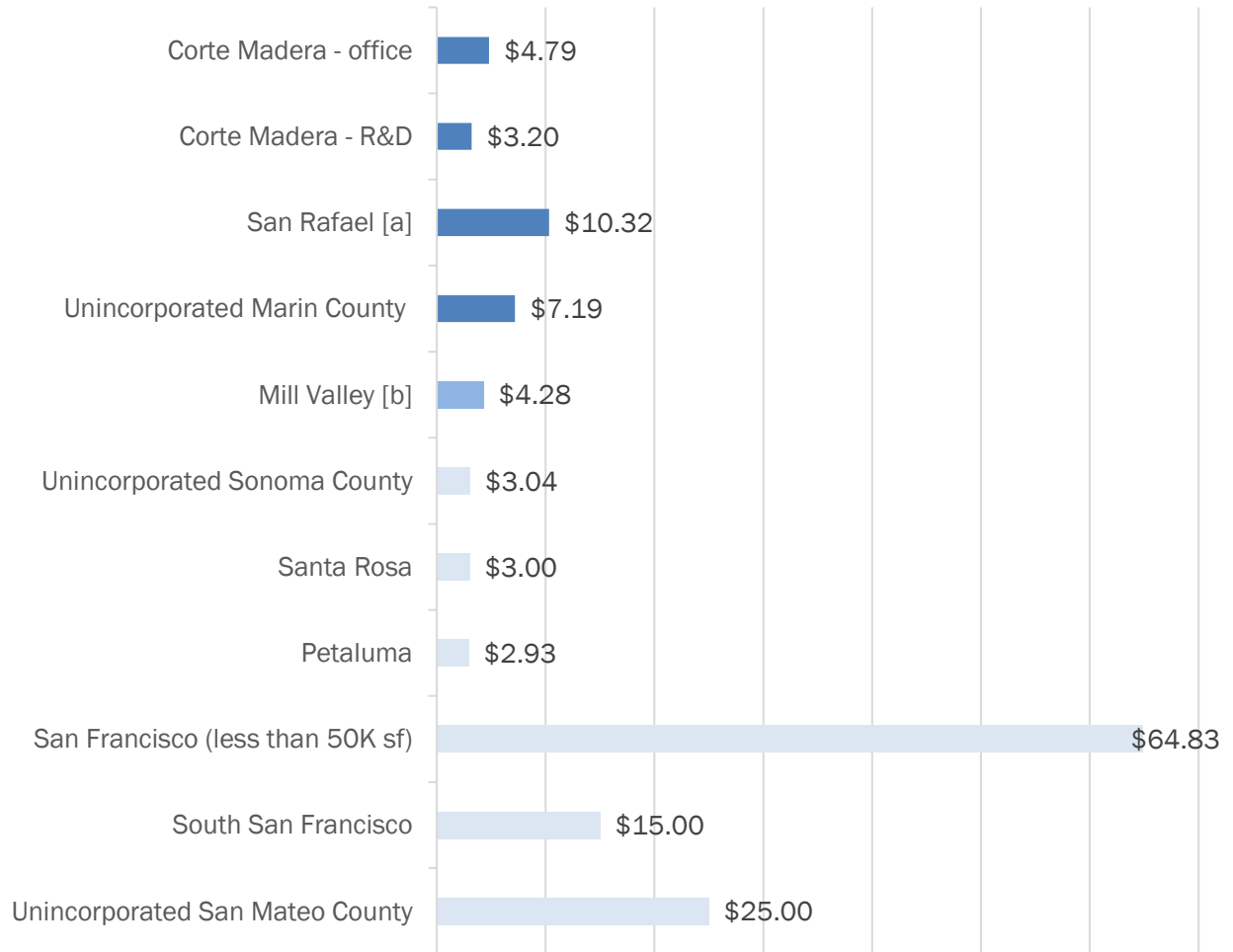
As shown in Figure 18, linkage fees for office/medical office/R&D land uses in Marin County range from \$3.20 to \$10.32 per square foot. The fee in San Rafael is at the high end of this range, reflecting its relative strength as an office center within the county. The selected jurisdictions from Sonoma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

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

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

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

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

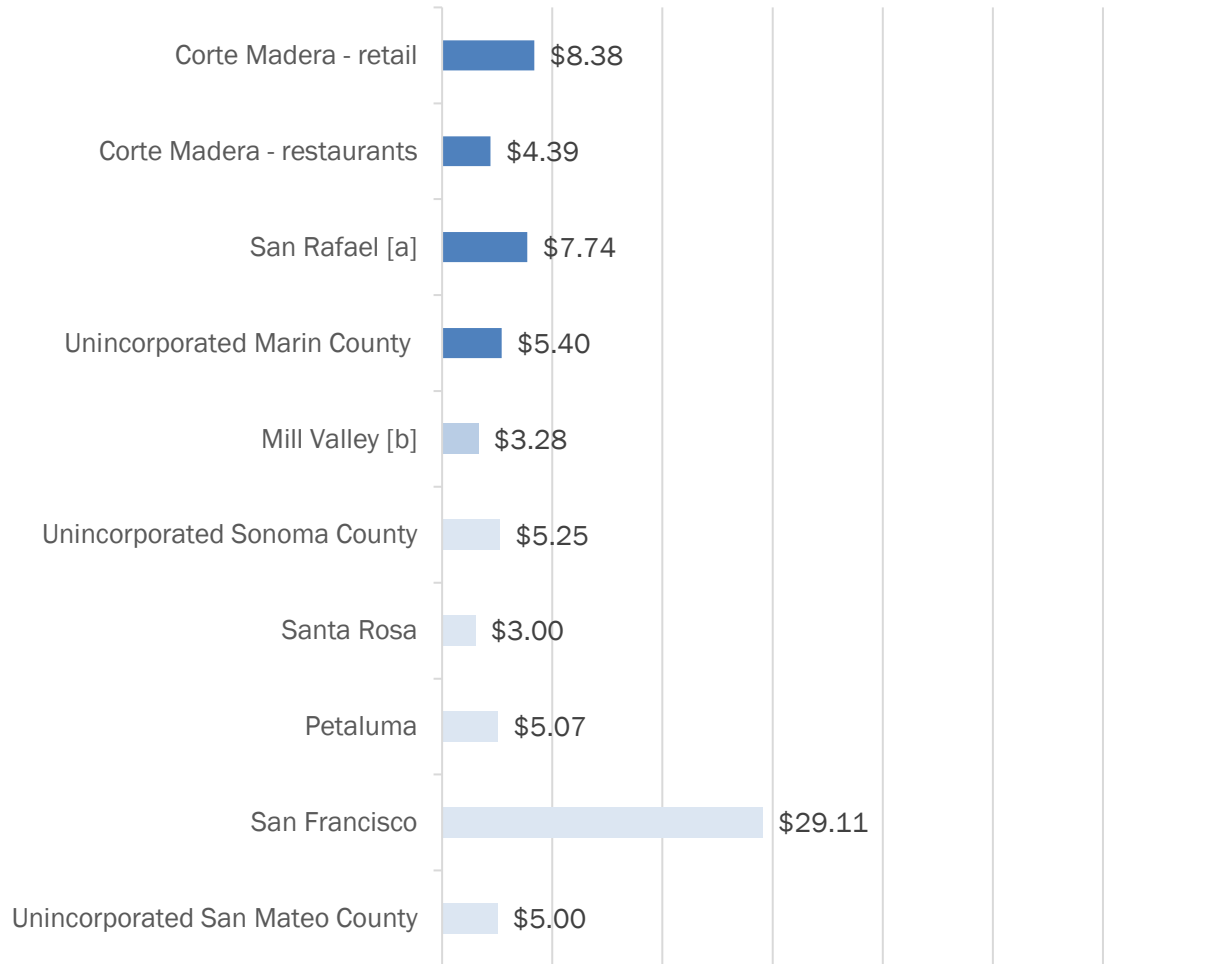


[a] San Rafael's fee is defined as a percentage of the inclusionary in-lieu fee.

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

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

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

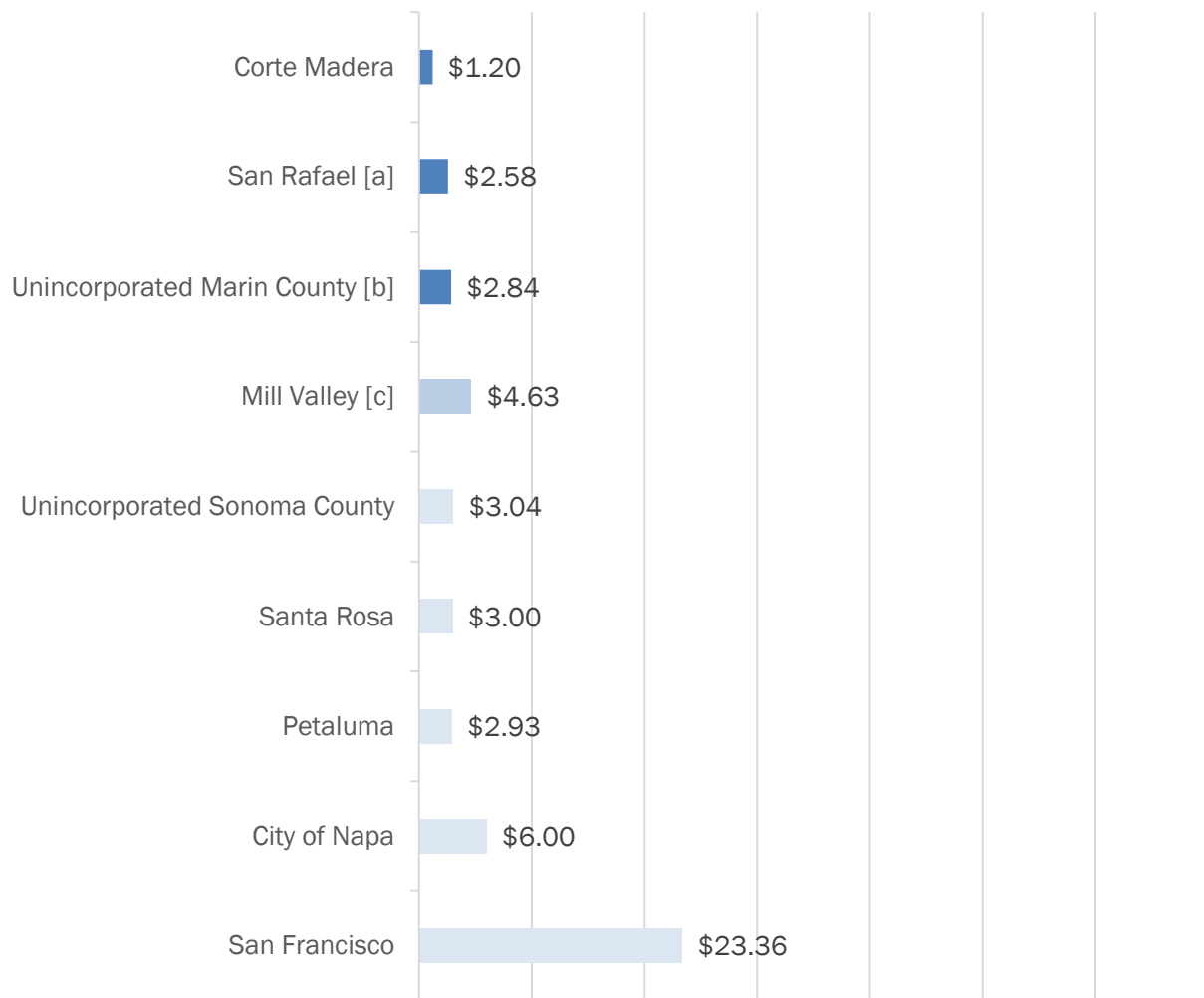


[a] San Rafael's fee is defined as a percentage of the inclusionary in-lieu fee.

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

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

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



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

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

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

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

Fee Scenarios

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

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

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

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

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

Feasibility Analysis

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

DEVELOPMENT PROTOTYPES FOR ANALYZING FEASIBILITY

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

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

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

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

FIGURE 22. DEVELOPMENT PROTOTYPES

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

DEVELOPMENT COSTS

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

LAND AND SITE COST ASSUMPTIONS

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

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

BUILDING AREA HARD COSTS

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

TENANT IMPROVEMENTS AND FF&E COSTS

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

SURFACE PARKING COSTS

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

SOFT COST ASSUMPTIONS

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

FIGURE 23: DEVELOPMENT COST ASSUMPTIONS

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

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

TOTAL DEVELOPMENT COSTS

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

FIGURE 24: TOTAL DEVELOPMENT COST BY PROTOTYPE

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

INCREASES IN DEVELOPMENT COSTS

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

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

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

FEE SCENARIOS COMBINED WITH OTHER MUNICIPAL FEES

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

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

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

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

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

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

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;¹⁵ in Figure 27, Strategic Economics converted this number to a typical fee per square foot using a gross average room size assumption.

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

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

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

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

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

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

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

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

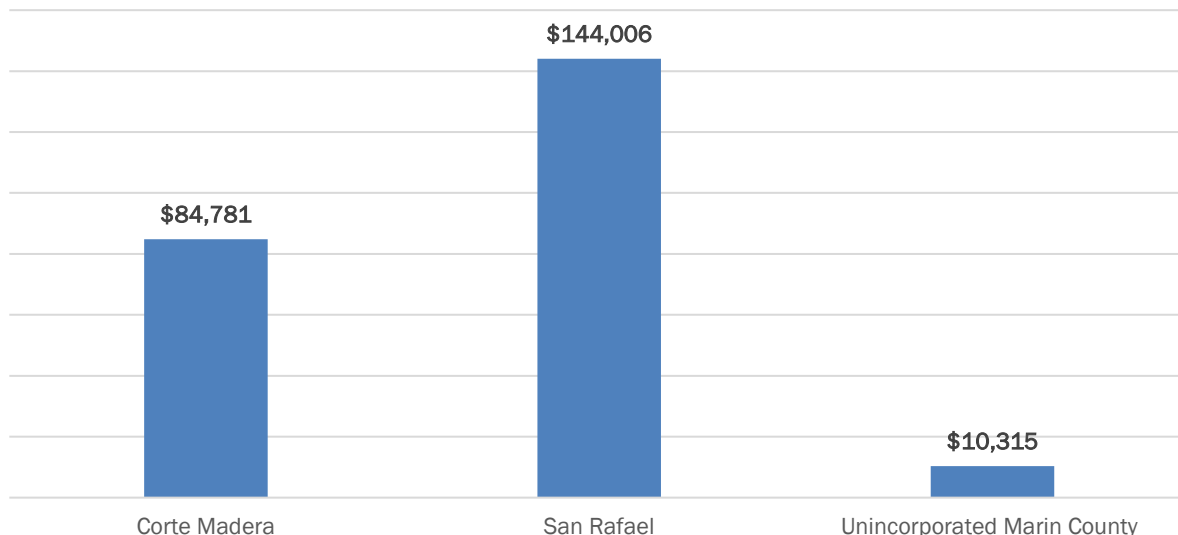
[a] In some jurisdictions, linkage fees may exist for other land uses outside the scope of this study. Only the relevant fees are shown.

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

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

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

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



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

Potential Fee Revenues under the Unified Fee Program

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

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

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

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

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

Notes:

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

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

Justification for New Fee Levels

AB 602 requires the nexus study for a new fee to “identify the existing level of service for each public facility, identify the proposed new level of service, and include an explanation of why the new level of service is appropriate” (Government Code § 66016.5).

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

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

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

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

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

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

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

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

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

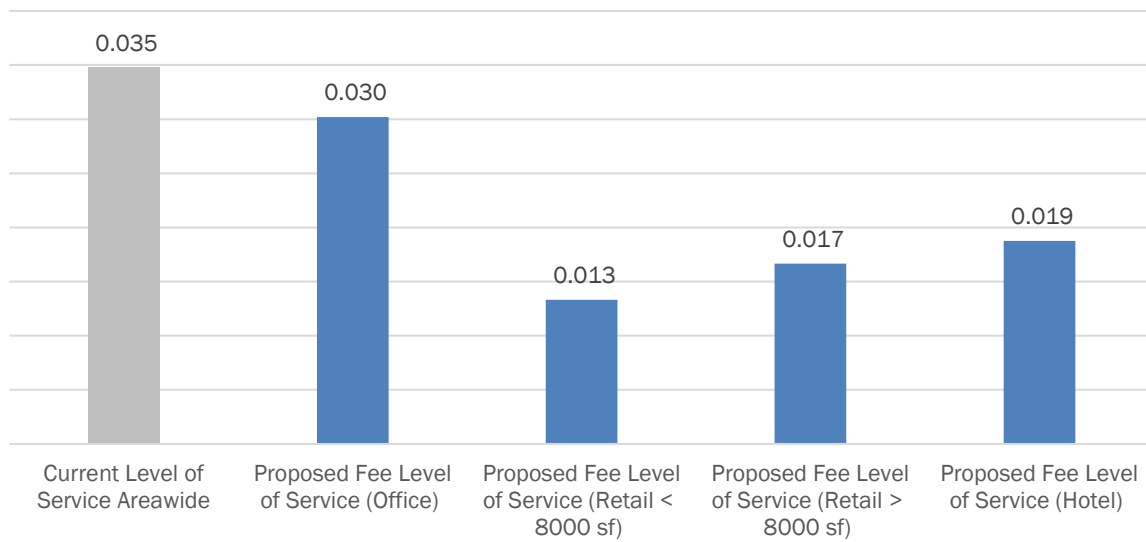
In summary, the fee program as proposed by the jurisdictions will accomplish two objectives. First, the unified fee proposal will level the playing field for developers, ensuring they are charged the same fee across all jurisdictions. Secondly, the fee levels are set such that the revenue is sufficient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

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

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

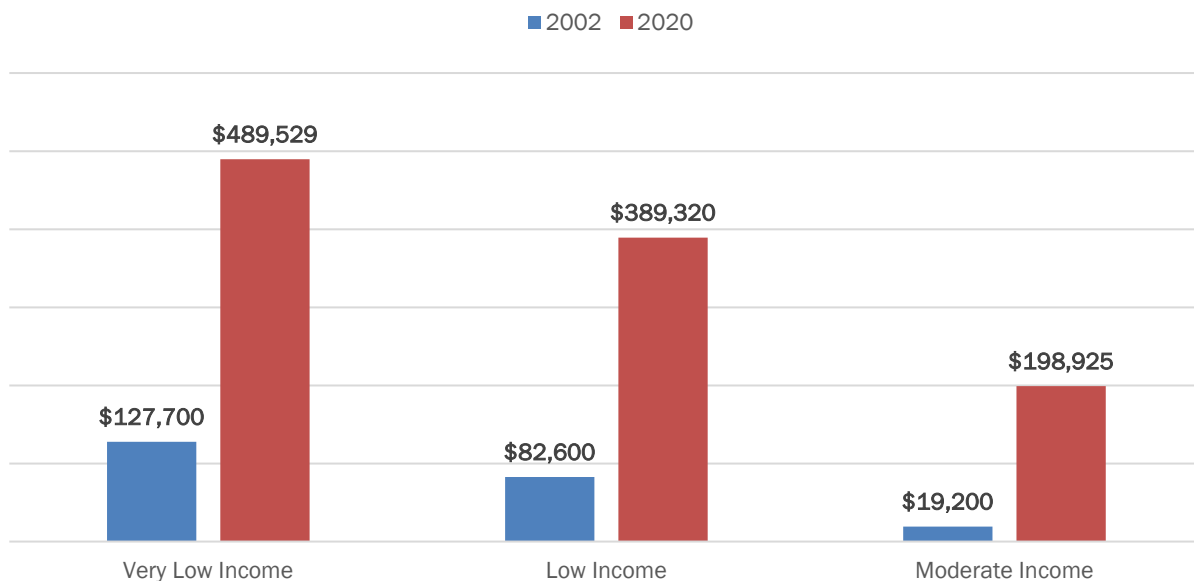
Source: Strategic Economics, 2022.

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



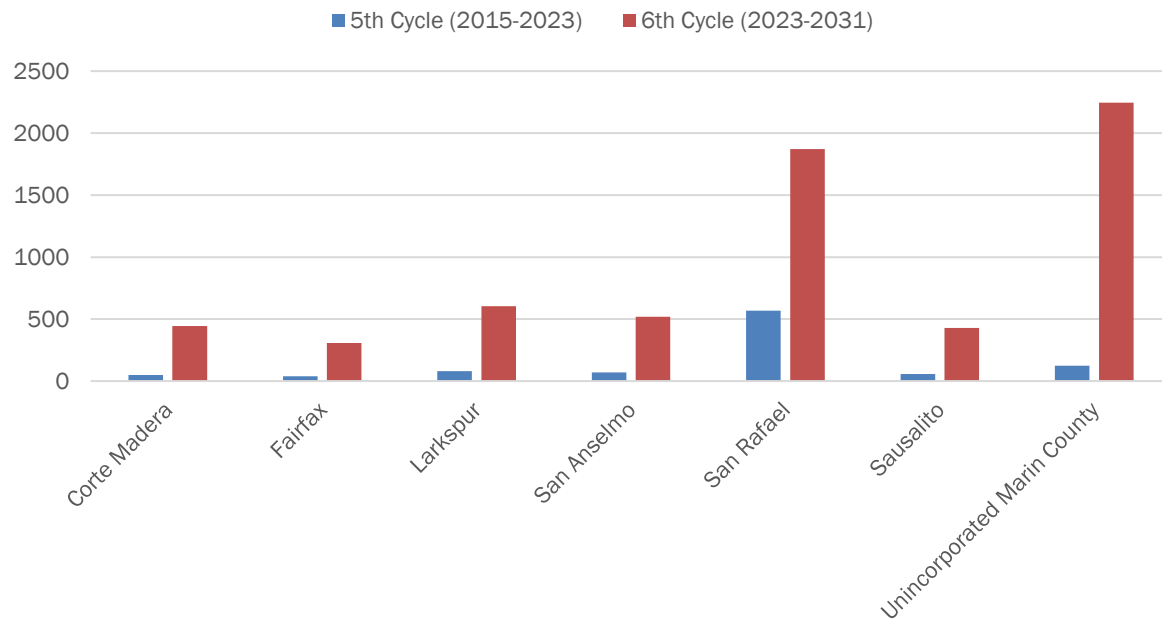
Source: Strategic Economics, 2022.

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



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

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



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

Data Tables: Occupational Wage by Land Use Prototype

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

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

| Occupation Code | Occupation Title (a) | Average Annual Wage (b) | Share of Total Office Workers (c) |
|-----------------|---|-------------------------|-----------------------------------|
| 11-0000 | Management Occupations | | |
| 11-1021 | General and Operations Managers | \$155,850 | 2.404% |
| 11-3021 | Computer and Information Systems Managers | \$201,960 | 1.131% |
| 11-3031 | Financial Managers | \$182,190 | 1.016% |
| | Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and | | |
| 11-9198 | 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% |
| | Property, Real Estate, and Community Association | | |
| 11-9141 | 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% |
| | Education and Childcare Administrators, Preschool and Daycare | | |
| 11-9031 | | \$70,080 | 0.008% |
| 11-9081 | Lodging Managers | \$104,250 | 0.006% |
| | Education Administrators, Kindergarten through | | |
| 11-9032 | Secondary | \$129,070 | 0.004% |
| 11-9033 | Education Administrators, Postsecondary | \$130,980 | 0.003% |
| 11-9161 | Emergency Management Directors | \$132,440 | 0.003% |
| 11-9013 | Farmers, Ranchers, and Other Agricultural Managers | n/a | 0.002% |
| 11-9071 | Gambling Managers | \$125,300 | 0.001% |
| | Weighted Mean Annual Wage | \$166,968 | 8.921% |

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Notes:

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Notes:

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.

FIGURE 37. OCCUPATIONAL MIX AND AVERAGE WAGES FOR HOTEL

| Occupation Code | Occupation Name (a) | Average Annual Wage (b) | Share of Total Hotel Workers (c) |
|-----------------|---|-------------------------|----------------------------------|
| 11-0000 | Management Occupations | | |
| 11-9081 | Lodging Managers | \$104,250 | 1.622% |
| 11-1021 | General and Operations Managers | \$155,850 | 0.810% |
| 11-9051 | Food Service Managers | \$63,460 | 0.422% |
| 11-2022 | Sales Managers | \$159,720 | 0.308% |
| | Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other | | |
| 11-9198 | | \$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% |
| | Property, Real Estate, and Community Association Managers | | |
| 11-9141 | | \$92,930 | 0.019% |
| 11-2030 | Public Relations and Fundraising Managers | \$142,950 | 0.012% |
| 11-9041 | Architectural and Engineering Managers | \$186,500 | 0.011% |
| 11-2011 | Advertising and Promotions Managers | \$175,210 | 0.008% |
| 11-9021 | Construction Managers | \$134,880 | 0.007% |
| 11-3131 | Training and Development Managers | \$152,380 | 0.005% |
| 11-3071 | Transportation, Storage, and Distribution Managers | \$123,910 | 0.005% |
| 11-3111 | Compensation and Benefits Managers | \$170,770 | 0.003% |
| 11-3051 | Industrial Production Managers | \$140,910 | 0.003% |
| | Weighted Mean Annual Wage | \$128,280 | 4.198% |
| 13-0000 | Business and Financial Operations Occupations | | |
| 13-1121 | Meeting, Convention, and Event Planners | \$67,530 | 0.441% |
| 13-2011 | Accountants and Auditors | \$93,590 | 0.438% |
| 13-1071 | Human Resources Specialists | \$89,820 | 0.225% |
| 13-1161 | Market Research Analysts and Marketing Specialists | \$91,350 | 0.182% |
| | Project Management Specialists and Business Operations Specialists, All Other | | |
| 13-1198 | | \$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% |
| | Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other | | |
| 13-2098 | | \$119,100 | 0.028% |
| 13-1111 | Management Analysts | \$113,750 | 0.020% |

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Notes:

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

Source: Strategic Economics and Vernazza Wolfe Associates, 2021.